DECLARATION

I Astridah Moonga Chilema, declare that this Dissertation represents my own work and that all the sources quoted have been indicated and acknowledged by means of complete references. I further declare that this Dissertation has not previously been submitted for a degree, diploma or other qualification at this or another University. It has been prepared in accordance with the guidelines for Master of Science in Nursing Dissertation of the University of Zambia.

Signed ....Date ....

                    Candidate

Signed ....Date ....

                    Supervisor

CERTIFICATE OF APPROVAL

The University of Zambia approves this Dissertation on factors that affect the ability of health care providers to detect mental health problems at Primary Health Care level: A case of Lusaka District Community Health Centres in partial fulfillment for the requirements for award of degree of Master of Science in Nursing.

Examiner's signature...Date..............................

Examiner's signature...Date..............................

Examiner's signature...Date..............................

ABSTRACT

Introduction: Mental health problems such as stress related conditions, substance abuse related problems, lead to difficulties in social, occupational and marital problems. Failure to detect mental health problems denies patients potentially effective management. The objective of the study was to explore factors impeding health care providers to detect mental health problems at PHC level in Lusaka.

Methods: This was a mixed method study involving primary health care providers. The study used simple random and purposive sampling methods. Quantitative and qualitative data was collected using a structured interview schedule and focus group discussion guide respectively. Quantitative data was analyzed using SPSS version 20 software computer packages. Qualitative data was analyzed using content analysis. Chi-square test was used for evaluation of data, with the confidence interval set at 95%, and the P value was equal or less than 0.05.

Results: A total of 134 participants took part in the structured interview and 20 in the FGD. Participants' age ranged from 25 – 55 years with a mean age of 43. One hundred and five (78.4%) were females with a profession ratio of 1:4 (Clinical officer and Nurses). A total of 58(100%) of the participants had high knowledge level in mental health and were able to use the mental health standardized guidelines, 41(53.4%) had low knowledge level and 39(51.3%) were unable to use the guidelines. Chi–square results on knowledge in mental health and use of mental health standardized guidelines showed a statistically significant relationship with p-value = 0.000, X^2 = 45.968 and p-value = 0.000, X^2 = 41.982 respectively. FGD revealed that health care providers have inadequate knowledge in mental health, have high work-load, have reduced patient contact time 5 – 10 minutes and no available standardized guidelines in mental health.

Conclusion: There is low ability to detect mental health problems. Knowledge level and use of mental health standardized guidelines are some of the factors impeding the ability of health care providers to detect mental problems early. Primary health care providers need regular in-service training in mental health and should use standardized guidelines to detect mental health early.

ACKNOWLEDGEMENT

DEDICATION

I dedicate this study to God for giving me the strength and ability to complete my study. To my beloved husband **Mr Pearson M. Chilema** for his undivided love and encouragement which enabled me to complete this study successfully. To my beloved children, Mwiinga, Josephine, Lumuno, Malala and Nchimunya for their support and prayers, for making my life meaningful and to you all, I am very grateful.

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LIST OF ABBREVIATIONS

BHCP   Basic Health Care Package

DSM   Diagnostic and Statistical Manual of Mental Diseases

FGD   Focus Group Discussion

GHQ   General Health Questionnaire

GP   General Practitioner

ICD   International Classification of Diseases

LDCHC   Lusaka District Community Health Centres

LDCHO   Lusaka District Community Health Office

MINI   Mini-International Neuropsychiatric Interview

MoH   Ministry of Health

NHRSP   National Health Resources Strategic Plan

NIAAA   National Institute on Alcohol And Alcoholism

PCC   Patient Centred Care

PHC   Primary Health Care

SAMHSA   Substance Abuse and Mental Health Services Administration

WHO   World Health Organization

ZAMFOHR   Zambia Forum for Health Research

CHAPTER ONE

1.0 INTRODUCTION

Mental health is a positive concept related to the social and emotional wellbeing of individuals and communities. It is related to the social and emotional wellbeing of individuals and communities. The concept is culturally defined, but generally relates to the enjoyment of life, ability to cope with stresses and sadness, the fulfillment of goals and potential, and a sense of connection to others (Tasmanian, 2009). Mental health is a desirable quality in its own right and is more than just the absence of mental-ill health. It is relevant to all people, regardless of whether they are currently experiencing or recovering from mental illness (Barry & Jenkins, 2007).

Mental-ill health is a spectrum of problems that interfere with an individual's cognitive, social and emotional abilities. The term encompasses both "mental health problems and mental illnesses" (Barry & Jenkins, 2007). Mathers et al. (2006) stated that mental illness or mental disorder is clinically diagnosable illness and is generally made according to the classification system of the Diagnostic and Statistical Manual of Mental Diseases (DSM) or International Classification of Diseases (ICD). However, there are different types of mental illnesses and each of these can occur with a varying degree of severity. Mental illnesses include mood disorders (depression, anxiety and bipolar disorder) and psychotic disorders (schizophrenia), eating disorders and personality disorders (Mathers et al., 2006).

According to Barry and Jenkins (2007), mental health problems interfere with a person's cognitive, emotional or social abilities but may not meet the criteria for a diagnosed mental illness. They often occur as a result of life stressors, and are usually less severe and of shorter duration than mental illnesses. These often resolve with time or when the life stressor changes. Moreover, when there is failure to detect mental health problems early, they tend to persist or increase in severity and may develop into a mental illness. Examples of mental health problems would be the sadness and despair associated with grief and loss, and symptoms associated with stress and reactive distress (Barry & Jenkins, 2007).

In addition, mental health problems result in impaired functioning, increased need for health care and marked deterioration among the different domains of quality of life. They have a dramatic effect on the lives of those who experience them and their families, and have a considerable economic impact on society. Recently, there has been an increasing global and regional recognition of common mental disorders as major public health problems in Primary Health Care (PHC) setting (Substance Abuse and Mental Health Services Administration (SAMHSA, 2012).

PHC is a vehicle that is used to deliver quality health services to people. It is about providing essential health care which is universally accessible to individuals and families in the community and provided as close as possible to where people live and work. It refers to the care which is based on the needs of the population. Primary health care provides keys for promoting mental health and preventing mental disorders among patients who are seen regularly at primary settings. According to WHO and Wonca (2008), it also serves as the basis for early detection and intervention for mental health problems.

In order to prevent common mental health problems to progress into mental illness, there is need to provide mental health services in primary settings which involve diagnosing, treating people with mental health problems, and putting in place strategies to prevent mental disorders (WHO and Wonca, 2008). This should be done by health care providers through applying key psychosocial and behavioral science skills such as interviewing, counselling and interpersonal skills in their day to day work in order to improve overall health outcomes in Primary Health Care (WHO, 2008). Therefore, early and accurate detection of mental health problems, followed by an appropriate treatment and management plan, may help to reduce the global and regional burden on health and social care systems caused by mental disorders.

Globally, mental health problems are a leading cause of morbidity (WHO, 2008). They are widespread in industrialized countries, ranging from 4.3 to 26.4 percent annually with 80 percent of the population consulting the primary health care providers (WHO, 2008; Mathers et al., 2006). Bushnell (2005) revealed that one in four patients in primary health care has a diagnosable mental health problem and PHC providers provide most of the treatment in the population.

In addition, Watson et al (2006) also revealed that health care providers' recognition of mental health problems in patients suggested that half of the people with mental health problems are not recognized. The study further argued that this may constrain early detection of mental health problems and optimal delivery of adequate treatment. The burdens of mental health problems include treatment cost, productivity loss, functional impairment, and reduced quality of life (Watson et al., 2006; Kringos, 2010). However, a study by Mathers et al. (2006) assets that early detection and management of mental health problems may promote a more holistic approach to patient care and ensures both improved delivery of care and prevention of mental disorders. The related study, Smith (2009) found that primary health care providers' ability to detect, diagnose, and adequately treat patients with mental health problems in Australia, New Zealand, the United Kingdom (UK), and Canada is often considered unsatisfactory and further revealed that 30-70 percent of patients with mental health problems pass undetected. In Africa between 90 and 95 percent of people with mental health problems present at primary health care, traditional and faith healers (Araya et al., 2005; Afana et al., 2005), while about 60 percent of patients with mental health problems in primary health care settings pass undetected (SAMHSA, 2012).

Mental health problems account for about 14 percent of the global burden of disease. According to Prince et al. (2007) non communicable diseases like mental disorders currently form 10 percent of the total disease burden, even in sub-Saharan Africa where, for a long time, communicable diseases have predominated as causes for mortality and morbidity. Associations exist between mental health problems and the numerous other general health problems and are among the conditions that require a lot of resources. Mental health has occupied a lower position in most countries' priority listing. This is evident from the low resources allocated for mental health services especially in developing countries (Hamid et al. 2008). As a result, most of the countries cannot adequately finance development of policies and legislative frameworks. Attention on mental health is increasing steadily especially after the establishment of the Movement for Global Mental Health and the subsequent call to scale up mental health services (Prince et al. 2007).

In some countries, the solution to getting mental health from its lower position has been to have it integrated into primary health care.

This has not worked in some situations but has been a success in others. The declining numbers of human resources in health care facilities has made matters worse for mental health. However, the general practice at PHC level in Zambia, acts as both the gateway and gatekeepers to secondary and tertiary health care with exception of the emergency presentations (Lusaka District Community Health Centres (LDCHC, (2013

1.1 BACKGROUND INFORMATION

Primary health care level is patients' first point of contact with the health system and involves the provision of integrated, accessible health care services by a variety of health care providers. It includes care given on first contact and in ambulatory settings. Primary care services encompass preventive, promotive, supportive, curative and rehabilitation services (WHO, 2008). These services are provided by professionals from different disciplines who attempt to enhance the individual's physical, mental, emotional and spiritual well-being, and address factors that influence patients' health. They are usually designed to deliver services that include mental health in conjunction with community health care providers (WHO & Wonca, 2008).

Over the last decade, Zambia embarked on a radical transformation process that aimed at creating a well functioning, cost effective and equitable health care system (Mwape et al., 2010). In line with Primary Health Care vision to provide essential health care as close to the family as possible, trainee nurses and clinical officers (health care providers) have in their respective curricula a course component which comprise mental health, mental illness and its management (Msidi, 2010; Health Professional Council of Zambia, 2009). In LDCHC, refresher courses in mental health were conducted in terms of workshops to enhance mental health knowledge and skills in primary health care providers to promote early detection of mental health related problems (Zambia Forum for Health Research (ZAMFOHR), 2011). This implies that in terms of ability to detect mental health related problems, all health care providers trained in Zambia have the basic knowledge and skills needed to provide mental health services to those who need them even without specialized training.

Zambia, like any other country has the rising rate (about 20%) of mental health problems which may be related to factors such as economic challenges, social violence and cultural disruptions. Hundreds of refugees and people dislocated from their homes by economic and political forces

are associated with increases and long term disease management (MoH, 2005, Simenda, 2012). Furthermore, Simenda (2012) reiterated that mental health problems now have increasing incidence and a public concern. The study further revealed that neuropsychiatric sequelae of HIV and AIDS, neuropsychiatric complications of alcohol and other drugs of abuse, and gender based violence are common in all of Zambia's communities leading to mental health problems. In addition, Chishinga et al. (2011) also revealed a high prevalence of mental health problems in the general population resulting from the challenges of life. This study also emphasizes that unless addressed adequately mental health problems have a negative effect on the individual, family, community as well as the economic well being of the country.

Majority of people with mental health problems, including those with severe mental illness, view primary care as the cornerstone of their health care system (Lester et al., 2005) and; health care providers are expected to identify and assess the mental health needs of the patients, and manage common mental health related problems in primary care (Department of Health, 2005). According to WHO and Wonca (2008), health care providers who are frontline health care providers provide most of the treatment of psychological problems of people in the general population. Therefore, early detection and treatment of mental health problems may help reduce the burden on individuals, families and society; household productivity whilst social integration may be maintained, resulting in better chances of recovery. There are numerous factors that may impede/ or affect the ability of health care providers to detect mental health related problems early, which may be service related factors such as workload and use of standardized guidelines in mental health; and health care provider factors which include knowledge in mental health and average time spent in contact with a patient.

1.2 STATEMENT OF THE PROBLEM

Primary health care providers are responsible for provision of holistic health care to the community. The requirement by WHO is that health care providers should provide quality health services to the people which include mental health (WHO & Wonca, 2008).

Information from health centre returns for 2010 to 2013 at LDCHC reveal that less than 10 percent of patients with major mental health problems were seen and referred to Chainama

Hospital for further management and yet no report on any minor mental health cases that were seen. Furthermore, LDCHC (2013) also revealed that there is scarcity of information regarding mental health problems (cases) detected at primary health care settings as they are not captured in their data base except for mental health cases that have been referred to the specialty health facility. In a related study, Prince et al. (2009) in UK, found that health care providers concentrate more on identifying physical conditions when screening or assessing patients leaving out the mental health aspect. These findings are in direct conflict when it comes to early detection and treatment of mental health problems which seeks to prevent common mental health problems complicating into mental illness (WHO & Wonca, 2008). In PHC, better health outcomes are achieved when health care providers are detecting both physical and mental health needs and problems of the patients (McCormack & McCance, 2010).

The probable causes of non-detection of mental health problems at PHC level include knowledge in mental health, staff workload, and amount of time health care providers spend with a patient and use of standardized guidelines in mental health. Inspite of this, the effects of non-detection of mental health problems early are diverse affecting the patient, family and community. Patient's condition may become chronic and complicate into a major mental disorder. The family and community may suffer loss of productivity related to time spent in accompanying the patient to the hospital and added cost of consultation and medicines. To improve the situation, LDCHO and MoH conducted mental health trainings for health care providers in the health centres in 2010 to enhance health care providers' knowledge and skills in mental health (ZAMFOHR, 2011). However, these efforts have not yielded much fruit as most patients with mental health problems are not detected early in LDCHC. It is for this reason that this study exploring factors affecting the ability to detect mental health problems at PHC level had to be undertaken and provided baseline scientific evidence for future interventions.

1.3 THEORETICAL FRAMEWORK

The Patient-Centred Care (PCC) model was used to provide a theoretical framework on which this study was based. PCC is a standard of practice that demonstrates respect for the patient, as a person (Shaller, 2007). According to Rogers et al. (2005), patient centredness also refers to a style of health care provider-patient encounter characterized by responsiveness to patient needs and preferences, using the patient's informed wishes to guide activity, interaction and information-giving and shared decision making. The concept of PCC places the patient at the centre of the health care system and recognizes the patient as a whole person with physical, psychological and social needs. The PCC model is useful in explaining patient assessment/screening and health management related factors.

According to McCormack and McCane (2006), PCC is considered from two approaches, that is, a systems model and a process model. Essentially, the systems model emphasizes the creation of a patient-centred environment in order to successfully implement PCC in the health care system, while the process model describes a range of activities essential for PCC. This study was based on the process model which focuses on structure, process and outcome, which comprises four basic constructs that focus on the attributes of the health care providers, which include:

(i) being professionally competent

(ii) having developed interpersonal skills

(iii) being committed to the job

(iv) being able to demonstrate clarity of beliefs and values; and knowing self.

The structure (care environment) focuses on the context in which care is delivered which includes: appropriate skill-mix, systems that facilitate shared decision making, effective staff relationships, organizational systems that are supportive, the sharing of power, the potential for innovation and risk taking, and the physical environment.

Person-centred processes focus on delivering care through a range of activities and include: working with patient's beliefs and values, engagement, having sympathetic presence, sharing decision making, and providing holistic care.

Outcomes, the central component of the framework, are the results of effective, person-centred care that include: satisfaction with care, involvement in care, feeling of well being, and creating a therapeutic environment. The relationship between the constructs of the framework is indicated by the pictorial representation displayed in Figure 1. To reach the centre of the framework (the outcomes), the basics (prerequisites) must first be in place in order to work with the care environment, to enable the delivery of effective care through the care processes.
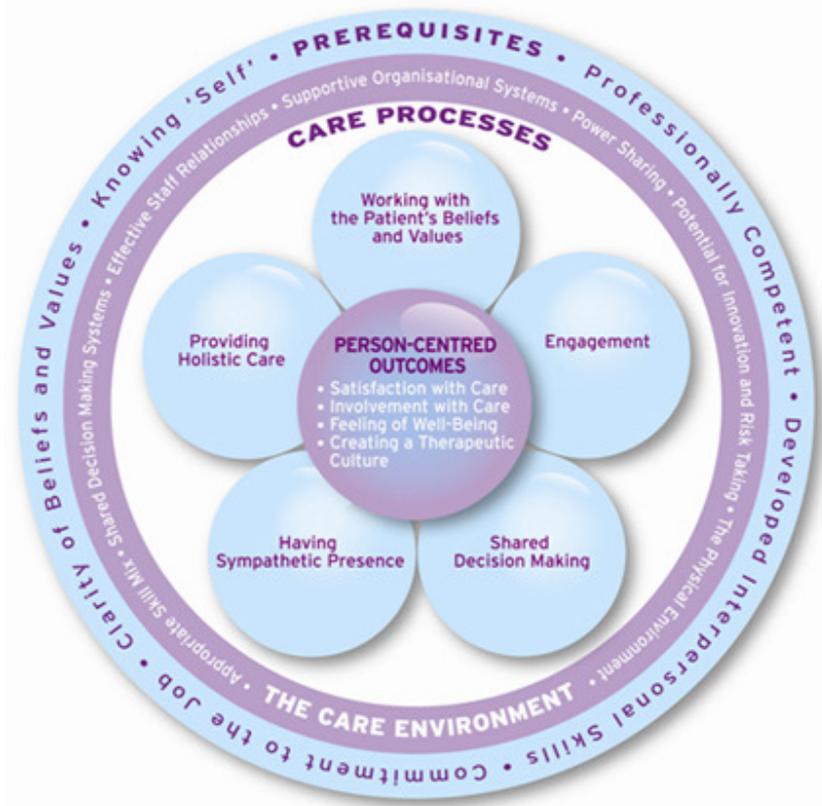
Figure 1: Person-Centred Nursing Framework (McCormack & McCance, 2010)

THE PERSON-CENTRED MODEL AS APPLIED TO THE STUDY

This model is appropriate to this study as it reveals some of the factors that enables or hinders health care providers to provide patient centred care. It is applicable to both Clinical officers and nurses in their respective duties. The Clinical officers use the patient-centred medical care while the nurses use the nursing process to give individualized nursing care. These health care providers are expected to assess the patients in order to elicit patient needs/health problems and provide appropriate interventions to identified needs/problems. The ability to care for the patient as a whole person is considered the essence of good healthcare practice in PCC and achieves better health outcomes. This model fitted well in this study as it supports holistic approach to patient care which upholds comprehensive patient assessment that includes both physical and mental aspects of health. The process model of this framework deals with the structure, process and outcome which in turn deal with identifying the factors that impact on person-centred care.

