
**POLYTECHNIC OF NAMIBIA**

Harold Pupkewitz Graduate School of Business

# The Introduction of Competence and Performance Assessment of Medical Practitioners in Namibia: Perceptions of Stakeholders

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Thesis presented in partial fulfilment of the requirements for the Degree of Master of Leadership and Change Management in the Harold Pupkewitz Graduate School of Business at the Polytechnic of Namibia

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## DECLARATION OF ORIGINAL WORK

I, Alfons Amoomo, declare that this Thesis is my own unaided work. Any assistance that I have received has been duly acknowledged in the thesis. It is submitted in partial fulfilment of the requirements for the degree of Master of Leadership and Change Management at the Polytechnic of Namibia. It has not been submitted before for any degree or examination at this or any other Institution of Higher Learning.

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This study is dedicated to my wife Liinda.

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# ABBREVIATIONS

| | |
|---|---|
| CEUs | Continuing Education Units |
| CEX | Clinical Evaluation Exercise |
| CLs | Confidence Intervals |
| CPD | Continued Professional Development |
| DRC | Democratic Republic of Congo |
| HPCNA | Health Professions Council of Namibia |
| GMC | General Medical Council |
| IHK | Intermediate Hospital Katutura |
| MDCNA | Medical and Dental Council of Namibia |
| MOHSS | Ministry of Health and Social Services |
| MSF | Multi-Source Feedback |
| QM | Quality Management |
| SPSS | Statistical Package for Social Sciences |
| UK | United Kingdom |
| UNAM | University of Namibia |
| USA | United States of America |
| WCH | Windhoek Central Hospital |

## ABSTRACT

Members of the public expect practicing medical practitioners to be competent. They expect poorly performing medical practitioners to be identified and either helped or removed from practice. Competence and performance assessment of individual medical practitioner is crucial for life-long learning and quality of care. Policymakers and the Health Professions Council of Namibia (HPCNA) should have good insights into the strengths and weaknesses of the methods available. The aim of this study was to describe the perceptions of stakeholders, namely Medical and Dental Council of Namibia (MDCNA) members as well as state and private medical practitioners, regarding the introduction of competence and performance assessment of medical practitioners in Namibia and to compare their views in order to gain insights into their views, with a view of implementing competence and performance assessment of a medical practitioners programme which might consequently improve quality services.

The study followed a quantitative research approach using a descriptive design. A survey method using questionnaires was applied. A response rate of 66.0% was obtained. Data analysis, that included identifying and comparing the perceptions of different stakeholders regarding the introduction of a competence and performance assessment of medical practitioners, was done using *SPSS*. The target population included all MDCNA members, as well as state and private medical practitioners in Windhoek. The findings were that the majority of MDCNA and private medical practitioners, respectively, believe it is very necessary to introduce a competence and performance assessment of medical practitioners in Namibia.

Their responses are comparable and consistent with the responses provided by the state medical practitioners. The study further revealed that the majority of MDCNA and private medical practitioners believe that the introduction of a competence and performance assessment of medical practitioners in Namibia could significantly improve quality health-care services. Their responses are comparable and consistent with the responses provided by the state medical practitioners. Recommendations are proposed based on the results of the study.

# CHAPTER 1

# BACKGROUND TO THE RESEARCH

## 1.1 Introduction to the study

This chapter provides an overview of research under taken. It also covers the study which was conducted to identify and describe perceptions of stakeholders regarding the introduction of a competence and performance assessment of medical practitioners in Namibia**.** The study's broad aims are to compare perceptions of stakeholders and make recommendations directed at improving quality services. A brief background to the research problem and objectives of the study are presented. Competence and performance assessment of medical practitioners is discussed and contextualised.

## 1.2 Research background

It is generally accepted that medical practitioners are regarded as being competent to start working with patients immediately after obtaining their medical qualifications (Rethans, Norcini, Baro'n-Maidonado, Blackmore, Jolly, LacDuca, Lew, Page & Southgate, 2002). It has been assumed that they will remain competent throughout their professional careers by taking postgraduate courses, for example. In addition, day-to-day problems experienced in clinical practice, as well as knowledge gained, should provide sufficient opportunities to enable them to maintain clinical competency to ensure that they remain fit to practice. Initial certification was also considered sufficient to guarantee quality for the entire professional life of a medical practitioner. However, ongoing advances in medicine mean knowledge becomes outdated very fast. The consensus nowadays is that it is no longer adequate to assume

that medical practitioners would themselves ensure to keep abreast with the latest medical advances (Brennan, Horwitz, Duffy, Cassel, Goode & Lipner, 2004).

To reflect these changes in practice, it is necessary that medical practitioners update their competences continuously to perform optimally (Davis & Harden, 2003). There needs to be regular assessment of their daily clinical practice to inform them about their performance. Several studies have shown that there are differences between what medical practitioners can do in controlled high stakes situations and what they really do in actual practice. In the United States of America (USA), the Accreditation Council for Graduate Medical Education and the American Board of Specialities has identified the core competencies for USA medical practitioners. This is also done by the Royal College of Physicians and Surgeons of Canada for Canadian medical practitioners (Accreditation Council for Graduate Medical Education and American Board of Medical Specialties, 2000). The focus of these essential competencies involves delivering quality care that extends beyond medical knowledge and clinical expertise, communication skills, collaboration, and professionalism. These competencies need to be maintained throughout medical practitioners' careers.

In the United Kingdom (UK), the General Medical Council (GMC) proposed that medical practitioners should undergo a process of revalidation, in which medical practitioners on the GMC register secure a continuing licence to practise on the grounds that they have demonstrated that they are up to date and fit to practice medicine. Medical practitioners on the GMC register were first issued with licences in 2009. A study done by De Vries, Sanderson, Janta, Rabinovich, Archontakis, Ismail, Klautzer, Marjanovic, Patruni, Puri, and Tiessen (2009) revealed that GMC undertook performance assessments of medical practitioners about whom concern had been raised. The UK GMC conducts assessments to satisfy itself that a medical practitioner

is meeting standards that can reasonably be expected of medical practitioners practicing in that medical discipline.

In the same study it was revealed that countries, such as Egypt, South Africa, and Spain, were developing proposals for competence and performance assessment systems and were considering implementing quality assurance programmes designed to ensure the continuing competence of their respective members. Given this trend in other countries it is important for the Medical and Dental Council of Namibia (MDCNA) to implement quality assurance programmes to ensure that medical practitioners' competencies are on par with sister regulatory bodies. Such programmes in Namibia could help reduce the public outcry about the quality of clinical care in government hospitals. For example, it was reported by the President Commission of Inquiry that poor quality clinical care in public hospitals was due to incompetent medical practitioners (Mtambanengwe, Maganu & Keiseb, 2013).

Disconcerting findings relating to poor quality service delivery in Namibia were reported in a study by Awases (2006). The study covered factors affecting poor performance among nurses. The findings were that performance is poor due to aspects related to knowledge and skills base as well as those aspects related to performance and building of knowledge and expertise. From these findings it can be inferred that the above mentioned factors might also be common among medical practitioners.

In Canada assessing medical practitioners' performance is established by regulatory authorities and speciality. Each province has its own regulatory body called the College of Physicians and Surgeons which is legislated to monitor doctors' performance. Since 1972, the College of Physicians and Surgeons of Ontario assessed doctors every five years with a clinical audit. All medical practitioners who turned 70 years of age in a given year are automatically selected for assessment, and the program

assesses a random selection of doctors within specific practice and speciality areas (Dauphine, 1999).

In the Republic of Namibia the MDCNA's statutory role, as outline in the Medical and Dental Act No. 10 of 2004, is to protect the public through regulated standard and practice by promoting and better ensuring high standards of professional conduct and professional education, training and competence among registered medical practitioners. The MDCNA Act (No 10, 2004) outlines procedures related to registration which involves, amongst others, oral pre-registration evaluation with the aim of determining professional knowledge, skills and competence (Republic of Namibia, 2004). Unfortunately the MDCNA does not have an established programme and procedure to assess medical practitioners who may have problems with loss of competence or acceptable professional conduct, or against whom allegations of deficient performance have been made. Such programmes are needed to ascertain whether medical practitioners are competent to practice in order to maintain public confidence in the medical profession and to reassure members of the public that practicing incompetent and poorly performing medical practitioners are identified and either helped or removed from practice.

It was reported on the President Commission of Inquiry (hereafter the Commission) (Mtambanengwe *et al*., 2013) that one of the identified factors affecting poor performance among medical practitioners was authorisation to practise medical profession in the state without being registered by the MDCNA as medical practitioners. It is disconcerting to note that during a number of consultations, and in written submissions as well as during public hearings, the complaint was raised that the system of authorisation is open to abuse: unqualified persons might be authorised to practise when in fact they should not.

Affidavits submitted to the Commission revealed that a number of cases of persons from Kenya, Nigeria, and Democratic Republic of the Congo (DRC) who were authorised to practise as medical practitioners apparently without consultation with the MDCNA. These persons were later found to be completely unsuitable to practise because they either obtained the Minister's authorisation fraudulently or they did not provide the required documentation or they did not comply with other requirements of the Medical and Dental Act (No. 10 of 2004). A number of such 'medical practitioners' were discharged from the public employment by the Public Service Commission (Mtambanengwe *et al*., 2013).

With the above stated findings it is important for the MDCNA to introduce competence and performance assessment of medical practitioners to identify unsuitable practitioners. A remedial programme should be incorporated to improve the quality of clinical care.

This study focuses on identifying and describing perceptions of stakeholders regarding the introduction of a competence and performance assessment of medical practitioners in Namibia. The study compares their perceptions and makes recommendations directed at improving quality services.

Competence and performance assessment of medical practitioners has not yet been examined in Namibia. In fact, this subject has not previously been thoroughly studied in Africa. There is a need to seek evidence about competence and performance assessment of medical practitioners, and find ways to monitor competence and performance of medical practitioners in order to improve their performance as well as quality service delivery.

## 1.3 Problem statement

There is no requirement for revalidation as well as competence and performance assessment of medical practitioners in Namibia. The Medical and Dental Act No 10 of 2004 does not make provision for medical practitioners' revalidation. This lack of revalidation, as well as lack of competence and performance assessment of medical practitioners, could compromise the quality of patient care. Patient safety could be at risk hence the vision of the MDCNA of protecting the public is possibly not been realised.

For example, the Commission's inquiry team found that quality of patient care in public health facilities was generally described by the public, and health professionals, to be below acceptable standards. One of the complaints raised in relation to poor quality patient care was that some medical practitioners do not carry out physical examination before prescribing medications (Mtambanengwe *et al*., 2013).

The issues of competence and performance assessment of medical practitioners are not adequately addressed in Namibia. It is therefore deemed necessary to undertake a study to obtain evidence to guide the MDCNA and other stakeholders to develop strategies for improving the competence and performance of the medical practitioners. It is also necessary to have a broader view from MDCNA members, as well as state and private medical practitioners on issues relating to the introduction of competence and performance assessment of medical practitioners with a view of introducing a competence and performance assessment of registered medical practitioners every five years.

The above background motivated the researcher to answer the following research questions.

## 1.4 Research question

What are the perceptions of different stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia?

### 1.4.1 Sub-questions

a) What are the perceptions of different stakeholders about the introduction of competence and performance assessment of medical practitioners in Namibia?

b) What is the best practice around the world on competence and performance assessment of medical practitioners?

c) What assessment strategies could be used to determine medical practitioners' competence and performance?

d) What are the challenges with introducing competence and performance assessment?

## 1.5 Research objectives

The objectives of this study are:

1. To identify the perceptions of different stakeholders regarding introducing competence and performance assessment of medical practitioners in Namibia.
2. To identify best practices around the world on the competence and performance assessment of medical practitioners.
3. To compare the perceptions of different stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia.

4. To describe the challenges that might be experienced in introducing competence and performance assessment of medical practitioners in Namibia.
5. Make fairly recommendations directing at improving quality services.

## 1.6 Motivation for the study

The purpose of this study is to describe the perceptions of stakeholders, namely, MDCNA members, state and private medical practitioners, regarding the introduction of competence and performance assessments of medical practitioners in Namibia and to compare their views and gain insights into such views, in order to address the implementation of a competence and performance assessment of medical practitioners programme in the country which might consequently improve quality services.

## 1.7 Research design and methodology

According to Babbie and Mouton (2001), "a research design addresses the planning of a scientific enquiry" (p.72). A research design focuses on the end product and the logic of the research. In other words, "it is a plan of how a researcher intends to conduct the research, which includes the evidence that is necessary to address the research question adequately" (Babbie & Mouton, 2001, p. 56). Research methodology refers to the process and the steps in the research process (Babbie & Mouton, 2001, p.56).

The researcher conducted this study using a quantitative approach based on positivism. The quantitative approach helped the researcher to objectively measure the responses of the MDCNA members and medical practitioners. It enabled him to describe the perceptions of different stakeholders (MDCNA, state and private medical practitioners) regarding the introduction of competence and performance assessment

of medical practitioners in Namibia, and to compare their views to gain insights into such views which might consequently improve quality services.

This brief discussion of research design and methodology is discussed in detail in Chapter 3 of this thesis.

### 1.7.1 Research design

A quantitative descriptive study was used by the researcher. Reasons' being it is an excellent vehicle to identify and describe the perceptions of different stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia and to compare their views in order to gain insights into such views which might consequently improve quality services. It is also the best method available to collect original data to describe the characteristics of this large research population, which is too large to observe directly. A major advantage of using a quantitative approach is that the data can be collected from the participants in their natural setting, for example in their workplace.

### 1.7.2 The target population

The target population studied during this survey was the MDCNA members, state medical practitioners that work in two main public hospitals in Windhoek, and private medical practitioners that work in private consulting rooms/surgeries. This study was conducted in Windhoek, Namibia because it is where the majority of MDCNA members, and state and private medical, are concentrated. The Ministry of Health and Social Services (MOHSS) staff establishment estimated that there are at least 140 posts for state medical practitioners working at the Intermediate Hospital Katutura (IHK), and Windhoek Central Hospital (WCH), but only 100 posts are filled. Out of these100 posts there were 30 medical practitioners on special study or annual leave (MOHSS, 2013). There are at least 558 private medical practitioners in Namibia

(MOHSS, 2008), but the exact population of private medical practitioners in Windhoek is unknown. The population of private medical practitioners, which is classified as known and accessible, is 37. There are 10 MDCNA members in Windhoek.

### 1.7.3 Sampling

Babbie and Mouton (2001) define sampling "as a process of selecting observations" (p.164). The purpose of sampling is to select a set of elements from a population in such a way that descriptions of those elements accurately portray the characteristics of the total population from which the elements were selected. "Taking a subset of the population to participate in the research enabled the researcher to state clearly that the sample was representative of the population" (Babbie & Mouton, 2001, p.164; De Vos, Strydom, Fouché, Poggenpoel & Schurink,2000, p.190; Neumann, 2000, p.265; Seaman, 1987, p.234).

Stratified random sampling was used because the study population is composed of various clearly recognisable, non-overlapping subpopulations that differ from one another in terms of specific variable.

### 1.7.4 The sample size

A sample of a 100 state medical practitioners was drawn from two main public hospitals in Windhoek. Twenty-five potential participants working in the Windhoek Central Hospital and Intermediate Hospital Katutura were selected from the 100 medical practitioners (MOHSS, 2013). The staff establishment of 2013 indicates there were 100 posts filled. A sample of 37 private medical practitioners was drawn from a known and accessible population working in Windhoek. Eight MDCNA members were drawn from the 10 members who are Windhoek residents.

### 1.7.5 Data generation and collection

The data was collected using self-administered questionnaires. The questionnaires were designed from the information gained from the literature search.

#### *1.7.5.1 Questionnaire*

A self-administered questionnaire was considered the most appropriate data collection instrument for this research. It was cost-effective as regards the amount of money and the time, and the data to be collected. Arrangements were made with the hospital superintendents and directors for private medical centers to distribute questionnaires to the medical practitioners. All questionnaires for private medical practitioners and MDCNA members were handed to the respondents 'receptionists.

The questionnaire was designed to obtain demographic data of the respondents; their perceptions regarding the introduction of the competence and performance assessment of medical practitioners; issues surrounding quality improvement; challenges of the introduction of a competence and performance assessment; and factors that affect professional performances.

### 1.7.6 Data analysis

The data was analysed using quantitative data analysis methods. The raw quantitative data was first coded and then analyzed using a soft-ware program *SPSS.*

## 1.8 Thesis outline

Chapter 1describes the relevance of this research to the field of quality assurance, the research problem, objectives, clarification of concepts with related literature review, research design and methodology, and ethical considerations.

Chapter 2 contains a discussion of the various concepts, their relevance to the research problem, and the context in which the study was conducted. Included in this chapter is a review of previous and relevant research findings in this field.

Chapter 3focuses on the methodology and the research design of this research. It includes the selection of the sample of the participants, data collection methods, and a plan to organize and analyze the data.

Chapter4presents the result of the research.

Chapter 5 focuses on the discussion of the results and the literature review.

Chapter6focuses on the summary of key findings, the conclusion reached and recommendations made.

## 1.9 The significance of the study

This study is relevant and significant as insights of MDCNA members, and state and private medical practitioners views of introducing competence and performance assessment of medical practitioners could assist to generate valuable inputs for amendment of the Medical and Dental Act No.10 of 2004 as well as hypothetical baselines for future researches in the areas of quality assurance of medical practitioners in the country.

## 1.10 Summary

This chapter briefly outlined the need for performance and competence assessment of medical practitioners by the regulatory bodies in order to identify incompetent medical practitioners in order to assist them, and to protect the public from unsuitable medical practitioners as well as improve quality service delivery. The problem statement, research objectives, motivation of the study, research methodology and significance of the study were also described. The next chapter covers the literature review.

# CHAPTER 2

# LITERATURE REVIEW

## 2.1 Introduction

This chapter covers a literature review on the competence and performance assessment of medical practitioners and how it affects quality service delivery. The researcher conducted an extensive literature review on concepts such as competence, competence and performance/workplace assessment, assessment strategies, best practices, factors affecting professional performance, quality improvement, and the challenges for introducing competence and performance assessment of medical practitioners.

## 2.2 Sub-headings by key concepts

In this section the following concepts are discussed: competence, assessment of competence and professional performance, practice and work assessment, quality assurance, assessment strategies, quality improvement, best practices and challenges. The discussion of these key concepts serves to develop a theoretical framework to help the researcher to get a clearer understanding of their relationship to the research problem.

### 2.2.1 Competence

The literature describes three main approaches to conceptualising competence (Hanley & Higgins, 2005).

**Behaviouristic:** a task-based approach that depends on direct observation of performance. This approach has been criticised on the basis that it ignores the role of professional judgement in intelligent performance and does not allow for the development of problem solving or critical thinking. Medical practitioners must not

only possess knowledge, skills, and attitudes to provide quality care, but they must also demonstrate competence when they evaluate and treat their patients.

**Generic:** this identifies the general attributes that are crucial to effective performance, focusing on transferable attributes such as knowledge and critical thinking; this transferability of generic skills is across different situations.

**Holistic:** this brings together a range of attributes including knowledge, attitudes, values and skills to meet the needs of a variety of clinical situations. In the literature there is a degree of confusion about competence-based assessments. This confusion is mainly caused by using the terms ‘competence’ and ‘competency’ interchangeably. Further, many authors distinguish between the assessment of performance and the assessment of competence (Ruedy, 2007). Hence by this inference all assessments of competence are assessment of performance, and there should be no distinction between these two. This confusion could be easily resolved by understanding the correct meanings of each of these terms and using them appropriately.

Competence has become an important concept in human resource development and education during recent decades (Mulder, 2007). The concept of competence is defined and interpreted in a multiple ways, both among different scientific fields and even within a single one. There is still a lack of a thorough conceptual framework including an operational (Delamare, De Leist & Winterton, 2005; Esteves, 2009).

The most common definition of professional competency used today is that of Epstein and Hundert (2002) who define it as the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served. Maintenance of professional competence is a lifelong process, and is motivated

by a number of factors, including curiosity, self-identified gaps in knowledge, and the desire to provide the very best care to patients.

Bhatti and Cummings (2007) have also defined competence as an ability to successfully apply professional knowledge, skills and attitudes to new situations as well as familiar ones. Eraut (2008) explains that competence usually refers to a person's underlying characteristics or overall capacity that is causally related to job performance. According to Taatila (2004) another related term that is close to the term competence is performance. Stobinskin (2008) notes that competence is one determinant of performance and that the relationship is not direct. Other factors, such as the work setting, time, and motivation, also have a major role in determining performance.

A definition by Cheneliere (2006) states that competence is the ability to solve ambiguous and undefined problems, tolerance against uncertainty and take decisions although there is limited information. Real competence is evident in unusual situations. Competence consists in the ability of showing cognitive flexibility and adaptation ability when we face new situations in a particular area, more than a series of answers to a foreseeable group of stimuli (Cheneliere, 2006).

From the above stated definitions of competence it can be argued that the competence acquisition does not represent a success in itself, but the acquisition of the learning habit through the professional life and its assessment have a fundamental role when helping medical practitioners to identify their needs of learning.

It could also be observed from the above stated definitions that it is problematic to develop a common definition of competency including the difficulty in creating a standard for competency assessment and the need to decide what competencies all practicing medical practitioners must be able to demonstrate and

whether these should be general or fundamental. This is in line with study done by Allen, Lauchner, Bridges, Francis-Johnson, McBride and Olivarez (2008) that found out that other barriers to developing a common definition of continuing competency include the difficulty in creating a standard for competency evaluation and the need to decide what competencies all practising registered nurses must be able to demonstrate and whether these should be general or fundamental. Murphy, Bruce, Mercer and Eva (2009) also highlighted the problem of lack of consistence in defining competence and performance in their studies.

There are several important aspects of medical practitioners' competence that deserve special emphasis. Firstly, medical practitioners' competence is inherently peer-driven. Requirements and standards for competence found in training programme accreditation, board certification and maintenance of certification, patient care practice guidelines, credentialing, licensing, and peer review, are all developed and administered by special committees of medical practitioner peers (Sepucha, Fowler & Mulley, 2004). Secondly, medical practitioners' competence is in part patient-determined. In the era of patient advocacy and patient-centred care, the assessment of a medical practitioner's competence is incomplete without considering the opinions of patients served by that medical practitioner (Sepucha *et al*., 2004). Thirdly, medical practitioners' competence is constantly evolving. The basic knowledge, skills, attitudes, and behaviours for competence must of necessity change with new discoveries, technologies, health care system structure and social mandates (Berwick & Finkelstein, 2010). Finally, medical practitioners' competence is a continuous process. Partly because of the evolving nature of competence, medical practitioners cannot maintain those abilities without ongoing attention to their knowledge and skills (Kirch, 2010).

