

**ADHERENCE OF MENTALLY STABLE SCHIZOPHRENIC PATIENTS TO
ANTIPSYCHOTIC MEDICATION AT A MENTAL HEALTH INSTITUTION IN THE
LIMPOPO PROVINCE**

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DECLARATION

I, Ramatsobane Granny Molaba, declare that this thesis titled “**ADHERENCE OF MENTALLY STABLE SCHIZOPHRENIC PATIENTS TO ANTIPSYCHOTIC MEDICATION AT A MENTAL HEALTH INSTITUTION IN THE LIMPOPO PROVINCE**” is my own work and effort. I further declare that this research study has never been submitted by me to any other university for a degree and all sources of information used have been acknowledged.

Signature:

Date:

Mrs RG Molaba

DEDICATION

The research study is dedicated to my son, Lehlogonolo Lekoadi, my daughter, Tebogo Lekoadi and my husband, Hector Mahlatse Lekoadi.

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ABSTRACT

Adherence to antipsychotic medication is very important to patients with schizophrenia. Therefore, if patients with schizophrenia are non-adherent to treatment, they are at risk of relapse and being re-admitted at a mental health care institution in the Limpopo Province. Despite the proven benefits of antipsychotic medications, half of the patients with schizophrenia do not take their prescribed drugs.

The researcher has observed the following occurrences during practice:

- Lack of adherence to antipsychotic medications of schizophrenic patients results in symptoms not being relieved, poor drug effectiveness and patients developed other serious or costly consequences, such as being violent and damaging property;
- High rate of relapse; and
- High rate of re-admissions.

This research questions has guided the study:

- What are the factors affecting adherence of mentally stable schizophrenic patients to antipsychotic medications at a mental health institution in the Limpopo Province?
- Do mentally stable schizophrenic patients adhere to prescribed treatment?
- Are there any guidelines used to promote adherence to antipsychotic treatment?

The aim of the study has been to determine the level of adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental healthcare institution in the Limpopo Province.

The objectives of the study have been to describe adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental health institution in the Limpopo Province. It implies that participants have been given the opportunity to describe their experience while on medication.

Their responses have led to the development of guidelines to promote adherence of mentally stable schizophrenic patients to antipsychotic medication. The study site has been the Thabamoope Mental Healthcare Institution in the Capricorn District of the Limpopo Province. A descriptive, exploratory and contextual qualitative research design has been used in this study. The population has consisted of all mentally stable schizophrenic patients and all the carers of such patients. Non-probability purposive sampling has been used to select participants in this study.

The researcher has used a semi-structured interview with two schedule guides for the patient and carers/relatives, which have specified the issues and questions covered. It has assisted the researcher with gathering information about the problem studied (De Vos et al. 2005). A total of twenty ($n = 20$) participants, consisting of fourteen ($n = 14$) mentally stable schizophrenic patients and six ($n = 6$) carers/relatives has been included voluntarily in the semi-structured interview sessions. The steps of data analysis as described by Tesch (1990) in Cresswell (1994) have been followed in this study. The findings of this study reveal a central storyline which indicates that participants share the same point of view in connection with aspects of adherence to antipsychotic treatment and also knowledge about the causes of mental illness and its prognosis. The following four themes and their sub-themes have emerged during data analysis:

- Theme 1: Participants share the same point of view related to aspects of adherence to antipsychotic treatment;
- Theme 2: Knowledge related to mental illness;
- Theme 3: Health seeking behaviours of mentally ill patients; and
- Theme 4: Experiences of relatives caring for mentally stable patients on treatment.

Guidelines and recommendations based on the findings of this study are described in Chapter 4. The criteria for establishing the trustworthiness of qualitative data maintained in this study have been: Credibility, dependability, confirmability and transferability. The following ethical principles have been adhered to: The principle of beneficence, justice, the principle of human respect and dignity, permission to conduct the study, informed consent and confidentiality, privacy and anonymity.

TABLE OF CONTENTS

CHAPTER 1: OVERVIEW OF THE STUDY	1
1.1 INTRODUCTION AND BACKGROUND	1
1.2 PROBLEM STATEMENT.....	2
1.3 RESEARCH QUESTIONS	3
1.4 AIM OF THE STUDY.....	4
1.5 OBJECTIVES OF THE STUDY.....	4
1.6 DEFINITIONS OF CONCEPTS	4
1.6.1 Adherence	4
1.6.2 Schizophrenia	4
1.6.3 Antipsychotic medication	5
1.6.4 Patient.....	5
1.6.5 Carers	5
1.6.6 Psychosis.....	5
1.6.7 Mentally stable schizophrenic patient	6
1.7 LITERATURE REVIEW.....	6
1.8 STUDY SITE	7
1.9 RESEARCH METHODOLOGY	8
1.10 ARRANGEMENTS OF CHAPTERS	8
1.11 CONCLUSION	9
CHAPTER 2: RESEARCH DESIGN AND METHOD.....	10
2.1 INTRODUCTION.....	10
2.2 RESEARCH METHOD.....	10
2.3 RESEARCH DESIGN.....	10
2.3.1 Descriptive design.....	11

2.3.2	Exploratory design	11
2.3.3	Contextual design	12
2.4	POPULATION	12
2.4.1	Sample.....	12
2.5	DATA COLLECTION	14
2.6	PREPARATORY PHASE.....	14
2.6.1	Information session.....	15
2.7	INTERVIEW PHASE	15
2.7.1	Conducting the semi-structured interview	15
2.7.2	Communication techniques.....	16
2.8	POST INTERVIEW PHASE.....	18
2.9	DATA ANALYSIS	18
2.10	MEASURES TO ENSURE TRUSTWORTHINESS	20
2.10.1	Credibility	20
2.10.2	Dependability	21
2.10.3	Confirmability	21
2.10.4	Transferability	22
2.11	ETHICAL CONSIDERATION	24
2.12	CONCLUSION	26
CHAPTER 3: DISCUSSION OF RESEARCH FINDINGS		27
3.1	INTRODUCTION	27
3.2	DISCUSSIONS OF THEMES AND SUB-THEMES AND LITERATURE CONTROL.....	28
3.2.1	Theme 1: Participants shared the same point of view in relation to aspects of adherence to antipsychotic treatment.....	29
3.2.2	Theme 2: Knowledge in relation to mental illness.....	32

3.2.3	Theme 3: Health seeking behaviours of mentally ill patients	34
3.2.4	Theme 4: Experiences of relatives caring for mentally stable patients on treatment.....	35
3.3	CONCLUSION	37

CHAPTER 4: GUIDELINES TO PROMOTE ADHERENCE OF MENTALLY STABLE SCHIZOPHRENIC PATIENTS TO ANTIPSYCHOTIC MEDICATION..... 38

4.1	INTRODUCTION	38
4.2	GUIDING PRINCIPLES FOR PROMOTING ADHERENCE.....	38
4.2.1	Theme 1: Participants shared same point of view in relation to aspects of adherence to antipsychotic treatment.....	38
4.2.2	Theme 2: Knowledge related to mental illness.....	42
4.2.3	Theme 3: Health seeking behaviour of mentally ill patients	42
4.2.4	Theme 4: Experiences of relatives caring for mentally stable patients on antipsychotic treatment	43
4.3	CONCLUSION	43

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS 44

5.1	INTRODUCTION	44
5.2	SUMMARY	44
5.3	RESEARCH METHOD AND DESIGN	44
5.3.1	Findings of the study.....	45
5.4	RECOMMENDATIONS	46
5.4.1	Theme 1: Participants shared the same point of view in relation to aspects of adherence to antipsychotic treatment.....	46
5.4.2	Theme 2: Knowledge related to mental illness.....	48
5.4.3	Theme 3: Health seeking behaviour of mentally ill patients	48

5.4.4	Theme 4: Experiences of relatives caring for mentally stable patients on treatment.....	48
5.5	CONCLUSION	49
	REFERENCES.....	50
ANNEXURE A:	INTERVIEW GUIDE QUESTIONS FOR PATIENTS	55
ANNEXURE B:	INTERVIEW GUIDE QUESTIONS FOR CARERS/RELATIVES	57
ANNEXURE C:	REQUEST FOR PERMISSION TO CONDUCT THE RESEARCH AT THE HEALTH FACILITY	58
ANNEXURE D:	UNIVERSITY OF LIMPOPO (TURFLOOP CAMPUS) ENGLISH CONSENT FORM.....	59
ANNEXURE E:	UNIVERSITY OF LIMPOPO (MEDUNSA CAMPUS) SEPEDI CONSENT FORM.....	61
ANNEXURE F:	TRANSCRIPT OF A CONDUCTED SEMI-STRUCTURED INTERVIEW SESSION.....	63
ANNEXURE G:	APPROVAL LETTERS	65
ANNEXURE H:	CODING REPORT AND CERTIFICATE.....	67
ANNEXURE I:	EDITING CONFIRMATION	72

LIST OF TABLES

Table 2.1:	Summary of four measures of trustworthiness	22
Table 3.1:	Themes and sub-themes	28
Table H.1:	Themes and sub-themes reflecting adherence of mentally stable schizophrenic patients to antipsychotic medication in a mental health institution, Limpopo Province	68

CHAPTER 1: OVERVIEW OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

Adherence is the degree to which a patient carries out clinical recommendations of a treating physician (Sadock 2003). Adherence to antipsychotic medication is important to patients with schizophrenia because after discharge from the hospital, patients with schizophrenia who do not take prescribed medication are likely to relapse and to be re-admitted. It is recommended that medication be taken as directed because it reduces the likelihood of relapse and being re-admitted (Mark & Beer 2002). Adherence is affected by several factors; such disease, treatment and psychosocial factors. All these factors ought to be addressed for reducing poor adherence to antipsychotic medication by schizophrenic patient (Olfson & Hansell 2006).

Antipsychotic medication reduces the psychotic symptoms of schizophrenia and allows the patient to function effectively and appropriately (Boyd & Nihart 2003). Adherence monitoring and interventions to enhance adherence should be part of the treatment of every individual with schizophrenia, because failure to take medication is the cause of relapse of schizophrenic patients (Olfson & Hansell 2006). Improving adherence to antipsychotic medications would be successful if barriers to adherence could be identified and addressed (Mark & Beer 2002).

Antipsychotic medication provides the foundation for treatment of acute exacerbations as well as relapse prevention of patients with schizophrenia (Bimbaume & Sharif, 2008). Despite the proven effectiveness, poor adherence to prescribed antipsychotic regimens remains a challenge for schizophrenic patients (Bimbaume & Sharif 2008).

The study about medication adherence by schizophrenic patients was conducted with a total number of 81 adult diagnosed with schizophrenia, who were using prescribed oral antipsychotic medication. It was revealed that adherence to antipsychotic medication was poor, with 80% of participants claiming to have missed a dose in the previous seven days (Clark 2009).

Furthermore, it was indicated that forgetting was a common reason for medication omission while alcohol abuse decreased the likelihood of medication taking.

One third of the study participants stated that the poor support of family, friends and health professionals decreased their adherence. Health professionals could contribute to non-adherence of antipsychotic medications by poor interpersonal relationships with patients and poor discharge planning. Side effects were annoying for 70% of respondents, and these side effects were the major reason for non-adherence (Clark 2009), while 68% of the participants believed that they experienced discrimination because of their illness. The findings further revealed that there were three factors -that is social; medication effect and individual which affected medication adherence (Clark 2009). Factors affecting adherence were emphasized as the need for health professionals to form good interpersonal relationships with their patients during the provision of care (Clark 2009).

The study by Weiss (2008) investigated adherence behaviour of 162 patients with psychotic disorders at an out-patient setting in America. At baseline, 80% of patients were rated as actively adherent upon admission. In a long term analysis, 75% of patients who were rated as adherent at baseline remained adherent at 5.2 months but only 50% remained adherent at 13.7 months. The study conducted by Valenstein, Mlow and Copelands (2004) about poor antipsychotic adherence among patients with schizophrenia found that 40% of schizophrenic patients displayed poor antipsychotic medication adherence. Following this background, the researcher was motivated to study the adherence of schizophrenic patients to antipsychotic medication at the mental healthcare institution in the Limpopo Province.

1.2 PROBLEM STATEMENT

Problem statement is defined as the issue that exists in literature, theory or practice that leads to a need for the study (Creswell 1994). Brink (2006), described the research problem as an area of concern in which there was a need for a solution, improvement or alteration, or in which there was a discrepancy between the ways things were and the way they ought to be. Adherence to antipsychotic medication was very important to patients with schizophrenia.

Therefore, if patients with schizophrenia were non-adherent to treatment they were at risk of relapse and being re-admitted at a mental health care institution in the Limpopo Province. Despite the proven benefit of antipsychotic medication, half of the patients with schizophrenia did not take their prescribed drugs.