In relation to this study, the researcher conducted a research study to explore factors that affect ability of health care providers to detect mental health problems. The study noted that there is low ability among health care providers to detect mental health problems at PHC level. Most of the health care providers were not providing patient-centred care. It was also noted that in the health centres, health care providers no longer provide PCC as they only concentrate on the physical aspect of health. In addition, some health care providers were unable to provide PCC due to their inadequate knowledge in mental health, high workload with reduced average patient contact time and non-use of standardized guidelines in mental health as they are not available.

This model in this study also showed that motivation affects health care providers' ability to detect mental health problems. The mixed method of the study design enrolled health care providers who met the criteria to participate in the study, thus, helped to identify some factors that affect the ability to detect mental health problems and contributed solutions in solving their problems. They also agreed to have regular training or updates in mental health and to be provided with an easy to use, time friendly mental health guidelines or flow-chart. The model reveals that factors such as staffing, workload, time and motivation could be some of the enablers or barriers for PCC in a clinical setting.

1.4 JUSTIFICATION

CSO (2010) and Simenda (2012) revealed that there have been an increasing number of mental health problems in the Zambian population, however, Nurses and Clinical officers aspire to detect health problems and treat patients holistically.

In PHC, the holistic approach to patient care is essential in order to achieve better health outcomes (WHO & Wonca, 2008). To achieve this, health care providers apply the acquired health knowledge, skills and experience (Kringos et al., 2010) during their initial and in-service trainings in health service delivery. Therefore, all health care providers trained in Zambia, during their training cover a course component on mental health which includes detection, diagnosis and treatment of mental health problems (Msidi, 2010; Health Professional Council of Zambia, 2009) to equip them with knowledge and skills to detect mental health problems early. Currently what is happening is that Chainama Hills Hospital the only mental health institution receives mostly patients with marked psychiatric problems for further management. A study done by Mwape et al. (2010) in Zambia found that health care providers had inadequate knowledge in mental health. A year later, health care providers were given trainings to increase their knowledge base and skills to detect mental health problems (ZAMFOHR, 2011). However, information from LDCHO revealed that there is no report on minor mental health cases that were attended to in the period under review. Therefore, it was important to explore whether the trainings that have been established made any improvement in detection and management of mental health problems. If not, other strategies would be used to improve the ability of primary health care providers to detect mental health problems. It was also important to conduct this study in order to check on the trends overtime with a view of improving quality patient assessments and promoting better health outcomes.

This study, therefore, generated data that must be used as a basis for subsequent studies and reference for policy makers. The results have contributed to the existing body of knowledge on the factors affecting early detection of mental health problems. This is important as there is a worldwide concern that health care providers concentrate more on identifying physical conditions leaving out the mental aspect.

Furthermore, Ministry of Health and Ministry of Community, Mother and Child Health through the health care planners will use the study results to take into consideration the factors that are affecting the ability to detect mental health problems in finding strategies to motivate health care providers and improve service delivery. Health care providers will also use the study results to develop a responsible way of attending to patients as individuals with unique health needs. This consequently may benefit society as a whole as they will be attended to by qualified and skilled health care providers capable of providing patient centred care.

1.5 RESEARCH QUESTION

What factors impede the ability of health care providers to detect mental health related problems at PHC level?

1.6 OBJECTIVES OF THE STUDY

1.6.1 General objective

To explore factors impeding the ability of health care providers to detect mental health problems at primary health care level in Lusaka.

1.6.2 Specific objectives

The specific objectives for this study are to;

1. Assess whether level of knowledge influences the ability to detect mental health problems among health care providers.
2. Evaluate whether workload is associated with the ability to detect mental health problems.
3. Assess whether time spent per patient affect the ability to detect mental health problems.
4. Evaluate whether use of standardized guidelines affect the ability to detect mental health problems.

1.7 HYPOTHESIS

This study addressed the following hypotheses

1.7.1 Null hypothesis

There is no association between primary health care providers' ability to detect mental health problems at primary health care level and the following factors:

a. Knowledge
b. Use of standardized guidelines
c. Time
d. Workload

1.7.2 Alternative hypothesis

There is an association between primary health care providers' ability to detect mental health problems at primary health care level and the following factors:

a. Knowledge
b. Use of standardized guidelines
c. Time
d. Workload

1.8 VARIABLES

A variable is any characteristic that can be measured or categorized (Burns & Grooves, 2009:726). There are two major types of variables in this study namely; Independent and Dependent variable.

1.8.1 Dependent variable

This is a variable that is used to describe or measure the problem (core problem) under study (Burns & Grooves, 2009:726). In this study, the dependent variable was ability to detect mental health problems.

1.8.2 Independent variable

This is a variable that is assumed to cause or at least influence the problem (Burns & Grooves, 2009:726). In this study, independent variables include: knowledge, use of standardized guidelines, workload and time.

1.9 CONCEPTUAL AND OPERATIONAL DEFINITIONS OF TERMS

1.10.1 Conceptual Definitions

Ability is a term that describes the person that have appropriate professional status and characterizes their level of knowledge, competences, perception that correspond the requirement of performed tasks or solution of problems (Svedience, 2009).

Knowledge is the condition of expression of something with familiarity and understanding of a science gained through experience or association (Perry, 2009).

Standardized guidelines are diagnostic frameworks that educate and guide clinical decision-making and facilitate quick patient assessment (Bushnell, 2005).

Time is described as time spent in face-to-face contact with patient gathering information, and developing a relationship, doing administrative work related to patients' visits and maintaining health care provider knowledge base (Araya et al, 2005).

Health care provider workload is defined as a number of activities done by a trained health worker (Nurse, Clinical officer, Doctor) which include diagnosing and treating a variety of injuries and diseases that fall under the general practice category; diagnose patients by examining them and performing tests using medical equipment and instruments; after examining and testing patients, analyze these tests to determine the correct course of treatment or refer a patient to a specialist (Morgan, 2013).

1.10.2 Operational definitions

Knowledge in this study means having good understanding of the factors contributing to development of mental health problems, knowing cues relating to mental problems, knowing how to assess them, and knowing appropriate intervention to apply. Knowledge was measured by asking questions from question number 6 to 10 on knowledge section. The variable was categorized into high and low. The variable was given a total score of twelve (12).

Workload in this study means activities that are undertaken by a health care provider which include, history taking, patient assessment, diagnosing, prescribing treatment, giving treatment, counselling patient, and number of patients attended to per day Workload was measured by asking questions from question number 11 to 15 on workload section. The variable was categorized into overload and normal load. The variable was given a total score of twelve (12).

Time in this study means amount of time spent attending to each patient carrying out activities such as history taking, clerking patient, doing physical examination and mental state examination, such as, 10 – 15 minutes, 16 – 20 minutes, 20 – 25 minutes or 26 – 30 minutes. Time was measured by asking questions from question number 16 to 20 on time section. Time was categorized as adequate or inadequate and with a total score of twelve (13).

Standardized guidelines in this study mean use of standardized guidelines or health assessment tools in detecting mental health related problems. Standardized guideline was measured by asking questions from question number 22 to 24 standardized guidelines section. The variable was measured using "Use of standardized guidelines, or Non use of standardized guidelines". Standardized guideline was given a total score of nine (7).

Ability to detect mental health problem in this study means being able to detect mental health related problems in the patients those health care providers attend to during their work shifts. Ability to detect mental health problems was measured using the total score of all the questions on knowledge, standardized guidelines and question 17 on time which was 24 scores. The variable was categorized into "able to detect" and "Not able to detect".

1.10 VARIABLES, CUT-OFF POINT AND INDICATORS

Table 1: Table showing variables, cut-off points and indicators.

VARIABLE	INDICATOR	CUT-OFF POINT	QUESTION No.
<u>DEPENDENT</u> Ability to detect mental health problem	Able to detect	Scores 13 to 24 in all the selected questions	6 – 10, 17, 22 - 24
	Not able to detect	Scores 0 to 12 in all the questions	
<u>INDEPENDENT</u> Knowledge	High	Scores 8 to 12 in questions on knowledge	6 – 10
	Low	Scores 0 to 7 in questions on knowledge	
Workload	Overload	Scores 8 to 12 in questions on workload	11 – 15
	Normal workload	Scores 0 to 7 in questions on workload	
Time	Adequate time	Scores 7 to 13 in questions on time	16 – 20
	Inadequate time	Scores 0 to 6 in questions on time	
Standardized guidelines	Use of standardized guidelines	Scores 4 to 7 in questions on standardized guidelines	22 – 24
	No use of standardized guidelines	Scores 0 to 3 in questions on standardized guidelines	

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CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

Literature review is a broad, comprehensive in-depth, systematic and critical review of scholarly publications, unpublished scholarly print materials, audio-visual materials and personal communications (Polit & Beck, 2008:165). The purpose of literature review was to establish what is known about the topic and to identify if there are gaps in the existing literature. The review focused on studies conducted on the factors that affect the ability to detect mental health problems at PHC level and other related variables. Sources of literature included books, articles from peer reviewed journals using search engines; Hinari, PubMed, and Google scholar. The literature review on factors affecting the ability to detect mental health problems was arranged in such a way that they focused on variables of the study. This served as a convenient way of organizing the work in building answers to the research question.

2.2 ASSESS WHETHER LEVEL OF KNOWLEDGE INFLUENCES THE ABILITY TO DETECT MENTAL HEALTH RELATED PROBLEMS AMONG HEALTH CARE PROVIDERS.

Knowledge refers to acquisition or awareness of facts, data, information, ideas or principles to which one has access through formal or individual study, research, observation, experience or intuition (Perry, 2009). Knowledge encompasses the skills, experiences and insights of practicing health care providers applied to maintain or improve their practice (Prince et al, 2009). Health care providers need to have knowledge in mental health and mental ill health. In addition, health care providers need to use their communication skills such as interviewing and observational skills to obtain all the necessary information in order to detect mental health problems (Bushnell, 2005). The study by Ndetei et al. (2011) in Kenya revealed that acquired knowledge in mental health set up a base for health care providers to detect and treat mental health problems in general health facilities. The study further found that health care providers had inadequate knowledge in mental health.

Similarly, in a related study by Olawale et al. (2010) on challenges facing primary health care setting in Nigeria on detection of mental health problems revealed that health care providers had inadequate knowledge on mental health problems. Furthermore, Prince et al. (2009) reiterated that the burden of mental health problems is likely to be underestimated as a consequence of the inadequate recognition of the connection between mental and physical health. However, Cowan et al. (2012) argue that health care providers have knowledge in mental health but fail to utilize it during patient assessment.

Furthermore, Kazlauskas et al. (2005) emphasized that primary health care providers need to have knowledge in mental health and to use it to detect mental health problems early in patients in order to reduce complicating into major mental health problems thereby enhance better health outcomes. Ndetei et al. (2011), therefore, supports Mwape et al. (2010)'s notion when stating that it was important that health care providers should have knowledge in mental health to provide mental health care and ensure a thorough patient assessment or examination in order to meet patient health needs holistically.

2.3 EVALUATE WHETHER WORKLOAD IS ASSOCIATED WITH THE ABILITY TO DETECT MENTAL HEALTH RELATED PROBLEMS.

Workload is the amount of work an individual has to do in a particular job or area (Carayon and Gurses, 2007). There are limited studies on workload in relation to detection of mental health related problems in particular, however, a study by Curationis (2005) assumes that change in workload ultimately affect performance of workers. The study further revealed that workload could be an opportunity for the workers to learn and develop skills more quickly. However, Carayon and Gurses, (2007) reiterated that as workers do their work they gain more work-experience which enrich their exposure. It is also viewed that workers who have enough work to do remains more active and energetic while work-less workers are inactive and lazy. Carayon and Alvarado, (2007) further argue that workers who possess the capabilities to perform a task enjoy workload. However, when this workload becomes excessive the individuals perceive that they do not possess necessary skills and abilities required to do some tasks (Curationis, 2005).

A study by Carayon and Gurses (2005) further revealed that factors such as large numbers of patients and other health care provider responsibilities work against provision of holistic quality care according to the expectation.

Furthermore, Curationis (2005) in South Africa revealed that most of the health care facilities have suffered shortages of health workers for some time now and this has seemingly increased workload. Curationis, 2005) further recommended that improved health outcomes must be accompanied by adequate staffing and this is in agreement with Coopers (2006) when stating that heavy workload may result from staff shortage.

2.4 ASSESS WHETHER TIME SPENT PER PATIENT AFFECT THE ABILITY TO DETECT MENTAL HEALTH RELATED PROBLEMS.

Health care providers spend minimal amount of time on assessing patients for physical conditions than required for mental health problems (Araya et al, 2005). Lack of adequate time for health care providers to properly assess patients might influence their ability to detect mental health problems. Schreuders et al. (2012) assume that the reason for not thoroughly screening patients in both physical and mental aspect is that it might be difficult and time consuming for the health care providers. The study further revealed that quality assessment or screening of patients is often hindered due to shortages in health care providers, and time compromised with an extremely average numbers of patients. Furthermore, Asibongi et al. (2010) stresses that adequate time to assess or screen patients according to WHO requirement is pertinent because literature shows better health outcomes to be highly compromised, yet still highly required (WHO & Wonca, 2008). However, Schreuders et al. (2012) further argues that reduced time spent per patient may lead to health care providers to only concentrate on the physical aspect of health that requires shorter consultation time.

In a related study Scheppers et al. (2006) also revealed that GPs did not spend enough time to assess patients with mental health problems according to WHO stipulations probably because they have more time constraints on their schedule. In a health care setting where the average patient visit lasts 15 minutes due to demands as health care providers attend to high numbers of patients per day, many health care providers have to cut down on time they can spend with their patients therefore compromise the quality of service delivery (WHO & Wonca, 2008).

However, this does not have to be always this way, it was possible to attend to more patients in less time and still be an effective health care provider as noted by Curationis (2005) who revealed that workload could be an opportunity for the workers to learn and develop skills more quickly.

2.5 EVALUATE WHETHER USE OF STANDARDIZED GUIDELINES AFFECT THE ABILITY TO DETECT MENTAL HEALTH RELATED PROBLEMS.

Standardized guidelines are diagnostic frameworks that educate and guide clinical decision-making and facilitate quick patient assessment (Bushnell, 2005), and they also ensure quality of care during patient management (Asibong et al, 2010). Therefore, non-use of standardized guidelines may affect the ability to detect mental health problems because protocols might facilitate quick and prompt assessment of patients. Studies by Schreuders et al. (2012) and Von Korff et al. (2009) revealed that about a third of patients presenting in primary care facilities often present to the health care providers with sub-threshold disorders featuring a confusing blend of psychological and physical symptoms. Therefore, this calls for an approach that will facilitate quick assessment of each patient. Asibongi et al. (2010) recommended that accurate recognition of mental health problems in a patient is essential for specific diagnosis and successful management. Hence, there is need to use an easy tool for screening and identification of psychopathologies especially in a busy clinic setting. Prince et al. (2007) also revealed that standardized guidelines for detecting mental health related problems has been developed by Goldberg in 1970s and is supported by research (Prince et al., 2007).

In the last decade, new and ever evolving research involving the format, design and construction of standardized guidelines for mental health problem identification have been developed in UK (Kringos et al., 2010; National Institute on Alcohol And Alcoholism (NIAAA), 2005). In addition, General Health Questionnaire (GHQ) health screening tool (Cape et al., 2003) helps health care providers to identify probable cases of psychological morbidity. The study further indicated that practice nurses' threshold for detection was low rating to 12% of patients as experiencing psychological problems compared to 26% probable cases identified by using GHQ. Although there have been several suggestions to improve early detection of mental health problems, none of these suggestions have enhanced early detection (Croudance et al., 2008).

A study by Bones et al. (2006) revealed that there is not sufficient research suggesting using standardized guidelines could derive diagnosis as the standard as health care providers were not able to correctly identify specific mental health problems most prevalent in primary care practice.