### 2.2.2 Assessment of competence and professional performance

Assessment of professional competence involves the process to determine the knowledge, skills, abilities, and performance levels of students or candidates for graduation, licensure, or certification (Kramer, Albino, Andrieu, Hendricson, Henson & Horn, 2009). In order to measure competence, one needs to be able to evaluate the knowledge, skills, and abilities represented by those behaviours in the actual practice setting. Therefore one can conclude that lack of performance and competence assessment of medical practitioners could compromise quality care delivery.

The most important issue in assessment is to build validity. Many experts suggest that validity is in fact a matter of climbing higher on the pyramid (Van der Vleuten & Schuwirth, 2005). What this means is that assessing what medical practitioners do in a real life setting is likely to be more valid and, therefore, a better predictor of future performance compared with assessment in a controlled situation. However, assessment of competence of medical practitioners by examination is inherently problematic. There are real differences between what medical practitioners do in controlled assessment situations and their actual performance in professional practice.

In contrast there is some criticism of published competence-based assessments. There is a range of views cautioning against the use of generic domains of clinical competence that do not take account of the specific context and skills required to practice in a specialist environment (McGrath, Fox Young, Moxham, Anastasi, Gorman &Tollefson, 2006). Other criticism includes: the lack of a systematic approach to incorporating specific competencies into curricula; questions about the methodology used to develop competencies; and concerns that measurement of competence is a form of regulation that may be limiting (McGrath *et al*., 2006). These

criticisms could be addressed by introducing a systematic approach to assess competencies and performance assessment.

Although many forms of assessment can be used to show a medical practitioner's knowledge or competence, there is evidence that competence does not reliably predict performance in clinical practice (Rethans *et al*., 2002). Evidence from several studies found that that there are a number of substantial problems with assessment of outcomes, and there is often no definition of thresholds of acceptable care (Landon, Normand, Blumental & Daley, 2003; Lilford, Mohammed, Spieglhalter & Thomson, 2004; Norcin, 2003).

Lilford *et al*. (2004) further found there is also a risk that comparative measures, such as morbidity and mortality, can be over-interpreted which can lead to ill-considered performance management programmes which divert attention from genuine improvement strategies to superficial solutions.

### 2.2.3 Practice and work assessment

Workplace based assessment refers to the assessment of day-to-day practices undertaken in the working environment or more simply, workplace based assessment is an assessment of what medical practitioners actually do in practice (Swanwick & Chana,2009). It is the quantitative assessment of performance based on rates at which patients of medical practitioners experience certain outcomes of care/or the rates at which medical practitioners adhere to evidence-based process of care during practice (Landon *et al*., 2003).

The main value of workplace based assessments is that they provide immediate feedback. The information acquired during a workplace based assessment can also provide evidence of progression of medical practitioners and therefore contributes evidence suitable for recording in their learning portfolio. This can then be compared

to the agreed outcomes set by the assessor and medical practitioner in the competence and performance agreement. It is essential that both assessor and medical practitioner are aware that both feedback and assessment of performance contribute to their growth of evidence, and are simultaneously taking place during workplace based assessment.

Workplace based assessment approaches are most effective if they integrate formative and summative evaluations, as these are mutually informative processes (Kaslow *et al*., 2004; Roberts, Borden & Christiansen, 2005). Formative assessment refers to an ongoing, developmentally informed process of competence assessment, and direct and thoughtful feedback during training and throughout professional development to ensure the attainment of higher levels of competence through learning and performance improvement. Summative assessment is the term used to depict an end-point or outcome measurement, such as degree conferral, completion of internship or postdoctoral fellowship training, licensure, or board certification. Summative feedback also should result in the enhancement of competence. Both formative and summative assessments of competence should focus on strengths, relative weaknesses, and areas of competence problems (below the minimum threshold for a particular developmental stage in a given competency domain or domains). This information should guide education and training plans and remediation efforts in ways that are useful to the person being evaluated. Often viewed as separate processes, formative and summative evaluation, respectively interact in a continuing sequence of assessments at various points in summative ways and provide information for self-improvements for formative actions (Prescott, Norcini, McKinlay & Rennie, 2002). Summative evaluations are most effective if there is a formative component (Weber, 2000).

### 2.2.4 Quality assurance and workplace based assessment

Workplace based assessment should comply with universal principles of quality management (QM) and quality assurance that one might expect in any assessment. However, the position of workplace based assessment is somewhat different. This is not to say it should not be quality managed but because of its nature there are issues concerning its best use. This might be summarized as being an assessment methodology that has demonstrably high validity, whilst being more challenging in terms of its reliability. However, in practice the evidence is that some workplace based assessments have very reasonable reliability.

The work of Norcini *et al.*(2003) work has demonstrated that mini-CEX can have acceptable reliability with six to ten separate but similar assessments based on 95% CIs using general ability. They emphasize the need to re-examine measurement characteristics in different settings and the need for sampling across assessors and clinical problems on which the assessments are based. The use of the 95% CI emphasizes the need for more interactions where performance is borderline in order to establish whether the trainee is performing safely or not. It is very important that the assessors are trained. Holmboe, Hawkins and Hout (2004) described a training method which was in practice very simple in that it consisted of less than one day of intensive training.

### 2.2.5 Assessment strategies

There are several known assessment strategies for competence and performance assessment of medical practitioners. For example, multi-source feedback (MSF): feedback from peers, co-workers, patients; direct observation and self-assessment.

### a) Multi-source feedback (MSF): feedback from peer, co-workers and patients

Since the ability to self-assess has shown to be limited means there is a need for external assessments (Davis, Mazmanian, Fordis, Thorpe & Perrier, 2006). Reliable, valid, feasible and effective measures of performance are vital to support these efforts.

The first step includes a combination of methods to assess professional performance in a number of domains which encompass valid and reliable instruments. Literature on performance assessment shows that the incorporation of information from multiple source and various occasions is essential in order to evaluate a complex construct such as medical practitioner performance (Van der Vleuten & Schuwirth, 2005).

The second step implies that the information gathered in step one is being processed to the medial practitioner involved and this is also called effective and acceptable feedback content and delivery. Several reviews have established broad agreement on characteristics of feedback content making it most effective (Hattie & Timperley, 2007). Feedback should focus on task performance and should not contain any judgements about the character of the recipient. Furthermore, feedback should be clear and specific. Feedback delivery implies the way feedback is offered to the medical practitioners being assessed. This can be posting a feedback report after the assessment or interactive feedback, such as discussions during assessments.

External assessments are now well established in revalidation programmes in the UK and Canada (Dauphine, 2005). In the past there has been disagreement as to whether revalidation should aim to enhance professional development or to weed out

those who are unfit to practice (Norcini, 2005). The current consensus is that revalidation should do both (Irvine, 2005).

Research by Sargeant *et al*. (2008) has shown that 360-degree (multi source feedback) can be instrumental in improving performance, but its impact may be impaired by a medical practitioner's emotional reactions to negative evaluations.

Moreover, increased awareness of weakness is often not enough to induce behavioural change. The literature however suggests that performance improvement can be enhanced by a facilitator who delivers feedback and by stimulating medical practitioners to reflect on feedback (Sargeant *et al*., 2008).

The above stated findings are in line with evidence produced by a systematic review (studies related to prescribing, referrals for diagnosis, management of common conditions) on assessment and feedback on medical practitioners' clinical performance which reveal that feedback can change performance when provided systematically over multiple years by authoritative, credible sources. The effects of formal assessment and feedback on medical practitioners' performance are influenced by the source and duration of feedback (Jamtvedt, Young, Kristoffersen, O'Brien, & Oxman, 2006; Rowan, Hogg, Martin & Vilis, 2006; Veloski, Boex, Grasberger, Evans & Wolfson, 2006).

Credible provisions of feedback from assessor to trainee will enable the trainee to steer his or her learning towards desired outcomes (Norcini & Burch, 2007). There is now convincing evidence that systematic feedback delivered by a credible source can change clinical performance (Veloski *et al*., 2006), although there are many complexities that influence the effectiveness of feedback in practice (Archer, 2010). In support of the above findings several studies have shown that multisource feedback can lead to small improvements in performance over time (Burford, Illing, Kergon,

Morrow & Livingston, 2010; Lockyer, 2003; Sargeant *et al*., 2003; Smither, Kondon & Reilly, 2005*)*.This variability may be due to individual differences. It is already known that performance improvement is more likely to occur when feedback indicates a need for change, when recipients have a positive view of feedback, and when they believe that change is feasible (Smither, London & Reilly, 2005). It seems that multisource feedback can lead to improved performance, but individual factors, the context of the feedback, and the presence (or absence of facilitation can have a profound effect on the magnitude of the response.

In contrast, a study done by Overeem, Lombarts, Arah, Grol and Wollersheim (2010) demonstrated that little of the variance in performance could be explained by factors such as gender of the ratter and length of the relationship with the ratter, which were beyond the physician's control.

Although these studies demonstrated that MSF instruments are reliable and valid for evaluating medical practitioners' performance it is not yet clear whether these targeted multisource assessments are feasible in clinical practice and which elements of MSF are critical to an improvement in medical practitioner performance.

A study done by Overeem *et al*. (2010) shows that the adapted Canadian MSF tool incorporating peer, co-worker, and patient feedback questionnaires, is reliable and valid for hospital-based physician assessments (surgical and medical). They found robust factor structures with good internal consistency across the three instruments. A number of groups have demonstrated that both MSF from colleagues and patients can also be defensibly reliable, although larger numbers of patient assessors are needed than colleagues in these assessments (Archer, Norcini, Davies, 2005; Archer, Norcini, Southgate, Heard & Davies,2006; Crossley, Davies & Eiser, 2003; Lockyer, 2003; Lockyer, Violato & Fidler, 2006).

This is in line with a study done by Ipsos MORI (2012) which found that participants think any system of professional development should have three key elements: doctors; patients; and an independent body. It should be a range of people: the department of health, other doctors and patients as well. Patient can provide feedback to peers of those being assesses. Senior doctors can appraise medical practitioners and the department of health can appraise administration and management. In the case of borderline trainees, however, it makes sense that more assessments are required to distinguish between trainees who are in fact safe and those where doubts remain. Extensive sampling for borderline trainees may be needed to precisely identify the problems behind their difficulties so that a plan can be formed to find remedial solutions where possible.

It is tempting to suggest that because workplace based assessment requires the provision of feedback and feedback can lead to learning and improved performance, the implementation of such assessment strategies will have a positive impact on medical practitioners' learning and performance. However, despite the considerable weight placed on them in postgraduate training, there is little information in the medical education literature to support this claim that medical practitioners exposed to specific feedback from peers, co-workers, and patients can use the data to inform changes in their practice (Smither *et al*., 2005).

Campbell, Roberts, Wright, Hill, Taylor and Richards (2011) in their study found that using information obtained from patients and colleagues of participating medical practitioners produced a systematic variation in results of professionalism assessments among medical practitioners working in a range of clinical settings and drawn from different clinical specialities. Some of the differences in the medical practitioners' scores after feedback from their patients and colleagues were attributable

to differences between participating medical practitioners in their personal and occupational characteristics. In addition, some of the differences in the medical practitioners' scores were attributable to variation between medical practitioners in the characteristics and socio-demographic mix of their patients or colleagues in the feedback sample. These findings suggest that some medical practitioners could be at risk of obtaining lower or higher scores based on sampling bias, rather than on the true variation between doctors in respect of their professional performance.

Assessment of competencies and performance is a complex undertaking, and as has been noted, each particular mode of assessment has a number of sources of error and a set of restrictions. This means that any single assessment method is not sufficient to capture the full spectrum of skills in the target domain in a credible way. Consequently, a mix of methods must be used, where both traditional tests and newer forms of assessment might be necessary components. For example, in order to assess the competency of medical practitioners it must be assessed if the patients can make use of their health knowledge when taking treatments. Since it is not possible to assess a broader sample of subject matter of knowledge in this way, authentic performance assessments might have to be complemented with more traditional tests.

**b) Direct observation of procedural skills**

Epstein and Hundert (2002) captured the complex responsibility borne by those charged with assessing professional competence when they characterized such competence as the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions values and reflection in daily practice for the benefit of the individual and community being served. On the other hand, these dimensions of competence are best assessed in different ways. For instance, while biomedical knowledge may be effectively assessed through multiple-choice questions,

assessments of technical procedures, communication skills, and professional behaviours, require a range of direct observation strategies in stimulated and actual clinical contexts.

A study done by Oveerem *et al*. (2007) observed six different methods of evaluating performance: simulated patients; video observation; direct observation; peer assessment; audit of medical records; and portfolio or appraisal. Peer assessment is a feasible method in terms of costs and time. Limited psychometric assessment of the instruments has been undertaken so far. Effectiveness of formative assessments is poorly studied. Their study findings are consistence with study done by Swanwick and Chana (2009) who reveal that many different workplace based assessment methods exist, all designed to assess different aspects of performance commonly, assessment tools will fit into one of the following categories.

An observational survey done by Morris, Hewitt, Roberts, and Saunders (2009) revealed that most (70%) felt that direct observation helped to improve clinical skills. Furthermore, 65% agreed with the statement: "I think that understanding direct observation of procedural skills will improve my future career." However, there was no evidence in the study that direct observation of procedural skills leads to objective performance improvement.

**c) Self-assessment**

Davis *et al*. (2006) in their systematic review of the accuracy of physicians' self-assessment, characterised self-assessment as the ability of physicians to determine their own learning needs, and resources to meet them.

Colthart, Bagnall, Evans, Alibutt, Haig, Illing and McKinstry (2008) undertook a systematic review on the effectiveness of self-assessment and they agreed on an

operational definition of self-assessment as a personal evaluation of one's professional attributes and abilities against perceived norms.

Self-assessment has been reported as the most common form of competence assessment. A small Australian study examined the importance of mentor feedback in self-assessment for practising nurses (Fereday & Muir, 2006). This Australian study involved 26 nursing clinicians who identified that nurses regularly engage in a process of self-monitoring regardless of whether this is a formalised process. Responses given in a focus group setting suggest that feedback was an important component of self-reflection, both in reinforcing and affirming competence as well as a way of alleviating doubts or concerns. This study concluded that situations should be sought to encourage self-reflection, given that opportunities are becoming more limited with staggered shifts and taped handover.

Sargeant *et al*.(2008) reported that in terms of available data self-assessment should be seen as a process of actively and repeatedly soliciting external feedback, comparing them with self-assessment and using both to direct learning and changes in practice. This process should be viewed as a social activity in which external guides can facilitate reconciling of internal and external assessments. Without this reconciliation, negative external feedback is unlikely to be taken into account and accommodating self-assessments are unlikely to lead on their own to appropriate measure to fill gaps in knowledge/competence.

Unfortunately, there is evidence that professionals often do not use data for assessing their own performance ( Doty, Shamasdin & Schoenbaum, 2005) which is unfortunate given that assessing oneself is central to maintaining professional competence (Reiter, Eva, Hatala & Norman, 2002). Thus, it was asserted that as a part of cultural shift towards greater emphasis on competence and competency, the

profession must promote the importance of self-assessment, self-monitoring, reflection, and self-awareness, which reflect ethical behaviour and are critical elements of the assessment of competence. In order to achieve this, professionals need to know what is required for effective self-assessment. Self- assessment, like many other abilities, is an ability that requires learning, practice, feedback, and public criteria so one knows the standard against which one is being assessed (Belar, Brown, Hersch, Hornyak, Rozensky, Sheridan, Brown & Reed, 2001).

The research on self-assessment underscores the difficulty that many physicians have in identifying their own competence problems (Davis *et al*., 2006). The same authors further found that a preponderance of evidence suggests that medical practitioners have a limited ability to accurately self-assess. The worst accuracy for self-assessment was among medical practitioners who were least skilled and those who were the most confident (Davis *et al*., 2006).

Because self-assessment may not line up with other assessment methods (Constantine & Ladany, 2000) and because it is poorly correlated with performance measures (Eva, Cunnington, Reiter, Keane & Norman, 2004) it is necessary to teach people how to engage in honest reflection of their own performance from the onset of training to the end of their career (Stewart *et al*., 2000). Ongoing practice in this assessment methodology should be encouraged to ensure maintenance of self-assessment skills. Training in self-assessment in the early phase of one's education can be enhanced if students are simultaneously receiving monitoring and feedback from external sources, such as professors, supervisors, and peers, and if they are helped to integrate feedback from self and others (Roberts, Borden & Christiansen, 2005). Such training, both for students and professionals, must underscore the importance of self-assessment throughout one's professional career (Roberts *et al*., 2005). Engaging in

self-assessment reflects a commitment to life-long, self-directed learning (Eva, Cunnington, Reiter, Keane & Norman, 2004) which is the cornerstone of medical practitioners' commitment to social and professional responsibility. Self-assessment is also a vital aspect of professional self-regulation (Eva & Regehr, 2005).

Although useful models for self-assessment have been developed (Loacker, 2000) and their value has been documented, there is a relative dearth of well-articulated self-assessment models within the medical profession. It is therefore argued that it behoves the profession to adopt or adapt such models and methods for self-assessment and train people in self-assessment processes.

### 2.2.6 Quality improvement

Quality as defined by an international organization for standardization is a relative concept and if the inherent characteristic of a service meets the requirements of the customer, it can be rated as high quality (Reinartz, 2004). In a service industry, like healthcare, experience of the patient plays a crucial role in rating and assessment of quality service.

Quality in healthcare may comprise of newer technology, newer and effective medication, and higher staff to patient ratios, affordability, efficiency and effectiveness of service delivery (Tam, 2005). It can also be broken down into two quality dimensions: technical quality and functional quality (Dean & Lang, 2008). While technical quality in the health-care sector is defined primarily on the basis of the technical accuracy of the medical diagnoses and procedure or the conformance to professional specifications, functional quality refers to the manner in which the healthcare service is delivered to the patients. Therefore to facilitate service quality and growth, hospitals must implement effective monitoring of medical practitioners

and must ensure that they continue to meet performance and practice standards to retain credentials.

In a study, done by Wanyu, Muiruri and Ayodo (2012) as to whether employees' incompetence affected service quality in the public sector, it was found that the majority (92%) of the respondents were in agreement while a few of them (8%) were of contrary opinions. The same study revealed that the majority (51%) indicated that there was high quality level of health services provided in the hospital while 49% indicated that there was minimum quality level of health services provided. These findings are in line with a study done by Iipinge, Hofnie, van der Westhuizen and Pendukeni (2006) which reveals that there was a shortage of competent staff and this has tremendous effect on poor performance in that specific hospital.

The above findings indicate that assessment of medical practitioner competence and performance is needed to ensure that performance and practice standards are met to enhance service quality provision. This will lead to proper medication services, patient satisfaction, good relationship between medical providers and patients, enable participation in multi-disciplinary decisions, and attract more patients leading to an effective improvement of hospital growth.

A study done by De Villiers, De Villiers and Kent (2006) on the maintenance of competence of rural district hospital medical practitioners found out that no single, effective method to improve the performance of medical practitioners could be suggested during the discussions around quality improvement and the effect of continuing education. An interesting finding of this study was that in-service learning under supervision in the workplace was the most widely supported method to update both knowledge and skills. Good supervision was positively associated with a deep learning approach. This, however, would require employment of experienced

practitioners in district hospitals who can provide supervision for this type of learning. It could however be assumed that competence assessment could improve quality of service delivery.

Another disconcerting finding from the literature regarding quality service was from the President's Commission of Inquiry Report (Mtambanengwe *et al*., 2013). The commission's team found that quality of patient care in public health facilities was generally described by the public and health professionals to be below acceptable standard. One of the complaints raised in relation to poor quality patient care was that some medical practitioners do not carry out physical examination before prescribing medication. This was specific for medical practitioners working at the Khorixas District Hospital. According to this complaint they lacked skills on how to use basic medical equipment, such as ultrasound machines, and could not interpret the images. This demonstrates that there is a need to introduce performance and competence assessment of medical practitioners, and document their competencies in a more formalised with a view to promoting quality care.

The above stated findings are consistent with a study done by Das and Hammer, (2007) who studied the differences in medical practitioners' competencies in government and private hospitals located in rich and poor localities in Delhi in India.

Their study justified the notion that the public health sector was performing worse than the private sector by comparing the distributions of bachelor of medicine and surgery (MBBS) qualified medical practitioners with MBBS qualified private medical practitioners. They also found both government and private hospitals in poor areas were performing worse than hospitals located in rich areas. However, the study did not reveal whether private sector health facilities are conducting competence and performance of their medical practitioners seeing as they are performing well.

### 2.2.7 Best practices: revalidation/competence assessment

There is published evidence that some Medical Councils have established procedures and activities to satisfy themselves that the medical practitioners are keeping their knowledge and skills and applying knowledge and skill to a standard that can reasonably be expected given the kind of medicine that they practice. In this way, a medical council protects the public and supports good professional practice. This generally comprises an assessment of a medical practitioner's knowledge and skills, or application of knowledge and skills, or both.

Arising from those assessments, medical practitioners do address any improvements necessary so as to satisfy the medical council that knowledge and skill, and application thereof, is being maintained to a reasonable standard. These requirements are contained in their Medical and Dental Acts. The regulatory authorities involved are: The Medical Council of Republic of Ireland (Medical Act 2007), UK (General Medical Council of UK), USA (Accreditation Council and American Board of Specialist), and the Medical Council of New Zealand (Health Practitioner Competence Assurance Act 2003).

Currently in Canada the process for ensuring that physicians maintain their competence varies from province to province. For instance: three provinces, namely Saskatchewan, Ontario, and Quebec, have mandated that physicians must participate in educational programmers' to maintain their license to practice, which is equivalent to the Australian registration. This contains the right conceptual elements of maintaining competence; however, as they are self-reporting they lack rigorous accountability (Levinson, 2008).

In European countries, like in Austria, Germany, and Spain, recertification and quality of care is promoted through continuing education, whereas in Belgium, France,

and The Netherlands, peer review is also incorporated (Merkur, Mossialos & McKee, 2008).

In the Republic of Namibia the MDCNA has not established procedures and activities to assess competence and performance of medical practitioners. Section 23 of the Medical and Dental Act (No. 10 of 2004) provides that the registration of a registered person may not be maintained unless that registered person has attended or completed, or has otherwise complied with, during the period of time so prescribed and to the satisfaction of the Council, the continuing professional development. As of 2010, every health professional registered in Namibia will be required to accumulate continuing education units (CEUs) per twelve month period. Professional groups have to accumulate 30 CEUs and supplementary groups 15 CEUs. At least 5 CEUs will be valid for 24 months from the date that the activity took place after which the CEUs lapse. Continued professional development (CPD) does not assess the competence and performance of medical practitioners despite it being a statutory requirement. One might infer that there are many practitioners who comply with CPD requirements but they are incompetent. It is important for MDCNA to complement CPD with competence and performance assessment to identify incompetent medical practitioners in order to provide remedial action with a view of improving quality services (Republic of Namibia, 2004).