The researcher had observed the following during practice:

- Lack of adherence to antipsychotic medications of schizophrenic patients resulted in symptoms not being relieved, poor drug effectiveness and patients might experience other serious or costly consequences, such as being violent and damage to properties;
- High rate of relapse; and
- High rate of re-admissions.

Poor adherence to antipsychotic medications was a leading source of unpreventable morbidity rate in the community among patients with schizophrenia (Mark & Beer 2002). Although non-adherence to antipsychotic medication regimen was a common barrier to the effective treatment of schizophrenia, knowledge was limited about how to improve medication adherence (Zygmunt, Olfson, Boyer & Mechanic 2002). There seemed to be non-adherence to antipsychotic medication by schizophrenic patients at the Capricorn mental health care institution based on personal observation in psychiatric wards and current knowledge in the working field. This problem seemed to be greater when treating outpatients but also occurred in the hospitals where some patients found ways of avoiding drugs administered by nurses (Gelder, Mayon & Cowen 2001).

1.3 RESEARCH QUESTIONS

The following research questions guided the study:

- Do mentally stable schizophrenic patients adhere to antipsychotic medication at a mental health institution in the Limpopo Province?
- Did mentally stable schizophrenic patients adhere to treatment as prescribed?
- Were there any guidelines used to promote adherence to antipsychotic treatment?

1.4 AIM OF THE STUDY

- The study aimed at determining the level of adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental health care institution in the Limpopo Province.

1.5 OBJECTIVES OF THE STUDY

The objectives of the study motivated the researcher to:

- identify the factors affecting adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental health institution in the Limpopo Province;
- describe adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental health institution in Limpopo Province (it implied that participants were given the opportunity to describe their experience while on medication); and
- develop guidelines to promote adherence of mentally stable schizophrenic patients to antipsychotic medication.

1.6 DEFINITIONS OF CONCEPTS

1.6.1 Adherence

According to Lippincott and Wilkins (2003), adherence was the degree to which a patient carried out the clinical recommendations.

In this study, adherence meant taking all the treatment as prescribed and attending follow-up appointments as recommended by clinicians and psychiatrists.

1.6.2 Schizophrenia

Schizophrenia was defined as a group of psychosis characterized by confused and disconnected thoughts, emotions and perceptions (Lippincott & Wilkins 2003).

1.6.3 Antipsychotic medication

Antipsychotic medication was used to treat psychosis in schizophrenic patients; e.g. mania, paranoia and major depression (Rawlins 2002).

1.6.4 Patient

Patient was defined as a person who was receiving medical attention, care or treatment (Quirk, Biber, Brown, Crystal, Leech, Scholfield, Wales & Wells 2003).

In this study, a patient was defined as a person who had been diagnosed with schizophrenia and who was taking prescribed antipsychotic medication.

1.6.5 Carers

Carers were people who had the responsibility of providing or arranging care for someone else due to long term illness, disability or old age (Quirk *et al.* 2003).

In this study, carers would be people who took care of schizophrenic patients and who were responsible for administration of antipsychotic medication.

1.6.6 Psychosis

Psychosis was a collection of several mental disorders with a common denominator: Contact with reality was lost or highly distorted and it prevented people from being able to distinguish between the real world and the imaginary world. Symptoms included hallucinations (seeing or hearing things that were not really there), or delusions, irrational thought and fear (Lippincott & Wilkins 2003).

1.6.7 Mentally stable schizophrenic patient

A patient who was not experiencing psychotic symptoms such as hallucinations, delusions, or behavioural disturbances, and who was able to function well in the community (Rawlins 2002).

In this study, mentally stable schizophrenic patient would refer to a patient diagnosed with schizophrenia, who had recovered from psychotic symptoms after relapse and readmission at a mental health care institution.

1.7 LITERATURE REVIEW

Adherence to antipsychotic medication often was poor, posing major clinical and public health challenges. The study conducted in four European Union Countries; namely England, Germany, Italy and the Netherlands; was aimed at assessing the quality of life following adherence therapy for patients with schizophrenia and their carers. The study revealed that one of the major clinical problems in the treatment of patients with schizophrenia was suboptimal medical adherence (Kikkert, Schene, Koeter & Robson, 2006). The study results also revealed the following five clinically relevant themes: medication efficiency, external factors (such as patient support and therapeutic alliance), insight, side effects and attitudes towards medication (Kikkert *et al.* 2006). It was concluded that adherence might be positively influenced when professionals focussed on the positive aspects of medication, on enhancing insight and on fostering a positive therapeutic relationship with patients and carers (Kikkert *et al.* 2006).

The study conducted by Kasper, Saya, Tekin and Loze (2009) about improving adherence to antipsychotic medication revealed that the most important factor influencing adherence to antipsychotic medication was considered to be the patients' insight, which was the knowledge that the patients had about psychiatric illness. In the study, a complete toolkit based on the top-rated questions to improve communication with patients and measures to aid adherence was recommended.

The study by West, Wilk, Olfson, and Riger (2005) about patterns and quality of treatment for patients with schizophrenia in routine psychiatric practice provided generalizable national data about the treatment of adult patients with schizophrenia in the United States. National data from the practice research network study of psychiatric patients and treatment of the American Psychiatric Institute for Research and Education were used to examine treatment patterns for 151 adult patients with schizophrenia. Findings of the study indicated that 37% of patients with schizophrenia were experiencing problems with treatment adherence, although in most patients who received guideline-consistent psycho pharmacologic treatment it did not bring expected results.

The study about suicide risk was conducted in South Africa (SA) at Weskoppies Hospital in Pretoria by Lippi, Smit, Roos & Jordaan (2009) revealed that two thirds of participants who committed suicide had poor adherence to their prescribed antipsychotic medication. The periodic adherence was associated with a higher risk of suicide than good adherence. It was further supported by the fact that the Beck Hopelessness Scale scored for patients with periodic adherence was higher than for patients with good treatment adherence (Lippi *et al.* 2009). The Calgary Depression Scale for Schizophrenia scores showed a similar trend (Lippi *et al.* 2009).

The study conducted by Paruk, Ramlall & Burns (2009) in KwaZulu-Natal had revealed that for adolescents who were admitted to general psychiatric wards; schizophrenia was the most common diagnosis. The majority of patients had trial on first-generation antipsychotics and there was a high rate of non-adherence for the first outpatient appointment. The study dealt with adolescents-onset psychosis; a 2-years retrospective study of adolescents admitted to a general psychiatric unit, and the researchers recommended that there was a need for developing adolescent psychiatric facilities and services, as well as to address non-adherence to treatment for adolescents with schizophrenia.

1.8 STUDY SITE

The study site was the location, position, place and the setting where the research study-related activities were conducted (Petersen 2006).

The study site was at the Thabamoopo Mental Health care Institution in the Capricorn District of the Limpopo Province. It was a specialised mental health care institution taking care of mental health care users and it was situated at Lebowakgomo, about 65 km south of Polokwane in the Limpopo Province of South Africa. It serves the community of Lepelle-nkumpi Municipality and it was a referral institution for mentally ill patients in the Limpopo Province. The type of mental health care users; whom were treated at the facility; included assisted, voluntary, involuntary and state patients.

1.9 RESEARCH METHODOLOGY

A descriptive, exploratory and contextual qualitative research design was used in this study. The population consisted of all mentally stable schizophrenic patients and all carers of such patients. Non-probability purposive sampling was used to select the participants who were interviewed during semi-structured interview sessions conducted during November 2011 until data saturation was reached. The sample consisted of fourteen (n=14) mentally stable schizophrenic patients and six (n=6) carers of some of these patients. Data were analysed using Tesch's open coding method outlined in De Vos, Strydom, Fouche, & Delpont (2005) and an independent coder assisted during data analysis to ensure credibility of the study. Measures to ensure trustworthiness and ethical standards were adhered to.

1.10 ARRANGEMENTS OF CHAPTERS

CHAPTER 1- Overview of the study

CHAPTER 2- Research methodology

CHAPTER 3- Discussions of research findings

CHAPTER 4- Guidelines to promote adherence to antipsychotic medications

CHAPTER 5- Summary, conclusion and recommendations.

1.11 CONCLUSION

Chapter 1 discussed an overview of the research study. The problem statement, literature related to the problem studied, research question, aim, objectives and summary of the research methodology followed in the study were outlined. Chapter 2 dealt with the research methodology used in this study.

CHAPTER 2: RESEARCH DESIGN AND METHOD

2.1 INTRODUCTION

This chapter described the research methodology used in this study. The qualitative research method was used in this study which was aimed at determining the level of adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental health care institution in the Limpopo Province of the Republic of South Africa. The population, sampling method, data collection method, ethical standards and the measures to ensure trustworthiness which were followed in this study were discussed below.

2.2 RESEARCH METHOD

A qualitative research method was concerned with subjective explorations of reality and the gaining of an understanding by acquiring first-hand knowledge about the meaning that the people attached to their everyday life (De Vos *et al.* 2005). Qualitative research was a systemic approach used to describe experiences of the participants with regard to the research phenomenon (Brink 2006, Burns & Grove 2003, Polit & Beck 2006). By conducting a qualitative enquiry, the carers' and schizophrenic patients' experiences with regard to adherence to antipsychotic medication were explored by the researcher and the participants were given an opportunity to describe the phenomenon studied during semi-structured interview sessions conducted (Polit & Beck 2006).

2.3 RESEARCH DESIGN

According to Polit and Hungler (2003), research design is the overall plan for collecting and analysing data. A qualitative descriptive, exploratory and contextual research design was used in this study to explore and describe the level of adherence of mentally stable schizophrenic patients to antipsychotic medication in a mental health institution in the Limpopo Province of the Republic of South Africa.

2.3.1 Descriptive design

The descriptive research design aimed at facilitating the description of new issues and/or information, factors within a problem studied, and the way in which these factors were related to other factors (Crinnell 1998). A descriptive research design was used because the researcher provided an opportunity to the participants to describe their experiences with regard to the adherence of schizophrenic patients to antipsychotic medication in order to elicit more information about the problem studied.

A qualitative descriptive design was used by the researcher and the participants were given an opportunity to describe their experiences about adherence to antipsychotic medications and factors affecting adherence. The researcher had an opportunity to understand a phenomenon with a detailed account of the context, the activities, the participants and the processes while the phenomenon was occurring. The researcher gathered factual data with regard to adherence to antipsychotic medications by means of the descriptions of the participants.

2.3.2 Exploratory design

Exploratory research design was defined as a study that explore the areas that were unknown with the aim of investigating the full nature of the phenomenon, which in this study was adherence of schizophrenic patients to antipsychotic medication and related factors affecting adherence (De Vos *et al.* 2005, Polit & Beck 2006). An exploratory research design provided in-depth information about the experiences of schizophrenic patients and carers about factors that influenced adherence to antipsychotic medications. To achieve the exploratory part of this study, the researcher asked a central question to the participants: **“Describe your experiences with regard to factors affecting adherence to antipsychotic medication”** which was followed by probing questions until data saturation was reached. It was done to gain more clarity and meaning.

2.3.3 Contextual design

In accordance with Babbie and Mouton (2009), the researcher aimed at describing and understanding events within the concrete, natural context in which they occurred which was adherence of mentally stable schizophrenic patients to antipsychotic medication at mental health care institution in the Limpopo Province. Mason (2002) mentioned that the researcher should not ignore the focus on the context, which would produce the sections of data by the researcher.

2.4 POPULATION

According to Brink (2006), a population is a complete set of participants that possessed some common characteristics that was of interest to the researcher. The population for this study was all mentally stable Schizophrenic patients on antipsychotic medication at Thabamooopo Hospital. Patients who had undergone treatment and rehabilitation and who were mentally stable; ready to be discharged; participated in the study. Furthermore, the population was also all the carers/relatives who were directly caring and supporting mentally stable schizophrenic patients.

2.4.1 Sample

Non-probability purposive sampling was used to select participants in this study. According to Polit and Hungler (2003), purposive sampling is a type of a non-probability method in which the researchers selected participants for the study on the basis of personal judgment with regard to the characteristics which the participants had to represent the target population. Purposive sampling is sometimes called judgmental or theoretical sampling; it was a type of sampling where the researcher selected the participants based on his or her knowledge of the participants' experience and expertise about the phenomena under the study (Brink 2006).

The researcher used personal judgments based on the inclusion criteria while selecting the participants who had the characteristics relevant to the problem studied.

The carers who came to visit or took home mentally stable schizophrenic patients at the hospital during the days of data collection were asked to voluntarily participate in the study. The researcher used purposive sampling to include mentally stable schizophrenic patients and the carers for the sample of the study from the Thabamooopo Mental Health Care Hospital.