Consequently, Prince et al. (2007) revealed that standardized guidelines or health screening tools such as GHQ heighten suspicion of the presence of psychological disorders and make it easier for health care providers to identify which cases may qualify as mental health problems. Furthermore, Prince et al. (2007) recommended that use of screening tools in primary care setting will not only be helpful in case detection, but reduce to some extent problems of recurrent consultations and time spent, unwarranted investigations, inappropriate referrals or treatments and chronicity of symptoms. This was a clear indication that health care providers should use standardized guidelines to ensure early detection and intervention of mental health problems.

2.6 CONCLUSION OF LITERATURE REVIEW

Although literature seems to say it is difficult to detect mental health related problems early due to inadequate knowledge in mental health, inadequate time spent per patient, high workload and non-use of standardized guidelines in mental health, the detection rate was very low. The literature reviewed indicate that there are some factors impeding the ability to detect mental health related problems by health care providers that include attitude and motivation that have been considered. In Zambia, despite all the efforts put in place by MoH and LDCHO to improve early detection of mental health problems in primary health care settings, patients still pass undetected. Health care providers are expected to identify and assess the mental health needs of patients and manage the common mental disorders within primary care.

<div align="center">**CHAPTER THREE**</div>

3.0 METHODS

3.1 INTRODUCTION

This chapter presents research methods which are steps, procedures, and strategies for gathering and analyzing the data in a study (Polit & Beck, 2008:167). According to Creswell (2009) the purpose of the methods chapter is to communicate to the readers exactly what was done to answer the research questions. This chapter covers the following sections; research design, research setting, study population, inclusion and exclusion criteria, sampling method and sample size, data collection tools and techniques, pilot study and ethical considerations.

3.2 RESEARCH DESIGN

Research design is an overall plan for collecting and analyzing data, including specifications for enhancing the internal and external validity of the study. The design provides answers to the research questions and tests the research hypothesis. It spells out the basic strategies that may be adopted to develop information that is accurate and interpretable (Polit & Beck, 2008:168). This study used a mixed method design with quantitative and qualitative approaches. It was quantitative because it involved collection of data at one point in time using structured interview. It was also qualitative because it used the Focus Group Discussions (FGDs) to collect data. This enabled the researcher to produce a richer and more insightful analysis of factors impeding the ability of health care providers to detect mental health problems and increase validity of the study. It provided an account of factors as it showed the cause and effect relationship between variables which impede ability of health care providers to detect mental problems in Lusaka district.

3.3 RESEARCH SETTING

Research setting is the physical location and conditions in which data collection takes place (Burns & Groove, 2009:726). The study was undertaken in Lusaka District Community Health Centres (LDCHC).

There are 28 Health Centres which provide primary health care services to more than 2,198,996 total population (CSO, 2010). The services are provided in all the departments of the health centres where health care providers work, such as Out-patient, In-patient, Antenatal, TB/HIV/AIDS units. The study was done in the four (4) health centres of which each one is a sub-district and is a first referral health facility.

3.4 STUDY POPULATION

According to Polit and Beck (2008:168), study population is the entire number of units under study. The study population included all the health workers in the selected health centres. In this study, the target population consisted of Clinical Officers, Nurses and In-charges in LDCHC that provide primary health care services as part of their work. The target population is the total group of individuals or people or things meeting the designated criteria of interest to the researcher (Treece & Treece, 2002:215).

3.5 INCLUSION AND EXCLUSION CRITERIA

Eligibility criteria are characteristics that delimit the population of interest (Polit & Beck, 2008:169). As highlighted under study population health care providers working in the selected clinics form the target population from which participants were selected. Therefore, eligibility criteria helped to make decisions about whether a person would be classified as a member of the population in question.

Inclusion criteria included all health care providers;

    a. Trained in Zambia (Clinical officer, nurse and In-charge)
    b. Given consent
    c. Had been working in the selected health centres for more than three months
    d. Present at the time of data collection.

Exclusion criteria included;

    a. Health care providers who trained outside Zambia
    b. Those who had specialty training in mental health.

3.6 SAMPLING METHOD

Sampling is a process of selecting participants, events, behaviors or elements for participation in a study (Burns & Grooves, 2009:170). There are about 285 health care providers in the target population, that is, 38 clinical officers, 20 In-charges and 227 nurses. For this study, two sampling methods were used, purposive and simple random sampling methods.

Purposive sampling technique is a non-probability sampling method which does not specify the chances that any person or unit on whom the study is based will be included in the sample (Burns & Grooves, 2009:170). It also involves using own judgment to achieve a specific purpose. According to Treece and Treece (2002) this method is commonly used in small-scale surveys because it is suitable when the intention is not to make statistical generalizations to any population except the sample studied. Purposive sampling was used to select the Clinical officers, In-charges and health centres.

Out of the 28 health centres, four (4) health centres were selected using purposive sampling method because they were sub-districts with bed capacity of at least 30 each, attend to fifty or more patients per day, and had more than fifty health care providers (Nurses and Clinical officers). In-charges and Clinical Officers from the four selected health centres were also selected by purposive sampling method with the help of the Nursing officer as a key individual because they provided more required information.

Simple random technique which is a probability sampling method which specifies the chances that any person or unit on whom the study is based will be included in the sample (Treece & Treece, 2002:120), was used to select the nurses. Simple random technique using a rotary method was used to select nurses working in the selected health centres to participate in the study because their population was more than the required number. Names of nurses were written on pieces of paper that were folded, placed in a container, and well mixed where the required number of nurses was picked by the Nursing officer.

3.7 SAMPLE SIZE

Sample size is a smaller part of the population selected in such a way that the individuals in the sample represent the characteristics of the population (Burns & Groves, 2009:176). The sample size was calculated using Krejcie and Morgan formula (1990), which is also recommended when dealing with limited population size. The population size for this study was 285 health care providers.

The sample size was calculated using Krejcie and Morgan formula as follows;

S= $\underline{X^2NP\ (1-P)}$

   d^2 (N-1) + X^2P (1-P)

Where;

- ▶ S = Required sample size
- ▶ X^2 = Degree of freedom at the desired confidence level (1.96^2 = 3.8416)
- ▶ N = Accessible study population size (285)
- ▶ P = Population proportion (assumed at 0.50)
- ▶ d = Degree of accuracy (assumed at 0.05)

Therefore, S = $\underline{X^2\ NP\ (1-P)}$

$\qquad\qquad$ d^2 (N-1) + X^2 P (1-P)

$\quad$ S = $\underline{3.8416(285)\ x\ 0.50\ (1\text{-}.0.50)}$

$\qquad\quad$ 0.0025 (285-1) + (3.8416) (0.50) (1 - 0.50)

$\quad$ S = 163.8613505747

$\quad$ **Total sample size was 164**.

The sample size was 164 health care providers composing Nurses (106) who were randomly selected; In-charges (20) and Clinical Officers (38) who were purposively selected.

The study had n= 12 (7.3%) of non-response rate leaving n= 152 (92.7%) as the participants of this study, and the final sample size was adjusted from 164 to 152. The Confidence interval was

set at 95%. A 5% level of significance (P-value 0.05 or less) was considered statistically significant.

3.8 DATA COLLECTION TOOLS

A data collection tool is a measuring device used in gathering information needed to address a research problem (Polit & Beck, 2008:200; Burns & Grooves, 2009:726). Structured interview was used in this study to collect data from the participants containing both closed ended and open ended questions which were used to collect quantitative data. Focus Group Discussion was also used to collect qualitative data which used open ended questions to elicit detailed responses.

3.8.1 Structured Interview

Structured interviews involve collecting data using a structured interview schedule (Polit & Beck, 2008) which comprise of closed responses with possible answers to each question. The tool was chosen because questions could be asked orally in either face-to-face or telephone format and as a questionnaire when the participants complete the instrument themselves in a paper and pencil format. The response rate tends to be high in face-to face interview (Treece & Treece, 2002). In addition, the face-to-face interaction between the investigator and the participant in an interview enhanced the quality of the data collected because it is possible to judge the reliability and the seriousness of the attention the participant offer to the exercise (Polit & Beck, 2008). In this study, the structured interview schedule was used as a questionnaire because the participants were literate and the response rate was high hundred percent.

3.8.2 Focus Group Discussion

Focus Group Discussions (FGDs) are semi-structured group interactions conducted with the aim of obtaining information on a selected topic (Polit & Beck, 2008:260). The focus group discussion guide with open-ended statements was used to direct the discussions. In this study, three (3) FGDs were conducted involving the In-charges of departments/units in the selected health centres. In-charges from the four selected health centres were nominated with the help of the Nursing officer as a key individual and the nominees were familiar with the topic, known for their ability to respectfully share their opinions, and willing to volunteer about 2 hours of their time. The group of viable nominees was established, and each one was called to confirm interest

and availability. The times and locations were given to the nominees of the focus groups and verbal confirmation was secured. They were informed of a written confirmation and call to remind them two days before the scheduled group. The FGDs were conducted with not less than 6 but not more than 8 participants and took between 45 – 90 minutes according Creswell (2009). Radio cassette recorder and note pad were used to record and take note of all the points that were raised during the FGDs. The FGDs were conducted at a centrally located health centre.

3.8.3 Trustworthiness

Trustworthiness of this study was maintained by using the strategies of credibility, transferability, dependability and conformability (Neuman, 2006:20). Trustworthiness is a term used in the evaluation of qualitative data and was coined by Lincoln and Guba in 1985 (Polit & Beck, 2008). To ensure confidence in the truth of the data collected, (credibility), structured interview and focus group discussions were used to collect data to address a research problem. Data analysis was carried out by the principal researcher. Transferability refers to the extent to which the findings can be transferred to other settings (Polit & Beck, 2008:225). To enhance transferability of the research results a complete description of the methodology including literature review was done. Narratives from the focus group discussions have been included in the analysis to illustrate and substantiate the quantitative data. Dependability refers to the stability of data over time (Meyrick, 2006). To increase dependability of the qualitative findings, the researcher consulted current literature on the subject. To enhance conformability, the investigator developed a systematic collection of materials and documentation that would allow an independent auditor to come to conclusions about the data. In addition, the researcher's interpretations were scrutinized by the Research Supervisor. Conformability refers to the objectivity or neutrality of the data (Polit & Beck, 2008:230).

3.8.4 Validity and reliability

The reliability and validity of an instrument are not totally independent qualities. A measuring device that is not reliable cannot possibly be valid.

Therefore, for validity and reliability to be assured, and the findings to be justifiable, the researcher demonstrated an accurate context representative of the group under study in relation

to the phenomena being investigated. As advised by Polit and Beck (2008) and Burns and Grooves (2009), the details of how validity and reliability was achieved was done by conducting a pilot study to pre-test the research instruments. The instruments were able to bring out the accurate information and when the instrument is used after sometime, it should obtain the same response.

3.8.4.1 Validity

Validity is seen in the extent to which the data collection instrument measures what it is intended to measure (Polit & Beck, 2008:225). Validity has to do with truth, strength and value. Validity of the instruments was derived from the literature reviewed, the investigator's personal observations and from consultation with others who are experts on the content involved. Experts in the field of Mental Health were requested to evaluate the structured interview schedule and FGD guide to determine whether the items included in the tools were the appropriate ones. The research instruments were also reviewed by the researcher's supervisor. The responses of the participants were verified, for instance, at the end of each FGD to confirm on what they said.

3.8.4.2 Reliability

Reliability is attained when the data collection instrument shows consistency and stability determined between two sets of scores or judges and gives a high correlation (Polit & Beck, 2008:225). The more reliable a measuring instrument is, the more confident it can show that the scores obtained would not fluctuate greatly with repeated administration of the instrument. Therefore, reliability can be equated with the stability, consistency or dependability of a measuring tool (Meyrick, 2006). Reliability was increased by triangulation, that is, use of two or more theories, methods, data sources, investigators or analysis methods in a study (Burns and Grove, 2009). It usually involves combining qualitative and quantitative research methodologies. The purpose of using triangulation was to provide a basis convergence on the truth. In this study for instance, data from the focus group discussions were compared with data from the structured interview questionnaire.

3.9 DATA COLLECTION TECHNIQUES

This is a procedure of collecting data or information needed to address a research problem (Polit & Beck, 2008:232). The investigator used a structured interview (questionnaire) and focus group discussions guide as data collection techniques. For the structured interview (questionnaire), the questionnaires were given to the participants in the selected health centres for them to answer. The purpose of the study was explained to the participants and permission was sought from the participants so that they could participate in answering the questionnaire. Confidentiality was maintained by ensuring that no names were written on the questionnaire, instead numbers were used.

For the focus group discussion, three FGDs were conducted at a centrally located health centre in a room that had a door for privacy, table and chairs to seat a circle of up to 8 people (6 participants and the moderator and assistant moderator). This was a conducive environment where participants were free, safe and comfortable to share their perspectives with others. Two research assistants were engaged to act as recorder and time keeper respectively and the researcher was the facilitator. The researcher and research assistants introduced themselves to the participants. The participants were also given chance to introduce themselves. Introduction of the research team, topic of the discussion, and the purpose of the study were explained. The information sheet was distributed to all participants to read. They were encouraged to ask questions if they needed clarifications. A consent form was then distributed for them to make a mark on if they were willing to participate. Demographic data was also obtained and other attributes important for correlation with focus group findings. Permission was asked from participants to record the discussion using a tape recorder and to take notes and confidentiality was assured. Using the focus discussion guide, the discussion commenced with lighter questions and gradually to advanced ones. Views that needed clarification were further explored during the discussion.

Each participant was given a chance to express his/her views freely to ensure that every one participates in the discussion. Each Focus Group Discussion took 45 to 60 minutes. At the end of the discussion, participants were thanked.

The structured interview questionnaire, tapes and note books were kept locked at all times and only accessible to the principal investigator in line with Polit and Beck (2008). A password was created for the data that was entered into the computer to limit accessibility to the principal investigator.

3.10 PILOT STUDY

Pilot study is the collection of data prior to the experimental intervention or the trial administration of a newly developed instrument to identify flaws or assess time requirements (Polit & Beck, 2008:230). According to Treece and Treece (2002), a pilot study was done to assess the predictability of data collection tool and to assess the feasibility of the study in order to make necessary adjustments to the structured interview schedule and focus group discussion guide. The pilot study also assisted to identify any part of the instrument that was difficult to understand or misinterpreted by the participant; to determine clarity of the instrument; to determine whether the sequencing of questions is effective; to determine acceptability of questions and willingness to respond or answer questions; to detect any errors in the structured interview schedule the main study; and to assess the appropriateness and clarity of questions.

The pilot study for the data collection tools was carried out in one of the health centres in Lusaka district other than the health centres selected for the study using 10% of the study population having characteristics similar to those of the target population. It consisted of sixteen (16) participants (which was 10% of the actual study population). The research instruments yielded the required data and there were no adjustments made.

3.11 ETHICAL CONSIDERATIONS

Ethics is defined as a system of moral values that is concerned with degree to which research procedures adhere to professional, legal and social responsibilities to the study participants (Burns & Grooves, 2009:750).

Therefore, ethical approval was sought from ERES CONVERGE IRB to conduct the study. Permission was also sought from the LDCHC in order to gain access to health facilities that participated in the study.

On accessing the selected facilities, permission was obtained from the person in-charge. Furthermore, consent was also sought from Nurses, Clinical Officers and In-charges who were participants.

Confidentiality and anonymity was maintained by avoiding indicating any names on the structured interview questionnaires. Code numbers were instead used in line with Polit and Beck (2008). Confidentiality regarding information that was obtained from the FGDs and structured interview was maintained.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

This chapter presents both quantitative data derived from structured interview, qualitative data from focus group discussion and analyzed data. Data analysis is defined as the systematic organization and synthesis of research data and testing of the research hypothesis using the data (Polit & Beck, 2008:220).

4.2 QUANTITATIVE DATA

4.2.1 ANALYSIS OF QUANTITATIVE DATA

Following data collection, each day data were sorted out and checked for internal consistency, completeness, legibility and accuracy. Data was put in categories and were then assigned numerical codes (1, 2,...). The codes were then entered and analyzed using SPSS version 20. A Chi-square test was used to test the association between ability to detect mental related problems and knowledge in mental health, staff workload, time spent per patient, use of standard guidelines in mental health. Binary logistic regression was used to control confounding variables and to adjust confounders. The cut off point for statistical significance was set at five percent. Therefore only p-value of less than or equal to 0.05 was considered to be statistically significant thereby rejecting the null hypothesis.

4.2.2 PRESENTATION OF QUANTITATIVE DATA

The findings of this study were presented as demographic data; knowledge in mental health; staff workload; time spent per patient and use of standardized guidelines in mental health. The findings have been presented in tables which summarize the findings in meaningful ways thus giving better understanding. Cross tabulations are helpful in showing relationships between variables. Section A represents the demographic characteristics of the respondents, section B represent the respondents' knowledge in mental health, section C represent the respondents' workload and section D represent the respondents' average time spent per patient while section E

represent respondents' utilization of standardized guidelines. The cross tabulations in section F represent the relationship between variables.

SECTION A: Demographic Characteristics

Section A consists of the respondents' demographic characteristics which include sex, age, profession, training institution and length of service. The demographic characteristics have been presented in Table 2.

