

**THE EFFECT OF QUALITY ASSURANCE NURSE MANAGERS ON THE PROVISION
OF PATIENT CARE AT SELECTED PUBLIC HOSPITALS IN THE
LIMPOPO PROVINCE**

by

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submitted in accordance with the requirements

for the degree of

MASTER OF ARTS

in the subject

HEALTH STUDIES

at the

UNIVERSITY OF SOUTH AFRICA

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November 2014

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DECLARATION

I declare that **THE EFFECT OF QUALITY ASSURANCE NURSE MANAGERS ON THE PROVISION OF PATIENT CARE AT SELECTED PUBLIC HOSPITALS IN THE LIMPOPO PROVINCE** is my own work and all sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.



20 November 2014

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Date

THE EFFECT OF QUALITY ASSURANCE NURSE MANAGERS ON THE PROVISION OF PATIENT CARE AT SELECTED PUBLIC HOSPITALS IN THE LIMPOPO PROVINCE

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ABSTRACT

Patient and public criticism of care in many South African public hospitals has resulted in negative media reports. The purpose of the study was to determine the effect of appointing Quality Assurance Nurse Managers (QANMs) on the provision of quality patient care in selected public hospitals of the Limpopo Province and to make recommendations where appropriate. The study was quantitative, exploratory and descriptive in nature. Data was collected by means of a self-developed questionnaire from 112 respondents, consisting of 10 QANMs and 102 Quality Assurance Team members (QAT). The response rate was 100% for the QANMs and 57% for the QAT members.

The study found that most of the ten selected hospitals have a good QA foundation with a vision, mission and goals, QA programme and manual. Moreover, the appointment of the QANMs had a positive impact on the nursing care. Regarding the improvement and change in the provision of nursing care, the majority of the respondents indicated that patients' complaints about nursing care had declined considerably; the in-service training assisted in improving nursing care, and patients were nursed in totality because of the quality guidelines in the QA manuals. However, the study found that the shortage of equipment, which interferes with the delivery of quality patient care, is a serious problem that hinders the QA programme and needs to be tackled. Recommendations were made for practice and further research.

Key words

Quality; quality assurance nurse manager; patient care; public hospital.

ACKNOWLEDGEMENTS

I give heartfelt praise and thanks to Almighty God without whose love and inspiration neither I nor this study would have been conceived.

There is an African saying, *Munhu I munhu hi van'wana vanhu*, which means “a person is a person because of other people”. My appreciation and gratitude are therefore due to all the following without whose quality assurance, support and help this study would not be what it is:

- Prof MC Bezuidenhout, my supervisor, for her tireless support and encouragement, and everything she taught me
- Dr EN Monama, my co-supervisor, for her gentle but firm guidance, encouragement and patience
- The Limpopo Province Department of Health, for permission to conduct the study
- The Chief Executive Officers and Health Service Managers of the selected public hospitals, for allowing me to conduct the study there
- George, my husband, for his support, encouragement, patience and sense of humour
- Kizzy, Kiki and Rendani, my children, for their love, understanding and prayers
- Prof TM Mothiba, my friend and mentor, for her encouragement, support and sharing
- Mr Robert Hall, the statistician, for his excellent data analysis and interpretation
- Ms lauma Cooper, for critically and professionally editing the manuscript
- Ms Rina Coetzer, for her patient, quality formatting and finalising of the manuscript

CHAPTER 1

ORIENTATION TO THE STUDY

1.1	INTRODUCTION	1
1.2	BACKGROUND TO THE PROBLEM	1
1.2.1	Patient care.....	4
1.2.2	Government intervention	4
1.2.3	Quality Assurance (QA) in South African health care services	5
1.3	STATEMENT OF THE PROBLEM	6
1.4	RESEARCH QUESTIONS.....	6
1.5	PURPOSE OF THE STUDY	7
1.6	OBJECTIVES	7
1.7	ASSUMPTIONS.....	7
1.7.1	Meta-theoretical assumptions	8
1.7.2	Ontological assumptions.....	8
1.7.3	Epistemological assumptions.....	8
1.8	METAPARADIGM.....	8
1.8.1	Person	9
1.8.2	Health	9
1.8.3	Environment.....	9
1.8.4	Nursing	10
1.9	THEORETICAL FRAMEWORK.....	10
1.10	SIGNIFICANCE OF THE STUDY	11
1.11	RESEARCH DESIGN	12
1.11.1	Quantitative.....	12
1.11.2	Exploratory.....	12
1.11.3	Descriptive.....	12
1.12	RESEARCH METHODOLOGY.....	13
1.12.1	Population.....	13
1.12.2	Sample and sampling	13
1.12.3	Data collection	14
1.12.4	Data analysis	15
1.12.5	Validity and reliability	15
1.12.6	Pre-test or pilot study.....	15
1.12.7	Ethical considerations.....	16