The following inclusion criteria had determined who participated in the study:

- Patients had to be diagnosed with schizophrenia, because they would be taking prescribed antipsychotic medication;
- Patients needed to have had antipsychotic medication prescribed to them for at least one (1) year, for adherence to be evaluated because patient would have used antipsychotic for quite an extensive period of time;
- Patients who were re-admitted as a result of poor adherence to antipsychotic medication based on the initial history given by carers/relatives;
- Carers/relatives who cared for patients with schizophrenia on antipsychotic medication for a period of at least one (1) year in order to provide information about adherence based on their experience while caring for the schizophrenic patients;
- Carers/ relatives were included because most of them were responsible for administration of antipsychotic medication to patients on a daily basis, since they had information about the factors contributing to adherence and/or to poor adherence;
- Males and females were included in the study; and
- The researcher gained cooperation from the patients because they were mentally stable during data collection for.

According to Burns and Grove (2003), inclusion criteria are a list of characteristics that were essential for the participants to be included in the sample. De Vos *et al.* (2005) stated that the purposeful selection of participants represented a key decision point in a qualitative study and clear criteria ought to be applied.

2.5 DATA COLLECTION

Data collection was an important process for the success of any research study. According to Polit and Hungler (2003), data collection is the gathering of information needed to address a research problem. The researcher used a semi-structured interview with two schedule guides for the patients and cares/relatives (see Annexure A & B), which specified the issues and questions covered to assist the researcher during gathering information about the problem studied (De Vos *et al.* 2005). There was no specified order in which the questions in the schedule guides were asked during the interview sessions.

The central question was asked at the beginning. Therefore; the participants were given an opportunity to describe their experiences while the researcher was following the flow of the descriptions and making sure that scheduled guide questions were covered. The questions on the schedule guide; which were not covered during the descriptions given by the participants; were asked as clarity seeking questions to ensure that all the questions were covered.

2.6 PREPARATORY PHASE

The steps explained by De Vos *et al.* (2005) were followed during preparation phase. Firstly, the researcher contacted the manager of hospital with the aim of building rapport, to discuss the involvement of the participants in the study and to plan dates for collection of data. The researcher explained the purpose and objectives of the study and gave the manager approval letter from Medunsa Research Ethics Committee (MREC) and the permission letter to collect data from the Limpopo Province Department of Health and Social Development. As a result, permission was granted by the chief executive officer of the hospital and the unit manager of the ward. The nurses allowed the researcher to continue with the preparations for the interview sessions that were to be conducted after this phase. The researcher identified potential participants and made contact with them in the hospital. The participants were mentally stable schizophrenic patients and the carers/relatives at the Thabamoopo Mental Health Institution.

2.6.1 Information session

The information session was conducted on a day prior to conduct the semi-structure individual interviews. During the information session, the researcher discussed issues related to the expectations from the participants, the purpose and objectives of the study and the central question which was going to be asked the same way to all the participants as well as the questions in the schedule guide (Chapter 1). The researcher confirmed the dates of the interviews with the unit manager of the ward and the nurses.

The informed consent forms were explained to all participants who agreed to form part of the interview sessions and the researcher also explained to the participants that the voice recorder was going to be used to capture all the interview proceedings. The participants were told about their right to withdraw from the study at any time without experiencing any negative outcomes, but were informed that the data that they would have supplied at the time of termination would be utilised by the researcher for the purpose of the study.

2.7 INTERVIEW PHASE

2.7.1 Conducting the semi-structured interview

A total of twenty (n=20) participants consisting of fourteen (n=14) mentally stable schizophrenic patients and six (n=6) carers/relatives were included voluntarily in the semi-structured interview sessions. At the beginning of each interview session the participants were given a warm welcome by the researcher. The researcher started by introducing herself to the participants and indicated that the permission to conduct the interview session had been granted by showing them all the letters from all institutions involved as explained in 2.6. The purpose and objectives of the study were explained again, the participants' confidentiality was ensured, since names were not used and the recording process was explained. The interview sessions commenced after the participants had signed an informed consent form. According to De Vos *et al.* (2005), the setting should provide privacy, comfort and a non-threatening atmosphere as well as being accessible.

The research environment was suitable because it was a quiet and relaxed venue for the participants and away from disruptions. No disruptions were encountered during the interview session and the participants were able to freely describe their experiences with regard to the problem studied which was adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental health care institution in the Limpopo Province.

According to De Vos *et al.* (2005), semi-structured interviews were used in order to gain a detailed picture of the participant's beliefs about a particular topic studied. The researcher was able to obtain more information by means of the semi-structured interview about the problem studied. A voice recorder allowed for a much more complete record of the conducted interview sessions and gave the researcher time to focus on the facilitation of the interview questions. The researcher also took field notes, which complemented the voice recordings because the non-verbal communication could not be picked up by the voice recorder. The central question which was asked in the same way to all the participants was: "Describe your experiences with regard to factors affecting adherence to antipsychotic medications" during the semi-structured interviews with a schedule guide. The participants were given time to think before they were expected to respond. The following skills were used during interview sessions conducted: probing, reflection, clarification and listening skills.

2.7.2 Communication techniques

The following communication techniques were used during the interview phase:

2.7.2.1 Probing

The purpose of probing was to deepen the response of the participants to a question in order to increase the richness of the provided data. Probing persuaded the participants to give more information about the problem studied (De Vos *et al.* 2005). The researcher asked probing questions after the response of the central question. It was aimed at gaining clarity and meaning about the problem studied.

Neuman (1997) also confirmed that probing could be used to clarify ambiguous questions and to elicit more information during the interview sessions of the qualitative research interviews. In this study, probing was used in order not to limit the time given to the participants to engage in discussions and not to lose focus on order for more data to be supplied by the descriptions of the participants.

2.7.2.2 Reflection

It was a process during which the researcher repeated the participants' ideas, thoughts and feeling to check whether these responses were well understood (De Vos *et al.* 2005). The researcher repeated some key sentences from the participants' descriptions with the purpose of confirming with the participants whether it was what they had meant. An example of reflection during data collection was: "You said you were feeling bad when you remember that you have to take your medication. Did I understand you well on this aspect?"

2.7.2.3 Clarification

Clarification was a technique that was used to gain clarity of some statements from participants (De Vos *et al.* 2005). The researcher asked questions in order to gain clarity about the research phenomenon (De Vos *et al.* 2005). In this study, clarification helped to link the participant's perception and factors identified during different interviews which gave a better understanding of factors influencing adherence to antipsychotic medications. For example, the researcher asked this kind of question for clarity: "You mentioned that your belief system made you to stop taking your medication. Can you explain your believe system more clearly?"

2.7.2.4 Listening

A researcher was expected to have good listening skills to be able to obtain quality information during an interview. Listening skills enabled the researcher to have more understanding and encouraged the participants to talk more when they were given the opportunity (DeVos *et al.* 2005).

The researcher showed interest in the participants by using responses, such as “mmm” or “okay” and nodding her head which motivated the participants to describe more about the problem studied. By using these listening skills, the researcher was able to maintain continuous interaction with the participants and obtained clarity and meaning about the problem studied.

2.8 POST INTERVIEW PHASE

The semi-structured interview sessions lasted for approximately 30 minutes with each participant who was included in the interviews. The sessions ended with the researcher thanking all the participants for sharing their experiences with regard to the problem studied and for giving of their time to participate.

2.9 DATA ANALYSIS

Data analysis was described as a systematic organisation of the transcripts and field notes until they were clear and had meaning. Data analysis involved making sense of text and images (data) collected during the interview sessions of any research study (Cresswell 1994; De Vos *et al.* 2005). Brink (2006) defined data analysis as categorising, ordering, manipulating and summarising data in order to be able to describe it in meaningful terms. The steps of data analysis which were followed in this study as described by Tesch (1990) in Cresswell (1994) were aimed at categorising, ordering, manipulating and summarising the collected data in order for it to provide meaning about the research phenomenon. These Tesch (1990) open coding data analysis steps were followed:

Step 1

The researcher started by listening to the voice recordings repeatedly while transcribing all information verbatim.

Step 2

The researcher then read through all the transcripts and the field notes to get some sense of the data and to gain background information. Some ideas that surfaced were written down. Some topics, which matched the content were identified and listed.

Step 3

The researcher proceeded by reading through all the other transcripts and identified topics. Attention was given to the meaning of the data. The researcher then compiled a list of all the topics and organised them into columns. Similar topics were identified and clustered together into major topics. The best fitting name was selected for the cluster of major topics.

Step 4

The researcher then created columns for the unique cluster topics and topics that could not be clustered or did not fit into another column were listed in a separate column as exceptions.

Step 5

The researcher took the list and returned to the data. The topics were abbreviated as codes and the codes were written next to the appropriate segments of the text. The researcher tested this preliminary organising scheme to see whether new themes and codes could emerge.

Step 6

The researcher found the most descriptive wording for the topics and turned them into themes and sub-themes. The researcher endeavoured to reduce the total list of themes by grouping topics together that related to each other. Lines were drawn between themes and sub-themes to show interrelationships.

Step 7

The researcher made a final decision on the abbreviations for each theme and sub-themes that had emerged.

Step 8

When coding with the independent co-coder was complete, the researcher and the co-coder reached an agreement about themes and sub-themes which were identified independently (Cresswell 1994:155). An agreement was reached that four (4) themes and their sub-themes had emerged, based on the eight steps of Tech (1990) in Cresswell (1994) which were used as indicated in Table 3.1 (Chapter 3) of this study.

2.10 MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness referred to the extent to which a research study was worth paying attention to, worth taking note of, and the extent to which other interested parties should be convinced that the findings were to be trusted (Babbie & Mouton 2009). According to Polit & Beck (2006), the following criteria for establishing the trustworthiness of qualitative data were maintained in this study: credibility, dependability, confirmability and transferability.

2.10.1 Credibility

Credibility referred to confidence in the truth of the data. It was also defined as an alternative to internal validity (Brink 2006, De Vos *et al.* 2005, Polit & Beck 2006). The credibility of the study was ensured by engaging in activities that had a likelihood of producing credible data, such as prolonged engagement, researcher credibility and data triangulation (Polit & Beck 2006). Prolonged engagement was ensured by investing sufficient time during data collection because the researcher stayed in the field for a period of one (1) month during the data collection phase until saturation was reached. Credibility was also ensured by involving the co-coder during data analysis of this study.

Triangulation of data collection methods was achieved by using methods such as semi-structured interviews, field notes were written down and voice recordings were done. The researcher was being supervised by experienced qualitative researchers; one was a Doctor of Philosophy in Psychiatry.

2.10.2 Dependability

De Vos *et al.* (2005) stated that dependability is an alternative to reliability in which the researcher had to account for changing conditions in the research phenomena. The dependability of data referred to the stability of the data over time. An enquiry audit was one technique to confirm the dependability of a study and involved scrutinising data and relevant supporting documents by an external interviewer (Brink 2006, Polit & Beck 2006). In this study, the researcher ensured dependability by requesting an enquiry audit to be conducted.

The supporting documents, such as the transcripts, voice recordings and the field notes were given to a co-coder and the meeting was arranged with the researcher to reach consensus about the themes and sub-theme that were identified independently. The research proposal and the research report were presented in two different departmental research seminars. Dependability was further ensured by the thick description of the research method and design followed in this chapter (Babbie & Mouton 2001).

2.10.3 Confirmability

Confirmability referred to the objectivity of the data. It ensured that the findings, conclusions and recommendations of the research study were supported by the data and that there was internal agreement between the researcher's interpretation and the actual audience. Congruency could only be reached between two or more independent people (Brink 2006 Polit & Beck 2006). De Vos *et al.* (2005) stated that it was important to ask whether the findings of the study could be confirmed by another person in order to ensure confirmability.

In this study, an audit trail was created in which all the documents such as transcript, voice recordings and field notes was compiled and handed over to a co-coder to draw conclusions about the data.

2.10.4 Transferability

Transferability was referred to as external validity and was defined as the degree to which the findings of this inquiry could apply or transfer beyond the bounds of this research, and applicability in other contexts (DeVos *et al.* 2005). Babbie and Mouton (2009) referred to transferability as the extent to which findings could be applied in other contexts or with other participants. During this study, the researcher ensured transferability by thick description of the research method and the utilisation of purposive sampling to include participants in the semi-structured interview with guide. It occurred when researcher purposefully selected participants who had experience with regard to the problem that was being explored. In this study, the researcher purposefully selected participants from a sub-acute ward who were on antipsychotic medication for one year or more, who relapsed and were re-admitted at mental health care institution and the carers/relatives who stayed with them at home when they were discharged from the hospital. These participants were able to provide information about the research phenomenon.