Table 2: Demographic Characteristics (n = 134)

Sex	Frequency	Percent
Male	29	21.6
Female	105	78.4
Total	**134**	**100.0**
Age range		
20 – 30 years	20	15.0
31 – 40 years	42	31.0
Above 40 years	72	54.0
Total	**134**	**100.0**
Profession		
Clinical Officer	28	20.9
Nurse	106	79.1
Total	**134**	**100.0**
Training Institution		
Chainama College of Health Sciences	28	21.0
Government owned Nursing Schools	30	22.4
Mission Owned Nursing Schools	66	49.2
Private Owned Nursing Schools	10	7.4
Total	**134**	**100.0**
Length of service		
3 months – 1 year	5	3.7
2 – 6 years	38	28.4
7 – 11 years	19	14.2
12 years and above	72	53.7
Total	**134**	**100.0**

Table 2 shows that majority of the respondents 105(78.4%) were females, (79.1%) were in the nursing profession, and 72(53.7%) had length of service 12 years and above.

SECTION B: Knowledge level in mental health

This section shows knowledge levels in mental health and data in this section is presented as high knowledge level and low knowledge level.

Table 3: Received training in mental health (n = 134)

Received training in mental health	Frequency	Percent
Yes	50	37.3
No	84	62.7
Total	**134**	**100.0**

Table 3 shows that majority of the respondents 84(62.7%) did not receive training, while, 50(37.3%) received training in mental health.

Table 4: Training improved ability to detect mental health problems (n = 134)

Training improved ability to identify mental health problems	Frequency	Percent
Yes	50	37.3
No	84	62.7
Total	**50**	**100.0**

Table 4 shows that majority of the respondents 84(62.7%) had no improvement in their ability to identify mental health problems, whereas, 50(37.3%) who received training had their ability improved.

Table 5: Common mental health problems identified (n = 134)

Common mental health problems identified	Frequency	Percent
Sleep disorders	6	12.0
Drinking problems	18	36.0
Stress related problems	26	52.0
Total	**50**	**100.0**

Table 5 shows that majority of the respondents 26(52%) who said stress related problems were common while, 6(12%) said sleep disorders were common mental health problems reported.

Table 6: Management of identified patients with mental health related problems (n = 134)

Management of identified patients	Frequency	Percent
Refer to mental health specialist	83	61.9
Prescribe treatment	2	1.5
Counsel patient	49	36.6
Total	**134**	**100**

Table 6 shows that majority of the respondents 83(61.9%) refer to mental health specialist, while, 2(1.5%) prescribe treatment.

Table 7: Need for regular training in mental health (n = 134)

Need regular training in mental health	Frequency	Percent
Yes	129	96.3
No	5	3.7
Total	**134**	**100.0**

Table 7 above shows that majority of the respondents 129(96.3%) needed regular training while, 5(3.7%) do not need regular training in mental health.

Section C: Staff workload

This section comprises the respondents' workload when on duty. The data in this section is presented in a pie chart and tables.

Table 8: Number of health care providers per shift (n = 134)

No. of health care providers per shift	Frequency	Percent
1 per shift	12	9
2 per shift	86	63.4
3 or more per shift	37	27.6
Total	**134**	**100**

Table 8 shows that majority of the respondents 86(63.4%) were 2 per shift and 12(9%) were 1 per shift.

Table 9: Average no. of patients attended to per shift (n = 134)

Average no. of patients attended to per shift	Frequency	Percent
10 – 20 patients	9	6.7
21 – 30 patients	24	17.9
31 patients and above	101	75.4
Total	**134**	**100**

Table 9 shows that majority of the respondents 101(75.4%) were attending to 31 patients and above per shift and 12 (12%) were attending to 10-20 patients per shift.

Table 10: Type of work done when on duty (n = 134)

Type of work done when on duty	Frequency	Percent
Patient care only	38	28.4
Both patient care and other responsibilities	96	71.6
Total	**134**	**100.0**

Table 10 shows that majority of the respondents 96(71.6%) were doing both patient care and other responsibilities, and 38(28.4%) were doing patient care only.

Table 11: Need for assistance when on duty to finish the work (n = 134)

Need assistance	Frequency	Percent
Yes	130	97
No	04	03
Total	**134**	**100**

Table 11 shows that majority of the respondents 130(97%) need assistance to finish their work when on duty and 4(3%) did not.

Staff workload (n = 134)
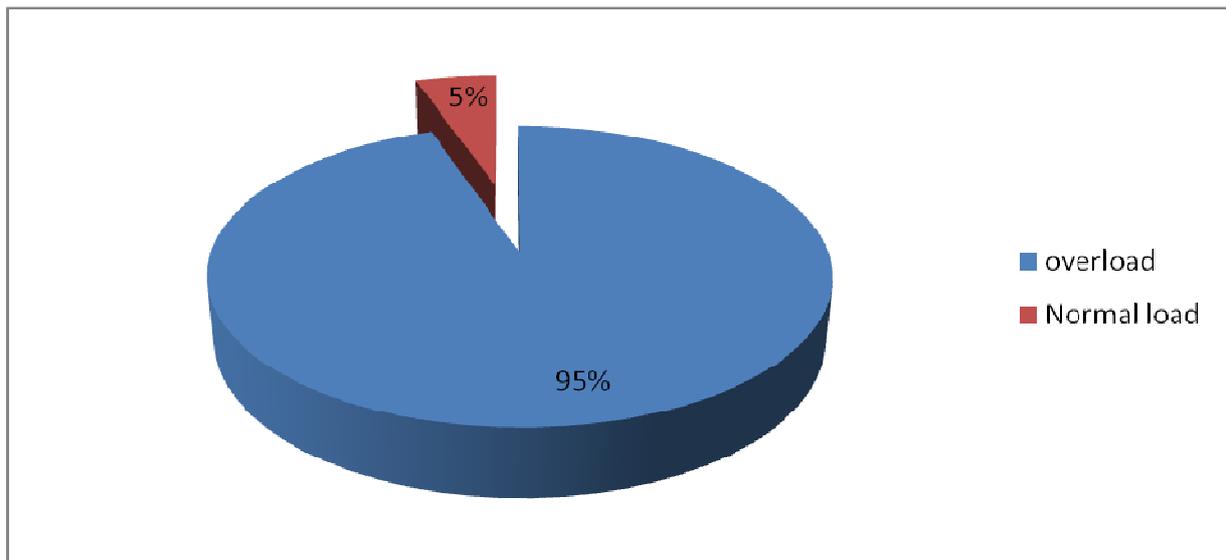
Figure 2 shows that majority of the respondents 93(95%) who had work overload, whereas, 7(5%) had normal workload.

SECTION D: Time spent per patient

This section comprises the respondents' average time spent on each patient. Data in this section is presented in pie charts and table.

Average time in hours spent per shift (n = 134)
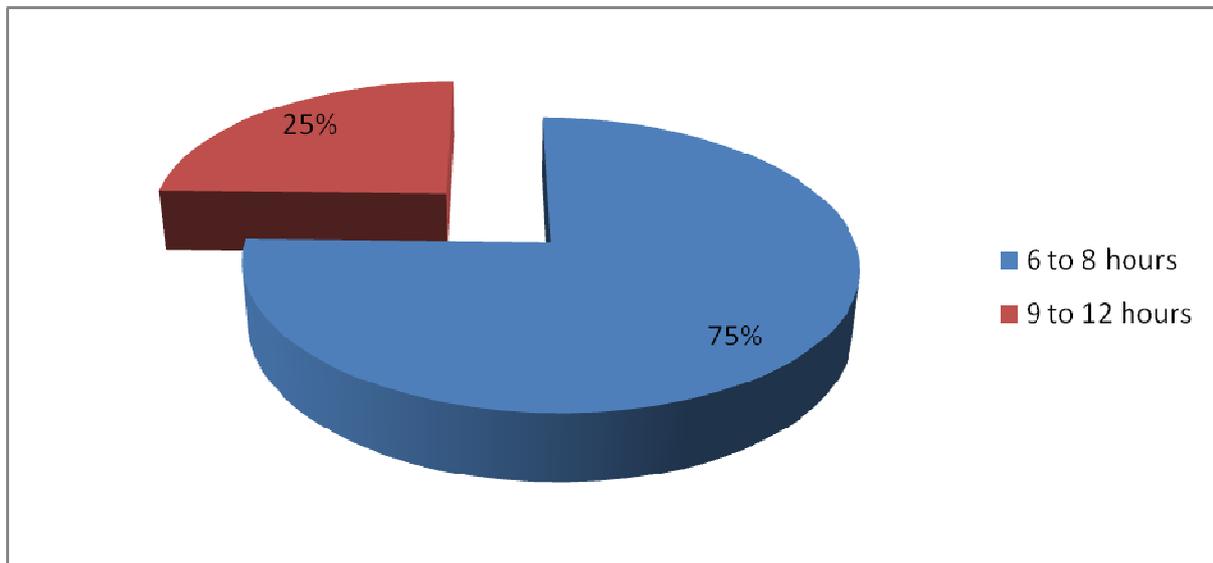
Figure 3 shows that majority of the respondents 67(75.4%) spend 6 to 8 hours, while, 33(24.6%) spend 9 to 12 hours per shift.

Table 12: Average time spent per patient (n = 134)

Average time spent on each patient when clerking the patient	Frequency	Percent
5 to 15 minutes	95	79.9
16 to 25 minutes	30	22.4
26 to 30 minutes	9	6.7
Total	**134**	**100**

Table 12 shows that majority of the respondents 95(79.9%) spend 5 to 15 minutes and 9(6.7%) spend 26 to 30 minutes per patient when clerking the patient.

Table 13: Type of patients where more time is spent on (n = 134)

Type of patients more time is spent on	Frequency	Percent
On first visit	67	50.0
On subsequent visit	2	1.5
On both visits	65	48.5
Total	**134**	**100**

Table 13 shows that majority of the respondents 67(50%) said they spend more time on patients on first visit and 65(48.5%) spend more time on both type of visits.

Time spent per patient also adequate to assess the mental aspect of the patient (n = 134)
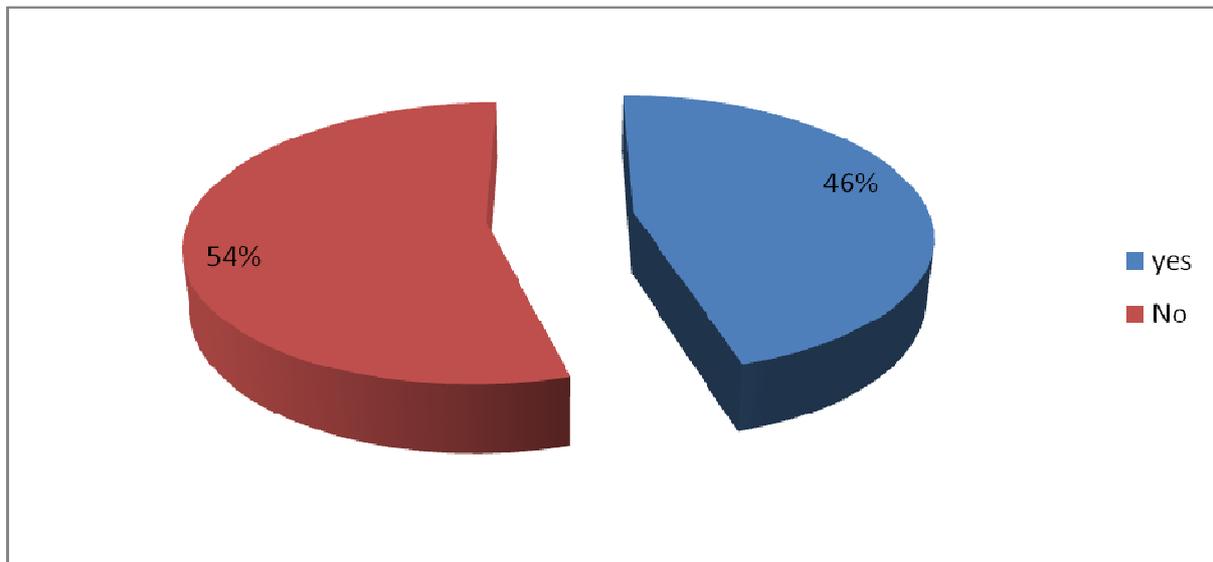
Figure 4 above shows that more than half of the respondents 73(54.5%) said time spent per patient was not adequate also to assess the mental health aspect of the patient, while, 61(45.5%) said time was adequate.

Adequate time needed to spend with a patient manifesting psychological symptoms (n = 134)
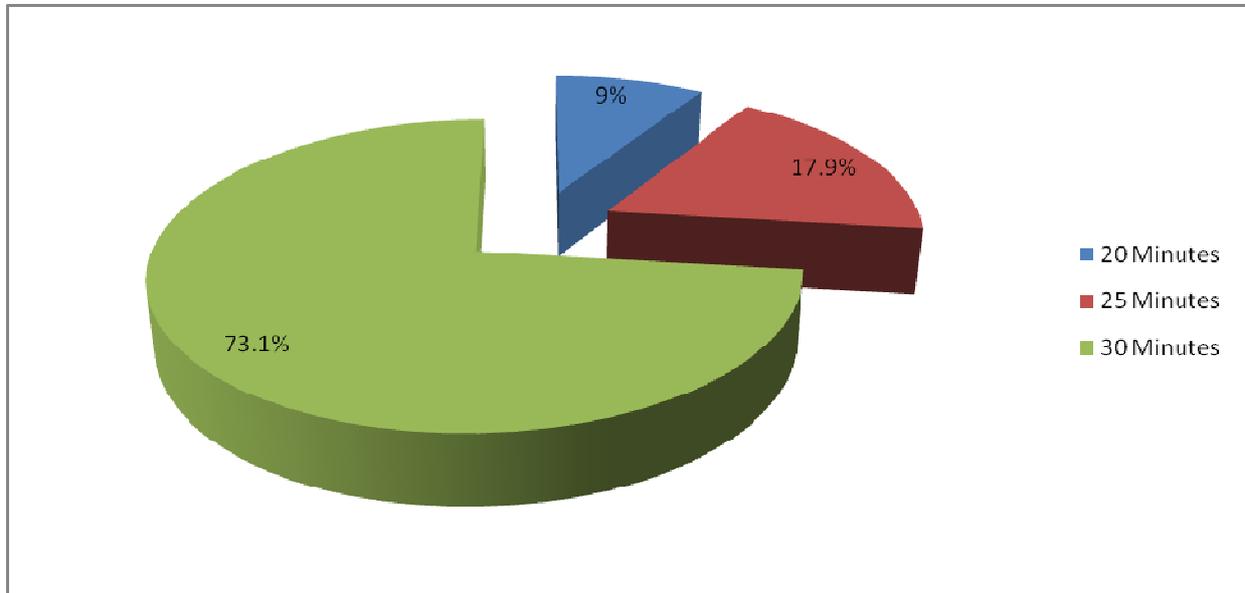
Figure 5 shows that majority of the respondents 98(73.1%) said 30 minutes was the adequate time to spend with a patient manifesting psychological symptoms, while, 12(9%) said 20 minutes was adequate.

SECTION E: Use of standardized guidelines

The data in this section is presented in pie charts and tables.

Table 14 : Use of any health screening tools when assessing health needs of patient (n = 134)

Use of any health screening tools when assessing health needs	Frequency	Percentage
Yes	122	91.0%
No	12	9.0%
Total	**134**	**100.0%**

Table 14 shows that majority of the respondents 122(91.0%) were using health screening tools when assessing health needs of patients, while, 12(9.0%) were not.

Table 15 : Use of standardized guidelines to detect mental health problems (n = 134)

Use of standardized guidelines to detect mental health problems	Frequency	Percent
Yes	58	43.3
No	76	56.7
Total	**134**	**Total**

Table 15 shows that majority of the respondents 76(56.7%) were not using standardized guidelines to detect mental health problems, while, less than half of the study respondents 58(43.3%) were using standardized guidelines.

Table 16: Number of patients identified with the use of standardized guidelines (n = 134)

Number of patients identified with the use of standardized guidelines	Frequency	Percentage
0 - 2 Patients	42	31.3
3 - 4 Patients	12	9.0
5 - 6 Patients	04	3.0
No response	76	56.7
Total	**134**	**100.0**

Table 16 shows that majority of the respondents 76(56.7%) did not respond, whereas, 4(6.9%) were identifying 5-6 patients.

Usefulness of standardized guidelines (n = 134)
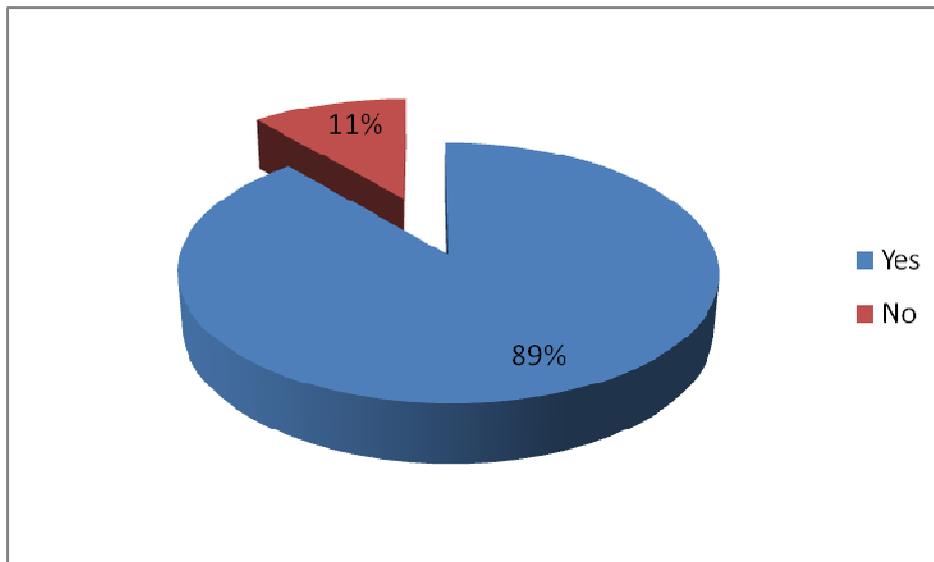
Figure 6 shows that more than three quarters of the respondents 119(88.8%) find use of standardized guidelines in mental health useful while, 15(11.2%) do not.