A study done by De Vries *et al*. (2009) found that none of the countries examined have a formal system of revalidation or assessment of competence similar to the one being developed in UK although some have a form of re-registration. These include Egypt, Germany, Greece, Italy, Pakistan, and Spain. Only in Poland is some form of revalidation, an assessment of competence, required, although there are no direct sanctions if a doctor does not get revalidation.

The same study reveals that some counties such as Egypt, South Africa, and Spain are developing proposals for an assessment competence system.

It is interesting to note that it is not only developing countries that do not have revalidation system in place but also developed nations. So it is important for every regulatory body to establish medical assessment competence and performance system to enhance service delivery.

It is not clear why revalidation is not widely established. The cost associated with the implementation of revalidation may be high, but it could be argued that revalidation could prevent certain fitness to practice procedures and ensure patient safety and improve quality service care. Further research needs to be conducted to establish the importance of medical practitioners' assessment competence and work performance.

### 2.2.8 Factors affecting professional performance

Several studies have demonstrated that a decline in cognitive ability is associated with aging (Eva, 2002; Durning, Artino, Holmboe, Beckharm, van der Vleuten, & Schuwirth, 2010; Ladouceu, Billard & Jacques, 2009; Trunkey & Botney, 2001; Williams, 2006). These authors reveal that cognitive ability declines from sixty years onwards and aging contributes to diminished insight about one's level of performance and decreases one's ability to learn, retain and implement new knowledge.

With the above stated findings, it could be suggested that all medical practitioners over sixty years of age must have their competence and performance assessed annually to determine the level of their performance and competence. It could be further suggested that the MDCNA should introduce a retirement age for medical

practitioners in order to protect the public from falling into the hands of medical practitioners with cognitive problems.

### 2.2.9 Challenges for the introduction of competence and performance assessment

#### a) Feasibility and cost

Assessment is inevitably constrained by feasibility and cost. Trainee numbers, venues for structured examinations, the use of real patients, timing of exit assessments, and the availability of assessors in the workplace, all place constraints on assessment design. In general, centralization is likely to increase cost-effectiveness. All assessments incur costs and these must be acknowledged and quantified.

#### b) Reliability

Since individual performance is influenced by the context in which a medical practitioner works, observations may vary from situation to situation. In general a combination of various instruments is necessary to assess performance over a wide range of competencies and contexts (Van der Vleuten & Schuwirth, 2005). One single observation is never reliable enough for high-stakes decisions, neither are multiple observations done by only one supervisor. Any assessment tool will provide information about more than one competency and a competency can only be assessed comprehensively by using different methods (Lurie, Mooney & Lyness, 2009).

#### c) Acceptability

Although competence and performance assessment can be integrated with routine clinical care, some forms of assessment can be time consuming. Observation and feedback sessions do not need to be lengthy, and the responsibility for assessment should be dispersed over many different team members, including nurse and other professionals (Brinkman *et al*., 2007).

Norcini (2005) notes some threats to the validity and reliability of assessment of medical practitioners which are applicable to other professional contexts: some medical practitioners treat patients with particularly poor prognoses; some with better prognoses. Patients vary in the extent to which other factors outside the medical practitioner's field of expertise and specialization may affect their life-chances. More broadly, a mix of professional and client groups may have a bearing on a professional's performance.

Where a professional is part of a team one needs to question how an individual's contribution can be singled out in the assessment process. One might have successful medical practitioners in less successful team, or vice versa. This is an issue that has been acknowledged more broadly in the assessment of group work in higher education, but to which no unequivocal best buy resolution has been found.

**d) Provision of feedback**

Many professionals find it challenging to give effective evaluative feedback. Although positive feedback is easier to give than negative feedback for most professionals, it is not uncommon for educators and trainers, for example to provide limited positive feedback. This may reflect the prevailing view that 'no news is good news' and a lacks of priority being placed on the role that positive feedback can play in both the learning and assessment processes. Professionals are even less likely to offer negative feedback in a constructive fashion. Many shy away from confrontation; they are reluctant to shame or hurt the person being evaluated, and have difficulty finding a way to frame their critique in a fashion that will be useful to their student or peer. In addition, many fear institutional or legal consequences if they provide negative input.

## 2.3 Theoretical framework and definition of key concepts

Sekaran (2000) defines a theoretical framework as a conceptual model of how one makes logical sense of the relationships among several factors identified to be important. In essence, the framework is an arbitrary of ideas that breaks a large complex idea down into parts, so as to make it tractable.

A typical theoretical framework provides "a schematic description of relationships among independent, dependent, moderator, control and extraneous variables so that a reader can easily comprehend the theorized relationships" (Radhakrisha, Yoder, & Ewing, 2007, p.62).

The framework of this study (see Figure 1 below) includes a perceptions component that identifies the perceptions of different stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia as illustrated in objective 1 in the previous chapter. In this study the perception component covers issues like competence and performance assessment of medical practitioners.

As stated in the previous chapter objective 2 is to identify best practice around the world on the competence and performance assessment of medical practitioners. In order to address part of this objective the researcher did an extensive consultation of the literature.

Objective 3 of the study is to compare the perceptions of different stakeholders regarding the introduction of competence and performance assessment of medical practitioners. To address part of this objective MDCNA member, state and private medical practitioners views on the introduction of competence and performance assessment are covered and compared in this study.

Objective 4 of the study is to describe the challenges that might be experienced in the introducing competence and performance assessment of medical practitioners in Namibia. To address part of this objective, challenges identified and factors affecting professional performance will be covered based on the literature reviewed.

Objective 5 of the study is to make recommendations directed at improving quality service. To address part of this objective, strategies methods, assessors and quality improvement are covered in terms of the reviewed literature.

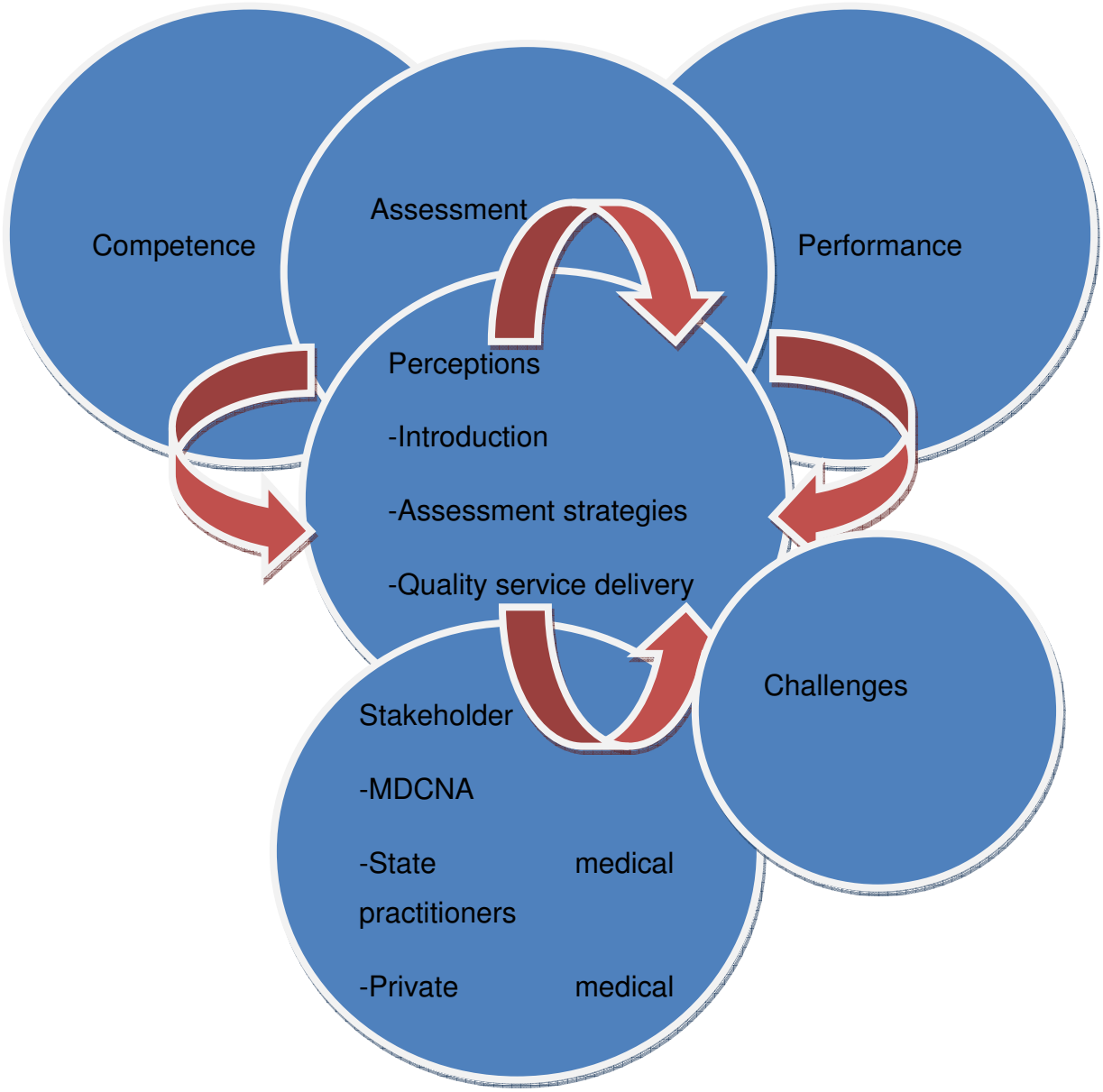



**Figure 2.1**Framework of the study (Source: Alfons Amoomo)

The following are definitions of key concepts.

**Competence** "is a multifaceted and dynamic concept that refers to the understanding of knowledge, clinical skills, interpersonal skills, problem-solving, clinical judgment, and technical skills by the different professions" (Verma, Paterson & Medves, 2006, p. 109). Other definitions include fundamental abilities and capabilities to do the job well, and use of descriptive language such as traits, capabilities, intelligence, and human abilities to describe competence (Garman &

Johnson, 2006). Actual competencies are specific skills and behaviors. Some authors believe that competencies can be learned but some are inherited. Some competencies are skills that decrease when not used and some are on a continuum.

**Performance** is the accomplishment of a given task measured against present known standard of accuracy completeness, cost and speed. It also means "work, function or to do something to a specific standard'. Performance is "an action or process of performing a task or function" (*Oxford Concise Dictionary*, 1999, p.1060).

Important variables to be kept in mind are function, work, actions, task, process and specific standard. Performance is the actual conducting of activities to meet responsibilities according to a standard. "It is an indication of what is done and how well it is done" (Winch, Bhattacharyya, Debay, Sarriot, Bertoli, & Morrow, 2003, p.2).

**Assessment** is the action or an instance appraisal. Assessment of competence can be understood as referring either to a binary scale, to a number of sequential stages or to a level on a continuum (Clinton, Murrells& Robinson, 2005). The binary scale refers to where one either is competent (yes) or one is not competent (no). An example of the sequential stages of competence is the work of Benner (1984) who outlined a five-stage model from novice to expert with competence being stage three. Competence is conceptualized as a continuum that assigns a level of competence on a continuous scale and can be used for comparisons of clusters such as graduates or other groups (Clinton *et al*., 2005). A continuous scale is the most efficacious as it provides the sensitivity often required to detect small differences (Clinton *et al*., 2005).

**Quality** in manufacturing, is a measure of excellence or a state of being free from defects, deficiencies and significant variations. It is brought about by strict and consistent commitments to certain standards that achieve uniformity of a product in

order to satisfy specific customer or user requirements. ISO 8402-1986 standard defines quality as "the totality of features and characteristics of a product or service that bears its ability to satisfy stated or implied needs." If an automobile company finds a defect in one of its cars and makes a product recall, customer reliability and therefore production will decrease because trust will be lost in the car's quality.

**A stakeholder** refers to person, group or organization that has interest or concern in an organization. Stakeholders can affect or be affected by the organization's actions, objectives and policies. Some examples of key stakeholders are creditors, directors, employees, government (and its agencies), owners (shareholders), suppliers, unions, and the community from which the business draws its resources(*Business Dictionary*, n.d).

## 2.4 Summary

This chapter emphasizes the importance of a literature review in identifying concepts and studies on the introduction of competence and performance assessment of medical practitioners in order to improve their performance as well as quality service delivery. The literature review enabled the researcher to build on the basis of existing knowledge and on what other scholars have achieved as well as to identify areas that allowed new questions to be explored.

Research design and methodology are discussed in the next chapter.

# CHAPTER 3

# RESEARCH METHODOLOGY

## 3.1 Introduction

The previous chapter explained the importance of literature review on competence and performance assessment of medical practitioners. Research approach, research design, research methodology, research population, sample and sampling technique, research strategy, research instrument, data collection, data analysis, and ethical considerations, are presented in this chapter.

## 3.2 Research question

What are the perceptions of different stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia?

### 3.2.1 Research objectives

1. To identify the perceptions of different stakeholders regarding introducing competence and performance assessment of medical practitioners in Namibia.
2. To identify best practices around the world on the competence and performance assessment of medical practitioners.
3. To compare the perceptions of different stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia.
4. To describe the challenges that might be experienced in introducing competence and performance assessment of medical practitioners in Namibia.
5. Make fairly recommendations directing at improving quality services.

### 3.2.2 Research design

A research design is a blue print for conducting a study that maximises control over factors that could interfere with the validity of the findings. It simply means a plan that describes how, when, and where, data are to be collected and analysed (Burns & Grove, 2005). The design identifies how subjects will be recruited and incorporated into a study, what will happen during the study, including timing of any treatments and measures, and when the study will end (Macnee & McCabe, 2008). Research methodology is a design that clearly defines structures within which the study is implemented (Burns & Grove, 2005).

In this study, the researcher undertook a quantitative descriptive study to identify the perceptions of different stakeholders regarding introducing competence and performance assessment of medical practitioners in Namibia, and to identify best practices around the world on the competence and performance assessment of medical practitioners. The study describes the perceptions of stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia, and compares their perceptions and views regarding introduction of competence and performance assessment of medical practitioners in Namibia. The study also describes the challenges that could be experienced in introducing competence and performance assessment of medical practitioners in Namibia. Recommendations directed at improving quality services are presented.

This design enabled the researcher to ask many medical practitioners questions by means of a questionnaire in a short period. In a quantitative approach the sample size is reasonably large. A stratified random sampling technique was used to select a sample that had the same characteristics as the population. A quantitative study often uses a sample or a smaller group of selected people, but generalises the results to a

larger group from which the smaller group were selected. The quantitative method enabled the researcher to identify and describe the perceptions of stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia. This design lends itself to counting, or measuring and analyzing data statistically (Neumann, 2000, p.34).

At the end of the data collection process, statistical analysis methods, *SPSS* and *4 Anova* computer software were used to analyse the data. The analyzed data were then interpreted. Quantitative data analysis and interpretation are primarily deductive, proving or disproving the hypothesis, or an assertion developed from a general statement. When reporting the research results the findings are discussed, in a recognized format, as to the extent to which the data collected either confirm or refute the research question (Babbie & Mouton 2001, p. 470; De Vos, Strydom, Fouche, Poggenpoel & Schurink, 2000, p. 241; Neumann, 2000, p. 422; Seaman, 1987, p. 169).

Descriptive study is defined as a way of discovering new meaning, describing what exists, determining the frequency with which something occurs, and categorising information (Burns & Grove, 2005). The design was a descriptive, as the researcher was interested in perceptions of stakeholders regarding introducing competence and performance assessment of medical practitioners with a view to making recommendations to amend the Medical and Dental Act No. 10 of 2004. Therefore the study described the perceptions of stakeholders regarding introducing competence and performance assessment of the medical practitioners in Namibia.

## 3.3 Research strategy

### 3.3.1 Research method

A positivism approach was used. According to Welman Kruger, and Mitchell (2005)

The positivist approach underlies the natural-scientific method in human behavioural research and holds that research must be limited to what we can observe and measure objectively, which exists independently of the feelings and opinions of individuals. The natural-scientific approach strives to formulate laws that apply to populations and that explain the causes of objectively observable and measurable behaviour (p. 6).

### 3.3.2 Research population

A population relates to the entire set of data that is of interest to a researcher (Wisniewski, 2006). For this study the population comprised MDCNA members, state and private medical practitioners who are working in Windhoek. Although the exact size of this population has not been accurately established, the MOHSS *Staff Establishment* has estimated that there are at least 140 posts for state medical practitioners working at the IHK, and the WCH, but only 100 posts are filled. Out of 100 filled posts there are 30 medical practitioners on special study or annual leave. There are 558 private medical practitioners in Namibia (MOHSS, 2008). However, the exact population of private medical practitioners in Windhoek is unknown. There are also 10 MDCNA members in Windhoek.

### 3.3.3 Sample and sampling technique

A stratified random sampling method was used. Stratified random sampling is a procedure of selecting a probability sample where the population is divided into meaningful segments. Thereafter subjects are drawn in proportion to their original numbers in the population (Whyte, 2013). Stratified random sampling was used because the study population is composed of various clearly recognisable, non-overlapping subpopulations that differ from one another in terms of a specific variable.

Although the population of private medical practitioners has not been accurately established it did comprise at least 37 private medical practitioners.

Sample selection included all MDCNA members, state and private medical practitioners that work in Windhoek. The selection of these samples was bases on the criteria that Windhoek it is where the majority of MDCNA members, state and private medical practitioners are concentrated. The other town were excluded because of practical reasons: medical practitioners are scattered all over intermediate and district hospitals in the urban and rural areas, with cost constraints for having data collectors to reach these remotes areas.

The process of selecting the sample involved the followings:

- Staff establishment from the Intermediate Hospital Katutura and Windhoek Central Hospital were acquire beforehand.
- There are at least 140 posts but only 100 posts are filled. Out of these100 posts there were 30 medical practitioners on special study or annual leave (MOHSS, 2013).
- All known and accessible private medical practitioners were included.
- All 10 MDCNA members in Windhoek were taken as sample but two did not return questionnaire.

The sample size consisted of 70 respondents. There were 37 private medical practitioners, 25 state medical practitioners, and eight MDCNA members. These numbers were determined using convenient sampling in each stratum. The sample size for state medical practitioners was drawn from the MOHSS staff establishment. Some private medical practitioners who received the questionnaire were either too busy or unwilling to respond for personal reasons. A sample frame, namely, a list of private practitioners working in Windhoek, was not available, thus the researcher approached

all known private consulting rooms/surgeries for the purpose of the study. If a private consulting rooms/surgeries could be identified it was then classified as known, and consequently as accessible. It can therefore be claimed that the total known population was included in this study, and sampling from that population was taken. The sample size was determined by using published tables which provide the sample size for a given set of criteria (Krejcie & Morgan, 1970).

The inclusion criteria were that a potential participant had to

- be a MDCNA member;
- be a state or private medical practitioner;
- be willing to participate in the study; and
- to be a resident of Windhoek.

The exclusion criteria were:

- MDCNA members who vacated their office; and
- medical practitioners not residents of Windhoek.

The rationale for the inclusion criterion of medical practitioners who are MDCNA members, and state and private medical practitioners, was that a good comparison of their views, regarding introducing of competence and performance assessment of medical practitioners, could be achieved.

## 3.4 Research instrument

### 3.4.1 Data collection instrument

In this study a self-administered questionnaire was used to collect data. The details of the participants were not required thereby ensuring anonymity. According to De Vos *et al*. (2005, p. 166), questionnaires are the most frequently used data collection instrument. A questionnaire is a collection of questions based on the subject of interest to the researcher and completed by respondents. Questionnaires are also

called surveys for quantitative research and are sometimes referred to as survey research (Burns & Grove, 2003, p. 289).

A self-administered questionnaire was used because it is the simplest and least expensive method of obtaining information from large numbers of subjects. It permits anonymity and may result in more honest responses. It eliminates bias due to phrasing questions differently for different respondents and the researcher is not present during completion of the questionnaire. If well designed, questionnaires collect accurate data.

The disadvantage is that questionnaires depend on personal reporting and therefore may be biased or inaccurate (Brink & Wood, 2001, p.159; Burns & Groove, 2003, p. 289; Enarson *et al.,* 2001, p.79).

### 3.4.2 Development of instrument

Validation is a crucial step in the development of an instrument because validity is the extent to which instrument measures what is intended to measure. The preliminary self-administered questionnaires were developed by the researcher to address the aforementioned objectives. Initially draft self-administered questionnaires were sent to two supervisors for their comments. Before the self-administered questionnaires were finalised and distributed, the questions themselves were refined or modified based on feedback received from these supervisors. The final self-administered questionnaires were prepared after all the issues raised by them had been clarified and the questions reformulated. Two structured self-administered questionnaires, one for state medical practitioners (Appendix 1) and one for MDCNA and private medical practitioners (Appendix 2) were designed for collecting data. The questionnaires had some similar content, bur only one question differed. For example, the MDCNA and private medical practitioners were asked for specific competence and performance assessment of medical practitioner in solo practice.

The questionnaires contained clear instructions on how to complete the questionnaires. Open and closed-ended questions were included. Closed-ended questions were used because they are easier and quicker for respondents to answer.

The answers from these questions were easily coded and analyzed. One disadvantage of using closed-ended questions is that it forces respondents to give simplistic responses to complex issues. Open-ended questions were included because they allow respondents to be creative and to express themselves when responding to these questions. Care was taken not to include too many open-ended questions because they may be time consuming to complete and could be liable to error (Neumann 2000, p. 261).

***Content of questionnaires***

The questions in these questionnaires were arranged in content subsections. The questions in each subsection were relevant to the content of that subsection. This was done to obtain information from the medical practitioners working in two main public hospitals, private medical practitioners, and MDCNA members, about their perception in the introduction of competence and performance assessment in Namibia.

***Section A***

Questions 1 and 4 requested the respondents to provide personal information with regards to age, gender, employment and Medical and Dental Council member. Respondents were requested to tick from the listed elements.

***Section B***

Section B requested respondents to tick choices on their view regarding the introduction of competence and performance assessment in Namibia; what should be assessed; frequency of assessment; and who should conduct the assessment.

***Section C***

Section C requested respondents to select two responses that match closely with their perceptions of the statement regarding assessment strategies. Questions included were: what are the strategies that could be used to assess the competence and performance of medical practitioners and places where the competence and performance assessment of medical practitioners could take place.

***Section D***

Section D requested respondents to tick one letter that best matched mostly close with their perception on aspects related to quality improvement. One open-ended question was formulated to determine their opinion on what can be done to improve quality health care services delivery.

***Section E***

Section E requested respondents to state what they think are some of the challenges regarding introducing competence and performance assessment in Namibia and who should develop competence and performance assessment standard of medical practitioners.

***Section F***

This section comprised questions to determine the respondents' perception on factors affecting professional assessment.