Table 2.1: Summary of four measures of trustworthiness

CREDIBILITY	<ul style="list-style-type: none"> • Prolonged engagement 	<ul style="list-style-type: none"> • Investing sufficient time in data collection. The researcher stayed in the field for 1 month. • Elaborations and expansion of the questions on several occasions. • Stayed in the field until data saturation was
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		reached.
	<ul style="list-style-type: none"> • Researcher credibility 	<ul style="list-style-type: none"> • Researcher was being supervised by experienced qualitative researchers; one was a Doctor of Philosophy in Psychiatry.
	<ul style="list-style-type: none"> • Data source triangulation 	<p>The following method was used for triangulation:</p> <ul style="list-style-type: none"> • interviews • fields notes • voice recordings • transcripts of the recordings • Independent coder
DEPENDABILITY	<ul style="list-style-type: none"> • Inquiry audit 	<ul style="list-style-type: none"> • Transcripts, voice recordings and field notes were given to an independent coder in qualitative research and the field of psychiatry. • Consensus was reached about the themes and sub-themes.
CONFIRMABILITY	<ul style="list-style-type: none"> • Audit trail 	<ul style="list-style-type: none"> • Transcripts, voice recordings and field notes were given to an independent coder in qualitative research and the field of psychiatry.
TRANSFERABILITY	<ul style="list-style-type: none"> • Purposeful sampling 	<ul style="list-style-type: none"> • Researcher purposively selected participants

		who had experience with the phenomenon.
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2.11 ETHICAL CONSIDERATION

The ethical standards for nurse researchers served as a framework for nurses conducting and participating in research studies as outlined by DENOSA (1998:2.2.1-2.3.3). Additionally, the ethical principles according to the Medical Research Council (MRC) were adhered to by the researcher during the study as indicated below. The following ethical principles were adhered to: The principle of beneficence, justice, the principle of human respect and dignity, permission to conduct study, informed consent and confidentiality, privacy and anonymity.

The principle of beneficence

Brink (2006) stated that adhering to this principle, the researcher needed to secure the well-being of the participants, who had the right to protection from discomfort and harm. The participants were informed about the significance of the study to the profession and the community in general. The participants were informed about the purpose of the study and the advantages of the research findings. The researcher minimised harm and maximised benefits for the participants during the interview sessions by indicating to the participants that when they felt uncomfortable to answer any question they should indicate their discomfort immediately. The study was explained to the participants in order to enable them to make informed decision about their participation during the semi-structured interview sessions (Polit & Beck 2006).

The principle of human respect and dignity

Individuals were autonomous, i.e. they had the right to self-determination. It implied that an individual had the right to decide whether or not to participate in the study, without the risk of penalty or prejudicial treatment (Brink 2006).

The researcher informed participants about their rights to terminate their participation in the study at any time they deemed it necessary, but the participants were informed that the data that they would have shared with the researcher at the time of termination would be utilized for the purpose of the study.

Permission to conduct study

Ethical clearance to conduct the study was obtained from Medunsa Research and Ethics committee, University of Limpopo (Medunsa Campus), and permission to conduct the study at the mental health care institution was obtained from the Limpopo Provincial Department of Health and Social Development research committee, the Chief Executive Officer (CEO) of the mental health care institution and the unit manager.

Informed consent

According to MRC, (2002) participants ought to give their voluntary informed consent. Information about the importance, purpose and objectives of the study was provided to the participants in a language they understood in order to obtain informed consent from them. A written informed consent form was given to participants to sign at the beginning of each interview session conducted, serving as proof of agreement to participate in the study.

Confidentiality, privacy and anonymity

Confidentiality entailed that no information provided by the participant should be divulged or made available to any person except people involved in the research project (Brink 2006). Confidentiality and anonymity were ensured by protecting the participants' identity, privacy, self-worth and dignity by allocating each participant a number during the interview session to avoid using their names. The right to self-determination was upheld by obtaining informed consent from the participants. There was no victimisation of participants who refused to participate in the research, or who withdrew during the course of the study (Brink 2006).

The principle of autonomy

The principle of autonomy recognised the rights of individuals to self-determination. It was rooted in the respect of society for individuals' ability to make informed decisions about personal matters. The right to self-determination was upheld by obtaining informed consent from the each participant before they could be involved in the interview sessions (Brink 2006).

2.12 CONCLUSION

Chapter 2 outlined in details the research design and methodology which were followed in this study. The semi-structured interview sessions which aimed at collecting data for this study focussed on the adherence of mentally stable schizophrenic patients to antipsychotic medication, in order to achieve the purpose of this study by asking a central question at the beginning of each interview session which was followed by probing in order to obtain clarity about all issues described by the participants. The population and the sample, as well as the analysis of data, were described. The measures of trustworthiness were also outlined. Chapter 3 presented a discussion of the research results of the study.

CHAPTER 3: DISCUSSION OF RESEARCH FINDINGS

3.1 INTRODUCTION

Chapter 2 had described the research method and design which was followed in this study. Chapter 3 presented the study findings which emerged during qualitative data analysis using Tesch's open coding method as described in Cresswell (1994). The findings were presented with support of literature to generate meaning based on existing relevant sources and previous research studies conducted. Themes and sub-themes were presented in Table 3.1 and were reflecting adherence of mentally stable schizophrenic patients to antipsychotic medication; that had emerged from the study findings; at mental health care institution in the Limpopo Province.

The central storyline (De Vos *et al.* 2006) reflected adherence of mentally stable schizophrenic patients to antipsychotic medication. Participants shared the same point of view in relation to aspects of adherence to antipsychotic treatment and also knowledge about the causes of mental illness and its prognosis. They had described that there were different causes of mental illness and the preventative measures that existed in order to prevent mental illness, including adherence to antipsychotic treatment. The mentally stable patients and their carers had reflected that drug abuse was one of the main causes of mental illness and led to non-adherence to antipsychotic treatment. It was confirmed by a participant who said: *"You can develop mental illness when you use dagga, benzene, glue and also if you have a head injury and again all this can make one not to drink treatment as told by nurses and doctors"*.

On one hand, some participants described that mental illness was not curable but it got suppressed because it was a lifelong illness. It was confirmed by the following statement: *"This disease is incurable, it is also a lifelong illness and everyone knows about this issue"*. At the same time, all carers experienced difficulties in dealing with their relatives on treatment who were mentally ill; even when they were stable. It was confirmed by the participant who indicated: *"It is very difficult to care for a relative who is not mentally well because you must sometimes use force for him to take medications and it is difficult"*.

3.2 DISCUSSIONS OF THEMES AND SUB-THEMES AND LITERATURE CONTROL

Table 3.2: Themes and sub-themes

THEME	SUB-THEMES
1. Participants shared the same point of view in relation to aspects of adherence to antipsychotic treatment.	1.1 Dominant aspects related to positive versus negative feelings towards adherence to antipsychotic treatment. 1.2 Scheduled time of treatment. 1.3 Consequences of lack of adherence versus adherence to antipsychotic treatment. 1.4 Problems associated with treatment of side effects. 1.5 Hallucinations which directed one to stop taking treatment. 1.6 Knowledge about the type of treatment taken.
2. Knowledge in relation to mental illness.	2.1 Knowledge about causes of mental illness. 2.2 Stabilisation of the illness. 2.3 Rationale for taking antipsychotic medication.
3. Health seeking behaviour of mentally ill patients.	3.1 Consultation of the Traditional Health Practitioners. 3.2 Instructions from the church related to curing mental illness.
4. Experiences of relatives caring for mentally stable patients on treatment.	4.1 Relatives' perceptions of treatment adherence. 4.2 Challenges associated with provision of care to mentally ill patients. 4.3 Lack of treatment at clinics.

3.2.1 Theme 1: Participants shared the same point of view in relation to aspects of adherence to antipsychotic treatment

The study findings revealed that participants shared the same point of view in relation to the aspects of adherence to antipsychotic treatment. Six sub-themes emerged under this theme:

Sub-theme 1.1: Dominant aspects related to positive versus negative feelings towards adherence to antipsychotic treatment

The study findings pointed out that there were aspects related to positive and also negative feelings towards adherence to antipsychotic treatment. It was evidenced because one participant said: *“Yes, I am happy taking my medications, but there are times when I feel sad when I think about the way my future is damaged due to mental illness.”* He further said: *“My condition is caused by suffering; I sometimes think that the parents that I’m staying with are not my biological parents because they seem not to be taking care about my wellbeing.”*

Negative attitudes and beliefs about self-worth were common in those suffering from mental health problems. Living with critical and hostile family members had been indicated in decreasing feelings of self-worth and leading to increased positive schizophrenic symptoms. Self-esteem might also be depressed by factors outside the immediate home environment, such as poor quality social relationships. These feelings contributed to poor adherence to antipsychotic medication (Masand & Narasimhan 2006).

Sub-theme: 1.2: Scheduled time of treatment

Good adherence involved taking prescribed medication which included taking the correct dose at the proper times each day, attending clinic appointments, and/or carefully following other treatment procedures. One of the participant (carer) said: *“...sometimes the patient will just go out in the morning and come back late in the evening.”*

This will then make her to miss morning and afternoon medications but if the patient is cooperative he/she will not miss time to take medications as indicated in hospital.”

Gottlieb (2000) discussed how the complexity of treatment regimens and also the patients' attitude could be responsible to a large degree for medication non-adherence. Patients who had negative attitude towards medication experienced difficulty in adhering. It was further indicated that patients who had one pill prescription from the doctor showed an 81% adherence rate to treatment, while those prescribed 3 pills per day adhered only 77% of the time. Those patients required to take 4 doses per day adhered only 39% of the time.

Sub-theme: 1.3: Consequences of lack of adherence versus adherence to antipsychotic treatment

The participants sometimes forgot to take their treatment which led to lack of adherence to treatment. It was supported by one of the participant who said: *“Sometimes when I am doing gardening then my friends come and I then forget to take treatment because I have to be with them or we go to the shop”*. Another participant said: *“I do take my medications but I sometimes forget.”*

In order to make sure that antipsychotic medication was effective, it was important to take it regularly and as prescribed. About half of the people diagnosed with schizophrenia did not take their drugs as recommended. Many people did not like the idea of taking drugs every day, because they forgot to take them or decided they did not need them anymore because they felt well (Masand & Narasimhan 2006).

The study by Masand and Narasimhan (2006) revealed that more than 50% of people with schizophrenia forgot to take their medication which resulted in increasing the risk of the return of psychotic symptoms.

Sub-theme: 1.4: Problems associated with treatment of side effects

The study revealed that the side effects of treatment contributed to poor adherence to antipsychotic medications. During the early phases of taking treatment, patients might be troubled by side effects such as drowsiness, restlessness, muscle spasms,

tremor, dry mouth, or blurring of vision. Most of these symptoms could be mitigated by lowering the dosage or could be controlled by other medications. Different patients had different treatment responses and side effects to various antipsychotic drugs (Masand & Narasimhan 2006).

One of the participant (carer) said: *“At the beginning he was gaining too much weight, then he stopped taking the medication, within two weeks he became sick then we took him to hospital.”* In relation to side effects experienced, another participant said: *“I sometimes get stomach problems such as running stomach due to the fact that I am taking this treatment and Laponex was giving me side effects my neck was turning to the side”*. According to Masand and Narasimhan (2006), extrapyramidal symptoms; a disturbing adverse effects that could cause patients to discontinue treatment; were less likely to occur with atypical antipsychotics than with conventional drugs. Furthermore, they indicated that the incidence of other adverse events were likely to decrease adherence, such as weight gain and sexual dysfunction.

Sub-theme: 1.5: Hallucinations which directed one to stop taking treatment

Hallucinations directed the patient to stop taking their antipsychotic medication. It was confirmed by a participant who said: *“Lack of understanding, hearing voices telling you that you are taking rubbish made me to discontinue medications”*. Another participant added: *“I was hearing noises immediately after taking the treatment; noises which was reduced late in the afternoon. But when I start to take medications the noises were starting again.”*

According to Kumar and Sedgwick (2001), the reasons for poor adherence included psychotic explanations, e.g. delusions and hallucinations. Psychotic psychopathology; especially paranoia, suspiciousness, grandiosity and delusional beliefs about medication; were highlighted as influencing adherence to antipsychotic medication.