SECTION F: Associations among variables

The level of ability to detect mental health problems was also correlated with each of the variables in order to establish the health care providers' ability level.

Table 17: Association between Knowledge level in mental health and Ability to detect mental health problems (n = 134)

Knowledge level	Ability to detect mental health problems		Total	P- value	Chi-square
	Not able to	Able to			
Low Knowledge	41(53.4%)	35(46.6%)	76(100.0%)		
High Knowledge	0(0.0%)	58(100.0%)	58(100.0%)	.000	45.968
Total	**41(29.1%)**	**93(70.9%)**	**134(100.0%)**		

Table 17 shows that respondents 58(100%) were able to detect mental health related problems among respondents with high knowledge in mental health compared to 35(46.6%) with low

knowledge. The Chi-square test results in table 17 show a statistically significant relationship between possession of knowledge in mental health and ability to detect mental health problems $(X^2 = 45.968, p < 0.05)$.

Table 18: Association between Standardized guidelines and Ability to detect mental health problems (n = 134)

Standardized guidelines	Ability to detect mental health problems		Total	P- value	Chi-square
	Not able to	Able to			
Non Use	39(51.3%)	37(48.7%)	76(100.0%)	.000	41.982
Use	00(0.0%)	58(100.0%)	58(100.0%)		
Total	**39(29.1%)**	**95(70.9%)**	**134(100.0%)**		

Table 18 shows that all the respondents 58(100%) were able to detect mental health related problems among the respondents who were using standardized guidelines in mental health compared to 39(51.3%) who were not using. The Chi-square test results in table 18 show a statistically significant association between use of standardized guidelines in mental health and ability to detect mental health problems. $(X^2 = 41.982, p = 0.000)$.

Table 19: Association between Knowledge in mental health and Use of standardized guidelines to detect mental health problems (n = 134)

Received training on mental health	Use of standardized guidelines to detect mental health problems		Total	P value	Chi-square
	Yes	No			
Yes	30(60.0%)	20(40.0%)	50(100.0%)	0.003	9.079
No	28(33.3%)	56(66.7%)	84(100.0%)		
Total	**58(43.3%)**	**76(56.7%)**	**134(100.0%)**		

Table 19 shows that respondents 30(60%) was using standardized guidelines in detecting mental health related problems was higher among those who received training in mental health compared to 28(33.3%) who did not receive training. The Chi-square test results in table 19 show a statistically significant relation between knowledge (that is assumed to come from formal

training) in mental health and the use of standardized guidelines in detecting mental health problems ($X^2 = 9.079$, $p < 0.003$).

Table 20: Association between Workload and Average time spent per patient (n = 134)

Workload	Average time spent per patient		Total	P value	Chi-square
	5 – 15 minutes	16 – 30 minutes			
Normal load	1(14.3%)	6(85.7%)	7(100.0%)	p < 0.001	11.471
Overload	94(74.0%)	33(26.0%)	127(100.0%)		
Total	**95(70.9%)**	**39(29.1%)**	**134(100.0%)**		

Table 20 shows respondents (85.7%) with normal workload spending more time on each patient than 33(26.0%) with overload. The pattern is further supported by the results from the Chi-square in table 20 where a statistical significant relationship was observed between workload and time spent on each patient ($X^2 = 11.471$, $p < 0.001$).

Table 21: Multivariate logistic regression model showing factors affecting the ability to detect mental health problems

Variable	P < 0.05 (CI 95%)
Knowledge in mental health	
High knowledge	**0.000**
Low knowledge	
Staff workload	
Normal load	.361
Overload	
Time	
Adequate time	.213
Inadequate time	
Use of standardized guidelines	
Use	**.000**
Non use	

Table 21 shows that knowledge (*p*-value = 0.000) and standardized guidelines (*p*-value = 0.000) are the most predictor variables in this study with statistical significance to ability to detect mental health related problems compared to workload and time with *p*-value >0.05.

4.3 QUALITATIVE DATA

4.3.1 ANALYSIS OF QUALITATIVE DATA

At the end of each focus group discussion the recorder read the points to focus group members who were asked to clarify them. This was done to check the information for accuracy and consistency. Using participants' own words, the key statements, ideas and attitudes expressed for each topic were categorized. The researcher read through all the data to obtain a general sense of the information and to reflect on its overall meaning.

Content analysis was used to analyze the data. According to Burns and Grooves (2009), content analysis refers to "analysis of the content narrative data to identify prominent themes and pattern among themes. In this regard, participants' own words were used to list the key statements and ideas expressed for each topic of discussion. The findings were then interpreted and a full report of the focus group discussion that reflected the discussion as much as possible was prepared.

4.3.2 PRESENTATION OF QUALITATIVE DATA FROM THE FGD

Qualitative analysis in general and thematic analysis in particular is not a simple and rigid process, it involves going back to the data as many times as may be required and needs a great deal of investment in terms of time. Data obtained from Focus Group Discussions were summarized in narrative form. The findings were interpreted and quotations that emerged from the discussions were selected to illustrate the main ideas. The following is a list of themes from which selection was made to identify those that were common and applicable to the study (Table 22).

Table 22: Showing Main themes, Sub-themes and Categories

MAIN THEME	SUB-THEMES	CATEGORIES
Knowledge in mental health	Knowledge of signs and symptoms, Mental state examination Treatment of identified mental health problems Counselling of patients	Presenting complaints Patient history taking Patient assessment
Impact of staff workload on the ability to detect mental health related problems in patients	Work overload Average time spent clerking patient/taking patient history Level of stress on health care providers Quality of health care given to patients	Patient population per shift Health service delivery Effectiveness of health care providers Staffing level
Use of standardized guidelines to detect mental health related problems	Patient screening Use of health screening tools Standardized Mental state examination	Comprehensive patient assessment Patient history taking
Factors affecting early detection of mental health problems	Workload Burn-out Reduced patient contact time Staff shortage Non-availability of screening tools and psychiatric drugs Inadequate screening rooms	Patient population Patient contact time Staffing levels Work environment
Suggestions for improvement	Regular training/updates Development of mental health guidelines Motivation Improving staffing levels	Areas for improving and maintaining early detection of mental health problems

Table 23: Showing demographic characteristics of FGD participants.

Sex	Frequency	Percent
Male	04	20.0
Female	16	80.0
Total	**20**	**100.0**
Age range		
20 – 30 years	04	20.0
31 – 40 years	10	50.0
Above 40 years	06	30.0
Total	**20**	**100.0**
Profession		
Clinical Officer	04	20.0
Nurse	16	80.0
Total	**20**	**100.0**
Length of service		
3 months to 1 year	00	00.0
2 to 6 years	00	00.0
7 to 11 years	08	40.0
12 years and above	12	60.0
Total	**20**	**100.0**

Table 23 shows majority of the respondents 16(80%) were females, 16(80%) were in the nursing profession, and 12(60%) had length of service 12 years and above.

4.3.2.1 Knowledge in mental health

Most of the participants in the FGD felt that mental health was the care given to patients with mental health problems. It was emphasized that mental health is being able to solve psychological problems and it is essential to everyone. Knowledge in mental health was exemplified in the statements below by participants.

Participant 1 stated that "*mental health is the care given to a person with a mental problem*".

Participant 2 stated that "*mental health is being able to handle one's problems without being affected mentally*".

Participant 4 said; "*it is easier to identify those with marked signs, for example, unusual behaviour and inappropriate responses but for us to isolate some psychological problems we need to be retrained in mental health again*".

The FGD showed that health care providers have basic knowledge in mental health and some apply theory to practice thus providing evidence based mental health practices. They also appreciated that not only patients need mental health care but health care providers as well.

4.3.2.2 Use of standardized guidelines to detect mental health related problems in patients

Use of standardized guidelines in mental health helps in early detection of mental health related problems. The FGD revealed that, there are no standardized guidelines in mental health. Health care providers use knowledge in psychiatry acquired during their initial training. They are able to manage some cases especially those which require counselling. Use of standardized guidelines in order to detect mental health problems was expressed in the following statements;

Participant 14 stated that "we *do not have standardized guidelines in mental health but use we psychiatric knowledge from the colleges where we trained*".

Participant 5 said; "*I use laboratory investigations to rule out some of the conditions and good history taking and screening assist me in early identification of mental health problems*".

Participant 13 stated that "*identified patients with mental health problems are counseled and referred when necessary, but some I just refer to mental health specialists*".

It can be aptly concluded that health care providers apply theory into practice although they have no mental health guidelines to quicken patient assessment. In addition, the finding from knowledge implies that use of standardized guidelines is important to enhance early detection of mental health problems as health care providers can easily identify only those patients with vivid signs.

4.3.2.3 Factors that affect early detection of mental problems in patients

Participants from Focus Group Discussions acknowledged that their ability to detect mental health problems have been challenged in various ways. Some of the challenges recognized by the participants include; work overload, shortage of staff, reduced patient contact time as depicted in the statements below.

Participant 6 said; "*In my department, on average we see 80-100 patients per day with only one Clinical officer and 1 or 2 nurses per shift. There is shortage of staff with a lot of work for them while they are expected to provide quality health care which is compromised at the end of the day*".

Participant 13 said "*We need a simple, short and easy to use guideline or flow chart in mental health which is time friendly if we are to identify mental health problems early in patients.*

Participant 11 said "*we are overloaded with work, therefore, are obliged to work without considering the quality but provide service at whatever level*".

In the presence of staff shortage, workload seemingly increases making health care providers to reduce the contact time with each patient. This has caused health care providers to compromise the quality of health care services rendered to the patients.

4.3.2.4 Impact of workload on ability to detect mental health problems in patients

As participants spoke of factors that affect early detection of mental health problems, they also alluded to the impact of work overload which include; long patient queues, reduced contact time with patients, compromised patient care, negative utterances from patients and staff burnout. These effects are noticeable in the statements below indicating that workload affect their ability to detect mental health problems.

Participant 1 said "*increased workload has affected the quality of health care given to patients as health care providers are always stressed and time spent on each patient is being reduced to 2-10 minutes depending on the condition of the patient. Workload has caused us to be biased*

towards physical aspect of health compared to mental health aspect because in physical health problems are obvious".

Participant 11 said; *"workload has made us to just work to clear patient queues fearing that when you take long on one patient, other patients will start complaining".*

Participant 12 retaliated that "*despite the workload we need to do the right thing and explain to the other patients why you have taken so long on one patient. Some patients do not know that in fact us as health care providers we also offer mental health services*".

The FGD revealed that among the participants, some of them are able to detect mental health problems despite their work overload, whilst, others have taken excuses, neglecting patients who might be having a mental health problem.

4.3.2.5 Suggestions for improvement

There are expectations that patients might be having on a health care provider who also contribute to better health outcomes, while, this might be desirable, what is obtaining is different. Therefore, the participants suggested the way-forward as follows;

Participants unanimously said *"we need to improve the staffing levels which include mental health personnel in the clinics. We need also to have regular training in mental health to increase our knowledge base, and to develop a simple, short, ease to use and time friendly guidelines or flow chart in mental health. We further need to start conducting community sensitization in mental health service that we are able to provide at health centre level".*

In order to succeed and improve early detection of mental health related problems, there is need to have regular training/updates in mental health, practice and provide them with screening tools in mental health to improve on their ability to detect mental health problems. Health care providers are willing to sensitize the community on mental health services available in the health centres to increase utilization of the services.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 INTRODUCTION

Mental health problems are a growing public health concern in Zambia (Simenda, 2010) even though ability to detect mental health problems is unsatisfactory. The main objective of the study was to explore factors impeding the ability of health care providers to detect mental health problems at PHC level in Lusaka. The ability to detect mental health problems was explored by comparing knowledge in mental health, staff workload, average time spent and use of standardized guideline scores. This section discusses the results presented above in light of related literature and makes conclusions grounded in the data and supported by other research findings where possible.

5.2 DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

The demographic characteristics revealed that the study population was composed of more females (78.4%) who were in the nursing profession (79.1%). This could mean that there are more female health care providers who are nurses, agreeing with CSO, 2005; 2010) who indicated that there are more females than males providing health care services.

The present study revealed that 54% had age range of 40 years and above; 53.7% had service length of twelve years and above. It is, however, recognized that the distribution of this sample by age and length of service are dependent on the advantages and disadvantages of the sampling methods (simple random and purposive sampling methods) used in the present study. The current study revealed that health care providers who participated in the study trained from different training institutions. This could mean that there are a lot of health training institutions in Zambia that are government and private owned in the quest to increase staffing levels in health facilities. These training institutions use the recommended curriculum in training the students which has got a component of mental health equipping graduating health care providers with knowledge and skills to deal with mental health related problems.

Furthermore, the present study considered that demographic variables could be associated with ability to detect mental health problems among health care providers. This study showed that health care providers from different health professions have different ability levels to detect mental health problems as Clinical officers (85.5%) were better able to detect mental health related problems than the nurses. This could be attributed to several possible explanations, for instance, acquisition of knowledge on a particular area like mental health is not dependent on a profession as both professions cover a component of mental health in their programmes (Msidi, 2012) and (HPCZ, 2009). On the other hand, this finding also could be attributed to the teaching methods that were used which could have been appropriate to each profession, such as, use of visual aids, simulations, role plays and clinical practice. However, the statistical test for this study revealed that demographic variables have no statistical significant relationship with ability to detect mental health problems ($p > 0.05$).

5.3 ASSESS WHETHER LEVEL OF KNOWLEDGE IN MENTAL HEALTH INFLUENCES THE ABILITY TO DETECT MENTAL HEALTH RELATED PROBLEMS AMONG HEALTH CARE PROVIDERS

Knowledge encompasses the skills, experiences and insights of practising that health care providers applied to maintain or improve their practice (Prince et al. 2009). Health care providers need to have knowledge in mental health and mental ill health especially that knowledge gained will be used in early detection of mental health problems. Mental health knowledge is power and plays a major role in early detection of mental health problems and provision of quality health services that culminates in better health outcomes (WHO and Wonca, 2008). In this study 62.7% of the health care providers had no in-service training in mental health. In-service training in mental health would have improved the knowledge base of health care providers. Lack of in-service training may reflect inadequate knowledge in mental health associated with inadequate funding that government ministries experience as reflected by National Human Resources for Health Strategic Plan (NHRH SP) 2011-2015. MoH (2005) also revealed that enough funding is allocated to departments that deal with life threatening conditions. Mwape (2010) affirms that mental health is not among the top ten conditions that are regarded as life threatening; this makes it not to be among the first priority in terms of funding.

Furthermore, this present study showed that only 37.3% of the health care providers had improved ability to detect mental health problems as they had received training between 2010 – 2013 that could have motivated interest in mental health, improved understanding of mental health and acquisition of appropriate skills. This study finding supports the results of Mutale et al. (2013) in the study that evaluated motivation of health workers. The study found that health care providers who had received some form of training in the preceding 12 months were more likely to have a higher motivation to perform their duties. Mutale et al. (2013) has shown that in-service training could be a motivating factor for health care providers to improve better health outcomes in health facilities. However, the reason for this different distribution of knowledge levels could be related to different training institutions as shown in table 2 where health care providers were trained in terms of teaching and evaluation methods. In addition, health care providers also learn through electronic and print media or through their past experiences during the working period. Other reasons could be lack of updates in mental health or not using the knowledge acquired during their initial training in their respective learning institutions. To augment this, the theory of passive decay (forgetting) states that information that is not actively used, with passage of time, is lost (Oberauer & Lewandowsky, 2008).

On the other hand, this present study revealed that health care providers (62.7%) had inadequate knowledge in mental health. The result is in agreement with the findings of Asibongi et al (2010) who found that most of the health care providers in primary care settings had inadequate knowledge in mental health. Despite this, the most interesting finding in the current study indicates that health care providers (52%; 36%) were able to identify stress and drinking-related problems respectively as the most common mental health problems in primary care settings. These results are consistent with the findings of Chishinga et al. (2011) who discovered that there is a high prevalence of psychological distress in the Zambian population. A possible explanation to this result could be attributed to life challenging situations, such as, stress, poverty, unemployment people are experiencing and poor coping strategies that are employed. This is in accordance with El-Rufaie (2005) who found that the rising rate of mental health related problems may be associated with such factors as economic change, political and social violence, and cultural disruptions.

El-Rufaie (2005) further revealed that ability to detect mental health problems is an important public health issue, since it allows for early interventions that reduce the social impairment in the long term.