***3.4.2.1 Validity and reliability***

Validity means the ability to produce findings that are in agreement with theoretical or conceptual values. In other words to produce accurate results and to measure what is supposed to be measured (Lee & Lings, 2008). According to De Vos (2002) validity is the degree to which an instrument actually measures what it intends to. Different kinds of validity may be established: content validity, face validity,

criterion validity, and construct validity. Content validity is concerned with the adequacy of the sampling to address the content of an instrument. Face validity refers to whether the instrument appears to measure the relevant construct. In this study face validity, criterion validity, and content validity were determined. To establish face validity, the questionnaire was submitted to two colleagues and the two supervisors of the researcher. They were asked to evaluate the questions and the thesis outline in relation to the study.

In terms of content validity the preliminary instrument for the study was presented to the Registrar of the Health Professional Council of Namibia (HPCNA) and his two supervisors. The researcher asked the Registrar to give his opinions on the validity of the tool and the thesis outline in relation to the objectives of the study (Polit & Hunger, 1997, p. 374). Confirmation from them ensured that the questions actually assessed the test characteristics identified by the researcher.

In terms of criterion validity the researcher obtained information from internet publications on competence and performance assessment of medical practitioners in order to compile the research instrument used in this study.

Reliability is another important characteristic of a research instrument. Reliability refers to the ability of an instrument to produce consistent results (Lee & Lings, 2008). In this study reliability was tested through a pilot study (inter-rater reliability) and enhanced by the researcher's thorough familiarity with the environment in which the study was conducted. Reliability improves automatically when a researcher is familiar with the research environment. Reliability was also ensured by using an already existing instrument.

### 3.4.3 Pre-testing of the instrument

Instruments were first tested prior to the use of the final document. Copies of the provisional questionnaire were given to five experienced medical specialists who examined each item of the questionnaires in relation to others and helped to refine the document. Pre-testing allowed for modification of the design of the questions, sensitivity of language, rephrasing of questions and an estimation of the time necessary for completing the questionnaire.

After proposing some changes, there was consensus amongst these experts that the instrument was valid for the study to commence (De Vos *et al*., 2005 p. 209).

### 3.4.4 Pilot study

A pre-test study is commonly defined as a smaller version of a proposed study conducted to refine the methodology (Burns & Grove, 2005). It is developed much like the proposed study, using similar subjects, the same setting, the same treatment, and the same data collection and analysis techniques.

According to De Vos *et al.* (2005, p. 210) a pilot study offers an opportunity for

- assessing the suitability of the interview schedule or questionnaire;
- testing and adapting the measuring instruments such as assessment scales, standard scales for sufficiency, validity and reliability;
- determining the suitability of the procedures for collecting data;
- testing the suitability of the sampling frame;
- determining the number of codes per questions and making necessary changes prior to the study; and
- estimating the amount of time for completing the questionnaires or interview schedule.

The instrument was pilot tested on five evaluators: a sub-committee of education of the MDCNA those were eligible for the survey but excluded during stratified random sampling. This enabled the researcher to assess relevance and accuracy of the questionnaire in terms of information retrieval and relevance. As described above, the aspect of inter-rater reliability was established during the pilot testing phase.

### 3.4.5 Pilot study report

The pilot study was carried out in Windhoek at the end of October 2013. All five evaluators that responded were medical practitioners. The scale provided to answer questions 1 and 2 on maintenance of professional competence was confusing to the respondents because they found it difficult to understand the question. This section was removed from the questionnaire.

In general, evaluators felt that the time required to completing the questionnaire was generally satisfactory. On average the evaluators took 5 to 10 minutes to complete the questionnaire.

## 3.5 Data collection

The researcher personally handed the questionnaire to the medical superintendents of the WCH and IHK, the directors of private medical centers, individual MDCNA members, and private medical practitioners' receptionists. The latter were requested to hand the questionnaires to the medical practitioners. All potential participants were asked to participate voluntarily in the study by completing the questionnaire. All the respondents were privy to a letter (Appendix 3) which explained the purpose of the research and requested them to participate in this study by completing the questionnaire. They were assured that their participation in this research would be treated confidentially. The researcher returned after two weeks and

collected the completed questionnaires from the medical superintendents' offices as well as the private medical practitioners' receptionists. Instructions were included on how to complete every section of the questionnaire. The name and cell phone number of the researcher as well as the name of the university endorsing the research were made known in the letter.

The instrument was used to collect data on the following subjects (see Sections A to F above in 3.4.2).

- Biographic data: Respondents were asked to give data about their age, gender (male or female), employment status (state or private) and Medical and Dental Council member (yes or no). They were not requested to divulge their names or other personal information.
- Respondents were first asked their opinion to what extent did they believe that the introduction of competence and performance assessment of medical practitioners in Namibia is necessary. Then they were given a list of three options and to tick: very necessary; necessary; and not necessary. They were also asked specifically on aspects to be assessed, frequency of assessment, and persons who should conduct medical practitioners' competence and performance assessment.
- Assessment strategies. Respondents were asked what assessment strategies could be used to assess the competence and performance of medical practitioners. They were also asked to state specific places where the competence and performance assessment could take place.
- Quality improvement. Respondents were asked to tick one letter that best matches most closely with their perception specifically if they believe that the introduction of competence and performance assessment of medical

practitioners will improve health care service delivery and what can be done to improve quality health care services delivery.

- Challenges**.** Respondents were asked to mention what they think are some of the challenges regarding introducing competence and performance assessment in Namibia. They were also asked whether standards for competence and performance assessment of medical practitioners are necessary and if so to provide the reason. They were further asked to indicate who should develop a competence and performance assessment standard of medical practitioners.
- Factors affecting professional performance. Respondents were asked to tick two letters specifically on factors affecting professional performance of medical practitioners. They were also asked to cite one example where the existence of a competence and performance assessment tool would have made a difference.

It was necessary to include these subjects in order to achieve the objectives of the study. The second subject synthesised enough data to address objective 1 of the study.

In order to identify and describe perception of stakeholders on the introduction of competence and performance assessment of medical practitioners in Namibia, it was necessary to gather information on competence assessment strategies, thus the inclusion of the above third subject.

To provide comprehensive on the quality improvement, it was imperative to collect information on all quality aspects thus inclusion of the fourth subject in the questionnaire.

Since the research centred on perception of stakeholders on the introduction of competence and performance assessment, it was necessary to ask question pertaining to challenges and factors affecting performance, thus the inclusion of fifth and sixth subject respectively.

Data was collected between beginning of November 2013 and beginning December 2013.

### 3.6 Data analysis

Data analysis is conducted to reduce, organise, and give meaning to data. In this study the researcher used descriptive statistics. Tables and bar charts were used to present findings of the study and *SPSS* and *4 One Way Anovas,* a computer software programme for statistical analysis, were used in data analysis. Data analysis was done by the researcher after data of the 70 completed self-administered questionnaires were captured using the abovementioned software.

**Table 3.1**
4-One Way ANOVAs statistical results (n=45)

| Parameter | Sum of squares | df | Mean square | F | Sig |
|---|---|---|---|---|---|
| Introduction of competence and performance assessment | 10.866 | 2 | 5.433 | 6.724 | .003 |
| Frequent of assessment | 12.963 | 2 | 6.482 | 8.262 | .001 |
| Who should conduct assessment | 12.009 | 2 | 6.004 | 6.182 | .004 |
| Opinion on competence assessment in relation to quality health care service delivery | 10.468 | 2 | 5.324 | 14.566 | .000 |
| Who should develop competence and performance assessment standards | 3.569 | 2 | 1.785 | 3.530 | .038 |

Source: primary data of the study

Table 3.1 indicates critical variables as well as significance of the questions. These variables are only for questionnaire number 2 since the 4 One ANOVAs statistical results for state medical practitioners(n=25) (questionnaire 1) does not

produce significant results either due to a different sample size or different number of questions.

## 3.7 Ethical considerations

Written and verbal consent was obtained from the Ministry of Health and Social Services (MOHSS) (see Appendix 4), and directors of private medical centers, to allow their employees to participate in the study. MOHSS and the directors of private medical centers, as well as potential participants received detailed written information about the purpose and objectives of the study to help them make informed decisions about whether or not to participate. Participants were assured that any information they divulged would be treated with confidentiality and respect for privacy (Brink & Wood, 2001, p.301). Names of hospitals and consulting rooms were not recorded on the instrument and all forms of identification that could make it possible to trace responses to a hospital were eliminated by the use of codes. The ethical issues that were observed during the conduct of the study are discussed below.

### 3.7.1 Permission

Permission to conduct the study was sought from the Polytechnic of Namibia Post Graduate Committee and MOHSS. The written proposal was reviewed by the Research Ethics committee to ensure that it conformed to ethical standards of scientific research. Verbal permissions were also sought from the individual participants.

### 3.7.2 Participant protection

De Vos (2002, p.64) cites the view of Dane (1990, p.44) that a researcher has an ethical obligation to protect a participant against any form of harm that could result from participating in a study. It is the obligation of the researcher to inform a potential participant about the research study beforehand, and to protect participants

conscientiously and completely. It is difficult to determine whether a participant could potentially incur harm during a study and the possibility should not be rationalized away by saying that the study might benefit them in some way.

### 3.7.3 Informed consent

A researcher is obliged to obtain informed consent from all participants. The researcher provided adequate information regarding the purpose and procedures of the study, and the rights of the participants. Information was also supplied to establish the credibility of the researcher. Participants were informed that they could withdraw from the study at any time. In this study, informed consent was sought when the questionnaire was administered, using a participant information leaflet.

### 3.7.4 Right to privacy and voluntary participation

In an increasingly public and transparent world, scientists need to be extremely vigilant that their actions or statements to not violate a subject's rights to privacy.

The right to privacy is expressed more concretely through the following principles:

A person has the right to:

- refuse to be interviewed;
- refuse to answer questions;
- not be interviewed at meal time;
- not be interviewed at night; and
- not be interviewed for a long duration (Mouton, 2002, p. 243).

De Vos (2002, p. 67) cites the views of Singleton *et al*. (1988 p. 454) that privacy is a participant's right to decide to whom, when, where and to what extent his attitudes, beliefs and behavior may be revealed. Privacy is synonymous with self-determination and confidentiality. Self-determination refers to an individual's right to

decide voluntarily whether or not to participate in research (Polit & Beck, 2004, p.732). It is the responsibility of a researcher to obtain informed consent from a participant whenever information of a private nature is solicited in a study. In this study participants were given information about the objectives of the study through a participants' information leaflet. Their informed consent was sought after they had read and understood the purpose and objectives of the study. The participants were assured that their responses were private and confidential.

### 3.7.5 Anonymity

Informants have the right to remain anonymous. That right should be respected both when it has been promised explicitly and also when no clear agreement to the contrary has been made (Mouton, 2003, p. 243). Anonymity is preserved when a person's acts or statements are revealed without a disclosure of his or her identity (Le Beau, 1998, p. 33). In this study the participants' responses were anonymous as their names as well as those of the health-care facilities were not recorded, nor required, on any questionnaire.

### 3.7.6 Confidentiality

All participants in the study were assured that the information and opinions they shared would be treated with the strictest of confidentiality. They were assured that data would only be used for the stated purpose of the research and that no other person would have access to questionnaire data. This condition is reflected by Le Beau (1998, p. 33), who states that confidentiality entails that information shared by someone is not divulged to others. No name of participant or their hospital was recorded on any questionnaire.

### 3.7.7 Benefits

The benefits that the research intended to produce were thoroughly explained to the participants to encourage them to give candid and honest responses. They were also informed that the gathered data would be used to identify and describe the perception of stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia.

## 3.8 Summary

This chapter defines what the activity of research is, how to proceed with research activity, how to measure research progress and what constitutes research success. It also discusses research design, methodology including research approaches, population, sample and sampling technique, data collection, data collection instruments, pre-testing of the data collection instrument and ethical considerations.

The results of the study are presented in the next chapter.

# CHAPTER 4

# RESULTS

## 4.1 Introduction

The previous chapter discussed research methodology used. This chapter presents the key results of the main sections as elaborated in the first chapter, the research problems, objectives, and research questions. The specific purpose of this study was to describe the perceptions of stakeholders (MDCNA members, state and private medical practitioners) regarding the introduction of competence and performance assessment of medical practitioners in Namibia and to compare their views in order to gain insights into their views, with a view of implementing competence and performance assessment of medical practitioners programme in the country which might consequently improve quality services. Self-administered questionnaires were used as the data collection instrument (see Appendices 1 and 2).

These were handed to the medical practitioners in the respective hospitals as well as private consulting rooms/surgeries to complete.

To obtain the required information the questionnaires were divided into six main sections: demographic data, competence and performance assessment, competence and performance assessment strategies, quality improvement, challenges and factors affecting professional performance. The findings are organised in relation to the two questionnaires that directed the study. Questionnaire 1 was directed to state medical practitioners and questionnaire 2 was directed to private medical practitioners and MDCNA members.

One-hundred and six questionnaires were distributed. Fifty-three were distributed to each of the two groups. Seventy completed questionnaire were returned thus the total response rate was 66% which is considered to be good (Polit & Beck,

2004).Twenty-five respondents returned questionnaire 1 and this resulted in a response rate of 47.2 %.( n=25). Forty-five respondents (n=45) completed questionnaire 2 giving a response rate of 85%.

## 4.2 Description of the sample

Seventy respondents (n=70) participated in this study. Twenty-five (n=25) were state medical practitioners from Intermediate Hospital Katutura, and Windhoek Central Hospital, respectively. Thirty-seven (n=37) were private medical practitioners from Windhoek and eight (n=8) were MDCNA members.

All questions were not answered by the respondents, therefore, the frequencies indicated in the below tables and figures are often a lower total number of the sample. It should be noted that the information presented in the tables and figures is primary data collected in this study.

## 4.3 Analysis of data

The *SPSS* computer software and One Way ANOVAs statistical programs were used to analyse the data obtained from the questionnaires. The data obtained from the open-ended and closed questions were analysed by using a coding technique until a pattern was identified in the data. Expect when relevant the percentages in the discussions below do not include decimal points.

As evident in Table 4.1 below critical variables as well as significance of the questions are listed. These variables included here are only for questionnaire number 2 since the 4-One ANOVAs statistical results for state medical practitioners(n=25) (questionnaire 1) did not produce significant results either due to different sample size or the different numbers of questions.

**Table 4.1**
4-One Way ANOVAs statistical results (n=45)

| Parameter | Sum of squares | df | Mean square | F | Sig |
|---|---|---|---|---|---|
| Introduction of competence and performance assessment | 10.866 | 2 | 5.433 | 6.724 | .003 |
| Frequent of assessment | 12.963 | 2 | 6.482 | 8.262 | .001 |
| Who should conduct assessment | 12.009 | 2 | 6.004 | 6.182 | .004 |
| Opinion on competence assessment in relation to quality health care service delivery | 10.468 | 2 | 5.324 | 14.566 | .000 |
| Who should develop competence and performance assessment standards | 3.569 | 2 | 1.785 | 3.530 | .038 |

**Table 4.2**
Demographic data, for state and private medical practitioners and MDCNA members (n=70)

| S-D characteristic | Number | Percentage (%) |
|---|---|---|
| Age | | |
| 25-29 years | 15 | 21.4 |
| 30-34 years | 4 | 5.7 |
| 35-39 years | 15 | 21.4 |
| 40- 44 | 2 | 2.9 |
| 45 and above | 34 | 48.6 |
| Total | 70 | 100.0% |
| Sex | | |
| Male | 42 | 60 |
| Female | 28 | 40 |
| Total | 70 | 100% |
| Employment status | | |
| Medical practitioners employed in state | 25 | 35.7 |
| Medical practitioners employed in private | 45 | 64.3 |
| Total | 70 | 100% |
| Medical and Dental Council member | | |
| Yes | 8 | 11.4 |
| No | 62 | 88.6 |
| Total | 70 | 100% |

Table 4.2 shows age distributions, female to male ratio, employment status and MDCNA members. The minimum age was 27 years and maximum was 66 years. Interpretation of the data reveals that 48.6% of the respondents were between 45 years and above; 60% were males and 40% were females; 35.7% of the respondents were state employed, 64.3% worked in private, 11.4% of the respondents were MDCNA members and while 88.6% were not.

### 4.3.1 Results of questionnaire 1 and 2

The purpose of this section is to present the information obtained from questionnaire 1 and 2 as guided by the objectives of the study. The statistical information presented was gained from questionnaire 1 (n=25) and questionnaire 2 (=45) as discussed in 4.1 and 4.2.

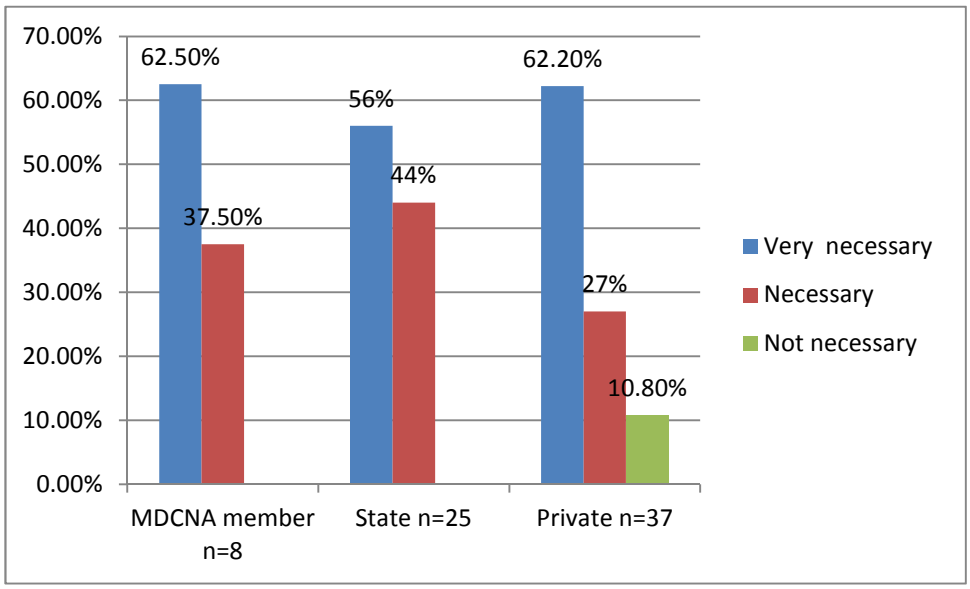
Questionnaire 2 included a question that focused on an aspect related to whom should conduct competence and performance assessment in solo practice. This question was not included in questionnaire 1.

#### *4.3.1.1 Section B: Competence and performance assessment*

**Question 1.** In your opinion to what extent do you believe that introduction of competence and performance assessment of medical practitioners in Namibia is necessary?

Figure 4.1 presents the common responses from MDCNA members, state and private medical practitioners on opinions of the introduction of competence and performance assessment of medical practitioner in Namibia.

**Figure 4.1** Opinions on the necessity of the introduction of competence and performance assessment of medical practitioner in Namibia (n=70)

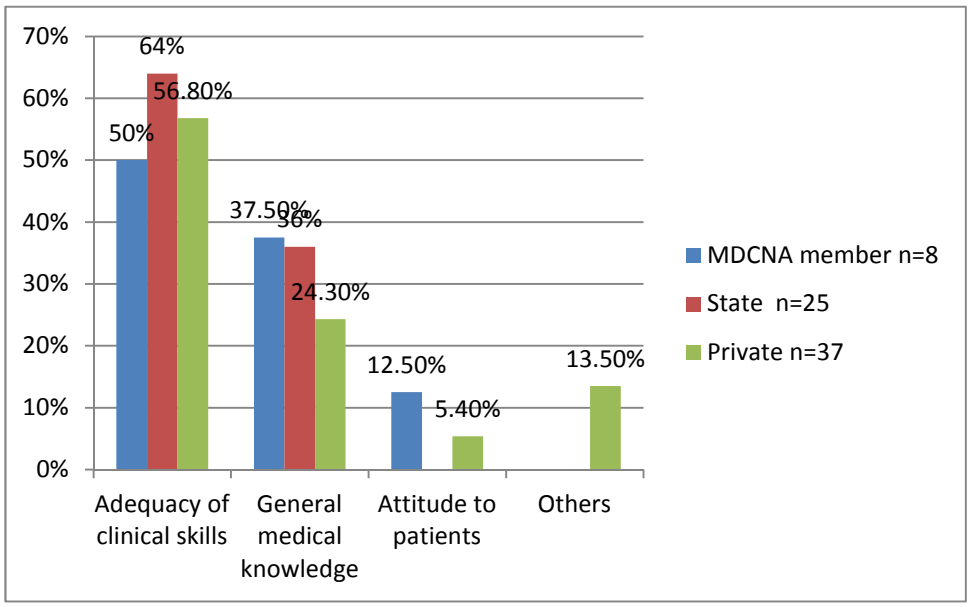



From the data presented in Figure 4.1 it is evident that MDCNA members, state and private medical practitioners believe that the introduction of competence and performance assessment of medical practitioner in Namibia is very necessary. Over 60% of respondents believe that it is very necessary to introduce competence and performance assessment of medical practitioner in Namibia; only 10.80% from private medical practitioner's respondents believe that it is not necessary to introduce competence and performance assessment of medical practitioner in Namibia.

**Question 2.**What should be assessed during competence and performance assessment of medical practitioners?

Figure 4.2 presents the common responses from MDCNA members, state and private medical practitioners on what should be assessed during competence and performance assessment of medical practitioners.

**Figure 4.2** Components of competence and performance assessment of medical practitioners




Note : Others = documentation and communication

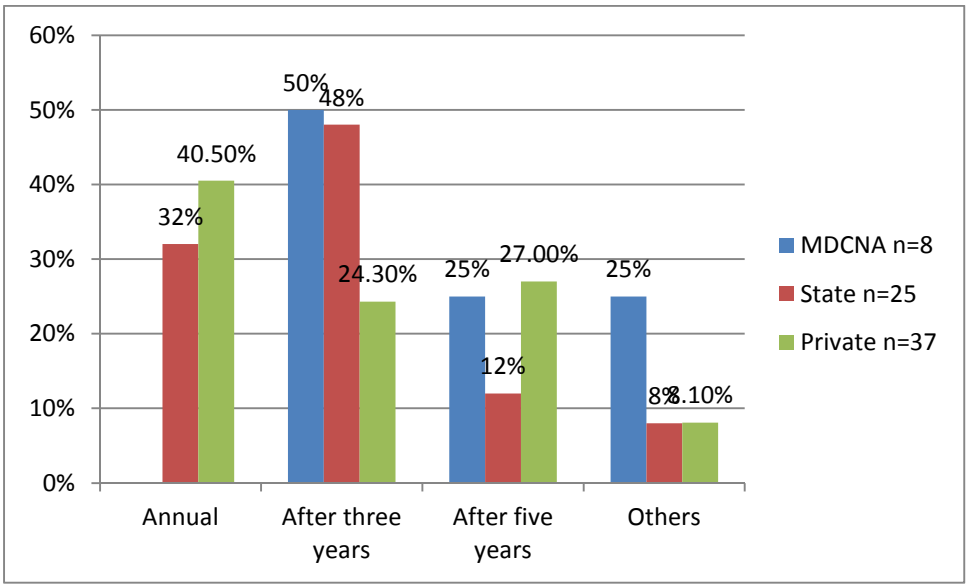
Fifty percent (50%) of the MDCNA respondents mentioned adequacy of clinical skills followed by general medical knowledge (37.5%) and attitude to patients (12.5%). The majority of state medical practitioners (64%) mentioned adequacy of clinical skills followed by general medical knowledge (24.3%). The majority of private medical practitioners (56.8%) mentioned adequacy of clinical skills followed by general medical knowledge (24.3%). Others was mentioned by 13.5%. Only 5.4% mentioned attitude to patients.