Sub-theme: 1.6: Knowledge about the type of treatment taken

The participants had knowledge about the treatment they were taking since one participant said: *"I was taking Serenace and I had side effects and they were changed but I have difficulty in understanding on how they assist me"*. Insufficient understandings of the potential therapeutic benefits were major contributors to relapse and rehospitalisation of individuals with chronic schizophrenic disorders. According to Gray, Leese, Bindman, Becker, Burti, David, Gournay, Kikkert, Koeter, Puschner, Schene, Thornicroft and Tansella (2002), the aim of educational intervention was to provide patients with information about their illness and medication with the aim of increasing understanding and promoting adherence. Contrary to the study findings, Kavanagh, Duncan-McConnell, Greenwood, Trivedi and Wykes (2003) stated that a lot of schizophrenic patients had no knowledge about their prescribed medication and it resulted in poor adherence.

3.2.2 Theme 2: Knowledge in relation to mental illness

Sub-theme 2.1: Knowledge about causes of mental illness

The study findings revealed that participants had knowledge about the causes of mental illness. It was supported by the following statement: *"...Pressure from my friends lead to my behaviour of taking dagga and the other thing is that I smoke petrol this lead to my mental illness"*. Another participant added: *"... You know I know what caused my mental illness I was stressed because I could not get employed therefore I started drinking heavily and smoked dagga thus when all this started, but I did not think that could have happened while I started it because other people are doing it but they do not develop mental illness"*.

According to Jorm, Korten, Jacomb, Christensen, Rodgers and Pollitt (2007), "mental health literacy" referred to knowledge and beliefs about mental disorders which aided psychiatric patients with recognising their mental status, and managing or preventing the lack of adherence to antipsychotic medication. It included the ability to recognise specific disorders; knowing how to seek mental health information; knowledge of risk factors and causes of mental ill health (Jorm *et al.*2007).

Sub-theme 2.2: Stabilisation of the illness

The participants also had knowledge about what made them to be stable during their proper adherence to treatment. One participant indicated: *“If you take treatment properly you get cured. The way I see it can get cured if you take treatment but if you do not take treatment well then you always come to hospital for readmission”*. The study findings was supported by Jorm *et al.* (2007) who revealed that most people’s psychotic symptoms could be stabilised within 6 weeks from the time they started taking their antipsychotic medication. It was further indicated that antipsychotic medications allow patients to be discharged from the hospital much earlier and to lead a normal life at home with their families (Jorm *et al.* 2007).

Sub-theme 2.3: Rationale for taking antipsychotic medications

The study results revealed that participants had knowledge about the reasons why adhering to their treatment was important to their condition. It was supported by one of the participants who said: *“The medications that I take I know they will make my condition better and not to come back to hospital that is why I told myself that after discharge I am going to take my medications as instructed by the doctor so that I should not come back again for readmission”*.

Concepts of health and disease were important factors of adherence to mental health treatment. Patients’ understanding of their condition and its need for treatment were positively related to adherence, and in turn adherence, satisfaction and understanding were all related to the amount and type of information given to the patients to understand the relationship between getting better and taking treatment as prescribed (Kelly, Maimon, J & Scott 2003). Furthermore, the study conducted by Daltroy, Katz, Morlino (2004) had shown that patients who understood the purpose of the prescription were twice more likely to collect it than those who did not understand.

3.2.3 Theme 3: Health seeking behaviours of mentally ill patients

Sub-theme 3.1: Consultations of the Traditional Health Practitioners

The study results revealed that consultation of traditional health practitioners was related to poor adherence to antipsychotic medication. It was supported by the participant who said: *"I have wasted about R88, 000.00 by consulting the Traditional Health Practitioners and it did not help, is then that I have decided to come to hospital"*. He further said: *"I wasted my time using traditional medication which could not assist me and caused me to relapse because I had to stop my medication when taking them"*. Another participant who used traditional ways of curing the disease said: *"We took the patient to one of the prophet, we stopped giving him antipsychotic medications and we used the prophet medications and this delayed the patient that is why he is readmitted."*

In support of the study results was indicated by patients in developing countries who generally had better family support, but a strong stigma attached to mental illness and interference by traditional healers led to poor treatment adherence (Sydara, Gneunphonsavath & Wahistrom 2005).

Lack of facilities and the shortage of medical professionals aggravated the situation. It was supported by a participant who said: *"We usually go to traditional healer, which is where we got medication and we can't use in combination with clinic psychiatric treatment because they are not to be utilised simultaneously and as a traditional person we still believe that the traditional health practitioners can assist us especially with mental illness"*.

The study conducted by Sydara *et al.* (2005) revealed that in many developing countries, poor drug adherence was attributed to the interference of traditional healers; it was reported that a significant number of psychiatric patients in Malaysia, for example, stopped taking their medication after visiting traditional healers.

Additionally, cooperation between the Traditional Health Practitioners and psychiatrists had been suggested to promote mutual referrals to resolve the issue of poor treatment adherence among psychiatric patients who visited a traditional healer (Sydara *et al.*2005).

Sub-theme 3.2: Instructions from the church related to cure for mental illness

The study revealed that instructions from the church related to the cure for mental illness played an important role with regard to the issues of adherence to antipsychotic medication by the mentally ill patients. It was confirmed by one of the participant who said: *“I use tea from ZCC church and I cannot mix it with the treatment as indicated by the priests, then I drink the tea when is finished is then that I can drink treatment”*. Another participant said: *“We took patient to church then they advised us that the patients should stop taking medication because it is believed that God will heal him.”*

Religion could also have a negative impact on the outcome of mental disorders, particularly when it replaced or delayed taking medical treatment. Some patients might refuse medical care, especially psychiatric care, due to their religious beliefs influenced by spiritual leaders; some people might exclusively consider spiritual recovery to the detriment of medical treatment (Koenig, McCullough & Larson 2001).

3.2.4 Theme 4: Experiences of relatives caring for mentally stable patients on treatment

Sub-theme 4.1: Relatives’ perceptions of treatment adherence

The study findings revealed that some of the family members did understand the reality of the illness and it was supported by the participant who said:

“If the treatment can be taken as prescribed then the disease will be cured that is why I do assist my brother to adhere to this treatment”.

The availability of family members who reminded patients to take their medication was widely believed to lower the risk of medication non-adherence.

Several cross-sectional studies had demonstrated lower rates of medication non-adherence among patients with schizophrenia who lived with family members or with people who supervised their medication (Amador, Flaum, & Andreasen 2006). At the same time, patients whose families were ambivalent about antipsychotic medication were at increased risk of medication non-adherence after hospital discharge.

Sub-theme 4.2: Challenges associated with provision of care to mentally ill patient

The study results pointed out that carers/relatives experienced challenges while caring for the schizophrenic patients on treatment and one of the participants (relative) confirmed that by saying: *"...Sometimes he gets troublesome when he is provoked by other people. Like this one time when his grandmother gave him a job to do and she never paid him for it. He got angry and when he is angry he does not want to take treatment"*. Another participant (carer) added: *"...Yes, he (patient) did refuse to take medications several times, and he will become angry and irritable and this is a problem to a person like myself because when caring for someone you want to see him/her cured"*. The study conducted by Amador *et al.* (2006) revealed that patients with anger and anxiety; especially in relation to antipsychotic medication; had lower adherence rates.

Sub-theme: 4.3 Lack of treatment at clinics

The study findings emphasised the importance of medication availability at clinics, since it negatively influenced adherence to antipsychotic medication. It was supported by the participant who said: *"When the clinic does not have medications and we have to go to hospital to get it and this will be difficult for us because we do not have money"*. The study revealed that the most shocking causes of poor adherence to antipsychotic medication were unavailability of the drugs at the health care facilities. Medication like Modecate and Largactil had been out of stock at both the St. Matthews Clinic and at S.S. Gida. In 2002, Modecate was out of stock for the first two and a half weeks. Patients who were seeking treatment at the time had to be turned away without receiving their medication (Logan & Romans 2002).

3.3 CONCLUSION

Chapter 3 outlined the main findings that arose from the conducted semi-structured interviews in order to answer the research questions. This chapter outlined four main themes and their sub-themes which had emerged during data analysis. The literature control for the study findings was identified and presented to embed and re-contextualise the results in existing literature. Chapter 4 included the discussion of the guidelines for promoting adherence of mentally stable schizophrenic patients to antipsychotic medication based on the study results presented in this chapter.

CHAPTER 4: GUIDELINES TO PROMOTE ADHERENCE OF MENTALLY STABLE SCHIZOPHRENIC PATIENTS TO ANTIPSYCHOTIC MEDICATION

4.1 INTRODUCTION

Chapter 3 presented the results of this study and literature control. The themes and sub-themes with regard to adherence of mentally stable schizophrenic patients to antipsychotic medication which had emerged during data analysis; using Tesch's qualitative data analysis method; were identified. In this chapter, the discussions were based on the guidelines to support the themes and sub-themes which had emerged from the data analysis.

4.2 GUIDING PRINCIPLES FOR PROMOTING ADHERENCE

4.2.1 Theme 1: Participants shared same point of view in relation to aspects of adherence to antipsychotic treatment

4.2.1.1 Dominant aspects related to positive versus negative feelings towards adherence to antipsychotic treatment

Closely evaluate patients' attitudes and concerns

Rettenbacher, Hofer, Eder, Hummer, Kremler, Weiss and Fleischhacker, (2004) reported that patients' attitudes and concerns about their illness and medication should be closely scrutinised, since misunderstandings in these areas could constitute barriers to treatment adherence. Understanding how patients felt about medication in general would provide some clues whether or not they would take medication as prescribed or not. Study results demonstrated that special attention should be paid to attitudes, severity of psychopathology, insight and history of treatment adherence of patients with schizophrenia (Stankovic, Britvic & Vukovic 2008).

4.2.1.2 Scheduled time of treatment

Design uncomplicated strategies for improving compliance

According to Atreja, Bellam, and Levy (2005), the strategy called “Simple” was created to assist health care providers with enhancing patient medication adherence. The letters stand for: (S) simplifying regimen characteristics, (I) imparting knowledge, (M) modifying patient beliefs, (P) patient communication, (L) leaving the bias, and (E) evaluating adherence. In order to affect consistent, long-term lifestyle behaviour changes, a combination of all of the above-mentioned tactics was necessary.

Describe proper dosing of prescribed medication

Gottlieb (2000) pointed out that the five “rights” of the medication should be clear to ensure that medication was taken properly. These rights included the right time, dosage, frequency, route, and the right patient. A behavioural contract could be attached which would include such pertinent information like keeping office appointments. The patient should be advised never to change medication without informing the health care provider. The health care provider, patient, and family or significant other should sign and keep a copy of the contract for treatment adherence. Additionally, the health care provider ought to be certain that the patient and/or the family/significant other fully understood the contract and the medication/regimen given to the patient (Gottlieb 2000).

4.2.1.3 Consequences of lack of adherence versus adherence to antipsychotic treatment

Create medication adherence contract

Gottlieb (2000) recommended that patients had to receive a medication-adherence “contract” at the initiation of treatment.

The contract would contain simple, clear, and concise instructions about the prescribed medication; important factors about the medication (including side-effects, interactions with other medication and food, if any); and information about the purpose of the medications, as well as the consequences of not taking the medications as prescribed. The contract should be emphasised as important information to the patients, relatives and/or carers, such as when and how medication readjustments would occur, and most importantly, a relapse prevention plan should be included.

Prevention of forgetfulness

Many patients required cues to remember to consistently take the right dose at the right time. These cues could be simple, such as placing the medication in an easily visible spot (next to their toothbrush or in front of the kitchen sink, for example) or using pillboxes to help ensuring the correct dosing and days of the week. Medication calendars or pill boxes labelled with the days of the week could assist patients and caregivers with knowing when medications had been taken or not. Using electronic timers that beeped when it was time for medication to be taken, or pairing medication taking with daily routine events like meals, could assist patients to remember and adhere to their dosing schedule.

4.2.1.4 Problems associated with treatment of side effects

Discuss potential medication side effects before prescribing them

Marder, Mebane and Chien (2002) stated that physical side effects such as akinesia, weight gain, anticholinergic effects, sexual problems and muscle rigidity were important issues related to patient adherence. Instructing patients that side effects were possible was of central importance in obtaining informed consent prior to beginning treatment. It also was essential in developing a collaborative effort between health care provider and patient.

4.2.1.5 Hallucinations which directed patients to stop taking treatment

Recognise the need for parenteral therapy

When patients did not reliably take oral medication, they might require long-acting injectable neuroleptics. In a study performed by Young and Associates (1997), non-adherence rates in patients with schizophrenia fell from 41% to 25% when patients received depot versus oral formulations of conventional medication which had good results of adherence since the patients returned for subsequent appointments to get their injections. Some antipsychotic medication, including haloperidol, and other were available in long-acting injectable forms that eliminated the need to take pills every day. However, it was viewed as one factor of non-adherence.