In the quest to fully understand the knowledge levels of health care providers in mental health, the present study revealed a high referral trend (61.9%) to mental health specialists and a lower treatment trend (1.5%). This could be due to inadequate knowledge health care providers possess in mental health. These findings for the current study are consistent with those of Olawale (2010) in Nigeria who found that health care providers have inadequate knowledge on treatment of mental health problems, hence, resort to refer patients to mental health specialists. In addition, results from the present study FGD also confirmed that there are no psychiatric drugs in the drug supplies making it difficult to manage such patients but rather refer the patients to specialist health facility.

Knowledge of mental health problems particularly symptoms helps to understand what may happen, and all this information presents a better opportunity to attend to a patient. This was proved by a statistically significant positive link between ability to detect mental health problems, evaluation of their influence on patients' behaviour and knowledge of how to interact with a patient with mental health problems (Kazlauskas et al. 2005). According to Prince et al. (2009), in order to obtain knowledge, learning should not be interrupted, and this study result shows that health care providers (96.3%) were willing to learn through having in-house training in mental health.

On the contrary, Mania et al. (2010) suggests that people have got individual traits that may hinder them to acquire knowledge even when training has been undertaken. This present study supports this assertion in its finding where 40% of the health care providers who had training in mental health could not use the standardized guidelines to detect mental health problems. This could be attributed to either the guidelines were not readily available, were not user friendly or just the attitude of the health care provider. It will be interesting to further establish whether ability to detect mental health problems improves with training in mental health as an intervention targeting health care providers at PHC level.

To confirm further, whether, knowledge in mental health affects ability to detect mental health problems, the results of the Chi-square show a statistically significant relationship between knowledge in mental health and ability to detect mental health problems (X^2 = 45.968, p 0.000). This result correlates with the findings by Asibong et al. (2010) in Nigeria which revealed that health care providers were unable to detect most of the mental health related problems early because they had inadequate knowledge in mental health. Similarly, Kringos et al. (2010) also revealed that health care providers' characteristics that might lead to low detection rate include their inadequate and/or lack of mental health training, and their inability to put appropriate psychiatric diagnosis. It might also be that health care providers' tendency to see the presenting symptoms as transient and easily treatable that leads them to avoid making psychiatric diagnosis. These findings on the variable knowledge in mental health has answered specific objective number one which sought to determine whether level of knowledge influences the ability to detect mental health problems among health care providers. These study results reject the null hypothesis which states that there is no association between knowledge in mental health and ability to detect mental health problems.

5.4 EVALUATE WHETHER WORKLOAD IS ASSOCIATED WITH THE ABILITY TO DETECT MENTAL HEALTH RELATED PROBLEMS

Workload can also be classified as quantitative (the amount of work to be done) or qualitative (the difficulty of the work) (Carayon and Gurses, 2007). The study results show that 75.4% of the health care providers were overworked and under staffed working with two health care providers per shift (64.3%). The present study further revealed that health care providers are experiencing work overload (94.8%) which could be due to increasing disease burden consequently demanding for health services and carrying out other responsibilities. This result supports what Carayon and Gurses (2007) and MoH 2006-2011 National Health Strategic Plan meant when stating that when workload increases, staff shortage seemingly occurs. Carayon and Gurses (2007) further revealed that work overload and shortage of staff seems to be related to suboptimal patient care which leads to reduced patient satisfaction which includes non-identification of mental health related problems.

During the focus group discussion for this study, participants brought out similar concerns that health care providers are experiencing work overload due to increased demand for health services, and inadequate staffing. According to Coopers (2005), work overload is a key job stressor of health care providers in a variety of care settings, such as primary health care. A heavy clinical workload can lead to distress (such as, sarcasm, anger, and emotional exhaustion) and burnout which impede provision of patient centred care.

This study found that 96% of the health care providers perform both patient care and other responsibilities when on duty which compromises the quality of health care given to patients. In addition, the FGD for this study also supports this notion that work overload contribute negatively to health care delivery as health care providers are obliged to work without considering the quality but provide service at whatever level. This finding is consistent with the results of a study done in the UK by Carayon and Alvarando (2007) which revealed that higher patient population, work system factors and expectations also contribute to the increasing workload, while, health care providers are expected to perform non-professional tasks such as coordinating and performing additional services.

On the other hand, Carayon and Gurses (2007) also found that health care provider-patient ratio exposed factors other than patient's clinical condition (for example, ineffective communication, supplies not well stocked) that may significantly affect workload and not the number of patients. Furthermore, Carayon and Gurses (2007) reiterated that researchers who use the health care provider-patient ratio as a measure of workload offer a limited contribution to understanding the impact of clinical health workload and designing solutions for reducing or mitigating clinical health workload. The use of health care provider-patient ratio may be attributed to that this measure is easy to use and is readily available in existing databases. However, Curationis (2005) reiterated that tools used by human factor researchers can comprehensively assess workload, facilitate the identification of the sources of excessive workload, and provide direction for corrective interventions.

The result from the FGD on workload furthermore revealed that despite work overload being experienced, health care providers need to provide patient centred care to meet individual patient's needs. This study result could be attributed to health care providers delivering health services in a professionally accepted manner. It is through upholding professionalism that comprehensive patient assessment detecting both physical and psychological health needs of patients could be attained. Curationis (2005) in South Africa also revealed that it is not always the case that as workload increases performance decreases, because as workload increases, the worker may have a strategy for handling task demands.

These findings on workload despite being general and very specific for mental health, due limited literature on this factor has answered specific objective number two which sought to establish whether workload is associated with the ability to detect mental health problems. Therefore, these study results fail to reject the null hypothesis which states that there is no association between workload and ability to detect mental health problems. As such, there is need to consider other contextual factors on workload.

5.5 ASSESS WHETHER TIME SPENT PER PATIENT AFFECT THE ABILITY TO DETECT MENTAL HEALTH RELATED PROBLEMS

In the current practice environment, health care providers face mounting demands on their time. The present study found that 70.9% of health care providers spend 5 to 10 minutes being in contact with a patient instead of the standard 10 to 15 minutes as stipulated in the adopted guidelines (Scheppers, 2006). This could be attributed to the workload experienced by health care providers as earlier alluded to under workload. A study done by Schreuders et al. (2012) argues that reduced patient contact time, increasing patient population, increasing administrative requirements for health care delivery as well as shortages on health care providers may lead to health care providers to only concentrate on the physical aspect of health that requires shorter consultation time. A study done by Carayon and Alvarando (2007) revealed that time spent on each patient is reduced when health care providers have work overload.

This is also supported by Schreuders et al. (2012) who stated that "as managed care predominates, expectations are increasing, particularly in countries with an extremely high average numbers of patients (over 60 patients a day in Germany). The reduction in time per patient to only a few minutes on a typical day probably forms a severe obstacle to improvement of both recognition of mental health problems and intervention, and may it be treatment or referral". During the FGD for this current study similar sentiments were revealed that health care providers would like to do a thorough history taking and screening of patients but the huge numbers of patients they attend to during their shifts compel them to reduce on the time they are in contact with a patient in order to attend to other patients.

Schreuders et al. (2012) further indicated that when working in demand-burden and time pressure settings like PHC setting, health care providers tend to reduce patient contact time making it difficult to assess the mental health aspect but only concentrate on the physical aspect which is obvious. Furthermore, this current study revealed that 54.5% of health care providers were unable to carry out mental health assessment within the limited time they are in contact with the patient; nevertheless, 45.5% were able to assess for mental health related problems. This result may be an indication of how health care providers apply the knowledge they possess in mental health and on usage of standardized guidelines. This has been supported by Lester et al. (2005) who revealed that health care providers with their limited time in primary care settings, and in some instances with only limited training and experience, are often criticized for failing to recognize a sizeable number of those suffering from mental health related problems or to treat them adequately if they do. On the other hand, Asibongi et al. (2010) found that "time pressure" specifically from pressures of workload and staff shortages were important sources of dissatisfaction in health care providers leading to non identification of mental health related problems that requires more consultation time.

Furthermore, this study found that 73.1% of the health care providers reported that 30 minutes was enough time to assess a patient with psychological symptoms. This could be that patients with mental health problems are likely to take up more time during consultations. This result is in agreement with Scheppers (2006) who found similar findings that, the length of the consultation was 30 minutes or more with patients with mental health problems.

Therefore, this consultation time was also perceived to be a barrier to identification of mental health problems as these patients often required a longer consultation time than the standard 10 to 15 minutes. According to Watson et al. (2006), time pressure in everyday practice is also responsible for difficulties in successful identification of mental health problems, referral to mental health specialists and other more efficient interventions.

The result of the FGD for the present study further revealed that time was not adequate to even assess for mental health related problems as increasing workload has affected the quality of health care given to patients as health care providers are always stressed and time spent on each patient is being reduced to 2-10 minutes depending on the condition of the patient. On the contrary, Curationis (2005) reported that sometimes increased workload provides an opportunity for the workers to learn and develop skills more quickly to provide the required services, and that it is possible to attend to more patients in less time and still be an effective health care provider. In a related study of GPs in the Netherlands, Schreuders et al. (2012) found that health care providers who expressed feeling a lack of time in their work practices had high rates of referrals than health care providers who did not feel a lack of time.

Interestingly, result of the FGD supports Curationis' (2005) understanding of workload and time in relation to being an effective health care provider which stated that despite the work overload health care providers need to do the right thing and explain to the other patients why health care providers take a lot of time with one patient. The FGD further reiterated that it is also important regardless of having huge numbers of patients against limited time, to listen to patients' complaints as this helps to capture mental health problems especially in adolescents. This result is in agreement with Bushnell et al. (2005) who explored patient awareness and concerns about time constraints with mental health consultations in which patients displayed self-imposed restraints in taking up doctor's time. This entails that regardless of the length of time spent per patient, health care providers must develop strategies to enhance early detection of mental health related problems within the amount of time available. According to Bushnell et al. (2005) strategies can be considered in relation to the individual patient encounter, the practice environment and health care system, for instance, improving health care provider's communication skills.

Patient-health care provider communication is enhanced by the use of PCC approach to interviewing which considers the patient's perspective of illness on equal ground with the health care provider's diagnostic imperative. Furthermore, Croudance et al. (2005) reported that it is important to design information systems that would facilitate the flow of work, for example, the use of standardized guidelines to optimize the use of time and early detection of mental health problems.

However, the study further revealed that health care providers with adequate time (72.4%) and 54.5% with inadequate time were able to detect mental health related problems. This could be attributed to health care providers having knowledge in mental health that have been acquired through their initial training in the training institutions and the in-service training in mental health during their work experiences. Similarly, this result augments Curationis (2005)'s finding which revealed that despite high patient population and limited time spent with patients, health care providers with adequate knowledge and skills should be able to provide PCC to patients and meeting patients' needs. The results of the chi-square on time spent per patient in association with staff workload showed a significant statistical relationship between patient contact time and workload as shown in Table 20 ($X^2 = 11.471$, $p < 0.001$). It could therefore, be concluded that time spent per patient by health care providers may be influenced by health care providers' workload.

Furthermore, Carayon and Gurses (2007) shows that factors other than patient's clinical condition (such as, attending to personal issues, many family needs, coordinating workplace activities, poor physical work environment) may significantly affect time. Although, this current study did not concentrate on such factors, the study result indicate that the average time spent per patient is 5–15 minutes (70.9%) which makes it difficult to conduct a thorough mental state examination and take psychiatric patient history and 73.1% indicated that 30 minutes would be adequate time. This finding is in agreement with Schreuders et al. (2012) whose findings demonstrate that for patient visits between 16 – 30 minutes, it is not the actual time spent with the health care providers that affects the outcome but rather what happens during that time, for example, attention to psychosocial aspect and explaining care to patients.

The findings of this study on time answered specific objective number three which was trying to evaluate whether patient contact time may affect the ability to detect mental health problems. Therefore, it fails to reject the null hypothesis which states that there is no association. Hence, it is important also to consider other factors that influence patient contact time when attending to patients.

5.6 EVALUATE WHETHER USE OF STANDARDIZED GUIDELINES AFFECT THE ABILITY TO DETECT MENTAL HEALTH RELATED PROBLEMS

Standardized guidelines are used for easier screening of patients with certain conditions, for instance, in HIV and AIDS, Integrated Management of Childhood Illnesses. Ninety-one percent of health care providers revealed that they use standardized guidelines which are not specific to mental health related conditions. This could be attributed to working in children's health or TB/HIV/AIDS settings where these guidelines are available.

Jirapramukpitak (2005) in India, revealed that about a third of patients presenting in primary care facilities often present to the clinicians working at this level with sub-threshold disorders featuring a confusing blend of psychological and physical symptoms. Furthermore, Chishinga et al. (2011) also agreed that there is a high prevalence of mental health problems in the general population that could easily be detected by use of the Mini-International Neuropsychiatric Interview (MINI). MINI defines current major depressive disorders and alcohol-use disorders respectively which is a suitable mental health screening tool for use among TB and ART patients in primary care in Zambia. The result of this study revealed that 43.3% use standardized guidelines to detect mental health problems, while a contrary finding from the FGD revealed that there are no standardized guidelines in mental health. The report from the FGD could be associated with the non-use of standardized mental health guidelines from health care providers (56.7%) as revealed in this study. This study produced results which corroborate the findings of Mubarek et al. (2014) in Ethiopia who also revealed that there were no mental health-related guidelines within any of the health centres. According to Manias et al, (2010) findings, non-availability of guidelines for health care providers to use as a reference for patient assessment could be attributed to non-identification of common mental health related problems.

On the other hand, standardized guidelines educate and guide clinical decision-making to ensure quality of care (Morales, 2012), and these may facilitate quick assessment of patients. Mubarek et al. (2014) posited that health screening tools such as the GHQ-12 may be used in primary health care settings to heighten suspicion of the presence of psychological disorders and make it easier for primary care providers to identify which cases may qualify as having mental health problems. This study also revealed that health care providers using standardized guidelines (72.4%) identify 0-2 patients with mental health related problems. This finding corroborate with Bones et al. (2005) who stated that, internationally, about one in four patients in primary care have a diagnosable mental health related problem. This current study result also is in agreement with the findings in a controlled comparison study by Cape et al. (2005) who established the ability of practice nurses to detect psychological distress in patients attending primary health care settings in Britain that it was enhanced from 12% to 26% when using a health screening tool.

The result of this study also show that 88.8% of the health care providers indicated that use of standardized guidelines is useful in identifying mental health problems. Asibongi et al. (2010) in Nigeria also revealed that use of a health screening tool in primary care setting will not only help in case detection, but will reduce to some extent problems of recurrent consultations, unwarranted investigations, inappropriate referrals or treatments and chronicity of symptoms. Use of mental health standardized guidelines is beneficial in accordance with Croudance et al. (2005) who demonstrated the effectiveness of using clinical tools such as standardized scales or clinical protocols in detecting mental health problems early in primary care. In addition, Smith (2009) also reported that minor mental health problems were easily detected using standardized guidelines /or health assessment tools.

In contrast, Bones et al. (2006) attested that using standard guidelines such as, the Structured Clinical Interview for DSM III R (SCID) – derived diagnosis as the standard, health care providers were able to correctly identify very few of the specific mental health problems most prevalent in primary care practice and failed to recognize two-thirds of their patients with a current mental health problem.

Furthermore, Croudace et al. (2005) also reiterated that passive dissemination of guidelines to improve the recognition and management of mental health problems, as well as broad education

programs have generally been found to have minimal positive outcomes. For this reason, Manias et al. (2010) concluded that even if simple and efficient screening tools may be, it is unlikely that health care providers in general health care setting will use it given the short period of time per patient. This was proven in this study with the results yielded from the cross tabulation between the independent variables knowledge in mental health and use of standardized guidelines to detect mental health problems that 40% of the health care providers could not use the guidelines despite having the knowledge in mental health or knowledge on the use of guidelines (Table 19).

Furthermore, the Chi-square test results (X^2 = 41.982, p = 0.000) on the use of mental health standardized guidelines showed a statistically significant relationship between use of standardized guidelines and ability of health care providers to detect mental health related problems (Table 18). This has answered specific objective number four which sought to evaluate whether use of standardized guidelines affect the ability to detect mental health problems. Therefore, these results reject the null hypothesis which states that there is no association between use of standardized guidelines and ability to detect mental health problems. However, this study identified a gap on the use and availability of mental health standardized guidelines. Future research may be done to investigate the availability of standardized guidelines in mental health or health assessment tools in the health centres.

5.7 LOGISTIC REGRESSION ANALYSIS

Forward logistic regression analysis was the final analysis done to determine which variables among those that were entered into the model were predictors of ability to detect mental health problems. Regression results in table 21 showed that knowledge in mental health and use of standardized guidelines provided a high prediction. They were statistically reliable in influencing the ability of health care providers to detect mental health problems in patients (Chi-square 45.968; p – 0.000). However, there was no statistically observed significance in the workload and time spent per patient variables with a p – values of 0.0361 and 0.213 respectively.

Similarly, the Patient-Centred Care (PCC) model which was used to provide a theoretical framework on which this study was based also revealed that factors such as, knowledge could be

one of the enablers or barriers to early detection of mental health problems in a clinical setting (McCormack and McCane, 2006).

5.8 WHAT IS "NEW" IN THIS STUDY

Mental health is an important aspect of health and without mental health, there is no health. Most of the literature revealed showed that health care providers have negative attitude towards mental health issues. The result of this current study revealed that most of the health care providers basic understanding of the factors that may lead to mental health related problems such as, economic challenges, social and cultural disruptions which affect both physical and psychological aspects of a person. The study further showed that health care providers are not unexceptional to these challenges.