None of state medical practitioners mentioned attitude to patients and only 13.5% of private medical practitioners mentioned others.

**Question 3.** How frequent should competence and performance assessment of medical practitioners be carried out?

Figure 4.3 presents the common responses from MDCNA members and state and private medical practitioners on the frequent of competence and performance assessment of medical practitioners.

**Figure 4.3** Frequent of competence and performance assessment of medical practitioners



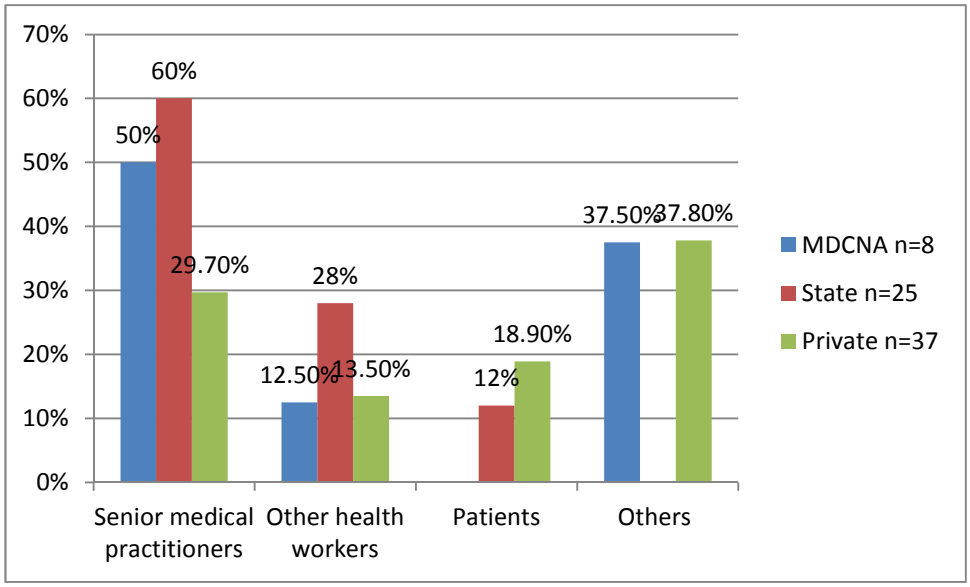

Note: Others = 10 years

The respondents identified how often the competence and performance assessment of medical practitioners should be carried. After three year was mentioned by 50% of the MDCNA members, followed by after five years (25%) and others (25%). After three years was mentioned by 48% of the state medical practitioners and this was followed by annual (32%); after five years (12%), and 8% mentioned others. Annual was mentioned by 40.5% of private practitioners 40.5% followed by: after five years (27%); after three years (24.3%) and others (8.1%).

**Question 4.** Who should conduct medical practitioner's competence and performance assessment?

Figure 4.4 presents the common responses from MDCNA members, state and private medical practitioners on who should conduct competence and performance assessment of medical practitioners.

**Figure 4.4** Persons and bodies to conduct competence and performance assessment of medical practitioners




Note. Others = UNAM School of Medicine, hospitals and medical association

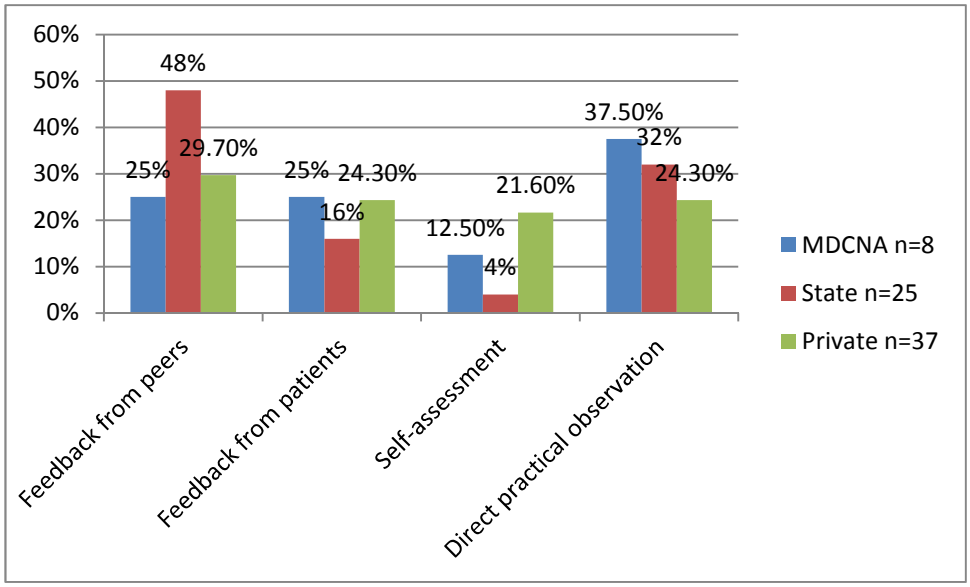
Respondents provided rich information on the persons and bodies to conduct competence and performance assessment of medical practitioners in Namibia. The majority of MDCNA members (50%) mentioned senior medical practitioners followed by others (37.5%), and other health workers (12.5%). The majority of state medical practitioners (60%) mentioned senior medical practitioners followed by other health workers (28%), and patients (12%). Others (37.8%) were mentioned by majority of private medical practitioners followed by senior medical practitioners (29.7%) and patients (18.9%) and other health workers (13.5%).

#### *4.3.1.2 Section C: Assessment strategies*

**Question 1.**What strategies could be used to assess the competence and performance of medical practitioners?

Figure 4.5 presents the common responses from MDCNA members, state and private medical practitioners on the strategies to be employed during competence and performance assessment of medical practitioners.

**Figure 4.5** Assessment strategies for competence and performance assessment of medical practitioners



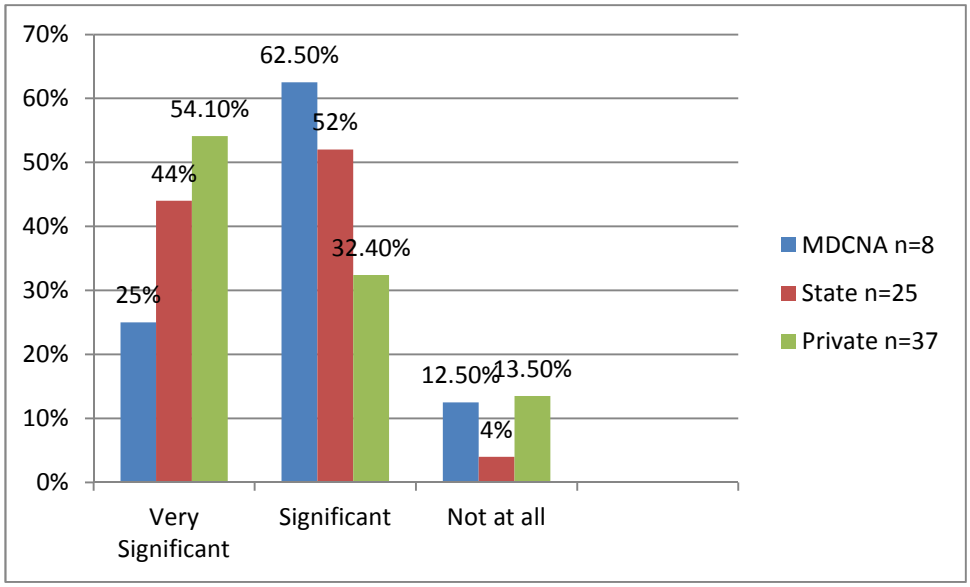

Direct practical observation (37.5%) was mentioned by MDCNA members, followed by feedback (25%) from patients and peers, and self-assessment (12.5%). Feedback from peers (48%) was mentioned by state medical practitioners, followed by direct practical observation (24.3%) and feedback from patients (16%). Only 4% mentioned self-assessment. Feedback from peers (29.7%) was mentioned by private medical practitioners, followed by feedback from patients and direct practical observation 24.3% respectively. Self-assessment was mentioned by 21.6%.

#### *4.3.1.3 Section D: Quality improvement*

**Question1.** In your opinion to what extent do you believe that introduction of competence and performance assessment of medical practitioners will improve health care service delivery?

Figure 4.6 presents the common responses from MDCNA members, state and private medical practitioners on their opinions on the significance of competence and performance assessment in relation to improving health care service delivery.

**Figure 4.6** Significance of competence and performance assessment of medical practitioners in relation to quality improvement



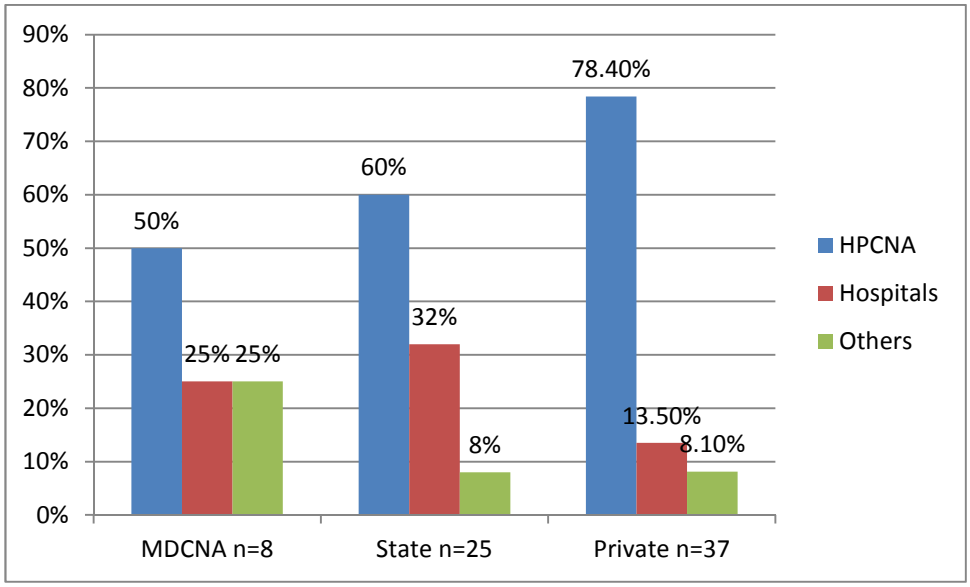

The majority of MDCNA members mentioned significant (62.5%), followed by very significant (25%) while only 12.5% mentioned not at all. The majority of state medical practitioners mentioned significant (52%), followed by very significant (44%) while only 4% mentioned not all. The majority of private medical practitioners mentioned very significant (54.1%), followed by significant (32.4%) while only 13.5% mentioned not at all.

#### *4.3.1.4 Section E: Challenges*

**Question 1.**Who should develop competence and performance assessment standard of medical practitioners?

Figure 4.7 presents the common responses from state and private medical practitioners and MDCNA members on their opinions on who should develop competence and performance assessment standard of medical practitioners.

**Figure 4.7** Persons to develop competence and performance standard




Note: Others = UNAM School of Medicine and medical association

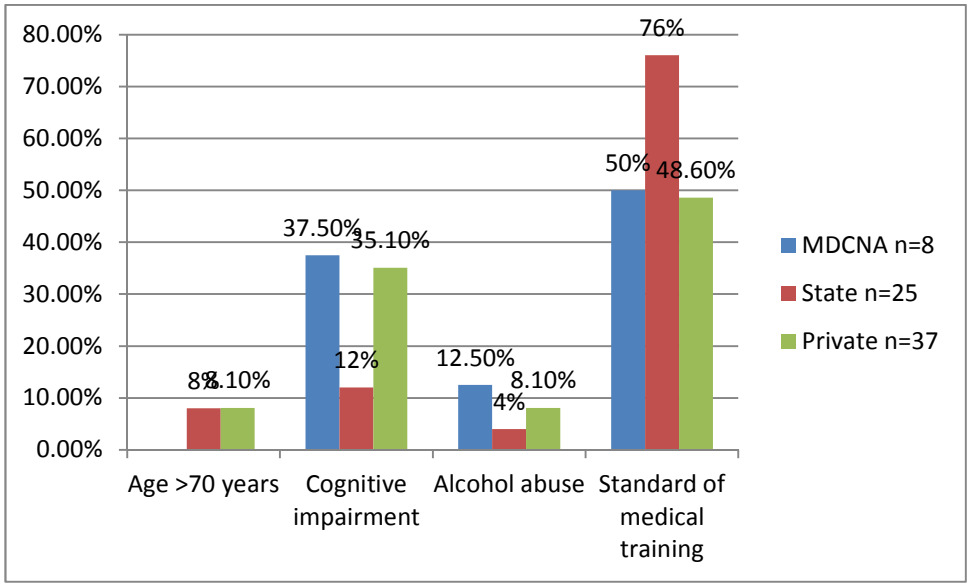
The majority of MDCNA members mentioned the HPCNA (50%), followed by hospitals and others: 25% respectively. The majority of state medical practitioners mentioned the HPCNA (60%), followed by hospitals (32%), while only 8% mentioned others. The majority of private medical practitioners mentioned HPCNA (78.4%), followed by hospitals (13.5%) while only 8.1% mentioned others.

#### *4.3.1.5 Section F: Factors affecting professional performance*

**Question 1.** What are the factors affecting competence and performance of medical practitioners?

Figure 4.8 presents the common responses from MDCNA members, state and private medical practitioners on their opinions on factors affecting competence and performance.

**Figure 4.8** Factors affecting competence and performance of medical practitioners




The majority of MDCNA members mentioned standard of medical training (50%), followed by cognitive impairment (37.5%) while only 12.5% mentioned alcohol abuse and none of them mentioned age>70 years. An overwhelming majority of state medical practitioners mentioned standard of training (76%), followed by cognitive impairment (12%) and age>70 years (8.1%), while only 4% mentioned alcohol abuse. The standard of medical training was mentioned by 48.6% of the private medical practitioners, followed by cognitive impairment (35.1%) and age> 70 years (8.1%) while only 4% mentioned alcohol abuse.

#### *4.3.1.6 Section F: Factors affecting professional performance – open-ended questions*

In order to capture spontaneous responses, open-ended questions asked MDCNA members, state and private medical practitioners about aspects related to where should the competence and performance assessment of medical practitioners take place. They were asked what can be done to improve quality health care services delivery. They were asked to lists challenges regarding introducing competence and

performance assessment in Namibia, and whether the standards for competence and performance assessment of medical practitioners are necessary and if so why, they were asked to give example where the existence of a competence and performance assessment tool would have made a difference. Respondents provided more than one response per question; however, not all respondents provided a response to all open-ended questions. Responses were clustered according to issues which were frequently mentioned by respondents.

#### *4.3.1.7 Section C: Assessment strategies*

**Question 2.** Where should the competence and performance assessment of medical practitioners take place?

Table 4.3 presents the common responses from MDCNA members; state and private medical practitioners on where should competence and performance assessment of medical practitioners take place.

**Table 4.3**

Places where the competence and performance assessment could take place (n=70)

| ISSUE | Places where the competence and performance assessment could take place | | |
|---|---|---|---|
| | MDCNA members n=8 | State medical practitioner n=25 | Private medical practitioner N=37 |
| Hospitals | 2(25%) | 19(76%) | 23(62.2%) |
| Consulting rooms | 2(25%) | 0 | 13(35.1%) |
| Duty stations | 2(25%) | 15(60%) | 0 |
| School of Medicine | 4(50%) | 3(12%) | 14(37.8%) |
| HPCNA | 2(25%) | 2(8%) | 0 |

The majority of state medical practitioners (76%) and private medical practitioners (62.2%) mentioned hospitals as a suitable place to conduct competence and performance assessment of medical practitioners. On the other hand only 25% of MDCNA members mentioned hospitals. Although all respondents mentioned UNAM School of Medicine, the majority of MDCNA members (50%) mentioned this venue more than the other participants. This venue was mentioned by 37.8% of the private medical practitioners 37.8% and by 12% of state medical practitioners. It is also evident in the above findings that majority of MDCNA members, namely 25% mentioned the HPCNA while only 8% of state medical practitioners mentioned it.

#### *4.3.1.8 Section D: Quality improvement*

**Question 2.**What in your opinion can be done to improve quality health care services delivery?

Table 4.4 presents the common responses from MDCNA members, state and private medical practitioners on their opinions on what can be done to improve quality health care services delivery.

**Table 4.4**
Aspects that can be done to improve quality health care services (n=70)

| ISSUE | What in your opinion can be done to improve quality health care services | | |
|---|---|---|---|
| | MDCNA members n=8 | State medical practitioner n=25 | Private medical practitioner N=37 |
| Continued education | 1(12.5%) | 13(52%) | 15(40.5%) |
| CPD | 3(37.5%) | 0 | 11(29.7%) |
| Adequate resources( Human, Equipment and facilities) | 0 | 18(72%) | 5(13.5%) |
| Performance appraisal | 2(25%) | 3(12%) | 9(24.3%) |
| Development of treatment protocols and standards | 1(12.5%) | 2(8%) | 10(27.0%) |
| Incentives (Good salary) | 1(12.5%) | 7(28%) | 2(5.4%) |
| Attendance of workshops/seminars | 2(25%) | 4(16%) | 11(29.7) |
| Good supervision | 0 | 3(12%) | 1(2.7%) |

This above has mixed results. The majority of MDCNA members mentioned CPD (37%) followed by performance appraisal (25%) and attendance of workshops/seminars (25%) and incentives (25%). None mentioned adequate resources and good supervision.

An overwhelming majority of state medical practitioners mentioned adequate resources (72%), followed by continued education (52%) and incentives (28%). None mentioned CPD.

The majority of private medical practitioners 40.5% mentioned continued education (40.5%) followed by CPD (29.7%) and attendance of workshops/seminars (29.7%).Development of treatment protocols and standards was mentioned by 27%, while only 2.7% mentioned good supervision.

#### *4.3.1.9 Section E: Challenges*

**Question 1.**What do you think are some of the challenges regarding introducing competence and performance assessment in Namibia?

Table 4.5 presents the common responses from MDCNA members, state and private medical practitioners on their opinions regarding the challenges of introducing competence and performance assessment in Namibia?

**Table 4.5**
Challenges of introducing competence and performance assessment in Namibia (n=70).

| ISSUE | Challenges | | |
|---|---|---|---|
| | MDCNA members n=8 | State medical practitioner n=25 | Private medical practitioner N=37 |
| Cost | 1(12.5%) | 1(4%) | 5(13.5%) |
| Reliability | 1(12.5%) | 10(40%) | 6(16.2%) |
| Acceptability | 0 | 7(28%) | 4(10.8%) |
| Provision of feedback/bias | 0 | 2(8%) | 14(37.8%) |
| Lack of time | 2(25%) | 5(20%) | 2(5.4%) |
| Lack of competent assessors | 2(25%) | 10(40%) | 10(27.0%) |
| Lack of assessment tool | 3(37.5%) | 6(24%) | 4(10.8%) |
| Lack of facilities | 0 | 0 | 1(2.7%) |

The majority of MDCNA members mentioned lack of assessment tool (37.5%), followed by lack of competent assessors (25%), lack of time (25%), and

reliability and cost (12.5%). None mentioned lack of facilities, provision of feedback, acceptability.

The majority of state medical practitioners mentioned lack of competent assessors and reliability (40%) followed by acceptability (28%), and lack of assessment tool (24%). None mentioned lack of facilities.

The majority of private medical practitioners mentioned provision of feedback (37.8%) followed by lack of assessment tool (27%) and reliability 16%.

Surprisingly a lack of competent assessors and assessment tool is commonly mentioned by MDCNA, state and private medical practitioners. This lack is not supported anywhere in the literature.

**Question 2.** In your opinions are the standard for competence and performance assessment of medical practitioners necessary and why?

Table 4.6 presents the common responses from MDCNA members, state and private medical practitioners on their opinions regarding whether the standard for competence and performance assessment of medical practitioners are necessary and reasons.

**Table 4.6**
Necessity and reasons of standards for competence and performance assessment of medical practitioners (n=70).

| ISSUE | Necessity of competence and performance assessment of medical practitioners | | |
|---|---|---|---|
| | MDCNA members n=8 | State medical practitioner n=25 | Private medical practitioner N=37 |
| Yes | 7(87.5%) | 20(80%) | 24(64.8%) |
| No | 1(12.5%) | 3(12%) | 13(35.1%) |
| No response | 0 | 1(4%) | 8(21.6%) |
| Reasons: | | | |
| Improve quality health care | 2(25%) | 17(68%) | 11(29.7%) |
| Safe guards patients | 3(37.5%) | 1(4%) | 1(2.7%) |
| Maintain standard of medical care | 3(37.5%) | 2(8%) | 10(27.0%) |

An overwhelming majority of MDCNA members mentioned yes (87.5%) and 12.5% mentioned no. An overwhelming majority of state medical practitioners mentioned yes (80%) while 12.5% mentioned no. The majority of private medical practitioners mentioned yes (64.8%) while 35.1% mentioned no. It is surprisingly to note that 35.1% of private medical practitioners mentioned no. This does not correlate with the questions asked who should develop competence and performance assessment of medical practitioners as the majority (73.7%) mentioned the HPCNA.

On the question why, the majority of MDCNA members mentioned safe guards patients and maintain standard of medical care (37.5%) followed by improve quality health care (25%). The majority of state medical practitioners mentioned improve quality health care (68%) followed by maintain standard of medical (8%). The majority of private medical practitioners mentioned improve quality health care (29.7%) followed by maintain standard of medical care (27%).

**Question 3.**Who should conduct competence and performance assessment of medical practitioner in solo practitioners?

Table 4.7 presents the common responses from MDCNA members and private medical practitioners on who should conduct competence and performance assessment of medical practitioner in solo practice.