4.2.1.6 Knowledge about the type of treatment taken

Improve patient and provider communication

Gottlieb (2000) reported that providers often talked too fast and were not sensitive to the patient's ability to understand the information they received. Often, too busy providers failed to reserve time for quality interaction with patients and, therefore, failed to consider adherence concerns when giving patients medication to take at home.

Provision of psycho-education and supportive services

Zygmunt, Olfson, Boyer, and Mechanic (2002) discovered that psycho-educational interventions without accompanying behavioural components and supportive services were not likely to improve medication adherence. They found that providing patients with concrete instructions and problem-solving strategies, such as reminders, self-monitoring tools, cues, and reinforcements were beneficial. Since problems with adherence tended to be recurring, reinforcement sessions were necessary to encourage adherence to treatment.

Zygmunt *et al.* (2002) further indicated that psycho-educational interventions, which included brief, time-limited skills training administered to psychiatric in-patients could encourage adherence to medication by patients.

It was determined that any kind of psycho-education – nine to eighteen months following the intervention when compared with standard care – decreased relapse or readmission rates. The training programmes included educational sessions during which patients were being taught everything from how medication worked to reasons for making and keeping treatment appointments. Teaching aids; including role-play, worksheets, problem-solving strategies, and a progress worksheet; ought to be used to emphasise the importance of adherence.

4.2.2 Theme 2: Knowledge related to mental illness

Assess patient's understanding of his/her illness

Gottlieb (2000) reported that sometimes patients did not believe they had a serious mental illness and, therefore, did not need to take medication. Information collected from the patient, family, friends, and, possibly, prior mental healthcare providers who had treated the same patient could provide insight about the beliefs and health care seeking behaviour of the patient. Therefore, the health care provider should depend on initial and subsequent history recording with the purpose of guiding the patient to adhere to treatment.

4.2.3 Theme 3: Health seeking behaviour of mentally ill patients

A formal call for the integration of biomedical and traditional health was important to reduce poor adherence of antipsychotic medication. There should be awareness among Traditional Health Practitioners and religious leaders to promote good adherence behaviour to antipsychotic medication.

4.2.4 Theme 4: Experiences of relatives caring for mentally stable patients on antipsychotic treatment

Family Education

It was important that family members learned about all the aspects needed in caring for schizophrenia patients on antipsychotic treatment and to also understand the difficulties and problems associated with the illness. It could be helpful for family members to learn ways of minimising the patient's chance of relapse, for example, by using different treatment adherence strategies and to be aware of the various kinds of out-patient and family services available during the period after hospitalisation. Family psycho-education, which included teaching various coping strategies and problem solving skills, might help families with dealing more effectively with their ill relative and might contribute to an improved outcome for the patient.

4.3 CONCLUSION

Chapter 4 described guidelines which could be utilised as strategies and interventions that would help to improve antipsychotic medication adherence amongst mentally stable schizophrenic patients at a mental health institution in the Limpopo Province. These guidelines were developed based on the study findings while literature formed the basis thereof.

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 5 presented the summary, conclusion and recommendations of this study which were based on the research findings.

5.2 SUMMARY

The aim of the study was to determine the level of adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental healthcare institution in the Limpopo Province.

The objectives of the study were to:

- identify the factors affecting adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental health institution in the Limpopo Province;
- describe adherence of mentally stable schizophrenic patients to antipsychotic medication at a mental health institution in the Limpopo Province (it meant that participants would be given an opportunity to describe their experience while on medication); and
- develop the guidelines to promote adherence of mentally stable schizophrenic patients to antipsychotic medication.

5.3 RESEARCH METHOD AND DESIGN

A qualitative descriptive, exploratory and contextual research design was adopted in this study to explore and describe the adherence of mentally stable schizophrenic patients to antipsychotic medications. The population for this study was all mentally stable schizophrenic patients in the Thabamopo Hospital who were taking antipsychotic medication. Patients who had undergone treatment, rehabilitation and who were mentally stable enough to be discharged participated in the study.

The population was also all the carers/relatives who were directly caring and supporting mentally stable schizophrenic patients when taking antipsychotic treatment.

The researcher used semi- structured interviews with two schedule guides for the participants who were schizophrenic patients and their carers/relatives. The steps of data analysis were followed as described by Tesch (1990) in Cresswell (1994). An independent coder was given transcripts and analysed the data independently and a meeting was arranged to discuss the themes with the researcher. The independent coder and researcher agreed about the themes and sub-themes reached independently. The following criteria for establishing the trustworthiness of qualitative data as outlined in Babbie & Mouton (2009) were maintained in this study: credibility, dependability, confirmability and transferability. The following ethical principles were adhered to: The principle of beneficence; justice; the principle of human respect and dignity; permission to conduct the study; informed consent; and confidentiality, privacy and anonymity.

5.3.1 Findings of the study

- The study revealed that participants shared the same point of view related to aspects of adherence to antipsychotic treatment and also had knowledge about the causes of mental illness and its prognosis. The following four themes had emerged during data analysis of this study:
 1. Participants shared the same point of view related to aspects of adherence to antipsychotic treatment;
 2. Knowledge related to mental illness;
 3. Health seeking behaviours of mentally ill patients; and
 4. Experiences of relatives caring for mentally stable patients on treatment.

5.4 RECOMMENDATIONS

The recommendations were summarized based on the guidelines in Chapter 4. These recommendations would be used for clinical practice to enhance adherence to antipsychotic treatment by mentally stable schizophrenic patients at a mental health institution in the Limpopo Province.

5.4.1 Theme 1: Participants shared the same point of view in relation to aspects of adherence to antipsychotic treatment

5.4.1.1 Dominant aspects related to positive versus negative feelings towards adherence to antipsychotic treatment

- There should be motivational classes at a mental health institution to eliminate negative feelings among schizophrenic patients with regard to adherence to antipsychotic treatment which determine their future of going back to leading a normal life while taking treatment.
- A possible solution for schizophrenic patients was to become involved in some kind of vocational training or rehabilitation programme. They could learn new skills and also get help with learning or improving social skills. These programmes could also help them function more fully and develop better thinking skills. Additionally, working with a psychotherapist could help with self-esteem issues, stress management, and making the best choices in terms of vocational activities.

5.4.1.2 Scheduled time for treatment

The patients should consider aids such as medication boxes and alarms which could assist them with adherence since they act as reminders. Reminders via mail, email or telephone could also assist to improve adherence to antipsychotic medication. There ought to be home visits by health care workers to monitor adherence, family support, and to supply treatment counselling to enhance adherence.

5.4.1.3 Consequences of lack of adherence versus adherence to antipsychotic treatment

Patients should be requested to bring with all medication that they were taking at every visit. The health care worker would see the number of pills left on the day of visit, which would determine whether the patient was taking the medications or not.

5.4.1.4 Problems associated with treatment of side effects

- Educate the patient about the treatment of side effects and to report immediately to the healthcare professional if there was a problem of adherence.
- Patient with psychotic symptoms should have a treatment supporter, e.g. family member or close friend to enable them to adhere to administration of their medication.
- The patient should always discuss all side-effects and all problems encountered with his/her physician. The dosage or the medication might be changed in order to eliminate or reduce the side effects. The doctor might temporarily prescribe another medication to counteract the side effects or give practical advice to reduce the discomforts.

5.4.1.5 Hallucinations which directed one to stop taking treatment.

- Patients with psychotic symptoms should take medication under direct supervision of family members in order to ensure adherence to antipsychotic medication.
- Accurate assessment should be done before discharge in order to ensure that the patients would adhere to their medications while at home.

5.4.1.6 Knowledge about the type of treatment taken

- The health care practitioner should take time to explain the treatment regimen clearly. State the realistic expectations for treatment; such as potential side

effects, dietary, environmental, and/or lifestyle restrictions, and an expected timeline of improvement; if it can be reasonably estimated.

- Providing pictures and written information in the target language and English could be helpful.
- Emphasise the importance of continued use of the prescribed medication even if symptoms subsided or were altogether absent.

5.4.2 Theme 2: Knowledge related to mental illness

Patient and family education was very important since it would positively influence them with knowledge about the attitudes toward mental illness. Patient, family, and other key people in the patient's life needed to learn as much as possible about what schizophrenia was and how it was treated, and to develop the knowledge and skills needed to avoid relapse and to work towards recovery by adhering to medication. Patient and family education was a continuous process that should be recommended during all phases of the illness.

5.4.3 Theme 3: Health seeking behaviour of mentally ill patients

- There should be collaboration between the traditional healers, religious leaders, prophets and medical health professionals in order to improve adherence to antipsychotic medication.
- Mental awareness was important to traditional healers, religious leaders or prophets, and it was suggested that a workshop should be available to them to ensure that they encouraged the patients to continue taking the medications after consultations.

5.4.4 Theme 4: Experiences of relatives caring for mentally stable patients on treatment

- The study findings strongly recommended that there was a need for starting family support groups to tackle the problems of the family member with managing their patient effectively.

- Some patients discontinued the treatment because they ran out of medication. To avoid treatment discontinuation, the health care providers should order refills for the treatment before they ran out of medication.

5.5 CONCLUSION

The research study used a qualitative descriptive, explorative and contextual research design. The aims and objectives of the research had been achieved by using semi-structured interviews with two guides. During the interview sessions, the researcher allowed the participants to describe their experiences with regard to the factors that contributed to adherence of the antipsychotic medication. Tesch's open coding method of qualitative data analysis was used and an independent coder was involved in data analysis. Guidelines and recommendations based on the findings of this study were described.

REFERENCES

- Amador, X.F., Flaum, M. & Andreasen, N.C., 2006: Awareness of illness in schizophrenia and schizoaffective and mood disorders. *Archives of General Psychiatry* 51:826-836.
- Atreja, A., Bellam, N., & Levy, S. 2005. Strategies to Enhance Patient Adherence: Making it Simple. *Medscape General Medicine*. Retrieved November 21, 2011 from: <http://www.medscape.com/viewarticle/498339> print.
- Babbie, E. & Mouton, J. 2009. *The practice of social research*. Oxford: Cape Town.
- Babbie, E. & Mouton, J. 2001. *The practice of social research*. Oxford: Cape Town.
- Bimbaume, M. & Sharif, Z. 2008 .Medication adherence on schizophrenic patient perspectives and the clinical utility of paliperidone ER. *Journal of Psychiatry*. 32(2) 233-240.
- Boyd, M.A. & Nihart, M.A. 2003. *Psychiatric nursing contemporary practice*. 1st edition. New York: Lippincott Company.
- Brink, H. 2006. *Fundamental of Research Methodology for health care professionals*. 2nd edition. Lansdowne: Juta & Co.
- Burns, N. & Groove, K. 2003. *The practice of nursing research, conduct, critique and utilization*. W.B Squanders company.
- Clark, I. 2009. Medication adherence schizophrenic patients. *Journal of Psychiatry*. 32(1)60-67.
- Cresswell, J. W. 1994. *Research design: qualitative & quantitative approach*. Thousand Oaks CA: Sage. London.

Crinnell, S. 1998. Group research design. In De Vos: research at grassroots. Van Schaik.

Daltroy, L., Katz, J., Morlino, C., 2004. Improving doctor patient communication. *Psychiatric Medicine*, 2, 31–35.

DENOSA, 1998. Position Statement. Pretoria: DENOSA

De Vos, A.S. Strydom, H. Fouche, C.B. & Delport, C.S.L. 2005. Research at grass roots. 3rd edition. South Africa: Van Schaick.

Gelder, G. Mayon, R. & Cowen, P. 2001. Shorter oxford textbook of psychiatry. 4th edition. New York: Lippincott Company.

Gottlieb, H. 2000. Medication Non-adherence: Finding Solutions to a Costly Medical Problem. *Drug Benefit Trends*.(pp.57-62). Retrieved NOVEMBER 21, 2011 from: <http://www.medscape.com/viewarticle/409940>

Gray, R., Leese, M., Bindman, J., Becker, T., Burti L., David, A., Gournay, K., Kikkert, M., Koeter, M., Puschner, B., Schene, A., Thornicroft, G. & Tansella, M. 2002. Adherence therapy for people with schizophrenia. *British Journal of Psychiatry* 189, 508-514.

Jorm ,A.F., Korten, A.E., Jacomb, P.A., Christensen, H., Rodgers B. & Pollitt P. 2007. Mental health literacy": a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia* 166:182.

Kasper, S. Saya, L. Tekin, B. & Loze, J.Y. 2009. How to improve adherence to antipsychotic medication. *The International Journal of Psychiatry in Clinical Practice*. 13(4) 245-25

Kavanagh, K., Duncan-Mcconnell, D., Greenwood, K., Trived, P. & Wykes, T. 2003. Educating acute inpatients about their medication: I sit worth it? Study of group

education for patients on a psychiatric intensive care unit. *Journal of Mental Health* 12 (1), 71-80.