The study also revealed that among the health care providers, Clinical Officers were better detectors of common mental health problems than the nurses. This could be attributed to probably the nature of work that these health care providers do, such as screening patients mostly done by Clinical officers while nurses are seemingly taking orders for the prescribers and provide nursing care. The study also revealed that in-service trainings or workshops in mental health motivated and developed interest in those health care providers who participated. If the most of the health care providers were given such trainings, it would have improved early detection because this is a source of skills development and motivation. However, the current study results revealed that health care providers are willing to detect mental health problems early if only they are provided with skills and screening tools in mental health that are easy to use and time friendly. It could be concluded that it is not only inadequate knowledge in mental health that might impede the ability to detect mental health problems but it could also be skills and motivation.

It is suffice to conclude that, the current study findings have added new information to the existing body of knowledge in the subject area.

It has provided a clear picture on which to base interventions for increasing the ability of health care providers in early detection of mental health related problems. It has highlighted on some areas to be considered for improvement such as skills development, supervision, motivation and

appropriate strategies that may be employed if early detection of mental health problems has to be achieved.

5.9 IMPLICATIONS OF THE STUDY

The low levels of ability to detect mental health problems in primary care settings prompted the author to highlight the possible implications for mental health system in Zambia and Ministry of Health, Ministry of Community, Mother and Child health, in particular LCDHO. This section highlights the possible 'way forward' for improving mental health service provision in Zambia and in particular Ministry of Health and Ministry of Community, Mother and Child health. The implications have been discussed in the light of the present study findings and the mental health situation in LDCHC.

5.9.1 Implications to Policy

Increasing accessibility to mental health services can also be achieved through deliberate efforts to ensure that mental health services are provided in primary health care. Currently Basic Health Care Package (BHCP) which is a group of carefully chosen interventions that have been assessed and found to be beneficial to the people, has improved accessibility to general health care and reduced accessibility to mental health care in general. Mental health care that is currently being provided at primary health care level is disintegrated. To influence policy formulation in mental health, the components of the BHCP will need to be reviewed so that a mental health component is included. There is need to have the political will to support formulation of work place mental health policies in government ministries and private institutions as mental health issues requires concerted effort if they have to be addressed holistically.

5.9.2 Implications to Nursing Administration

Health care providers have basic knowledge and skills in mental health to help them provide PCC. However, there are a number of hindrances to provision of PCC leading to non-detection of mental health related problems early, such as, lack of in-service training in mental health, non-availability of ease to use mental health guidelines, lack of clinical presentations, lack of a system to capture mental health data and inadequate supervision, monitoring and evaluation of

health care providers and the quality of health care being provided. To improve and promote provision of PCC and early detection of mental health related problems, there is need for supervisors/managers to ensure that health care providers are provided with these necessary requirements. Provision of these necessities may influence health care providers to carry out comprehensive patient assessment for early detection and management of common mental health related problems. Supervisors must ensure that guidelines on mental health are formulated, ensure that mental health data is being captured in the database, conduct regular supervision, monitoring and evaluation of mental health services being provided and encourage clinical presentations which promotes learning and sharing of experiences, thereby enhancing mental health knowledge.

5.9.3 Implications for Nursing Practice

In an effort to make mental health services more accessible to patients at PHC level, there is need to restructure the routine work to reduce the staff workload so that it is easier for health care providers to detect mental health problems using the formulated mental health guidelines which may have a positive influence on the sustainability of the change. Guidelines, for example in form of 'standardized guidelines or flow chart', might be helpful at this level given that not every health care provider at PHC level would be competent enough to identify mental health problems. There is need to ensure that health care providers record the mental health information and reports accordingly and let the data be entered into the database for reference.

5.9.4 Implications for Research

There is absence of evidence-based information regarding the extent of mental health problems and their long lasting consequences in the country (Zambia) to guide and justify the need for its importance. Therefore, there is need to establish the extent of mental health problems in Zambia through an evidence-based study and the appropriate interventions to be implemented.

5.10 CONCLUSION AND RECOMMENDATIONS

5.10.1 CONCLUSION

Challenging life experiences and responses take place within a context where such factors as economic challenges, political and social violence, and cultural disruptions attach significance to both physical and psychological aspect of a person. Patients with mental health related problems in this context face reproach from both their families and the general public and disapproval from people if the patient cannot fulfill the expectations of society. Such public scrutiny may set the stage for mental health problems (psychological distress). The results of this study suggest that ability to detect mental health problems have a substantial impact on the psychological/mental well-being of patients. The study has found low level knowledge in mental health among health care providers, and non-use of standardized guidelines in mental health as these were not available. These seem to be the contributing factors with other factors that this study did not look at.

5.10.2 RECOMMENDATIONS

5.10.2.1 Ministry of Health

1. The ministry should conduct research in mental health in order to understand mental health problems and their psychodynamics. This may unveil fresh challenges and facilitate the discovery of more appropriate strategies to address mental health problems experienced in Zambia.

2. The ministry should formulate standardized mental health guidelines that other stakeholders should follow in formulating their mental health work place policy as strategies to address mental health problems need concerted efforts.

5.10.2.2. Ministry of Community, Mother and Child Health

1. The ministry should review the Basic Health Care Package in order to include mental health care provision

2. The ministry should formulate mental health guidelines or flow charts on mental health to improve and enhance early identification and management of mental health problems at PHC level.

3. The ministry should have a provision in the health information system to capture mental health data for ease of reference.

 4. The ministry should be conducting in- service training in mental health regularly to enhance mental knowledge and skills of the health care providers.

5.11 STRENGTHS AND LIMITATION OF THE STUDY

5-11.1 STRENGTHS OF THE STUDY

The study had recognizable achievements that need to be noted. The objectives which directed the research were met. The study also used a mixed method research design which increased the quality of the data. The study used statistical test that helped to control confounding variables. The study also provided information that would be used to consider improving the skills or practices in detecting mental health related problems by conducting training courses for updating health care providers' knowledge and motivation.

5.11.2 LIMITATIONS OF THE STUDY

The limitations of the study include the inclusion criterion which was limited to health care providers trained in Zambia. This meant that exclusion of health care providers who trained outside Zambia. It would have been possible that foreign trained health care providers had the ability to detect mental health problems; therefore, their inclusion might have provided broader and different insights into ability of health care providers to detect mental health problems. Furthermore, the study was undertaken in urban health centres which limit the generalisability of the findings to the study area and population.

5.12 DISSEMINATION OF RESULTS

The author intends to disseminate the study findings by making copies of the report and giving a copy to each of the following; Department of Post Basic Nursing, UNZA, The Medical Library, UNZA, Ministry of Health Headquarters – Library, Ministry of Community, Mother and Child Health Headquarters, Lusaka District Community Health Office. The author also intends to disseminate the findings in seminars and conferences such as ECSACON (East, Central and Southern Africa College for Nurses) Mental Health meetings that and MoH Scientific Conference. Information will also be published in Medical Journal of Zambia.

REFERENCES

Afana, A.H., Dalgard, O.S., Bjertness E., Grunfeld B. (2005). The Ability of General Practitioners to Detect Mental Disorders among Primary Care Patients in a Stressful Environment: Gaza Strip. **Journal of Public Health Medicine.** 24;320–8. Available from: http://www.ourmediaourselves.com/archives/93pdf/Ventevogel%20et%20al_Intro.pdf Accessed on 20/04/2014.

Araya, R., Wynn, R., Leonard, R., Lewis, G. (2005). Psychiatric Morbidity in Primary Health Care in Santiago, Chile. **British Journal of Psychiatry.** 165:530–3. Available from: http://bjp.rcpsych.org/content/178/3/228.full Accessed on 24/04/2014.

Asibongi, U.E, Udonwa, N. E., and Ekpe, E.E. (2010). Patient Characteristics that may Predict the Likelihood of the Presence of Mental Health Problems in Patients Attending the General Outpatient Clinic of a Tertiary Hospital in South-South Nigeria. **Journal of Mental Health Family Medicine.** 7(3): 169–177. Available from: http://www.ncbi.nlm.gov/pmc/issues/193227/ Accessed on 14/05/ 2014.

Barry, M. M. & Jenkins, R. (2007). **Mental health promotion in primary health care: Implementing Mental Health Promotion (pp. 255–295).** Philadelphia, PA: Churchill Livingston. Available from: http://www.fishpond.co.nz/Books/Implementing-mental-health. Accessed on 12/02/2014.

Bones, J. F., Howes, M. J., Derins N. P., Rosenberg R., Livingstone W. W. (2006). Primary Health Care Providers' Recognition and Diagnosis of Mental Disorders in their Patients. Available from: http://www.ncbi.n/m.nih.gov/pubmed/3169532 Accessed on 20/04/2015

Burns, N and Grooves, S. K. (2009). **The Practice of Nursing Research: Appraisal, Synthesis, and Generation of Evidence.** 6th edition, Saunders Elsevier. ISBN-13:978-416054689. (Pg 726-730).

Bushnell, A. D. (2005). Recognition of Physical and Psychological Symptoms. UK**. British Journal of General Practice.** Nov 1, 2004; 54(508): 838–842. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1324917/. Accessed on 02/03/2014.

Cape, J., Morris, E., Adams N., Fairbairns, A. (2005). **Identification of psychological morbidity in older people in primary care by practice nurses. Aging and Mental Health.** 7(6):446-51 Available from: http://hinarilogin.research4life.org/uniquesigwww.ncl. Accessed 14/03/2014.

Carayon, P and Alvarado, C.J. (2007). Impact of workload on Performance. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2677047/ Accessed on 20/04/2015

Carayon, P and Gurses, A. P. (2005). Nursing workload and the changing health care environment. Available from http://www.swosu.edu/academics/aji/2011/u1i2-docs/ncill.pdf. Accessed on 21/04/2015

Carayon, P and Gurses, A.P. (2007). Nursing Workload and Patient Safety in Intensive Care Units: a Human Factors Engineering Evaluation of the Literature. Intensive Critical Care Nursing 2005; 21: 284-301.

Central Statistics Office (CSO). 2010 Census Report for Zambia. Lusaka.

Chishinga, N., Kinyanda, E and Weiss, H. A et al. (2011). Validation of Brief Screening Tools for Depressive and Alcohol use Disorders among TB and HIV patients in Primary Care in Zambia. **Journal: BioMed Central of Psychiatry.** vol. 11, no. 1, pp. 1-10. Available from: http://www.biomedcentral.com/1471-244X/11/75 Accessed on 15/05/2014.

Cooper, J. E. (2005). Detection and Management of Psychiatric Disorder in Primary Care. **British Journal of Psychiatry.** 2003;182:1–2. [PubMed]

Cowan J, Raja S, Naik A, Armstrong G. (2012). Knowledge and attitudes of doctors regarding the provision of mental health care in Doddaballapur Taluk, Bangalore Rural district, Karnataka. **International Journal of Mental Health System**. 6(1):21. (PubMed).

Creswell, J.W. (2009). **Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.** 3rd ed. Los Angeles: Sage Publications. ISBN: 10:1412965578. (Pg 225-230).

Croudace, T., Evans, J., Harrison, G, et al. (2005). Impact of the ICD-10 Primary Health Care (PHC) Diagnostic and Management Guidelines for Mental Disorders on Detection and Outcome

in Primary Care: Cluster Randomised Controlled Trial. **British Journal of Psychiatry**. 182:20–30. Available from: http://bjp.rcpsych.org/content/182/1/20.full Accessed on 02/02/2014.

Curationis (2005). Experience of Nurses Working in a Rural Primary Health Care Setting in a Mopani District, Limpopo Province. Available from: www.ncbi.nlm.nih.gov/pubmed?itool Accessed on 21.04.2015

Department of Health. (2005). Meeting the Physical Needs of Individuals with Mental Health Problems and the Mental Health Needs of Individuals Cared for in General Health Sectors: Advice from the Standing Nursing and Midwifery Advisory Committee, London: The Stationery office. Available from: www.scie.org.uk/publications/guides/guide03/files/guide03.pdf Accessed on 20/04/2014.

El-Rufaie, O. E. (2005). Review - Primary Care Psychiatry: Pertinent Arabian Perspectives. **East Mediterrenean Health 2005**; 11:449-58. [PubMed]

Hamid, H., Abanilla, K., Bauta, B. and Yen Huang, K. (2008). Evaluating WHO Assessment Instrument for Mental Health Systems by Comparing Mental Health Policies in Four Countries. Bulletin of the World Health Oganisation. Vol. 6 pp 467 – 471.

Health Professional Council of Zambia. (2009). Clinical officer – General Curriculum. Lusaka, Zambia.

Jirapramukpitak, T, and Wogsarnri, W. (2005). The Ability of Health Care Physicians to Detect Mental Health Disorders in a Hospital. **Association Medical Journal** 2002; 85:301–7. [PubMed]

Kazlauskas, A, Radzevičienė, L, and Šlapkauskaitė, D, et al. (2005). Image of Mental Disability in Society. Sveikatos mokslai 2005; 3:68-73. Available from: http://www.lvb.lt/primo_library/libweb/action/dlDisplay.do?vid=LDB&docId=TLITLIJ.04~2005~1367151849063&fromSitemap=1&afterPDS=true Accessed on 21/03/2014.

Krejcie, R. V., and Morgan, D. W., (1970): Determining Sample Size for Research Activities. Educational and Psychological Measurement. Published *formula* for *Determining Sample Size*. ...

The Relationship Between *Sample Size* and Total *Population* illustrated in Figure 1. Available from: http://home.kku.ac.th/sompong/guest_speaker/KrejcieandMorgan_article.pdf Accessed on 6/05/2014.

Kringos, D. S., Boerma, W. G. W., Hutchinson, A., van der Zee, J., Groenewegen, P. P: The Breadth of Primary Care: A Systematic Literature Review of its Core Dimensions. **BioMed Central of Health Services Resources** 2010, 10-65. Available from: http://www.ncbi.nlm.nih.gov/pubmed/20226084. Accessed on 02/01/2014.

Lester, H., Tritter, J. Q., Sorohan, H. (2005). Patients' and Professionals' views on Primary Health Care for People with Serious Mental Illness: Focus Group Study. **British Medical Journal** 2005:330(7500): 1122-1126 Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC557894/ Accessed on 10/01/2014.

Lusaka District Community Health Centres (LDCHC). (2013). Action Plan. Lusaka, Zambia.

Manias, E., Aitken, R., and Dunning, T. (2010). How Graduate Nurses Use Protocols to Manage Patients' Medications. **Journal of Clinical Nursing**, 2005:14(8):935-44.

Mathers, C., Loncar, D. (2006). Projections of Global Mortality and Burden of Disease from 2002 to 2030. PLoS Medicine 2006, 3(11):e442. Available from: http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.0030442 Accessed on 10/01/2014.

McCormack, B and McCance, T. (2006). Development of a Framework for Person-centred nursing. *Journal of Advanced Nursing* 56(5) 1-8. Available from: http://www.britishgerontology.org/DB/gr-editions-2/generations-review/the-implementation-of-a-model-of-person-centred-pr.html. Accessed on 02/04/2015.

McCormack, B. & McCance, T. (2010). **Person-centred Nursing: Theory and Practice**. Oxford: Wiley Blackwell.

Meyrick, J. (2006). What is good qualitative research? A step towards a comprehensive approach to judging rigor/quality. **Journal of Health psychology**. Vol. 11 (5) pp 799 – 808.

Ministry of Health (MoH). (2005). **Mental Health Policy**. Lusaka, Zambia.

Ministry of Health. (2011). **National Human Resources for Health Strategic Plan 2011 – 2015.** Lusaka, Zambia.

Morales, K. (2012). **Clinical Practice Guidelines: A Deeper Look into Protocols and Algorithms**. Available from: http://nursetogether.com. Accessed on 21/05/2014.

Morgan D, Kosteniuk J, D'Arcy (2012). Diagnoses of anxiety and depression in clinical-scenario patients. Canandian Family Physician. 2012; 58(3): e144–e151. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3303667/ Accessed on 12/03/2014.

Msidi, E. J. (2010): The General Nursing Council of Zambia: Curricula Development. Zero Draft, Lusaka

Mutale, W., Tembo, M., Mwanamwenge, M. T and Balabanova, D. (2013). **Measuring Health Workers' Motivation in Rural Health Facilities: Baseline Results from Three Study Districts in Zambia.** Available from: http://www.human-resources-health.com/content/pdf/1478-4491-11-8.pdf. Accessed on 05/07/2015.

Mubarek, A., Markos, T, and Charlotte, H. (2014). Perceived Challenges and Opportunities arising from Integration of Mental Health into Primary Care: A Cross-sectional Survey of Primary Health Care workers in South-West Ethiopia. **BMC Health Serv Res.** 2014; 14: 113.

Mwape, L., Sikwese, A., Kapungwe, A., Mwanza, J., Flisher, A., Lund, C and Cooper, S. (2010). Integrating Mental Health into Primary Health Care in Zambia: A Care Provider's Perspective. **International Journal of Mental Health Systems** 2010:4:21 doi: 10.1186/1752-4458-4-21

National Institute on Alcohol and Alcoholism (NIAAA). (2005). Alcohol Assessment Tool. pubs.niaaa.nih.gov/publications/aa65/AA65.htm accessed on 20/04/2015.