**Table 4.7**
Persons and bodies to conduct competence and performance assessment of medical practitioners in solo practice (n=70)

| ISSUE | MDCNA members n=8 | Private medical practitioner N=37 |
|---|---|---|
| Hospitals | 2(25%) | 2(5.4%) |
| School of Medicine | 3(37.5%) | 2(5.4%) |
| HPCNA | 3(37.5%) | 7(18.9%) |
| Peers | 2(25%) | 5(13.5%) |
| Specialists | 2(25%) | 7(18.9%) |
| Partners | 0 | 2(5.4%) |
| Private medical centre's director | 0 | 3(8.1%) |
| Medical association | 0 | 2(5.4%) |

The majority of MDCNA members (37.5%) mentioned the School of Medicine and HPCNA, respectively. Partners, private medical centres' directors, and medical association, was not mentioned by any of these respondents. The majority of private medical practitioners mentioned specialists and the HPCNA, 18.9% respectively, while 5.4% mentioned medical association, partners School of Medicine and hospitals, respectively. This is a new finding because it is not mentioned anywhere in the literature.

#### *4.3.1.10 Section F: Factors affecting professional performance*

**Question 2.**Could you cite one example where the existence of competence and performance assessment tool would have made a difference?

Table 4.8 presents the common responses from MDCNA members, and private medical practitioners on examples provided.

**Table 4.8**
Example provided (n=70)

| ISSUES | Example | | |
|---|---|---|---|
| | MDCNA members<br>n=8 | State medical practitioner<br>n=25 | Private medical practitioner<br>N=37 |
| No response | 3(37.5%) | 15(60%) | 18(48.6%) |
| Incompetent doctors due to different education standard | 1(12.5%) | 2(8%) | 3(8.1%) |
| Fake doctors | 1(12.5%) | 0 | 0 |
| Increase public complaints about poor management of patients | 3(37.5%) | 10(40%) | 5(13.5) |
| Indiscipline doctors | 0 | 1(4%) | 0 |
| Unlicensed doctors | 0 | 0 | 4(10.8%) |

The majority of MDCNA members (37.5%) mentioned increase public complaints about poor management of patients and no response (37.5%), followed by fake and incompetent doctors due to different education standard (12.5%).

The majority of state medical practitioners gave no response (60%), followed by increase public complaints about poor management of patients (40%) and 8% mentioned incompetent doctors due to different education standard.

The majority of private medical practitioners did not give any response (48.6%) and this was followed by increase public complaints about poor management of patients (13.3%), and unlicensed doctors (10.8%).

### 4.4 Reliability of instruments

In this study reliability was tested through a pilot study (inter-rater reliability) and enhanced by the researcher's thorough familiarity with the environment in which the study was conducted. Reliability improves automatically when a researcher is familiar with the research environment. Reliability was also ensured by using an already existing instrument.

### 4.5 Validity of measurement

In this study validity was tested by giving the research instruments to the experts. The questionnaires were submitted to two colleagues and the two supervisors for this thesis. They were asked to evaluate the questions and the thesis outline in relation to the study.

### 4.6 Limitations observed

The main limitation of this study could be that MDCNA members might be biased which might have negative effect in comparing views of state and private medical practitioners. The data collection process takes long time because both the state and private medical practitioners were too busy to complete the questionnaire on time. Some questionnaires were returned half completed while some were not returned at all. Both time and financial resource challenges meant the study was limited to Windhoek.

### 4.7 Summary

In this chapter, the results of both questionnaires were presented and discussed. Questionnaire 1 was completed by 25 state medical practitioners and questionnaire 2

was completed by 37 private medical practitioners and eight MDCNA members. A variety of aspects associated with stakeholders' perceptions, regarding the introduction of a competence and performance assessment of medical practitioners in Namibia, were covered. They included:

- opinions on the introduction of competence and performance assessment;
- aspects to be assessed during competence and performance assessment of medical practitioners;
- aspects related to how often the assessment to be carried out;
- aspects related to the person to conduct assessments;
- aspects related to challenges of introducing competence and performance assessment;
- aspects related to development of competence and performance assessment of medical practitioners;
- aspects related to quality improvement;
- aspects related to factor affecting competence and performance assessment; and
- aspects related to example of existence of a competence and performance assessment tool would have made a difference.

Analysis of data revealed the opinions and views of MDCNA members, state and private medical practitioners with regard to the introduction of a competence and performance assessment of medical practitioners in Namibia. From this information a discussion could be formulated and is presented in the next chapter.

# CHAPTER 5

# DISCUSSION

## 5.1 Introduction

The purpose of this study was to describe the perceptions of stakeholders, namely, MDCNA members, state and private medical practitioners, regarding the introduction of competence and performance assessments of medical practitioners in Namibia and to compare their views and gain insights into such views, in order to address the implementation of a competence and performance assessment of medical practitioners programme in the country which might consequently improve quality services. The results of the study conducted among participants indicate that majority of MDCNA members, and state and private medical practitioners, respectively, believe that it is very necessary to introduce a competence and performance assessment of medical practitioners in Namibia. Their responses are comparable and consistent to each other.

## 5.2 Main results or themes

The below refers to section B of the questionnaire: competence and performance assessment.

**Question 1.** In your opinion to what extent do you believe that introduction of competence and performance assessment of medical practitioners in Namibia is necessary?

From the data presented in Figure 4.1 it is evident that MDCNA members, and the state and private medical practitioners, believe that the introduction of competence and performance assessment of medical practitioner in Namibia is very necessary.

This is supported by the literature which indicates that to reflect these changes in practice, it seems necessary that medical practitioners need to update their

competencies continuously to perform optimally (Davis & Harden, 2003). Medical practitioners need to be assessed in daily practice in order to inform them about their performance. The findings of this study have established those MDCNA members, and the state and private medical practitioners, support the introduction of competence and performance assessment in Namibia.

All of the MDCNA members and state medical practitioners did not believe that it is not necessary to introduce the competence and performance assessment. On the hand 10.8% of the private medical practitioners in the study believe that it is not necessary to introduce competence and performance assessment of medical practitioner in Namibia.

**Question 2.** What should be assessed during competence and performance assessment of medical practitioners?

The majority of participants mentioned adequacy of clinical skills followed by general medical knowledge and attitude to patients. None of state medical practitioners mentioned attitude to patients and only 13.50% of the private medical practitioners mentioned others, such as documentation and communication. This is in line with a current definition of professional competency. Epstein and Hundert (2002) define it as the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served. The Accreditation Council for Graduate Medical Education and American Board of Medical Specialties (2000) support this definition of professional competency. The focus of these essential competencies involves delivering quality care that extends beyond medical knowledge and clinical expertise.

However, it is positive to note that this question was not significant in this study as indicated by the 4–One Way ANOVAs Statistical result. The 4–One Way ANOVAs Statistical result is in line with the literature. The latter indicates that there is some criticism of competence-based assessment. There is a range of views in the literature cautioning against the use of generic domains of clinical competence that do not take into account the specific context and skills required to practice in a specialist environment (McGrath *et al*., 2006).

Although many forms of assessment can be used to show a medical practitioner's knowledge or competence, there is evidence that competence does not reliably predict performance in clinical practice (Rethans *et al*., 2002). Evidence from several studies found that there are a number of substantial problems with assessment of outcomes, and there is often no definition of thresholds of acceptable care (Landon *et al*., 2003; Lilford *et al*., 2004; Norcin, 2003).

The opinions of the MDCNA members and state and private medical practitioners are comparable to each other whereby the majority indicated that adequacy of clinical skills needs to be assessed. In contrast the state medical practitioners did not mention attitude to patients. They might just believe that patients' opinions are not important since they are lay persons. It can be assumed that state medical practitioners do not have positive attitudes toward their patients.

**Question 3.** How frequent should competence and performance assessment of medical practitioners be carried out?

There was a range given, namely annually, every three years, every five years, and every 10 years. This is contrary to the literature that shows that since 1972 the College of Physicians and Surgeons of Ontario assess doctors every five years with a so called clinical audit (Dauphine, 1999). The majority of participants mentioned

assessment every three years. This could be attributed to the fact that they want incompetent medical practitioners to be identified early so that remedial action can be implemented immediately. It should be noted that the majority of state and private medical practitioners prefer annual assessments while the majority of MDCNA members mentioned assessment after three years.

**Question 4.** Who should conduct medical practitioner's competence and performance assessment?

The participants provided rich information pertaining to suitable persons and bodies to conduct competence and performance assessments of medical practitioners in Namibia. These were senior medical practitioners, UNAM School of Medicine, hospitals, medical associations, other health worker, and patients.

Senior medical practitioners were overwhelming cited by the majority of participants. In terms of the literature medical practitioners' competence is inherently peer-driven. Requirements and standards for competence in training programme accreditation, board certification and maintenance of certification, patient care practice guidelines, credentialing, licensing, and peer review, are all developed and administered by special committees of medical practitioner peers (Sepucha, Fowler & Mulley, 2004). Additionally, a medical practitioner's competence is in part patient-determined. In the era of patient advocacy and patient-centred care, the assessment of a medical practitioner's competence is incomplete without considering the opinions of the patients served by that medical practitioner (Sepucha *et al*., 2004). This is further supported by a study done by Ipsos MORI, (2012) which found that participants think any system of professional development should have three key elements: doctors; patients; and an independent body. It should be a range of people: the department of health, other doctors, and patients as well. Patients can provide feedback on health-

care services rendered by medical practitioners, for example. Senior doctors can appraise medical practitioners. The department of health can appraise administration and management. It can be concluded that the participants in this study strongly supported competence and performance assessment to be conducted by senior medical practitioners as well as specialists.

However, it is important to note that state medical practitioners did not mention the need to assess attitudes to patients in the previous question. In this question they mentioned patients as players in conducting competence and performance assessment of medical practitioners in Namibia. It is also important to note that the School of Medicine, hospitals, and medical associations were not mentioned in the literature as being bodies to conduct competence and performance of medical practitioners. In this study these were mentioned by the participants. This is a new finding specifically for Namibia.

The below refers to section C of the questionnaire: assessment strategies.

**Question 1.**What strategies could be used to assess the competence and performance of medical practitioners?

Suggested strategies to be employed during competence and performance assessment include feedback from peers, direct practical observation, feedback from patients and self-assessment. However, it is important to note that the majority of participants mentioned feedback from peers. This is in line with the literature. The first step includes a combination of methods to assess professional performance in a number of domains which encompass valid and reliable instruments. Literature on performance assessment shows that the incorporation of information from multiple sources and various occasions is essential in order to evaluate a complex construct, such as medical practitioner performance (Van der Vleuten & Schuwirth, 2005).

The second step implies that information gathered in step one is processed for the medial practitioner involved: this is also called effective and acceptable feedback content and delivery. Several reviews established broad agreement on the characteristics of feedback content to make it most effective (Hattie & Timperley, 2007). Feedback should focus on performance tasks and should not contain any judgements about the character of the recipient. Furthermore, feedback should be clear and specific. Feedback delivery implies the way it is offered to the medical practitioners being assessed. Feedback could be interactive, such as a discussion, or it could be emailed or posted to the medical practitioner after the assessment.

This research has established that medical practitioners prefer to be assessed by peers and not by other bodies. MDCNA members, on the other hand, support more direct practical observation. The latter's' views are supported by an observational survey done by Morris, Hewitt, Roberts and Saunders (2009) which revealed that most (70%) felt that direct observation helps to improve clinical skills. Furthermore, 65% agreed with the statement. Self-assessment was the least mentioned by the participants. This is in line with the research on self-assessment which underscores the difficulty that many physicians have in identifying their own competence problems (Davis *et al*., 2006). The same authors further found that a preponderance of evidence suggests that medical practitioners have a limited ability to accurately self-assess. The worst accuracy for self-assessment was among medical practitioners who were the least skilled and those who were the most confident (Davis *et al*., 2006).

The below refers to section D of the questionnaire: quality improvement.

**Question1.** In your opinion to what extent do you believe that introduction of competence and performance assessment of medical practitioners will improve health care service delivery?

The majority of MDCNA members and state medical practitioners mentioned that this is significant, while the majority of private medical practitioners mentioned it is very significant. This is supported by Berwick and Finkelstein (2010) as their study indicates that it is very significant to conduct competence and performance assessment of medical practitioners due to the fact that medical practitioners' competence is constantly evolving. Basic knowledge, skills, attitudes, and behaviours for competence, must of necessity change with new discoveries, technologies, health-care system structure, and social mandates. This research has established that the participants believe that the introduction of the competence and performance assessment in Namibia can improve quality health care services. Furthermore, it can be concluded that they would like competence and performance assessment of medical practitioners to be introduced in Namibia.

The below refers to section E of the questionnaire: challenges.

**Question 1.**Who should develop competence and performance assessment standard of medical practitioners?

The majority of participants mentioned the HPCNA, followed by hospitals. Others mentioned include the UNAM School of Medicine, and medical associations. Requirements and standards for competence found in training programme accreditation, board certification and maintenance of certification, patient care practice guidelines, credentialing, licensing, and peer review, are all developed and administered by special committees of medical practitioner peers (Sepucha, Fowler & Mulley, 2004). The findings of this study have established, however, that the HPCNA should develop competence and performance assessment of medical practitioners in Namibia. This can be attributed to the fact that the HPCNA's statutory role as outlined in the Medical and Dental Act No.10 of 2004, is to protect the public through

regulated standard and practice by promoting and better ensuring high standards of professional conduct and professional education, training and competence among registered medical practitioners.

The below refers to section F of the questionnaire: factors affecting professional performance.

**Question 1.** What are the factors affecting competence and performance of medical practitioners?

The majority mentioned standard of medical training, followed by cognitive impairment, and alcohol abuse. Age >70 years was mentioned the least by the participants. These factors are contrary to those in literature which indicates that a decline in cognitive ability is associated with aging (Eva, 2002; Ladouceu, Billard, & Jacques, 2009; Durning *et al*., 2010; Trunkey & Botney, 2001; Williams, 2006). These authors reveal that cognitive ability declines from sixty years onwards and aging contributes to diminished insight about one's level of performance and decreases the ability to learn, retain, and implement new knowledge.

It is important to note that the majority of participants mentioned standard of medical training. This could be attributed to the fact that medical practitioners working in Namibia qualified indifferent medical universities in the world. It can further be attributed to the fact that many medical practitioners, who are working in Namibia, are foreigners and have undergone different medical training standards. So it is important to introduce competence and performance assessment of medical practitioners in Namibia and to design a remedial programme for incompetent medical practitioners in order to maintain the standard of medical care in the country.

The below is a discussion of open ended questions. Question 2 in section C of the questionnaire pertains to assessment strategies.

**Question 2.** Where should the competence and performance assessment of medical practitioners take place?

Assessment places mentioned: the hospital, UNAM School of Medicine, the HPCNA, and duty station. It is worth noting that majority of state medical practitioners mentioned duty stations (60%). This is supported in the literature because in order to measure competence, one needs to be able to evaluate the knowledge, skills, and abilities represented by those behaviours in the actual practice setting (Kramer *et al*., 2009). The majority of respondents from study populations support overwhelmingly competence and performance assessment to be conducted in the hospital. This is important because it is a quantitative assessment of performance based on rates at which patients of medical practitioners experience certain outcomes of care/or the rates at which medical practitioners adhere to evidence-based process of care practice (Landon *et al*., 2003).

Question 2 in section D of the questionnaire pertains to quality improvement.

**Question 2.** What in your opinion can be done to improve quality health care services delivery?

Aspects that were mentioned are adequate resources, continued education, incentives, CPD, attendance of workshops/seminars, development of treatment protocols, performance appraisal, and good supervision.

It is surprising to note that the most mentioned aspects are not supported in the reviewed literature. However, aspects related to adequate resources, such human resources, equipment, and facilities, were reported in the work of Tam (2005) who stated that quality in health care may comprise of newer technology, newer and effective medication, and higher staff to patient ratios, affordability, efficiency and

effectiveness of service delivery. Quality can also be broken down into two dimensions: technical quality and functional quality (Dean & Lang, 2008).

Other opposing views emerged: good supervision was not mentioned by the majority of respondents, but in a study conducted by De Villiers *et al*. (2006) it was found that in-service learning under supervision in the workplace was the most widely supported method to update both knowledge and skills. Good supervision was positively associated with a deep learning approach. This, however, means employment of experienced medical practitioners in hospitals who can provide supervision for this type of learning. It could however be assumed that all issues mentioned could improve quality of service delivery.

The below question in section E of the questionnaire pertains to challenges.

**Question1.** What do you think are some of the challenges regarding introducing competence and performance assessment in Namibia?

Challenges mentioned were lack of assessment tool; lack of competent assessors; lack of time; reliability and cost. Surprisingly a lack of competent assessors and an assessment tool were commonly mentioned by MDCNA members and both the state and private medical practitioners but these challenges are not supported in the literature reviewed in this study. The most mentioned issues, such as reliability, cost acceptability, and provision of feedback, are supported by the literature which indicates that in general a combination of various instruments is necessary to assess performance over a wide range of competencies and contexts (Van der Vleuten & Schuwirth, 2005). One single observation is never reliable enough for high-stake decisions, neither are multiple observations done by only one supervisor. Any assessment tool will provide information about more than one competency and a

competency can only be assessed comprehensively by using different methods (Lurie, Mooney & Lyness, 2009).

Although competence and performance assessment can be integrated with routine clinical care, some forms of assessment can be time consuming. Observation and feedback sessions do not need to be lengthy. The responsibility for assessment should be dispersed over many different team members, including nurses and other professionals (Brinkman *et al*., 2007). Many professionals find it challenging to give effective evaluative feedback. Professionals find that positive feedback is easier to give than negative feedback. On the other hand it is not uncommon for educators, and trainers, for example, to provide limited positive feedback. This may reflect the prevailing view that 'no news is good news'. A lack of priority could be placed on the role that positive feedback can play in both the learning and assessment process.

This research has established that cost, reliability, acceptability, provision of feedback, lack of time, lack of competent assessors, lack of assessment tool, and lack of facilities, are some of the challenges mentioned regarding the introduction of competence and performance assessment of medical practitioners in Namibia. It can be concluded that specific challenges for Namibia regarding the introduction of competence and performance assessment are lack of competence assessment, acceptability due to political influences, and lack of assessment tools.

**Question 2.** In your opinions are the standard for competence and performance assessment of medical practitioners necessary and why?

The majority of participants agreed that such assessment is necessary. It is surprisingly to note that 35.1% of the private medical practitioners were in disagreement with this question. This does not correlate with the questions as to who

should develop competence and performance assessment of medical practitioners because 73.7% of the private medical practitioners mentioned the HPCNA.

Reasons give as to why such assessment is necessary included safeguarding patients, maintenance of the standard of medical care, and improving quality health care. Safeguarding patients was mentioned by 37.5% of the MDCNA members whereas it was only mentioned by 4% of the state medical practitioners, and by 2.7% of private practice medical practitioners. This could be attributed to the fact that the MDCNA members know that the statutory role of the HPCNA, as outlined in the Medical and Dental Act No. 10 of 2004, is to protect the public through regulated standard and practice by promoting and better ensuring high standards of professional conduct and professional education, training and competence among registered medical practitioners.

This research has established that it is necessary to have competence and performance standards of medical practitioners in Namibia in order to improve quality health care, safe guard the patients, and maintain the standard of medical care.

**Question 3.**Who should conduct competence and performance assessment of medical practitioner in solo practice?

The following were mentioned: the School of Medicine, the HPCNA, partners, private medical centres' directors, medical associations, and specialists. Private medical practitioners and MDCNA members mentioned partners, medical centre directors, and medical associations. This could be attributed by the fact that most private medical practitioners work in group practices that are managed by directors as well as partners. This is a new finding because it is not mentioned anywhere in the literature.

The below open-ended question in section F of the questionnaire pertains to challenges factors affecting professional performance.

**Question 2.** Could you cite one example where the existence of competence and performance assessment tool would have made a difference?

Examples cited: increased public complaints about poor management of patients, fake doctors, and incompetent doctors due to different education standards, and unlicensed doctors. Some of these issues are supported in the literature. For example, a study done by Wanyu, Muiruri and Ayodo (2012) on whether employees' incompetence affected service quality in the public sector indicated that the majority (92%) of the respondents were in agreement while a few (8%) held contrary opinions. These findings are in line with a study done by Iipinge *et al*. (2006) who revealed that there was a shortage of competent staff and this had a tremendous effect on poor performance in that specific hospital.

Another disconcerting finding in the literature regarding quality service is the President's Commission of Inquiry Report (Mtambanengwe *et al*., 2013). The commission's team found that quality of patient care in public health facilities was generally described by the public and health professionals to be below acceptable standards. One of the complaints raised, in relation to poor quality patient care, was that some medical practitioners do not carry out a physical examination before prescribing medication. This was specific for medical practitioners working at the Khorixas District Hospital. They lacked respective skills on how to use basic medical equipment, such as an ultrasound machine, and how to interpret the images. The team's finding itself demonstrated that there is a need to introduce performance and competence assessment of medical practitioners. Competencies should be documented more formalised with a view to promoting quality care.

Furthermore, the said report mentioned that a factor affecting poor performance among medical practitioners identified was authorisation to practise medicine in the state without being registered by the MDCNA as medical practitioners (Mtambanengwe *et al*., 2013). It is disconcerting to note that during a number of consultations, and written submissions as well as during public hearings, a complaint was raised that the system of authorisation is open to abuse since unqualified persons might be authorised to practise when in fact they should not. Affidavits submitted to the Commission reveal cases of persons, from Kenya, Nigeria, or the Democratic Republic of the Congo (DRC), who were authorised to practise as medical practitioners apparently without consultation with the MDCNA. They were later found to be completely unsuitable to practise. They either obtained the minister's authorisation fraudulently, or did not provide the required documentation or did not comply with other requirements of the MDCNA Act, No 10 of 2004. A number of such 'medical practitioners' were discharged from employment by the Public Service Commission (Mtambanengwe *et al*., 2013).

Finally, it is disconcerting to note that this question was poorly answered given that that majority of participants, namely state medical practitioners, account for 60%. It can be concluded that this question was difficult to answer.

This research established that an increase in public complaints about poor management of patients was one of the most cited examples where the existence of competence and performance assessment tool would have made a difference.

## 5.3 Summary

This chapter presented findings of the study and, where applicable, linked them to the reviewed literature. A pivotal finding being that the absence of a competence

and assessment tool probably accounted for public complaints of poor management of patients in Namibia.

# CHAPTER 6

# CONCLUSION AND RECOMMENDATIONS

## 6.1 Introduction

In this chapter the objectives are revisited. A summary of the key findings and their contribution to the study are presented and recommendations for future research are made. The chapter includes final remarks. The purpose of this study was to describe the perceptions of stakeholders, namely MDCNA members, state and private medical practitioners, regarding the introduction of competence and performance assessments of medical practitioners in Namibia and to compare their views and gain insights into such views, in order to address the implementation of a competence and performance assessment of medical practitioners programme in the country which might consequently improve quality services.

## 6.2 Objectives revisited

The findings, together with the relevant theoretical information used in the study, led the researcher to arrive at several conclusions. The objectives are presented below and linked to the findings of the study.