Kelly, G., Maimon, J. & Scott, J. 2003. Utility of the health belief model in examining medication compliance among psychiatric outpatients. *Social Science and Medicine*, 25, 1205–1211.

Kikkert, M.J. Schene, A.H. Koeter, M.W.J. & Robson, D. 2006. Medication adherence in schizophrenia: exploring patients', carers' and professionals' view. *The International Journal of Psychiatry in Clinical practice*. 32(4): 78-81

Koenig, H.G., McCullough, M.E. & Larson, D.B. 2001. Summary and conclusions. In: KoenigHG, editor. *Handbook of Religion and Health*. Oxford, U.K.: Oxford University Press;. p. 391-393.

Kumar, S. & Sedgwick P. 2001. Non-compliance to psychotropic medication in eastern India: Clients' perspective. Part II. *Journal of Mental Health* 10 (3), 279-284.

Lippi, G., Smit, D.J., Roos J.L. & Jordaan, J.L. 2009. Suicide risk in schizophrenia. *The South African Journal of Psychiatry*. 15(4)82

Lippincott, W. & Wilkins, N. 2003. *Synopsis of psychiatry*. 9th edition. Philadelphia & New York: A Wolters Kluwer Company.

Logan, M. & Romans, S. 2002. Spiritual beliefs in bipolar affective disorder: their relevance for illness management. *J Affect Disord*; 75:247-257.

Mark, H. & Beer, M.D. 2002. *The Merck manual of medical information*. 2nd edition. United States of America. Merck & Co.

Marder, S.R., Mebane, A. & Chien, C.P. 2002. A comparison of patients who refused and consent to neuroleptic treatment. *Am J Psychiatry*. 140, 470–472.

Masand, P.S. & Narasimhan, M.2006., Current Clinical Pharmacology: Improving Adherence to Antipsychotic Pharmacotherapy 1, 47-56

Neuman, W.L. 1997. Social Research Methods: Qualitative and Quantitative Approaches. 3rd edition. Boston: Allyn and Bacon.

Olfson, M. & Hansell, D. 2006. Addressing non-adherence to anti-psychotic medication regimens. The British journal of psychiatry, 184(2): 361.

Paruk, S., Ramlall, S. & Burns, J.K. 2009. Adolescents-onset psychosis; a 2-years retrospective study of adolescents admitted to a general psychiatric unit. South African Journal of Psychiatry. 15(4) 88

Petersen, Q.R 2006. Clinical trial for research. (On-line). Retrieved July 03, 2009. from world wide web: www.astrazenecaclinicaltrials.com/glossary/

Polit, D.E. & Hungler, B. 2003. Nursing Research principles and methods. 7th edition. Philadelphia: Lippincott Company.

Polit,D.F. & Beck,C.T. 2006. Essential of nursing research: Methods, appraisal and utilization. 6th edition. London: Lippincott Williams & wilkins.

Quirk,L. Biber,P.D. Brown,P.G. Crystal,P.D. Leech,G. Scholfield,P. Wales,J. & Wells, J. 2003. Longman dictionary of contemporary English. 4th edition. Letterpark,UK: Longman.

Rawlins, W.B. 2002. Mental Health Psychiatry Nursing. 3rd edition. London: Mosby year book.

Rettenbacher, M., Hofer, A., Eder, U., Hummer, M., Kremler, G., Weiss, E., & Fleischhacker, W. 2004. Compliance in schizophrenia: Psychopathology side effects, attitude toward the illness and medication. J. Of Clinical Psychiatry, 1211-8.

Sadock, B.J. 2003. Synopsis of psychiatry. 9th edition. Philadelphia: Lippincott Williams and Wilkins company.

Stankovic, Z., Britvic, D., & Vukovic, O. 2008. Treatment compliance of outpatients with schizophrenia: Patients' attitudes, demographic, clinical and therapeutic variables. *Psychiatr Danub.* Mar, 42-52.

Sydara K., Gneunphonsavath S. & Wahistrom R. 2005. Use of traditional medicine in Lao PDR. *Complement Ther Med.* 13, 199–205.

Valenstein, M., Mlow, F.C. & Copelands, L.A. 2004. Poor antipsychotic adherence among patients with schizophrenia: medication and patient factor. *American journal of psychiatry.* 30(2) 188.

Weiss, K.M. 2008. Medication adherence in schizophrenia. *American journal of psychiatry.* 34(4):163-164

West, J.C., Wilk, J.E., Olfson, M. & Riger, D.A. 2005. Patterns and quality of treatment for patients with schizophrenia in routine psychiatric practice. *Journal of psychiatry.* 32(4): 789-794

Zygmunt, A., Olfson, M., Boyer, C.A. & Mechanic, D. 2002. Addressing interventions to improve medication adherence in Schizophrenia. *American Journal of Psychiatry,* 159(4):1653-1664

ANNEXURE A: INTERVIEW GUIDE QUESTIONS FOR PATIENTS

Central question

- Describe factors affecting adherence to antipsychotic medication.

The following questions will be asked to participants (patients) in order to achieve the research aim and objectives:

- Are you happy taking your medication?
- What kind of feeling do you have when you remember that you need to take your medication?
- What do you think your illness is?
- What do you think causes your illness?
- How will you describe the usual daily routine of taking medication; beginning when you get up in the morning?
- Have you ever had an allergic reaction, or any other bad reaction to the medication? If yes, describe what happened?
- What kind of medication side effects do you experience and how do you react to such side effects?
- Is there anything else you do or use to treat illness or to maintain your health, such as using herbs, ointments, home remedies or nutritional supplements?
- Are you taking anyone else's medication?
- Where do you get your medication and how far do you need to go to fetch it?
- Do you have any difficulty in taking your medication?
- Is there anything you do to help you remember to take your medicine at the appropriate time?
- What kind of things makes it harder for you to take your medication?
- Do you have problem with regard to drug-abuse? Or which substance are you abusing?
- Are you drinking alcohol, and if so, how often?
- Whom are you staying with at home?
- Are you adhering to your medication? If not, why?

- Do you understand the importance of taking your medication correctly?
- Are you aware of the consequences resulting from non-adherence to antipsychotic medications?

ANNEXURE B: INTERVIEW GUIDE QUESTIONS FOR CARERS/RELATIVES

Central question

- Describe factors affecting adherence to antipsychotic medication.

The following questions will be posed in order to achieve the research objectives:

- Is the patient adhering to his or her medication? If not, why?
- Do you have an understanding of what mental illness is?
- How will you describe the usual daily routine of taking medication by the patient?
- What kind of medication side effects does the patient experience and how do you react to that?
- What do you do, in addition, to ensure that the patient takes the medication in order to manage and improve the condition of the patient?
- As the carers, do you have problems of substance abuse, such as alcohol or drugs?
- Does patient sometimes refuse to take medication or to go for a follow up visit?
- What challenges do you experience with regard to medication administration to the patient?
- Are you staying full time with the patient at the same premises?

**ANNEXURE C: REQUEST FOR PERMISSION TO CONDUCT THE RESEARCH
AT THE HEALTH FACILITY**

Nursing Department
Private Bag x1106
Sovenga
0727

04 March 2011
Department of Health and Social Development
Ethics Committee
Private Bag X9302
Polokwane
0700

Sir/Madam

Request for permission to conduct the research at the health facility

We hereby request permission to conduct a research study at the Thabamooopo Psychiatric Hospital campus. The study title is "ADHERENCE OF MENTALLY STABLE SCHIZOPHRENIC PATIENTS TO ANTIPSYCHOTIC MEDICATION AT A MENTAL HEALTH INSTITUTION IN THE LIMPOPO PROVINCE", and the results might be useful in the decision making process. The purpose of the study is to investigate and identify several variables that are associated with poor adherence to antipsychotic medications. Participation in the study is on voluntary basis and consent to participate will be signed by the participants prior to the interview session. The study is conducted as partial fulfilment of the requirements for the Master's Degree in nursing (M CUR), School of Health Sciences, University of Limpopo. The researcher's cell number is 073 9539242.

Enclosed, please find my research proposal.

Yours truly,

Molaba RG

ANNEXURE D: UNIVERSITY OF LIMPOPO (TURFLOOP CAMPUS) ENGLISH CONSENT FORM

Statement concerning participation in a clinical trial/research project.

NAME OF PROJECT/STUDY/TRIAL

ADHERENCE OF MENTALLY STABLE SCHIZOPHRENIC PATIENTS TO
ANTIPSYCHOTIC MEDICATION IN THE LIMPOPO PROVINCE

I have read the information about the aims and objectives of the proposed study and have been provided with an opportunity to ask questions and have been given adequate time to rethink the issue. The aim and objectives of the study are sufficiently clear to me. I have not been pressured in any way to participate.

I know that photographs/electronic images/sound recordings will be taken of me. I am aware that this material may be used in scientific publications which will be electronically available. I consent to it, provided that my name and hospital number are not revealed. With regard to images of my face, I understand that it may not be possible to disguise my identity, and I consent to the use of these images.

I understand that participation in this research project is completely voluntary and that I may withdraw from it at any time and without supplying reasons. It will have no influence on the regular treatment that holds for my condition; neither will it influence the care I receive from my regular doctor.

I know that this research study has been approved by the Turfloop Campus Research and Ethics Committee (TCREC), University of Limpopo (Turfloop Campus).

I am fully aware that the results of this study will be used for scientific purposes and may be published. I agree to this, provided that my privacy is guaranteed.

I hereby consent to participate in this study.

.....
Name of patient/volunteer
guardian

.....
Signature of parent or

.....
Place

.....
Date

.....
Witness

Statement by the researcher

I provided verbal and/or written information regarding this research study.

I agree to answer any future questions concerning the research study as best as I am able.

I will adhere to the approved protocol.

.....
Name of researcher

.....
Signature

.....
Date

.....
Place

**ANNEXURE E: UNIVERSITY OF LIMPOPO (MEDUNSA CAMPUS) SEPEDI
CONSENT FORM**

Setatamente mabapi le go tšea karolo ka go Protšeke ya Dinyakišišo tša Teko ya Klinikhale

Leina la Protšeke / Dinyakišišo / Teko*

GO NWA DIHLARE TSA BOLWETSI BJA MONAGANO KA MOKGWA WA MALEBA, MO PROVINSENG YA LIMPOPO.

Ke badile/ke kwele ka ga tshedimošo mabapi le *maikemišetšo le morero wa* dinyakišišo tšeo di šišintšwego gomme ke ile ka fiwa monyetla wa go botšišadipotšišo gomme ka fiwa nako yeo e lekanego gore ke naganišiše ka ga taba ye. Ke tloga ke kwešiša maikemišetšo le morero wa dinyakišišo tšegabotse. Ga se ka gapeletšwa go kgathatema ka tselaefegobaefe.

Ke a kwešiša gore go kgathatemaProtšekeng/Dinyakišišongtše tša Teko ya Klinikhale* ke ga boithaopo gomme nkatlogela go kgathatemanakongefegobaefentle le gore ke femabaka. Se se ka se be le khuetšoefegobaefe go kalafoyaka ya ka mehla ya maemo a ka gape e ka se huetše le ge e ka batlhokomelo yeo ke e humanago go ngakayaka ya ka mehla.

Ke a tseba gore Teko/Protšeke/Dinyakišišo tše* di dumeletšwe ke Medunsa Campus Research and Ethics (MREC), Yunibesithi ya Limpopo (Khamphase ya Medunsa) / Dr George MukhariHospital.Ketsebagabotse gore dipoelo tša Teko/Dinyakišišo/ Protšeke tše * di tladirišetšwamerero ya saense gomme di ka phatlalatšwa. Ke dumelelana le se, gefelabosephiribja ka bo ka tiišetšwa.

Mo ke fatumelelo ya go kgathatemaTekong/Dinyakišišong/ Protšekeng* .

.....
Leina la molwetši/ moithaopi Mosaeno wa molwetšigobamohlokomedi.

.....
Lefelo

.....
Letšatšikgwedi

.....
Tlhatse

Setatamente ka Monyakišiši

Ke fana ka tshedimošo ka molomo le/goba yeo e ngwadilwego * mabapi le Teko/Dinyakišišo/ Protšeke ye .*

Ke dumela go arabadipotšišodifegobadife tša ka moso mabapi le Teko/Dinyakišišo/ / Protšeke ka bokgoni ka moo nkakgonago ka gona.

Ke tlalatelamelao yeo e dumeletšwego.