Ndetei, D. M., Khasakhala, L. I and Mutiso, V, et al. (2011). Knowledge, Attitude and Practice (KAP) of Mental Illness Among Staff in General Medical Facilities in Kenya: Practice and

Policy Implication. **African Journal of Psychiatry.** 14:225-2350114. Available from: www.ajol.info/index.php/ajpsy/article/download/69605/57616. Accessed on 10/01/2014.

Neuman, W. L., (2006). **Social Research Methods; Qualitative and Quantitative Approaches.** 6th Ed, Pearson AB International, Boston.ISBN:10:1412965578. (Pg14-25).

Oberauer, K., & Lewandowsky, S. (2008). **Forgetting in Immediate Serial Recall: Decay, Temporal Distinctiveness, or Interference?** [Electronic version]. Psychology review, 115(3), pp. 544-576. Available from: http://www.ncbi.nlm.nih.gov/pubmed/18729591. Accessed on 8/8/2015.

Olawale, O, Francis, A. O and Abasiubong, F et al. (2010). **Detection of Mental Disorders with the Patient Health Questionnaire in Primary Care Settings in Nigeria.** Available from: http://www.oalib.com/search?kw=%20Patient%20Health%20Questionnaire&searchField=keyword. Accessed on 26/01/2014.

Perry D. F., Debora F. et al (2009). Integrating Early Childhood Mental Health. Available from: http://wwwchallengingbehaviour.fmhi.usf.edu/do/resources/.../brief-integrating.pdf Accessed on 20/04/2014.

Polit, D. F. and Beck, C. T. (2008). **Generating and Assessing Evidence for Nursing Practice.** 8th edition, Lippincott, Philadelphia. ISBN:10-1605477087. (Pg 165-230).

Prince, M., Patel, V., Saxena, S. (2007). **No Health Without Mental Health. The Lancet** 2007;370:859–77. Available from: http://www.ncbi.nlm.nih.gov/pubmed/17804063. doi: 10.1016/S0140-6736(07)61238-0. Accessed on 20/03/2014.

Rogers, A., Kennedy, A., Nelson, E., Robinson, A. (2005). Uncovering the Limits of Patient-centeredness: Implementing a Self-management Trail for Chronic Illness. *Qual Health Res* **125**(2): 224-39. Available from: http://www.mednwh.unimed/b.edu-au/pchc/downloads/PCHC-literature-review.pdf. Accessed on 05/07/2015.

Scheppers, E., van Dongen, E., Dekker, J., Geertzen, J and Dekker, J. (2006). Potential Barriers to the Use of Health Services Among Ethnic Minorities: a review. Family Practice 2006; 23: 325–348.

Schreuders. B and Patricia van Oppen. (2012). Primary Care Patients with Mental Health Problems: Outcome of a Randomised Clinical Trial**.** http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2169312/

Shaller D. (2007). Patient-centered Care: What Does it Take? Picker Institute, Oxford and The Commonwealth Fund. Accessed from http://tinyurl.com/shaller on 20/04/2015.

Simenda F. (2012). A Synopsis of Mental Health in Zambia. **Medical Journal of Zambia.** Available from: http://www.mjz.co.zm/content/synopsis-mental-health-zambia. Accessed on 25/02/2014.

Smith, G. C. (2009). From Consultation-liaison Psychiatry to Integrated Care for Multiple and Complex Needs. **New Zealand Journal Psychiatry.** 43(1):1-12. Available from: www.ncbi.nlm.nih.gov/pubmed/19085523. Accessed on 25/02/2014.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2012). **Adolescent Health Highlight: Access to Mental Health Care.** Available from: http://samhsa.gov/data/default.aspx. Accessed on 01/03/2014.

Svedience L, Jankauskiene L and Kusleikaite M. et al. (2009).Competence of the general nurses caring for patients with mental health problems in the somatic departments. Medicina. 45(10): 822-9 Available from: http://wwwmedicina.kmu.lt/0910/0910-10e.pdf. Accessed on 10.03.2014.

Tasmanian. A. (2009). **Strengthening the Mental Health Consumer Voice**. Available from: http://www.peersupportvic.org/research-directory/peer-support...downlod.2009. Accessed on 04/04/2014.

Treece, E. W, and Treece, J. W, (2002). **Element of Research in Nursing.** 5th Ed, C.V.Mosby Company, St. Louis, Missouri. (Pg 215-336).

Von Korff, M., Scott, K and Gurejej, O. (2009). Global Perspectives on Mental-Physical Co-morbidity in the WHO World Mental Health Surveys, Cambridge University Press, Cambridge, UK, 2009.

Watson, D. E., Heppner, P., Roos, N. P., Reid, R. J., Katz, A. (2005). Population-based Use of Mental Health Services and Patterns of Delivery Among Family Physicians, 1992 to 2001. **Canadian Journal of Psychiatry. 50**(7)**:**398-406.

WHO and Wonca. (2008). **Integrating Mental Health into Primary Care: A Global Perspective. Geneva: World Health Organization and World Organization of Family Doctors.** Available from: www.who.int**/mental_health/**resources**/mentalhealth_PHC_2008**.pdf. Accessed on 20/02/2014.

World Health Organization (WHO). (2008). **Mental Health Gap Action Programme (mhGAP): Scaling up Care for Mental, Neurological and Substance Use Disorders. Geneva**. Available from: www.who.int**/mental_health/**mh**gap/**en/. Accessed on 20/03/2014.

APPENDIX IA: **DATA COLLECTION TOOL**

THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF NURSING SCIENCES

STRUCTURED INTERVIEW ON FACTORS AFFECTING THE ABILITY OF HEALTH CARE PROVIDERS TO DETECT MENTAL HEALTH PROBLEM AT PHC LEVEL – A CASE OF LUSAKA URBAN CLINICS.

DATE OF INTERVIEW   :   _____

PLACE OF INTERVIEW   :   _____

NAME OF INTERVIEWER   :   _____

SERIAL NUMBER   :   _____

INSTRUCTIONS FOR THE INTERVIEWER

1. Introduce yourself to the participant.
2. Explain the reason for the interview.
3. Assure the participant of confidentiality and anonymity
4. Do not write the name of the participant on the interview schedule.
5. Fill in the most appropriate response to the question on the space provided.
6. Provide time for the participant to ask questions at the end of the interview.
7. Refer the participants to a person who can answer the questions you are not sure of.
8. Thank the participant at the end of each interview.

SECTION A: DEMOGRAPHIC DATA

FOR OFFICIAL USE

1. Sex

    a) Male

    b) Female

2. Indicate your age _____

3. What is your profession?

    a) Clinical Officer

    b) Nurse

4. Indicate the college you went for training.

_____

5. How long have you been working?

    a) 3 months to 1 year

    b) 2 to 6 years

    c) 7 to 11 years

    d) 12 years and above

SECTION B: KNOWLEDGE ON MENTAL HEALTH

6. Did you receive a training in mental health in the
   recent past?

        2. Yes
        1. No

7. Does the training you received improved your
   identification of mental health problems?

        2. Yes
        1. No

8. If "yes" to no. 7, what are the common mental health
   problems seen at your clinic?

        1. Sleep disorders
        2. Drinking problems
        3. Stress related problems

9. How do you manage patients with identified mental
   health problems?

        1. Refer to mental health specialist
        2. Prescribe treatment
        3. Counsel patient

10. Would do you need regular in-house training on
    mental health?

         2. Yes

         1. No

SECTION C: STAFF WORKLOAD

11. How many health care providers are you regularly
    per shift?

         3. per shift 1

         2. per shift 2

         1. per shift 3 or more

12. What is the average number of patients do you
    attend to per shift?

         1. per shift 10 – 20 patients

         2. per shift 21 – 30 patients

         3. per shift 31 and above patients

13. What type of work do you do when on duty?

         2. Patient care only

         1. Both patient care and other responsibilities

14. Are there situations when you would need assistance
    while on duty to finish your work?

         2. Yes

         1. No

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15. How do you rate your workload?

       2. Overload

       1. Normal load

SECTION D: TIME SPENT CLERKING PATIENT

16. How long is your shift per day?

       1. 6 to 8 hours

       2. 8 to 12 hours

       Others specify_____

17. What is your average time spent on each patient during your shift?

       3. per patient 5 – 15 minutes

       2. per patient 16 – 25 minutes

       1. per patient 26 – 30 minutes

18. Which patients do you spend more time on?

       1. Patients on first visit

       2. Patients on subsequent visits

       3. On both visits

19. Does your answer on question no. 17 adequate also to assess the mental aspect of the patient?

       2. Yes

       1. No

20. From your experience, what do you think is the adequate time to spend with a patient manifesting psychological symptoms?

       1. 20 minutes

       2. 25 minutes

       3. 30 minutes

SECTION E: ON STANDARDIZED GUIDELINES

21. Do you follow any health screening tools for assessing health needs of patients?

       2. Yes

       1. No

22. Do you use standardized guidelines to detect mental health problems?

       2. Yes

       1. No

23. If your answer is "yes" to no. 22, how many patients with mental health problems do you identify?

       1. 0 – 2 patients

       2. 2 – 4 patients

       3. 5 – 6 patients

24. Do you find the use of standardized guidelines on mental health useful?

       2. Yes

       1. No

END OF THE QUESTIONNAIRE

THANK YOU FOR ACCEPTING TO PARTICIPATE.

APPENDIX IB: FOCUS GROUP DISCUSSION GUIDE FOR HEALTH

CARE PROVIDERS (CLINICAL OFFICERS AND NURSES)

Number of informants_____

Composition of informants_____

Language used during interview_____

Date: _____**Duration:**_____

Place: _____

BRIEF

Purpose of the study

This study in which you are being asked to participate is being undertaken in partial fulfillment of my postgraduate studies at University of Zambia. This part of the study is being undertaken in order to find out what factors affect the ability of health care providers to detect mental health problems at primary health care level in LDCHC. It aims to target different groups of health workers to get adequate information. Apart from being a requirement for my studies, the study will also contribute to the generation of knowledge, which will be used to influence policy-makers as they develop policies to increase the ability to detect mental health problems to improve patient outcomes at primary health care settings. It will also assist in developing and advocating for interventions that are responsive to mental health needs.

Choice

Be informed that you have the right to choose to participate in this study and can withdraw in the process of the group discussion whenever you wish to do so without any prejudice. You will be given the opportunity to ask any questions before, during and after the discussion. You can also choose to or not to answer any questions or contribute to the discussion. I will not be looking for any wrong or right answers but your views on the topic. The topic will last between 30 – 45 minutes and be recorded on a cassette recorder.

Procedure

I will be leading the discussion in which you will be asked to share experiences and views about the topic with other members of the group.

Ground Rules

In order to foster the discussion, these rules will be observed by the group.

1. Only one person should speak at a time.
2. Group members should respect each other's opinion.
3. Whatever has been discussed in this discussion should not be talked about outside the room/group.

Questions

1. In your own opinion what do you think mental health is?
2. How can you know that this person has a mental health problem?
3. What do you use to detect mental health problems in patients you see?
4. What factors do you think might be affecting early detection of mental health problems in patients at this health centre?
5. How does workload impact on the ability to detect mental health problems in patients?

Debrief

Do you have any questions?

Thank very much for participating in this discussion. If you have any questions please don't hesitate to contact me at the address already given.

APPENDIX II: BUDGET

BUDGET CATEGORY	UNIT COST (ZMK)	QUANTITY	TOTAL
1. STATIONERY			
a) External hard drive	500.00	x 1	500.00
b) Bond paper	30.00	x10	300.00
c) Pens	2.50	x10	25.00
d) Pencils	2.50	x 4	10.00
e) Rubbers	5.00	x2	10.00
f) Note book	8.00	x2	16.00
g) Tippex	12.00	x2	24.00
h) Bag for questionnaires	150.00	x1	150.00
i) Stapler	25.00	x1	25.00
j) Staples	10.00	x1 Box	10.00
k) Tape recorder	250.00	x 1	250.00
SUBTOTAL			**1,320.00**
2. PERSONNEL			

a) Lunch allowance			
Principal researcher	30.00	x1 x 30 days	900.00
Research assistant	30.00	x3 x 30 days	2,700.00
SUBTOTAL			**3, 600.00**
3. SERVICES			
a) Ethics committee	1, 000.00	1	1,000.00
b) Data entry	500.00	1	500.00
c) Data analysis	1 000.00	1	1,000.00
d) Photocopying proposal	2.50	320 pages	800.00
e) Photocopying questionnaire	2.50	10 pages x 65	1,625.00
f) Photocopying report	2.50	100 pages	250.00
g) Binding	7.00	5 copies	35.00
SUBTOTAL			**5,510.00**
TOTAL			10,430.00
CONTIGENCY FUND10%			1,043.00
GRAND TOTAL			**11,473.00**

JUSTIFICATION FOR THE BUDGET

STATIONERY

The 10 reams of bond paper were used for the research proposal development and the final report. Paper was also required to make extra copies of the proposal for submission to the Research Ethics committee and the board of graduate studies.

In addition the questionnaire consisted of 10 pages which need to be photocopied. The bag for questionnaires was for the researcher to ensure that the questionnaires are kept safe. The external hard drive was for copying, storage and safe keeping of research data. Other accessories such as pens, pencils rubbers, stapler and staple, note books, calculator and tape recorder were required for the routine collection of research data.

PERSONNEL

Data collection was be conducted throughout the day as such the researcher needed lunch allowance. The research was allocated 30 days to allow adequate time for administration of questionnaire and focus group discussions.

SECRETARIAL SERVICES

Funds for photocopying services and binding of the proposal and report were needed. The charge for photocopying implies that one copy was printed and the rest were photocopied to cut down on the cost. The researcher needed five copies of the proposal to submit to Post Graduate Research Committee for dissertation and dissemination.

CONTIGENCY

Contingency fund which is 10% of the budget was required for any extra costs due to inflation and for any eventualities.

APPENDIX III: GANTT CHART

Task to be performed	Responsible person	Month of Year 2014											Month of Year 2015	
		Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb
Literature Review	Principal Investigator (PI)	←												→
Development and finalization of research proposal	PI		←						→					
Presentation of proposal at DNS	PI									←				→
Presentation of proposal at graduate forum	PI												←	→
Pilot study	PI													↔
Permission to conduct research	PI													↔
Data collection	PI													← →
Data analysis	PI &												←	→

Task to be performed	Responsible person	Month of Year 2014											Month of Year 2015	
		Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb
	Statistician													
Report writing	PI					↔								
Draft report to school of medicine (Department of Nursing Science)	PI						↔							
Finalization of report	PI							↔						
Submission of final report	PI							↔	↔					
Dissemination of report findings	PI										↔	↔		
Monitoring research project	PI	↔										↔		

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APPENDIX IV: PARTICIPANT INFORMATION SHEET

FACTORS IMPEDING THE ABILITY OF HEALTH CARE PROVIDERS FROM DETECTING MENTAL HEALTH RELATED PROBLEMS AT PRIMARY HEALTH CARE LEVEL IN LUSAKA.

I, Astridah Moonga; a student of Masters of Science in Nursing at the University of Zambia is kindly requesting for your participation in the research study mentioned above. Your participation in this study is entirely voluntary. You are under no obligation to participate; you may choose to participate or not to participate. If you decline to participate, no privileges will be taken away from you. If you agree to participate, you will be asked to sign consent in front of the researcher. Agreement to participate will not result in any immediate benefits.

PURPOSE OF THE STUDY

The study will explore factors impeding the ability of health care provider from detecting mental health problems at primary health care level. This is important as the information obtained will help LDCHC and the Ministry of Health to take measures to increase the ability to detect mental health problems to improve patient outcomes at primary health care settings.

PROCEDURE

The study involves a structured interview schedule. After signing the consent form, you will proceed to answer the questions and your responses will be written on the space provided.

RISKS AND DISCOMFORTS

There is no risk involved in this research though part of your time will be utilized to answer some questions.

BENEFITS

There is no direct benefit to you by participating in this study, but the information which will be obtained will help the policy makers to take measures to improve the ability of primary health

care providers to detect mental problems and improve patient outcome. No monetary favors will be given in exchange for information obtained.

CONFIDENTIALITY

Your research records and any information you will give will be confidential to the extent permitted by law. You will be identified by a number, and personal information will not be released without your written permission except when required by law. The Ministry of Community, Mother and Child Health, Ministry of Health, the University of Zambia Research Ethics Committee or the School of Medicine may review your records again but this will be done with confidentiality.

WITHDRAW

If you feel like withdrawing from participating in the study you are free to do so without giving an explanation and no privileges will be taken away from you.

APPENDIX V: INFORMED CONSENT FORM

The purpose of this study has been explained to me and I understand the purpose, the benefits, risks and discomforts and confidentiality of the study. I further understand that: If I agree to take part in this study, **I can withdraw at any time without having to give an explanation** and that taking part in this study is purely voluntary.

I_____ (Names) agree to take part in this study.

Signed: _____ Date: _____
(Participant)

Signed: _____ Date: _____
(Researcher

PERSONS TO CONTACT FOR PROBLEMS OR QUESTIONS

1. Astridah Moonga. University of Zambia. Department of Nursing Sciences. P.O. Box 50110, Lusaka. Cell: 0977 150 842.

2. Dr L. Mwape, University of Zambia, Department of Nursing sciences. P.O. Box 50110, Lusaka. Cell: 0979 093 045.

3. The Chairman, ERES CONVERGE, Private Bag 125, Lusaka.