Table of contents		Page
1.13	SCOPE AND LIMITATION OF THE STUDY	16
1.14	DEFINITION OF KEY TERMS.....	16
1.15	STRUCTURE OF THE STUDY.....	18
1.16	CONCLUSION.....	19
CHAPTER 2		
LITERATURE REVIEW		
2.1	INTRODUCTION	20
2.2	THEORETICAL FRAMEWORK	21
2.2.1	Donabedian's <i>model of quality</i>	21
2.2.1.1	Structure standards	22
2.2.1.1.1	Facilities and layout	22
2.2.1.1.2	Human resources	23
2.2.1.1.3	Material resources	29
2.2.1.1.4	Vision.....	30
2.2.1.1.5	Mission.....	30
2.2.1.1.6	Philosophy	30
2.2.1.1.7	Policy and procedure	32
2.2.1.2	Process standards.....	32
2.2.1.2.1	Patient care.....	33
2.2.1.3	Outcome standards	34
2.3	QUALITY MANAGEMENT.....	35
2.3.1	Quality care.....	35
2.3.1.1	Dimensions of quality.....	36
2.3.1.2	Standards and criteria.....	39
2.3.2	Quality planning	40
2.3.3	Quality assurance.....	45

Table of contents		Page
2.3.3.1	Definition of quality assurance.....	45
2.3.3.2	Principles of quality assurance	46
2.3.3.3	Quality assurance in health services of other countries.....	46
2.3.3.4	Quality assurance in South African health care services.....	47
2.3.4	Quality control.....	51
2.3.4.1	Objectives of quality control.....	51
2.3.4.2	Steps of the quality control process.....	51
2.3.5	Quality improvement.....	52
2.4	CONCLUSION.....	55

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1	INTRODUCTION.....	56
3.2	RESEARCH QUESTIONS, PURPOSE AND OBJECTIVES OF THE STUDY.....	56
3.3	RESEARCH DESIGN.....	57
3.2.1	Quantitative.....	57
3.2.2	Exploratory.....	58
3.2.3	Descriptive.....	58
3.4	RESEARCH METHODOLOGY.....	59
3.5	POPULATION.....	59
3.5.1	Site population.....	59
3.5.2	Respondent population.....	60
3.6	SAMPLE AND SAMPLING.....	60
3.7	DATA COLLECTION.....	61
3.7.1	Data collection instrument.....	61
3.7.1.1	Validity and reliability of the data collection instrument.....	62
3.7.1.1.1	Validity.....	63
3.7.1.1.2	Reliability.....	63
3.7.1.2	Pre-testing the data collection instrument.....	64
3.7.2	Data collection process.....	64
3.10	DATA ANALYSIS.....	65

Table of contents		Page
3.11	ETHICAL CONSIDERATIONS	66
3.12	CONCLUSION.....	68
 CHAPTER 4 		
DATA ANALYSIS AND INTERPRETTION		
4.1	INTRODUCTION	69
4.2	DATA ANALYSIS.....	69
4.3	DATA ANALYSIS AND RESULTS.....	71
4.3.1	Section A: Biographical information.....	71
4.3.1.1	Type of institution at which respondents were employed.....	71
4.3.1.2	Respondents' current post in the institution.....	72
4.3.1.3	Respondents' years of experience as QANM and QAT member.....	73
4.3.2	Section B: Functions of QANMs and QATs.....	73
4.3.2.1	Structure standards	73
4.3.2.1.1	QAT respondents' perceptions of structure standards.....	74
4.3.2.1.2	Statistical analysis of findings on structure standards provided by the QANMs	82
4.3.2.2	Process standards.....	93
4.3.2.2.1	Process standards for QATs.....	93
4.3.2.2.2	Process section of QANM.....	99
4.3.2.3	Outcome standards	113
4.3.2.3.1	Outcome standards of QAT respondents	113
4.3.2.3.2	Outcome standards for QANM.....	118
4.3.3	Section C: General Information on the outcome of QA activities.....	124
4.4	CONCLUSION.....	133
 CHAPTER 5 		
FINDINGS, CONCLUSION AND RECOMMENDATIONS		
5.1	INTRODUCTION	134
5.2	SUMMARY OF FINDINGS	134
5.2.1	Section A: Biographic information.....	135