.....
Leina la Monyakišiši

.....
Mosaeno

.....
Letšatšikgwedi

.....
Lefelo

ANNEXURE F: TRANSCRIPT OF A CONDUCTED SEMI-STRUCTURED INTERVIEW SESSION

(ONE INTERVIEW SESSION SELECTED FROM TWENTY)

Key: R = Researcher P = Participant

PARTICIPANT NO1 = P1 (MALE)

DATE: 19/10/2011

R: My name is Granny Molaba, and I'm a student at the University of Limpopo. I am doing research regarding the adherence to anti-psychotic medication, to identify the factors affecting adherence of mentally stable schizophrenic patients to antipsychotic medication in a mental health institution, Limpopo Province. Do you consent to freely participate in this study?

P1: Yes, I agree.

R: Are you happy taking your medication?

P1: Yes I am happy

R: What kind of feeling do you have when you remember that you need take your medication?

P1: I don't feel good about it, I get scared.

R: What makes you to feel bad and scared?

P1: It is mental illness

R: And what else?

P1: I have been taking the medication for long. It has become tiring.

R: When did you start taking the medication?

P1: Since 1990

R: Do you have knowledge about mental illness?

P1: You can get it if you use dagga, benzene, petrol, glue or if you had a head injury.

R: What else do you know about mental illness?

P1: Its incurable, it's a lifelong disease, and it just gets suppressed.

R: How will you describe the usual daily routine for taking of medication beginning when you get up in the morning?

P1: I take them at 07h00 in the morning and 17h30 in the evening

R: What do you think caused your illness?

P1: It was over-reading. I read big books, I bought a computer and it made me sick.

R: What kind of medication side effects do you experience and how do you react to such side effects?

P1: I had Serenace, and it made me sleepy. Then I stopped taking the medication but I told my doctor and they changed it.

R: Is there anything else you do or use to treat illness or to maintain your health, such as using herbs, ointments, home remedies or nutritional supplements?

P1: I use medical aid to get other medication. I wasted about R88 000 on traditional medications and it did not help.

R: What kinds of things make it harder for you to take your medications?

P1: Peer pressure from my friends. They influence me to take dagga and stop taking my medication. Then I relapse and come back to the hospital. The other thing is I smoke petrol, I see things and smile.

R: Since you have to take your medication every day at the correct time, is there anything you do to help you remember to take your medicines at the appropriate time?

P1: I do gardening, wait for time for medication. But then my friends will come and then I forget.

R: Who reminds you to take your medication?

P1: My mother, but she also forgets.

R: Do you have any difficulty in taking of your medications?

P1: Lack of understanding, hearing voices telling you that you are taking rubbish.

R: Do you have problem regarding drug-abuse? Or which substance are you abusing?

P1: Dagga is the problem. But I won't take it anymore.

R: Who are you staying with at home?

P1: I live with my mother, but she is old and I am the last born.

R: Do you understand the importance of taking your medication correctly?

P1: Yes. You take your medication to get cured, marry a wife and have a future.

R: Are you aware of the consequences resulting from non-adherent to antipsychotic medications?

P1: Yes. You will get readmitted, chained, and get sick again

ANNEXURE G: APPROVAL LETTERS



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Enquiries: Selamolela Donald

Ref: 4/2/2

23 September 2011
Molaba RG
University of Limpopo
Sovenga
0727

Greetings,

Re: Permission to conduct the study titled: Adherence of mentally stable schizophrenic patients to antipsychotic medication in a mental health institution, Limpopo Province

1. The above matter refers.
2. Permission to conduct the above mentioned study is hereby granted.
3. Kindly be informed that:-
 - Further arrangement should be made with the targeted institutions.
 - In the course of your study there should be no action that disrupts the services
 - After completion of the study, a copy should be submitted to the Department to serve as a resource
 - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible

Your cooperation will be highly appreciated

Head of Department
Department of Health
Limpopo Province

18 College Street, Polokwane, 0700, Private Bag x9302, POLOLKWANE, 0700
Tel: (015) 293 6000, Fax: (015) 293 6211/20 Website: <http://www.limpopo.gov.za>

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UNIVERSITY OF LIMPOPO
Medunsa Campus



MEDUNSA RESEARCH & ETHICS COMMITTEE

CLEARANCE CERTIFICATE

P O Medunsa
Medunsa
0204
SOUTH AFRICA

MEETING: 06/2011

PROJECT NUMBER: MREC/HS/127/2011: PG

Tel: 012 - 521 4000
Fax: 012 - 560 0086

PROJECT :

Title: Adherence of mentally stable schizophrenic patients to antipsychotic medications in a mental health institution, Limpopo Province.

Researcher: Ms RG Molaba
Supervisor: Mothiba TM
Co-supervisor: Kgole JC
Other involved HODs: Dr ME Lekhuleni
Department: Nursing Science
School: Health Sciences
Degree: Master of Curationis

DECISION OF THE COMMITTEE:

MREC approved the project.

DATE: 18 August 2011


PROF GA OGUNBANJO
CHAIRPERSON MREC

Note:

- i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.
- ii) The budget for the research will be considered separately from the protocol. PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

African Excellence - Global Leadership

ANNEXURE H: CODING REPORT AND CERTIFICATE FROM INDEPENDENT CODER

FOR: MOLABA RG

DATE: 2011-11-06

STUDY: ADHERENCE OF MENTALLY STABLE SCHIZOPHRENIC PATIENTS TO ANTIPSYCHOTIC MEDICATION IN A MENTAL HEALTH INSTITUTION, LIMPOPO PROVINCE.

BY: SONTU MAPUTLE

Method: Tesch's inductive, descriptive coding technique (in Creswell, 1994:155-156) was used by following the steps below:

1. The researcher obtains a sense of the whole by reading through the transcriptions carefully. Ideas that come to mind may be jotted down.
2. The researcher selects one interview, for example the shortest, top of the pile or most interesting and goes through it asking: "What is this about?" thinking about the underlying meaning in the information. Again any thoughts coming to mind can be jotted down in the margin.
3. When the researcher has completed this task for several respondents, a list is made of all the topics. Similar topics are clustered together and formed into columns that might be arranged into major topics, unique topics and leftovers.
4. The researcher now takes the list and returns to the data. The topics are abbreviated as codes and the codes written next to the appropriate segments of the text. The researcher tries out this preliminary organizing scheme to see whether new themes and codes emerge.
5. The researcher finds the most descriptive wording for the topics and turns them into themes.
6. The researcher endeavours to reduce the total list of themes by grouping together topics that related to each other. Lines are drawn between themes and sub-themes to show interrelationships.
7. The researcher makes a final decision on the abbreviations for each theme and alphabetises the codes.

8. The data belonging to each theme is assembled in one place and a preliminary analysis performed.
9. If necessary, existing data is recoded by the researcher.

Table H.3: Themes and sub-themes reflecting adherence of mentally stable schizophrenic patients to antipsychotic medication in a mental health institution, Limpopo Province

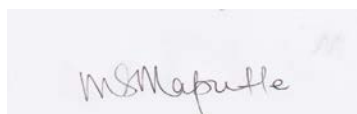
<p>Central storyline: Participants shared same point of view related to aspects of adherence to antipsychotic treatment and also knowledge about the causes of mental illness and its prognosis. They have described that there are different causes of mental illness and the preventative measures that exist in order to prevent mental illness. The mentally stable patients and their carers had reflected that drug abuse is one of the main causes of mental illness. One patients said <i>“You can develop mental illness when you use dagga, benzene, glue and also if you have a head injury”</i>. On the one hand, some participants described that mental illness is not curable but it get suppressed because is a lifelong illness. This was confirmed by the following statements <i>“This disease is incurable, it is also a lifelong illness and everyone knows about this issue”</i>. At the same time all carers have difficulties in dealing with their relatives who are mentally ill on treatment even if they are stable.</p>	
Main themes	Sub-themes
<p>1. Participants shared same point of view related to aspects of adherence to antipsychotic treatment.</p>	<p>1.1 Dominant aspects related to positive versus negative feelings towards adherence to antipsychotic treatment.</p> <p>1.1.1 Scheduled time for treatment</p> <ul style="list-style-type: none"> - A tale that exist currently and would still be there in future – honouring time for taking treatment if a person wants to be better. <p>1.1.2 Consequences of lack of adherence versus adherence to antipsychotic treatment</p> <p>The participants sometimes forget to take their treatment which lead to lack of adherence to treatment <i>“Sometimes when I am doing gardening then my friends come and I then forget to take</i></p>

	<p>treatment because I have to be with theme or we go to the shop”.</p> <p>1.1.3 Problems associated with treatment</p> <ul style="list-style-type: none"> ○ Treatment side effects ○ Hallucinations which direct you to stop taking treatment “Lack of understanding, hearing voices telling you that you are taking rubbish”. <p>1.1.4 Side effects associated with taking the antipsychotic treatment “I sometimes get stomach problems such as running stomach due to the fact that I am taking this treatment”- ---“ Laponex was giving me side effects my neck was turning”</p> <p>1.1.5 Knowledge about the type of treatment taken – the participants had an idea of the treatment they are taking “<i>I was taking Serenace and I had side effects and they were changed</i>”.</p>
<p>2. Knowledge related to mental illness</p>	<p>2.1 Causes of mental illness – the participants have knowledge about the causes of mental illness because all the participants had an idea on this aspect “<i>Pressure from my friends lead to my behaviour of taking dagga and the other thing is that I smoke petrol this lead to my mental illness</i>”.</p> <p>2.2 Stabilisation of the illness – The participants also have knowledge about what makes them stable throughout “<i>If you take treatment properly you get cured. The way I see it can get cured if you take treatment</i>”</p> <p>2.3 Rationale for taking antipsychotic drugs – the participants have knowledge about the reasons of adhering to their treatment---- “<i>the</i></p>

		<i>medication that I take I know they will make my condition better and not to come back to hospital”.</i>
3. Health seeking behaviours of mentally ill patients	3.1	Consultation to the Traditional Health Practitioners “I have wasted about R88, 000.00 by consulting the Traditional Health Practitioners and it did not help, is then that I have decided to come to hospital” in addition “I used traditional medication”.
	3.2	Instructions from the church related to cure for mental illness “I use tea from ZCC church and I cannot mix it with the treatment, then I drink the tea when is finished is then that I can drink treatment”
4. Experiences of relatives caring for mentally stable patients on treatment	4.1	Relatives’ perceptions of treatment adherence “If the treatment can be taken as prescribed then the disease will be cured”
	4.2	Challenges associated with provision of care to mentally ill patient “sometimes he gets troublesome, He gets provoked. Like this one time when his grandmother gave him a job to do and she never paid him for it. He got angry”
	4.3	Lack of treatment at clinic “When the clinic does not have medications and we have to go to hospital to get it and is difficult for us because we do not have money”

Saturation of data was achieved related to the major themes and most sub-themes.

Dr Maputle MS



CERTIFICATE FROM INDEPENDENT CODER

Qualitative data analysis

Master of Curationis Degree (Nursing Science)

RAMATSOBANE GRANNY MOLABA

THIS IS TO CERTIFY THAT:

Prof. Maria Sonto Maputle has co-coded the following qualitative data:

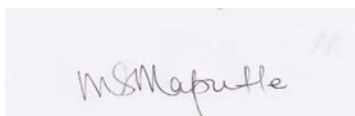
18 Individual interviews and field notes

For the study:

ADHERENCE OF MENTALLY STABLE SCHIZOPHRENIC PATIENTS TO
ANTIPSYCHOTIC MEDICATION AT A MENTAL HEALTH INSTITUTION IN
THE LIMPOPO PROVINCE

I declare that the candidate and I have reached consensus on the major themes reflected by the data during a consensus discussion. I further declare that adequate data saturation was achieved as evidenced by repeating themes.

Prof Maria Sonto Maputle

A rectangular box containing a handwritten signature in black ink that reads "M. S. Maputle".

ANNEXURE I: EDITING CONFIRMATION

P O Box 65251
Erasmusrand
0165

26 May 2012

Dear Ms Molaba

**CONFIRMATION OF EDITING AND FORMATTING YOUR DISSERTATION
TITLED: ADHERENCE OF MENTALLY STABLE SCHIZOPHRENIC PATIENTS
TO ANTIPSYCHOTIC MEDICATION AT A MENTAL HEALTH INSTITUTION IN
THE LIMPOPO PROVINCE**

I hereby confirm that I have edited the abovementioned article as requested.

Please pay particular attention to the editing notes AH01 – AH14 for your revision.

The tracks copy of the document contains all the changes I have effected while the edited copy is a clean copy with the changes removed. Kindly make any further changes to the edited copy since I have effected minor editing changes after removing the changes from the tracks copy.

You are more than welcome to send me the document again to perform final editing should it be necessary.

Kind regards



André Hills
083 501 4124