### 6.2.1 Objectives 1 to 5

*1. To identify the perceptions of different stakeholders regarding introducing competence and performance assessment of medical practitioners in Namibia.*

This objective was met because the study clearly established that MDCNA members, state and private medical practitioners believe that it is very necessary to introduce a competence and performance assessment of medical practitioners in Namibia.

*2. To identify best practices around the world on the competence and performance assessment of medical practitioners.*

Review of the literature in this study clearly indicates that the following regulatory authorities are conducting competence and performance assessment of medical practitioners, namely:

- Medical Council of Republic of Ireland (Medical Act 2007);
- UK (General Medical Council of UK);
- USA (Accreditation Council and American Board of Specialist); and
- Medical Council of New Zealand (Health Practitioner Competence Assurance Act 2003).

These medical councils have established procedures and activities to satisfy themselves that the medical practitioners are keeping abreast with knowledge and skills and applying them to a standard that can reasonably be expected in terms of the kind of medicine that is practiced.

*3. To compare the perceptions of different stakeholders regarding the introduction of competence and performance assessment of medical practitioners in Namibia.*

In terms of the findings of this study the participants, namely MDCNA members, and state and private medical practitioners, have the same perceptions that it is very necessary to introduce a competence and performance assessment of medical practitioners in Namibia. All of the participants have the same perception that the introduction of a competence and performance assessment of medical practitioners is significant and would be very significant in improvement of health care delivery.

*4. To describe the challenges that might be experienced in introducing competence and performance assessment of medical practitioners in Namibia.*

In terms of this objective this research established that cost, reliability, acceptability, provision of feedback, lack of time, lack of competent assessors, lack of

assessment tool, and lack of facilities, are key challenges regarding the introduction of competence and performance assessment of medical practitioners in Namibia. It can be concluded that specific challenges for Namibia regarding the introduction of competence and performance assessment are lack of competence assessment, acceptability due to political influences, and lack of assessment tools

5. *Make fairly recommendations directing at improving quality services.*

Based on the findings of this study recommendations were suggested, namely:

- The MDCNA and Intermediate Hospital Katutura and Windhoek Central Hospital should establish procedures and programmes for competence and performance assessment of medical practitioners.
- Both private and medical practitioners should consider continued education and should comply with continuing professional development (CPD) requirements.
- MOHSS should provide adequate resources and improve working incentives for their medical practitioners.
- Hospital Katutura and Windhoek Central Hospital should develop treatment protocols and standards for medical practitioners. Hospital superintendents should ensure good supervision of their medical practitioners.

From the research results and discussion it can be concluded that the participants would like the introduction of competence and performance assessment of medical practitioners in Namibia. The assessment should be conducted by the peers, more specifically senior medical practitioners.

Furthermore, it can be concluded that state medical practitioners and MDCNA members are totally supportive of the introduction of a competence and performance assessment of medical practitioners in Namibia.

Finally, it can be concluded that specific challenges for Namibia regarding the introduction of competence and performance assessment are lack of competence assessment, acceptability due to political influences and lack of assessment tools

## 6.3 Summary of key findings

- The exact population of state and private medical practitioners in Windhoek has not been accurately established.
- The majority of MDCNA members and private medical practitioners believe that it is very necessary to introduce a competence and performance assessment of medical practitioners in Namibia. Their responses are comparable and consistent with the responses provided by the state medical practitioners.
- The majority of MDCNA members and state medical practitioners believe that competence and performance assessment of medical practitioners should be conducted after three years. However, their responses are not consistent with the responses provided by the private medical practitioners whereby the majority of respondents mentioned annual assessments.
- The majority of MDCNA members and private medical practitioners identified senior medical practitioners to conduct a competence and performance assessment of medical practitioners in Namibia. Their responses are comparable and consistent with the responses provided by the state medical practitioners.

- The majority of MDCNA members and private medical practitioners believe that the introduction a competence and performance assessment of medical practitioners in Namibia could significantly improve quality health care services. Their responses are comparable and consistent with the responses provided by the state medical practitioners.
- The majority of MDCNA members and private medical practitioners mentioned that Health Professional Council of Namibia (HPCNA) should conduct competence and performance assessments of medical practitioners in Namibia. Their responses are comparable and consistent with the responses provided by the state medical practitioners.
- The literature reviewed in this study clearly indicates that there are some regulatory authorities in the world that are conducting competence and performance assessments of medical practitioners.
- Aspects that were mentioned to be done to improve quality health care services in order of priority are: adequate resources, continued education, CPD, attendance of workshop/seminars, development of treatment protocols and standards, performance appraisals, incentives, and good supervision.
- Challenges regarding the introduction of a competence and performance assessment of medical practitioners, are

  (i) cost;

  (ii) reliability;

  (iii) acceptability;

  (iv) provision of feedback/bias;

  (v) lack of time;

(vi) lack of competent assessors;

(vii) lack of assessment tool; and

(viii) lack of facilities.

- The majority of MDCNA members and state and private medical practitioners believe that standards for a competence and performance assessment of medical practitioners in Namibia are necessary for the following reasons: improve quality health care, safe guard patients, and maintain a standard of medical care.
- The majority of MDCNA members, and private medical practitioners, mentioned that hospitals, the School of Medicine, the HPCNA, peers, and specialists, should conduct a competence and performance assessment of medical practitioners in solo practice.

Examples cited where the existence of a competence and performance assessment tool would have made a difference were: an increase in public complaints about poor management of patients; incompetent doctors due to different education standards; undisciplined doctors; and unlicensed doctors.

Finally, it is also important to note that School of Medicine, hospitals, and medical association, were not mentioned anywhere in the literature as being bodies to conduct competence and performance of medical practitioners.

## 6.4 Contribution of the study

Findings of the study contribute to further understanding of perceptions of stakeholders regarding the introduction of a competence and performance assessment of medical practitioners in Namibia. Improving quality services is linked to recommendations made by the participants.

The study produced evidence that it is very necessary (i) to introduce competence and performance assessment of medical practitioners, (ii) to find ways to monitor competence and performance of medical practitioners, and (iii) to improve their performance as well as the quality of service delivery.

The study further generated relevant evidence to guide the MDCNA and other stakeholders to develop strategies for improving the competence and performance of the medical practitioners as well as to amend the current Medical and Dental Act No. 10 of 2004.

## 6.5 Recommendations for future research

The following issues should be considered for future research:

- Perception of client and patients on the competence and assessment of medical practitioners should be investigated.
- The impact of CPD should be explored.
- Factors affecting performance of medical practitioner in Namibia should be determined.

## 6.6 Final remarks

The study clearly established that stakeholders believe that it is very necessary to introduce a competence and performance assessment of medical practitioners in Namibia. Furthermore, the study clearly established that stakeholders believe that the introduction a competence and performance assessment of medical practitioners in Namibia could significantly improve quality health care services.

It must first be pointed out that the recommendations that follow are put forward in the hope that policymakers, the HPCNA, and all those involved in hospital management and patient care management will find them useful in their decision making. It must, however, be borne in mind that while this study provides suggestions

and recommendations towards the introduction of a competence and performance assessment in Namibia, it does not serve as a detailed assessment and performance plan in terms of the required competence of medical practitioners to improve the quality of patients' lives.

First, there is a need to develop competence and performance assessment procedures in order to identify incompetent medical practitioners and provide remedial programmes. A competent medical practitioner is likely to provide quality health care services.

Secondly, competence and performance assessment of medical practitioners should be carried out every three years in order to identify incompetent medical practitioners.

Thirdly, since there is not yet a standard for competence and performance assessment of medical practitioners in Namibia, the HPCNA, in conjunction with the hospitals, should develop standards for competence and performance assessments of medical practitioners.

Finally, the HPCNA, and senior medical practitioners, should conduct competence and performance assessments of medical practitioners once introduced in the country.

**REFERENCES**

Accreditation Council for Graduate Medical Education and American Board of Medical Specialties. (2000). Toolbox of assessment methods: A product of the joint initiative of the ACGME Outcome Project of the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Medical Specialties *(ABMS), version* 1.1.

Allen, P., Lauchner, K., Bridges R.A., Francis-Johnson, P., McBride, S.G., & Olivarez, A. (2008).Evaluating continuing competency. A challenge for nursing. *The Journal of Continuing Education in Nursing, 39(2*), 81-85.

Archer, J.C., Norcini, J., & Davies, H. A. (2005).Use of SPRAT for peer review of pediatricians in training. *British Medical Journal*, *330 (7502),* 1251-1253.

Archer, J., Norcini, J., Southgate, L., Heard, S., & Davies, H. (2006). Mini-PAT (Peer Assessment Tool): A Valid Component of a National Assessment Programme in the UK? *Advances in Health Sciences Education: Theory and Practice*, *13(2),* 181-192.

Archer, J.C. (2010). State of the science in health professional education: effective feedback. *Med Educ, 44(1),* 101-108. Doi: 10. 1111/j.1365-2923.2009.03546.x.

Awases, M. H. (2006). *Factors affecting performance of professional Nurses in Namibia.* Master Thesis University of South Africa: Pretoria, South Africa.

Babbie, E. & Mouton, J. (2001). *The Practice of Social Research*. Cape Town: Oxford University Press.

Baartman, L.K.J., Bastiaens, T.J., Kirschner, P. A., & Van der Vleuten, C.P.M. (2006). The wheel of competency assessment: Presenting quality criteria for Competency assessment Programs. *Studies in Educational Evaluation,32(2),* 153-170.

Belar, C. D., Brown, R. A., Hersch, L. E., Hornyak, L. M., Rozensky, R. H., Sheridan, E. P., Brown, R.T.,& Reed, G.W. (2001). Self-assessment in clinical health psychology: A model for ethical expansion of practice. *Professional Psychology: Research and Practice, 32(1),* 135-141.

Benner, P. (1984). *From Novice to Expert, Excellence and Power in Clinical Nursing Practice*. Menlo Park, CA: Addison Wesley.

Berwick, D.M., & Finkelstein, J.A. (2010).Preparing medical students for the continual improvement of health and healthcare: Abraham Flexner and the new "public interest. *Journal of the association of American Medical College, 85(9),* 56-65.

Bhatti, N. I., & Cummings, C.W. (2007). Competency in surgical residency training: defining and raising the bar. *Journal of the Association of American Medical Colleges,* 82(1), 569-573.

Brennan, T.A., Horwitz, R.I., Duffy, F.D., Cassel, C.K., Goode, L.D., & Lipner, R.S. (2004).The role of physician specialty board certification status in the quality movement. *Journal of American Medical Association, 292(9),* 1038-1043.

Brink, P. J., & Wood, M. J. (2001). *Basic steps in planning nursing research from question to proposal.* (5th Ed). Singapore: Jones and Bartlett.

Brinkman, W.B., Geraghty, s. R., Lanphear, B. P., Knoury, J.C., Gonzalez de Rey, J.A., Knoury, T. G.,& Britto, M. T. (2007). Effect of multisource feedback on resident communication skills and professionalism: a randomized controlled trial. *Arch Pediatr.Med*, *161(1),* 44-49.

Bullock, A. D., Hassel, A., Markham, W. A., Wall, D. W., & Whitehouse, A. B. (2009). How ratings vary by staff group in multisource feedback assessment of junior doctors. *Medical Education, 43(6),* 516-520. Doi:10.11/j.1365.2009.03333.x.

Burford, B., Illing, J., Kergon, C., Morrow, G.,& Livingston, M. (2010).User perception of multi-source feedback tool for junior doctors. *Medical Education, 44 (2),*165-176. Doi:10.11/j.2923.2009.03565.x.Epub2010 Jan 5.

Burns, N., & Grove, S.K. (2003).*Understanding Nursing Research* 3rd edition. Philadelphia: W.B. Saunders Company.

Burns, N., & Grove, S.K. (2005).*The Practice of Nursing Practice*.5th edition. Philadelphia: Elservier.

*Business dictionary (n.d).* Retrieved fromhttp://www.businessdictionary.com/definition/quality.html#ixzz2nR5dDV1L

Byrne, M., Delarose, T., King, C. A., Leske, J., Sapnas, K.G., &Schroeter, K. (2007). Continued professional competence and portfolios. *Journal of Trauma Nursing*, *14(1),* 24-31.

Campbell, J.L. Roberts, M. Wright, C., Hill, J., Taylor, M., & Richards, S. (2011). Factors associated with variability in the assessment of UK doctor's professionalism: Analysis of survey results. *British Medical Journal,* 343doi:http://dx.doi.org/10.1136/Bmj.d6212.

Chassin, M. R., Loeb, J.M., Schmaltz, S.P., & Wachter, R.M. (2010).Accountability measures-using measurement to promote quality improvement. *The New England Journal of Medicine, 363(7),* 683-688.

Clinton, M., Murrells, T., & Robinson, S. (2005). Assessing competency in nursing: A comparison of nurses prepared through degree and diploma programmers'. *Journal of Clinical Nursing*, *14(1),* 82-94.

Colthart, I., Bagnall, G., Evans, A., Alibutt, H., Haig, A., Illing, J., & McKinstry, B. (2008). "The effectiveness of self-assessment on the identification of learner needs, learner activity, and impact on clinical practice": BEME Guide no.10", *Medical Teacher, 30(2),* 124-145.

Constantine, M. G., &Ladany, N. (2000). Self-report multicultural counselling competence scales: Their relation to social desirability attitudes and multicultural case conceptualization ability. *Journal of Counselling Psychology, 47(2),* 155-164. Doi10.1037/0022-0167.47.2.155.

Crewson, P.E. (2004). Public-service motivation: Building empirical evidence of incidence and effect. *Journal of Public Administration Research and Theory, 6(2),* 479-497.

Crossley, J. Davies, H.,& Eiser, C. (2003). The measurement characteristics of children's and parents' ratings of the doctor-patient interaction: measuring what matters well. *Archives of Disease in Childhood*, *88(1):* A50.

Das, J., & Hammer J. (2007). "Which doctor? Combining vignettes and item-response to measure doctor quality", *Journal of Development Economics*, *78(1),* 348-83.

Dauphine, W.D. (1999). Revalidation of doctors in Canada.*BMJ*; 319: 1188-1190 doi:http//dx.doi.org/10.1136/bmj.319.7218.1188.

Dauphine, W.D. (2005). Self-regulation must be made to work. *MBJ*; 330: 1385-1387.doi:http://dx.doi.org.10.1136/bmj.330.7504.1385.

Davis, A.D., Mazmanian, P.E., Fordis, M.,Thorpe, K.E.,& Perrier, L. (2006) Accuracy of Physician self-assessment compared with observed measures of competence-A system review**.** *Journal of American Medical Association, 296(9),* 1094-1102.

Davis, M.H., & Hardne, R. M. (2003). Competency based assessment: Making it a reality. *Medical Teacher, 25(6),* 565-568.

Dean, D.H., & Lang, J.M. (2008).Comparing three signals of service quality. *Journal of service marketing, 23(1*), 23-34.

Delamare Le Deist, F., & Winterton, J. (2005). What is competence? *Human Resource Development International*, *8(1),* 27-46.

De Villeirs, M. R., De Villiers, P.J.T., & Kent, A. (2006).The maintenance of competence of rural district hospital medical practitioners*. South Africa Family Practice, 48(3),* 18.

De Vos, A.S., Strydom, H., Fouché, C., Poggenpoel, M., & Schurink, E. (2000). *Research at grass roots.A primer for the caring professions***.**Pretoria: Van Schaik.

De Vos, A. S. (2002). *Research at grassroots 2nd edition*. Pretoria: J L van Schaik.

De Vos, A.S., Strydom, H., Fouche, C.B., &Depolrt, C.S.L. (2005).*Research at grass roots for the social sciences and human services professions.*3rd edition. Pretoria: Van Schaik.

De Vries, H., Sanderson, P., Janta, B., Rabinovich, l., Archontakis, F., Ismail, S., Klautzer, L., Marjanovic, S., Patruni, B., Puri, S., & Tiessen, J. (2009). *International comparison of ten medical regulatory systems: Egypt, Germany, Greece, India, Italy, Nigeria, Pakistan, Poland, South Africa and Spain.* Santa Monica, CA: RAND Corporation. http://www.rand.org/pubs/technical_reports/TR691.

Duggirala, M., Rajendran, C.,&Anantharaman, R.N. (2008). "Patient-perceived dimensions of total quality service in healthcare". *Benchmarking. An International Journal, 15(5),* 560-583.

Durning, S.J., Artino, A.R., Holmboe, E., Beckharm, T.J., van der Vleuten, C., & Schuwirth, L. (2010).Aging and cognitive performance: Challenges and implications for physicians practicing in the 21st century. *Journal of Continuing Education in the Health Professions, Summer, 30(3),* 153-156.

Enarson, A.D., Kennedy, S.M., Miller, D.C., & Bakke, P. (2001).*Research methods for promotion of lung health. A guide to protocol development for low-income countries*. Paris: IUATLD.

Epistein, R.M., & Hundert, E.M. (2002). Defining and assessing professional competence. *Journal of American Medical Academy, 287(2),* 226-256.

Eraut, M. (2008). How professionals learn through work. Surrey Centre for Excellence in Professional Training and Education. *Draft 1*, 22/04/08. Retrieved from http://learningtobeprofessional.pbworks.com/michael-Eraut 2010-01-15.

Esteves, M. (2009).Construction and development of the professional competences of teachers. *Educational Sciences Journal, 80(2),* 33-44.

Eva, K.W. (2002). The aging physician: changes in cognitive processing and their impact on medical practice. *Journal of the Association of American Medical College*, *77(10),* 1-6.

Eva, K. W., Cunnington, J. P. W., Reiter, H. I., Keane, D. R., & Norman, G. R. (2004). How can I know what I don't know? Poor self assessment in a well-defined domain. *Advances in Health Sciences Education*, *9(3),* 211-224.

Fereday, J., & Muir, C. E. (2006). The role of performance feedback in the self assessment of competence: a research study with nursing clinicians. *Royal College of Nursing, Australia,13(1),* 10-15.

Garman, A.N., & Johnson, M. P. (2006). Leadership competencies: an introduction. *Journal of Healthcare Management*, *9(51),* 13-17.

General Medical Council, Academy of Medical Royal colleges. *Workplace based assessment: a guide for implementation*. 2010.

Ghiabi, E., & Taylor, K.L. (2010). Assessment of surgical competence in North American Graduate Periodontics Programs: A survey of current Practices. *Journal of Dental Education, 74(8),* 869-875.

Grimshaw, J., McAurey, L., Bero, L., Grilli, R., Oxman, A., Ramsay, C., Vale, L.,& Zwarenstein, M. (2003). Systematic reviews of the effectiveness of quality improvement strategies and programmes. *Quality and Safety in Health care, 12(4),* 298-303.

Hanley, E., & Higgins, A. (2005). An assessment of clinical practice in Intensive care: a review of the literature. *Intensive and Critical Care Nursing, 21(5),* 268-275.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Rev Educ Res, 77(5*), 81-112.

Holmboe, E.S., Hawkins, R.E., & Hout, S. (2004). Effects of training in direct observation of medical residents' clinical competence; a randomized trial. *Annals of Internal Medicine*, *140(6),* 874-81.

Iipinge, S.N., Hofnie, K., van der Westhuizen, L., & Pendukeni, M. (2006). Perception of health workers about conditions of service: A Namibian Case study, *EQUINET discussion paper, 35.*

Ipsos Mori. (2012). Public perceptions on the NHS and social care. An ongoing tracking study conducted for the Department of Health. *December 2011 Wave*

Irvine, D. (2005). Patients, professionalism and revalidation. *British Medical Journal, 33(7502),* 1265-1268.

Jamtvedt, G., Young, J., Kristoffersen, D.T., O'Brien, M.A., & Oxman, A. A. (2006). Audit and feedback: effects on professional practice and health care outcomes (Review). *Cochrane Database Systematic Review; 19(2): CD00259.doi10.1002/14651858.cd000259.pub.2*

Kaslow, N. J., Borden, K. A., Collins, F. L., Forrest, L., Illfelder-Kaye, J., Nelson, P. D., Rallo, J.S., Vasqueze, M.J., & Willmuth, M.E. (2004). Competencies conference: Future directions in education and credentialing in professional psychology. *Journal of Clinical Psychology, 60(7),* 699-712.

Klass, D. (2007). A performance-based conception of competence is changing the regulation of physician's professional behaviour. *Journal of the Association of American Medical College, 82(6),* 529-535.

Kirch, D.G. (2010). Commentary: The flexnerian legacy in the 21st century**.** *Journal of the Association of American Medical College, 85(2),* 190-192.

Kramer, G.A., Albino, J.E.N., Andrieu, S.C, Hendricson, W.D, Henson, L. & Horn, B.D. (2009).Dental student assessment toolbox. *Journal of Dental Education,73(1),* 12-35.

Krejcie, R., & Morgan, D. (1970).Determining sample size for research activities. *Education Psychological Measurement, 30(1*), 607-610.

Ladouceu, R., Billard, M.,& Jacques, A. (2009). DPC et visites d' inspection professionnelle: le development professionnel continues-ilgarant d'un exercice de qualite? *Le College, 49(1),* 14.

Landon, B., Normand S., Blumental, D., & Daley, J. (*2003).*Physician clinical performance assessment, prospects and barriers. *Journal of American Medical Association, 290(3), 1183-1189.*

LeBeau, D. (1998). *Sociological research methods workbook (Part 1) for module 1131(Soc 3201).*Windhoek: University of Namibia, Centre for External Studies.

Levinson, W. (2008). Revalidation of physicians in Canada: are we passing the test? *Canadian Medical Association Journal, 179(10), 979-980.*

Lilford, R., Mohammed, M. A., Spegelhater, D., & Thomson, R. (2004). Use and misuse of process and outcome data in managing performance of acute medical care: avoiding institutional stigma*. Lancet, 363(2),* 1147-1154.

Loacker, G. (Ed.). (2000). *Self assessment at Alverno College*. Milwaukee, WI: Alverno College.

Lockyer, J., Violato, C., & Fidler, H. (2006).The assessment of emergency physicians by a regulatory authority.*AcdEmerg Med, 13(12),* 1296-1303.

Lockyer, J.M., Violato, C., & Fidler, H. (2006). A multi source feedback program for anesthesiologists. *Canadian Journal of Anesthesia*, *53(1),* 33-39.

Lockyer, J. (2003). Multisource feedback in the assessment of physician competencies. *The Journal of Continuing Education in the Health Professions*, Winter, *23(1),* 4-12.

Lurie, S.J., Mooney, C. J.,& Lyness, J.M. (2009). Measurement of the general competencies of the accreditation council for graduate medical education: a systematic review, *Acad Med, 84(3),* 301-309.

Macnee, C.L., & McCabe, S. (2008). *Understanding nursing research: Using research evidence-based practice*. (2nded). Lippincott: Williams & Wilkins.

Masella, R.S., Thompson, T.J. (2004). Dental and evidence-based educational best practices: bridging the great divide. *Journal of Dental Education, 68(12),* 1266-1271.