Table of contents	Page
5.2.1.1 Respondents' type of institution	135
5.2.1.2 Respondents' current nursing position.....	135
5.2.1.3 Respondents' years of experience as QANMs and QATs	135
5.2.2 Section B: Functions of QANMs and QATs	135
5.2.2.1 Structure standards	136
5.2.2.1.1 Structure standards of QANMs and QATs.....	136
5.2.2.2 Process standards	136
5.2.2.2.1 Process standards of QATs	137
5.2.2.2.2 Process standards of QANMs.....	138
5.2.2.3 Outcome standards	139
5.2.2.3.1 QAT respondents' outcome standards	139
5.2.2.3.2 QANM respondents' outcome standards	139
5.2.3 Section C: General information on the outcome of QA activities	140
5.3 GENERAL CONCLUSIONS	142
5.3.1 Section A: Biographic information.....	142
5.3.2 Section B: Functions of QANM and QATs	142
5.3.2.1 Structure standards	142
5.3.2.2 Process standards	143
5.3.2.2.1 QAT process standards	143
5.3.2.2.2 QANM process standards.....	144
5.3.2.3 Outcome standards	145
5.3.2.3.1 QATs' outcome standards	145
5.3.2.3.2 QANMs outcome standards.....	146
5.3.3 Section C: General information on the outcome of QA activities	146
5.4 LIMITATIONS OF THE STUDY	147
5.5 RECOMMENDATIONS	147
5.5.1 Practice.....	147
5.5.2 Further research	153
5.5.3 Contribution of the study.....	153
5.6 FINAL CONCLUSION.....	153
LIST OF REFERENCES	154

List of tables		Page
Table 2.1	Donabedian's <i>model of quality</i>	22
Table 2.2	Six most critical areas for patient-centred care, complaint and resolution	42
Table 2.3	Levels of QA, role player and their functions.....	49
Table 2.4	Policy and steps to improve the quality of health care in South Africa	53
Table 3.1	Numbers of respondents	62
Table 4.1	Institution in which the QANM respondents (n=10) and QAT respondents (n=102) were employed .	72
Table 4.2	Respondents' current rank/post (N=112)	72
Table 4.3	Respondents' years of experience as a QANM or QAT member (N=112).....	73
Table 4.4	QAT respondents' views of structure standards of QAT (n=102).....	74
Table 4.5	<i>Eigen values</i> of structural standards	82
Table 4.6	QANM respondents' views of structure standards (n=10).....	83
Table 4.7	Sub-themes of the construct: Process standards according to the QAT respondents (n=102).....	94
Table 4.8	Cronbach's alpha results for construct: Process: professional practice and conduct.....	97
Table 4.9	Cronbach's alpha results for construct: Process: standards and guidelines	97
Table 4.10	Cronbach's alpha results for construct: Process: Problem-solving	98
Table 4.11	Cronbach's alpha results for construct: Process: Training and teamwork.....	98
Table 4.12	QANM respondents' responses to the process standards	99
Table 4.13	QAT respondents' responses on QA outcome standards (n=102).....	114
Table 4.14	QANM respondents' responses on AQ outcome standards.....	118
Table 4.15	QAT respondents' responses to general information on the outcome of QA activities (n=102)	124
Table 4.16	QANM respondents' responses to general information on the outcome of QA activities (n=10).....	124
Table 5.1	Recommendations for improvement of patient care.....	148

List of figures		Page
Figure 1.1	Area map of the research site, Limpopo Province	3
Figure 2.1	Component of nursing service philosophy	31
Figure 2.2	A quality improvement cycle	56
Figure 4.1	QAT respondents' knowledge of the availability of a QA programme (n=102).....	75
Figure 4.2	QAT respondents' knowledge of the availability of a QA vision (n=102).....	75
Figure 4.3	QAT respondents; knowledge of the availability of a QA mission (n=102).....	76
Figure 4.4	QAT respondents' knowledge of QA-related goals (n=102).....	76
Figure 4.5	QAT respondents' views of QA-related goals (n=102).....	77
Figure 4.6	QAT respondents' knowledge of sufficiency of equipment (n=102)	78
Figure 4.7	QAT respondents' knowledge of the functionality of equipment in their units (n=102).....	78
Figure 4.8	QAT respondents' knowledge of the adequacy of medical supplies in the unit (n=102)	79
Figure 4.9	QAT respondents' perception of the environment's conduciveness to the provision of quality patient care (n=102).....	80
Figure 4.10	QAT respondents' perceptions of structure standards	80
Figure 4.11	QANM respondents coordinate the development of the institution's QA programme (n=10).....	84
Figure 4.12	QANM respondents ensure that the institution has a QA vision (n=10)	84
Figure 4.13	QANM respondents made sure the institution had a QA mission (n=10).....	85
Figure 4.14	QANM respondents ensure that the institution has QA-related goals (n=10).....	86
Figure 4.15	QANM respondents ensure that institution has QA procedure manual (n=10)	86
Figure 4.16	QANM respondents give direction on implementing QA measures (n=10)	87
Figure 4.17	QANM respondents establish QA teams (n=10)	87
Figure 4.18	QANM respondents develop QA-related policies and strategies (n=10).....	88
Figure 4.19	QANM respondents develop QA-related clinical guidelines and protocols (n=10).....	88
Figure 4.20	QANM respondents' knowledge of the institution having formulated nursing standards (n=10)	89
Figure 4.21	QANM respondents' aspiration to have enough material resources to carry out QA activities (n=10).....	90
Figure 4.22	QANM respondents' aspiration to have sufficient equipment in the unit for patient care (n=10).....	90

List of figures		Page
Figure 4.23	QANM respondents' aspiration to have equipment in the unit generally in good working order	91
Figure 4.24	QANM respondents' aspiration to have adequate medical supplies in the units (n=10)	92
Figure 4.25	QANM respondents' aspiration to have the environment in the units conducive to providing optimal patient care (n=10)	92
Figure 4.26	QANM respondents' responses to keeping the procedure manual on QA up to date (n=10)	101
Figure 4.27	QANM respondents' responses to making sure that procedures contained in QA procedure manuals are followed (n=10)	101
Figure 4.28	QANM respondents ensure that health care personnel met national QA standards (n=10)	102
Figure 4.29	QANM respondents' adapting the national QA standards (n=10)	103
Figure 4.30	QANM respondents monitor QA programmes (n=10)	103
Figure 4.31	QANM respondents implement policies developed by QA Directorate (n=10)	104
Figure 4.32	QANM respondents organise QA workshops and seminars (n=10)	104
Figure 4.33	QANM respondents facilitate QA workshops and seminars (n=10)	105
Figure 4.34	QANM respondents provide in-service training on QA-related topics to health care personnel on a quarterly basis (n=10)	105
Figure 4.35	QANM respondents keep a record of in-service training attendance on QA-related topics (n=10) ..	106
Figure 4.36	QANM respondents establish QATs (n=10)	106
Figure 4.37	QANM respondents supervise QATs (n=10)	107
Figure 4.38	QANM respondents mobilised resources for QA activities (n=10)	107
Figure 4.39	QANM respondents made sure that health care professionals participated in QA programmes (n=10)	108
Figure 4.40	QANM respondents develop a budget for QA activities (n=10)	108
Figure 4.41	QANM respondents hold monthly QA meetings with nursing personnel regarding patient care (n=10)	109
Figure 4.42	QANM respondents expect nurses to teach patients about their follow-up care (n=10)	109
Figure 4.43	QANM respondents encourage patients to be involved in planning of their care (n=10)	110
Figure 4.44	QANM respondents expect nurses to plan nursing care of patients according to the nursing process (n=10)	111
Figure 4.45	Q ANM respondents expect nurses to develop nursing care plans for all patients (n=10)	111

List of figures		Page
Figure 4.46	QANM respondents monitor that the catering staff provide patients with the right and adequate amount of food (n=10).....	112
Figure 4.47	QANM respondents encourage nurses to attend to patients' additional needs, such as psychological and social needs (n=10)	113
Figure 4.48	QAT respondents give feedback to nursing personnel after auditing of patients' records (n=102) ..	115
Figure 4.49	QAT respondents give feedback to nursing personnel after conducting patients' satisfaction survey (n=102)	115
Figure 4.50	QAT respondents are given opportunity to attend in-service training about quality improvement at least once per quarter (n=102).....	116
Figure 4.51	QAT respondents' response to patients frequently expressing their satisfaction of the care given to them on discharge (n=102)	117
Figure 4.52	QAT respondents encourage patients to express their feelings about the care they received (n=102).....	117
Figure 4.53	QANM respondents evaluate at quarterly intervals whether the set QA goals are met (n=10)	119
Figure 4.54	QANM respondents document the results of evaluating the achievement of QA goals (n=10).....	119
Figure 4.55	QANM respondents ensure that the results of evaluated QA goals are communicated to the personnel of the institutions	120
Figure 4.56	QANM respondents establish a reward/incentive system for the institution(s) (n=10)	121
Figure 4.57	QANM respondents encourage nurses to compile a report on maternal deaths that occur in maternity wards/units (n=10).....	121
Figure 4.58	QANM respondents provide patients with the opportunity to evaluate and report on care received (n=10)	122
Figure 4.59	QANM respondents encourage patients to express their feelings about the care they received by filling in the discharge questionnaire (n=10).....	123
Figure 4.60	QANM respondents ensure that patients' responses to the nursing interventions and care received during their hospitalisation, guide future nursing action (n=10)	123
Figure 4.61	QAT respondents on QANM introduction of the QA programme in the institution (n=102)	125
Figure 4.62	QANM respondents' introduction of the QA programme in the institution (n=10).....	125
Figure 4.63	QAT respondents on QANM dissemination of aims and objectives of QA in the institution (n=102).....	126
Figure 4.64	QANM respondents' dissemination of aims and objectives of QA in the institution (n=10)	126
Figure 4.65	QAT respondents on QANMs bringing changes in patient care (n=102)	127