McGrath, P., Fox Young, S., Moxham, L., Anastasi, J., Gorman, D., & Tollefson, J. (2006). Collaborative voice: ongoing reflections on nursing competency. *Contemporary Nurse, 22(1),* 46-58.

Medical Council of Republic of Ireland. (2009). *Medical Council of Ireland Act*. Dublin: Ireland.

Medical Council of New Zealand. (2013). *Good medical practice.* Wellington: New Zealand.

Merkur, S., Mossialos, E., & McKee, M.(2008). Physician revalidation in Europe. *Clin Medicine, 8(4),* 371-376.

MOHSS. (2008). *Health and Social Services System Review*: Windhoek: Namibia.

MOHSS. (2013). *Ministry of Health and Social Services Staff Establishment.* Windhoek: Namibia.

Morris, A., Hewitt, J., Roberts, B., & Saunders, D. (2009).Investigation of trainee and specialist reactions to the mini-clinical evaluation exercise, and peer observation in pre-registration house officer (FY1) trainees.*Br J Anaeth,103(2),* 524-530.

Mouton, J. (2001).*How to succeed in your master's &doctoral studies. A South African guide and resource book.* Pretoria: Van Schaik.

Mtambanengwe, S., Maganu, E.T., &Keiseb, J. (2013).*Report of the Presidential Commission of Inquiry*: Ministry of Health and Social Services. Windhoek: Namibia.

Mulder, M. (2007). Competence – the essence and use of the concept in ICVT. *European Journal of Vocational Training, 40(2),* 5-21.

Murphy, D. J., Bruce, D.A., Mercer, S.W., & Eva, K. (2009). Workplace-based assessment: A robust addition to general practice specialist training. *Education for Primary Care, 20(6),* 486-488.

Neumann, W.L. (2000). *Social research methods*: *Qualitative and qualitative* a*pproaches.* Boston: A Pearson Education Publication.

Norcin, J.J. (2003). ABC of learning and teaching in medicine: work based assessment. *British Medical Journal, 326(7392),* 753-755 doi:10.1136/bmj.326.7392.753.

Norcini, J.J., Blank, L.L., Duffy, F.D., & Fortna, G.S. (2003).The mini-CEX: a method for assessing clinical skills. *Annals of Internal Medicine*, *138(6),* 476-481.

Norcini, J.J. (2005). Where the next with revalidation? *MBJ, 330(7506),* 1458-1459.

Norcin, J.J. (2005). Current perspectives in assessment: the assessment of performance at work. *Medical Education, 39(9*), 880-889.

Norcini, J., Burch, V. (2007). Workplace-based assessment as an educational tool: AMEE guide No: 31. *Medical Teacher, 29(9),* 855-871.

O'HearneRebholz, M. (2006).A review of methods to assess competency. *Journal for Nurses in Staff Development*, *22(5),* 241-245.

Overeem, K., Faber, M. J., Arah, O. A., Elwyn, G., Lombarts, K. M.J.H., Wollersheim, H.C.,& Grol, R. P.T.M. (2007). Doctor performance assessment in daily practise: does it help doctor or not? A systematic review. *Medical education, 41(11),* 1039-1049.

Overeem, K., Lombarts, M.J., Arah, O.A., Grol, R.P., & Wollersheim, H.C. (2010). Three methods of multi-source feedback compared: a plea for narrative comments and co-worker's perspectives. *Med Teacher, 32(2),* 141-147.

*Oxford Concise Dictionary.* (1999). 10th edition.Oxford: Oxford University Press.

Polit, D. F.,&Hungler, B. (1995).*Nursing research principles and methods*. Philadelphia: Lippincott Company.

Polit, D.F., & Hungler, B.P. (1997).*Nursing research, principles and methods.* (5thed.). London: J.B. Lippincott Company.

Polit, D.F., & deck, C.T. (2004). *Nursing research principles and methods.*7th edition. Philadelphia: Lippincott Williams & Wilkins.

Postgraduate Medical Education and Training Board Workplace Based Assessment Subcommittee (2005). *Workplace based assessment. London*

Prescott, L. E., Norcini, J. J., McKinlay, P., & Rennie, J. S. (2002). Facing the challenges of competency-based assessment of postgraduate dental training: Longitudinal evaluation of performance (LEP). *Medical Education, 36(1),* 92-97.

Radhakrisha, R. B., Yoder, E.P., & Ewing, J. C. (2007).*Strategies for linking theoretical framework and research types.* Pennsylvania: Pennsylvania State University.

Reinartz, W.J. (2004). The customer management process: Its measurement and impact on performance. *Journal of Marketing Research, 41(3),* 293-305

Reiter, H.I., Eva, K.W., Hatala, R.M., & Norman, G.R. (2002). Self and peer assessment in tutorials: application of a relative-ranking model. *Journal of the Association of American Medical College. 77(11),* 1134-1139.

Republic of Namibia. (2004). *Medical and Dental Act No 10 of 2004.* Windhoek: Namibia.

Rethans, J.J., Norcini, J.J., Baro'n-Maidonado, M., Blackmore, D., Jolly, B.C., LacDuca, T., Lew, S., Page, G.G., & Southgate, L.H. (2002). The relationship between competence and performance: implications for assessing practice performance. *Med Educ, 36(10), 901-909.*

Roberts, M. C., Borden, K.A., & Christiansen, M. (2005). Toward a culture of competence: Assessment of competence in the education and careers of professional psychologists. *Professional Psychology: Research and Practice, 36(10),* 355-361.

Rowan, M., Hogg, W., Martin, C., & Vilis, E. (2006).Family physician's reactions to performance assessment feedback. *Canadian Family Physician,*52(12),1570-1571.

Ruedy, J. (2007). Assessing students-clinical competence versus performance. *IeJSME, 1(1),* 15-21.

Sargeant, J.M., Mann, K.V., Ferrier, S.N., Langille, D.B., Muirhead, P.D., & Hayes, V.M. (*2003).*Response of rural family physicians and their colleague and co-

worker raters to a multi-source feedback: a pilot study. *Journal of the Association of American Medical College, 10 (suppl),* 44.

Sargeant, J., Mann, K., & Ferrier, S. (2005). Exploring family physician's reactions to multisource feedback: perception of credibility and usefulness. *Medical Education, 39(5),* 497-504.

Sargeant, J., Mann, K., van der Vleuten, C.,& Metsemakers, J. (2008).Directed self-assessment: practice and feedback within a social context. *The Journal of Continuing Education in the Health Professions, 28(1),* 47-54.

Sargeant, J. Mann, K., Sinclair, D., Van der Vleuten, C., & Metsemakers, J. (2008).Understanding the influence of emotions and reflection upon multi-source feedback acceptance and use. *Adv Health SciEduc Theory Pract, 13(3),* 275-288.

Seaman, C.H.C. (1987). *Research methods, principles, practice, and theory for nursing*. California: Appleton & Lange.

Sepucha, K. R., Fowler, F. J., & Mulley, A. G. (2004). Policy support for patient-centered care: the need for measurable improvement in decision quality. *Health Affairs 2004;* VAR-54-VAR 62.

Schuwirth, L. W., & Van der Vleuten, C.P. (2004). Changing education, changing assessment, changing research? *Medical Education, 38(8), 805-812.*

Sekaran, U. (2000). *Research methods for business*. New York: John Wiley & Sons.

Smither, J. W., London, M., & Reilly, R.R. (2005). Does the performance improve following multisource feedback? A theoretical model, meta-analysis and review of empirical findings. *Personnel Psychology, 58(1)*, 33-66.

Stewart, J., O'Halloran, C., Barton, J. R., Singleton, S. J., Harrigan, P., & Spencer, J. (2000).Clarifying the concepts of confidence and competence to produce appropriate self-evaluation measurement scales. *Medical Education, 34(1),* 903-909.

Steinbrook, R. (2005). Renewing board certification.*N Engl J Med, 353(1),* 1994-197.

Stobinski, J. (2008). Perioperative nursing competency.*AORN Journal, 88,*417-418, 421-426, 428-430, 432.

Swanwick, T., & Chana, N. (2009). Workplace –based assessment. *British Journal Hospital Medicine (London), 70(5),* 290-293.

Tam, J.L.M. (2005).Examining the dynamics of consumer expectation in Chinese technologies. *Journal of Marketing, 66(3),* 98-111.

Taatila, V. (2004).*The concept of organisational competence – a foundation analysis. Academic dissertation.*Jyväskyla: Jyväskyla University Printing House. Retrieved from https://jyx.jyu.fi/dspace/bitstream/handle/123456789/13248/9513917185.pdf?sequence=1 2010-02- 01.

Trunkey, D.D., & Botney, R. (2001).Assessing competency: a tale of two professions**.** *Journal of the American College of Surgeon, 192(3),* 385-395.

Van der Vleuten, C.P.,& Schuwirth, L. W. (2005). Assessing professional competence: from methods to programmes*. Medical Education, 39(3),* 309-317.

Veloski, J., Boex, J.R., Grsberger, M.J., Evans, A., & Wolfson, D.B. (2006). Systematic review of the literature on assessment, feedback and physician's clinical performance: BEME guide no 7. *Med Teach,* 28 (2)117-128.

Verma, S., Broers, T., Paterson, M., Schroder, C., Medves, J. M., & Morrison, C. (2009).Core competencies: the next generation.Comparison of a common framework for multiple professions.*Journal of Allied Health*, *38(1),* 47-53.

Violato, C., Lockyer, J. M., & Fidler, H. (2008). Changes in performance: a 5 year longitudinal study of participants in a multi-source feedback programme. *Med Educ* 42.

Violato, C., & Locckyer, J. (2006).Self peer assessment of paediatricians, psychiatrists and medicine specialist: Implications for self-directed learning. *AdvHealthSciEduc Theory Pract, 11(3),* 235-244.

Violato, C., Lockyer, J..& Fidler, H. (2006).The assessment of paediatricians by a regulatory authority.*Paediatrics, 117(3),* 796-802.

Wanjau, K.N., Muiruri, B.W., & Ayodo, E. (2012). Factors affecting provision of service quality in the public health sector: A case of Kenyatta national hospital. *International Journal of Human and Social Science, 2 (13).*

Weber, M. L. (2000). Evaluation of learning: An impossible task? *Royal College of Physicians and Surgeons of Canada*, *33(1),* 339-344.

Whyte, G. (2013). *Lecture 3.The Sample [PowerPoint Slides]*. Windhoek, Namibia: Polytechnic of Namibia.

Winch, P.J., Bhattacharyya, K., Debay, M., Sarriot, E.G, Bertoli, S.A., & Morrow, R.H. (2003). Improving the performance of facility-and community-based health workers.*State-of- the –Art Series: Health Worker Performance*. Maryland: The Child Survival Technical Support (CSTS0 project.

Wisniewski, M. (2006).*Quantitative methods for decision makers*. (4th ed). Prentice Hall: Financial Times.

**Appendix 1**

Data collection tool: the introduction of a competence and performance assessment of medical practitioners in Namibia: perceptions' of stakeholders

Self-assessment questionnaire for state medical practitioner (Please answer by ticking

(**QUESTIONNAIRE 1)**

SECTION A: BIOGRAPHIC DATA

AGE

| | |
|---|---|
| 25-29 | |
| 30-34 | |
| 35-39 | |
| 40-44 | |
| 45 and above | |

GENDER

| | |
|---|---|
| MALE | |
| FEMALE | |

EMPLOYMENT

| | |
|---|---|
| STATE | |
| PRIVATE | |

SECTION B: COMPETENCE AND PERFORMANCE ASSESSMENT

Please tick two letters that best matches most closely with your perception

1. In your opinion to what extent do you believe that introduction of competence and performance assessment of medical practitioners in Namibia is necessary?

a) Very necessary

b) Necessary

b) Not necessary

2. What should be assessed during competence and performance assessment of medical practitioners?

a) Adequacy of clinical skills

b) General medical knowledge

c) Attitude to patients

d) Other----------

3. How frequent should competence and performance assessment of medical practitioners be carried out?

a) Annual

b) After three years

c) After five years

d) Other----------

4. Who should conduct medical practitioner's competence and performance assessment?

a) Senior medical practitioners

b) Other health workers

c) Patients

d) Other----------

**SECTION C: ASSESSMENT STRATEGIES**

Each question is presented as a statement. Please read the statement carefully before responding. You are requested to select two responses that matches most closely with your perception of the statement

1. What strategies could be used to assess the competence and performance of medical practitioners?

a) Feedback from peer

b) Feedback from patients

c) Self-assessment

d) Direct practical observation of procedural skills by senior member of staff

2. Where should the competence and performance assessment of medical practitioners take place? (**Please mention three places**)

a)----------

b)----------

c)----------

**SECTION D: QUALITY IMPROVEMENT**

Please tick one letter that best matches most closely with your perception

1. In your opinion to what extent do you believe that introduction of competence and performance assessment of medical practitioners will improve health care service delivery?

a) Very significantly

b) Significant

c) Not at all

2. What in your opinion can be done to improve quality health care services delivery?

**(Please mention three aspects)**

a)----------

b)----------

c)----------

**SECTION E: CHALLENGES**

Please tick one letter that best matches most closely with your perception

1. What do you think are some of the challenges regarding introducing competence and performance assessment in Namibia?

a)----------

b)----------

c)----------

2. In your opinion are the standards for competence and performance assessment of medical practitioners necessary and why? **Provide your answer below)**

---

3. Who should develop competence and performance assessment standard of medical practitioners?

a) Health professional council of Namibia

b) Hospitals

c) Other (please specify)----------

**SECTION F: FACTORS AFFECTING PROFESSIONAL PERFORMANCE**

Please tick two letters that best matches most closely with your perception

1. What are the factors affecting competence and performance of medical practitioners?

a) Age >70 years

b) Cognitive impairments

c) Alcohol abuse

d) Standard of medical training

2. Could you cite one example where the existence of a competence and performance assessment tool would have made a difference?

…….

**Appendix 2**

Data collection tool: the introduction of a competence and performance assessment of medical practitioners in Namibia: perceptions' of stakeholders

Self-assessment questionnaire for MDCNA members and private medical practitioner (Please answer by ticking (**QUESTIONNAIRE 2)**

SECTION A: BIOGRAPHIC DATA

AGE

| | |
|---|---|
| 25-29 | |
| 30-34 | |
| 35-39 | |
| 40-44 | |
| 45 and above | |

GENDER

| | |
|---|---|
| MALE | |
| FEMALE | |

EMPLOYMENT

| | |
|---|---|
| STATE | |
| PRIVATE | |

**SECTION B: COMPETENCE AND PERFORMANCE ASSESSMENT**

Please tick two letters that best matches most closely with your perception

1. In your opinion to what extent do you believe that introduction of competence and performance assessment of medical practitioners in Namibia is necessary?

a) Very necessary

b) Necessary

b) Not necessary

2. What should be assessed during competence and performance assessment of medical practitioners?

a) Adequacy of clinical skills

b) General medical knowledge

c) Attitude to patients

d) Other----------

3. How frequent should competence and performance assessment of medical practitioners be carried out?

a) Annual

b) After three years

c) After five years

d) Other----------

4. Who should conduct medical practitioner's competence and performance assessment?

a) Senior medical practitioners

b) Other health workers

c) Patients

d) Other----------

**SECTION C: ASSESSMENT STRATEGIES**

Each question is presented as a statement. Please read the statement carefully before responding. You are requested to select two responses that matches most closely with your perception of the statement

1. What strategies could be used to assess the competence and performance of medical practitioners?

a) Feedback from peer

b) Feedback from patients

c) Self-assessment

d) Direct practical observation of procedural skills by senior member of staff

2. Where should the competence and performance assessment of medical practitioners take place? (**Please mention three places**)

a)----------

b)----------

c)----------

**SECTION D: QUALITY IMPROVEMENT**

Please tick one letter that best matches most closely with your perception

1. In your opinion to what extent do you believe that introduction of competence and performance assessment of medical practitioners will improve health care service delivery?

a) Very significantly

b) Significant

c) Not at all

2. What in your opinion can be done to improve quality health care services delivery?

**(Please mention three aspects)**

a)----------

b)----------

c)----------

**SECTION E: CHALLENGES**

Please tick one letter that best matches most closely with your perception

1. What do you think are some of the challenges regarding introducing competence and performance assessment in Namibia?

a)----------

b)----------

c)----------

2. In your opinion are the standards for competence and performance assessment of medical practitioners necessary and why? **Provide your answer below)**

3. Who should develop competence and performance assessment standard of medical practitioners?

a) Health professional council of Namibia

b) Hospitals

c) Other (please specify)----------

4. Who should conduct competence and performance assessment of medical practitioners in Solo practice? **(Please mentioned 3)**

a) ----------

b) ----------

c) ----------

**SECTION F: FACTORS AFFECTING PROFESSIONAL PERFORMANCE**

Please tick two letters that best matches most closely with your perception

1. What are the factors affecting competence and performance of medical practitioners?

a) Age >70 years

b) Cognitive impairments

c) Alcohol abuse

d) Standard of medical training

2. Could you cite one example where the existence of a competence and performance assessment tool would have made a difference?

……
…

**Appendix 3**

12 November 2013

**Dear Respondent**

My name is Alfons Amoomo and I am a student at Polytechnic of Namibia in the department of Harold Pupkewitz Graduate School of business. I am conducting a research of the introduction of a competence and performance assessment of medical practitioners in Namibia: perception's of stakeholders in partial fulfilment of the requirements for the degree of master of leadership and change management. The information I would like to collect from you is purely for academic purposes and will therefore not be used for any other purpose. You are therefore kindly requested to participate in this research by answering all the questions as sincerely and fully as possible. Your confidential is assured.

Yours sincerely

Alfons Amoomo (0811249924)

12 November 2013

The Managing Director

Khomas Medical Centre

Windhoek

Namibia

**Re: Request to submit research questionnaire**

My name is Alfons Amoomo and I am a student at Polytechnic of Namibia in the department of Harold Pupkewitz Graduate School of business. I am conducting a research of the *Introduction of a competence and performance assessment of medical practitioners in Namibia: perceptions' of stakeholders* in partial fulfilment of the requirements for the degree of master of leadership and change management. The information I would like to collect from your staffs is purely for academic purposes and will therefore not be used for any other purpose.

I am writing to request permission to submit questionnaires to medical practitioners at Khomas Medical Centre for the purpose of conducting a research

Yours sincerely

Alfons Amoomo (0811249924)

12 November 2013

Dr. S K Shalongo

Senior Medical Superintendent: Windhoek Central Hospital

P O Box 24341

Windhoek

**Re: Request to submit research questionnaire**

My name is Alfons Amoomo and I am a student at Polytechnic of Namibia in the department of Harold Pupkewitz Graduate School of business. I am conducting a research of the *Introduction of a competence and performance assessment of medical practitioners in Namibia: perceptions' of stakeholders* in partial fulfilment of the requirements for the degree of master of leadership and change management. The information I would like to collect from your staff is purely for academic purposes and will therefore not be used for any other purpose.

I am writing to request permission to submit questionnaires to medical practitioners at Windhoek Central Hospital for the purpose of conducting a research.

Yours sincerely

Alfons Amoomo (0811249924)

12 November 2013

The Managing Director

Rhino Private Hospital

Windhoek

Namibia

**Re: Request to submit research questionnaire**

My name is Alfons Amoomo and I am a student at Polytechnic of Namibia in the department of Harold Pupkewitz Graduate School of business. I am conducting a research of the *Introduction of a competence and performance assessment of medical practitioners in Namibia: perceptions' of stakeholders* in partial fulfilment of the requirements for the degree of master of leadership and change management. The information I would like to collect from your staff is purely for academic purposes and will therefore not be used for any other purpose.

I am writing to request permission to submit questionnaires to medical practitioners at Rhino Private Hospital for the purpose of conducting a research.

Yours sincerely

Alfons Amoomo (0811249924)

12 November 2013

Acting Senior Medical Superintendent

Intermediate Hospital Katutura

Windhoek

**Re: Request to submit research questionnaire**

My name is Alfons Amoomo and I am a student at Polytechnic of Namibia in the department of Harold Pupkewitz Graduate School of business. I am conducting a research of the *Introduction of a competence and performance assessment of medical practitioners in Namibia: perceptions' of stakeholders* in partial fulfilment of the requirements for the degree of master of leadership and change management. The information I would like to collect from your staff is purely for academic purposes and will therefore not be used for any other purpose.

I am writing to request permission to submit questionnaires to medical practitioners at Intermediate Hospital Katutura for the purpose of conducting a research.

Yours sincerely

Alfons Amoomo (0811249924)

12 November 2013

The Managing Director

Roman Catholic Private Hospital

Windhoek

Namibia

**Re: Request to submit research questionnaire**

My name is Alfons Amoomo and I am a student at Polytechnic of Namibia in the department of Harold Pupkewitz Graduate School of business. I am conducting a research of the *Introduction of a competence and performance assessment of medical practitioners in Namibia: perceptions' of stakeholders* in partial fulfilment of the requirements for the degree of master of leadership and change management. The information I would like to collect from your staff is purely for academic purposes and will therefore not be used for any other purpose.

I am writing to request permission to submit questionnaires to medical practitioners at Catholic Private Hospital for the purpose of conducting a research.

Yours sincerely

Alfons Amoomo (0811249924)

## Appendix 4

9-0/0001

**REPUBLIC OF NAMIBIA**

*Ministry of Health and Social Services*

**Private Bag 13198** | **Ministerial Building** | **Tel: (061) 2032510**
**Windhoek** | **Harvey Street** | **Fax: (061) 222558**
**Namibia** | **Windhoek** | **E-mail:** eshaama@mhss.gov.na
**Enquiries:** Ms. E.N Shaama | **Ref:** 17/3/3 | **Date:** 19 November 2013

**OFFICE OF THE PERMANENT SECRETARY**

**Mr. Alfons Amoomo**
**P.O. Box 431**
**Outapi**
**Namibia**

Dear Mr. Amoomo

***Re: The introduction of a Competence and Performance Assessment of Medical Practitioners in Namibia: Perception of Stakeholders***

1. Reference is made to your application to conduct the above-mentioned study.

2. The proposal has been evaluated and found to have merit.

3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**

3.1 The data to be collected must only be used for completion of your Master of Leadership and Change Management Degree;
3.2 No other data should be collected other than the data stated in the proposal;
3.3 A quarterly report to be submitted to the Ministry's Research Unit;
3.4 Preliminary findings to be submitted upon completion of the study;
3.5 Final report to be submitted upon completion of the study;
3.6 Separate permission should be sought from the Ministry for the publication of the findings.

Yours sincerely,

PERMANENT SECRETARY
Republic of Namibia
MINISTRY OF HEALTH AND SOCIAL SERVICES

**MR. ANDREW NDISHISHI**
**PERMANENT SECRETARY**

*"Health for All"*