List of figures	Page
Figure 4.66 QANM respondents' observation of improvement in the provision of nursing care since their appointment (n=10).....	127
Figure 4.67 QAT respondents and factors that contributed to the success of the QANMs' performance (n=102).....	128
Figure 4.68 QANM respondents and factors that contributed to the success of their performance (n=10).....	129
Figure 4.69 QAT respondents' responses to QA activities.....	133
Figure 4.70 QANM respondents' responses to QA activities	133

List of abbreviations

CEO	Chief Executive Officer
CQI	Continuous Quality Improvement
DoH	Department of Health
HRP	Hospital Rehabilitation Programme
HRP	Hospital Revitalisation Programme
IOM	Institute of Medicine
MM	Medical Manager
OSD	Occupation Specific Dispensation
QA	Quality Assurance
QANM	Quality Assurance Nurse Manager
QAT	Quality Assurance Team
SA	South Africa
SANC	South African Nursing Council
UK	United Kingdom
WHO	World Health Organization

List of annexures

- Annexure A Letter requesting permission to conduct research: Limpopo Province Department of Health Ethics committee
- Annexure B Permission to conduct research granted by Limpopo Province Department of Health Ethics committee
- Annexure C Letter requesting permission to conduct research: CEOs of public hospitals of Limpopo Province
- Annexure D₁ Questionnaire: QANMs
- Annexure D₂ Questionnaire: QATs
- Annexure E Informed consent form for respondents
- Annexure F Ethical clearance from University of South Africa

CHAPTER 1

Orientation to the study

1.1 INTRODUCTION

Quality assurance (QA) in patient care refers to a managed process whereby care given to the patient is compared against predetermined standards. This is guaranteed to lead to implementing changes and ensuring that these changes produce the desired improvement in the patient's condition in health care services (Sandle 2005:141).

QA in patient care follows a formal process in which standards are set, and work performance is measured and evaluated against the pre-determined standards. Remedial action should be taken during and at the end of the process to solve problems in order to improve the quality of service delivery and performance outcomes (Muller, Bezuidenhout & Jooste 2006:491).

In the United Kingdom (UK), QA and clinical governance requires that a team be in place that is responsible for setting standards and monitoring the quality assurance package to improve patient care. Furthermore, the team should be allocated a manager to whom they report and who will supervise the whole process (Hunt, Keeley, Cobb & Ahmedzai 2004:248). The Institute of Medicine (IOM) in Chicago specified how quality issues in health care should be addressed and initiated a process by which all health care professionals should be educated to deliver patient-centred care as a member of an interdisciplinary team, emphasising evidence-based practice, quality improvement approaches and informatics (Hughes 2008:2). Warholak (2009:47) states that the provision of patient care should be monitored using strategies that will affirm whether it is provided as expected or below expectation.

1.2 BACKGROUND TO THE PROBLEM

A research problem is an area of concern where there is a gap in knowledge or a situation or discrepancy which needs a solution to improve and inspire prompt investigation by the researcher (Brink, Van der Walt & Van Rensburg 2006:58).

Limpopo Province is the northernmost province of South Africa, and is bordered by Botswana, Mozambique and Zimbabwe (Limpopo Provincial Department of Health and Social Development 2008:7). Limpopo has a population of 5 404 868, consisting of 96.67% (n=5 224 754) Blacks, 0.27% (n=14 415) Coloureds, 0.33% (n=17 881) Indians, 2.58% Whites (n=139 359) and 0.16 (n=8 459) others. The population make up 10.4% of the total South African population. The province is divided into five (5) districts, namely Capricorn, Sekhukhune, Vhembe, Mopani and Waterberg (Statistic South Africa 2011). (See figure 1.1).

Limpopo has forty (40) public hospitals, which are classified as follows:

- Two (2) tertiary hospitals
- Three (3) specialised psychiatric hospitals
- Five (5) regional hospitals
- Thirty (30) district hospitals (Limpopo Province Annual performance plan 2008: 89).

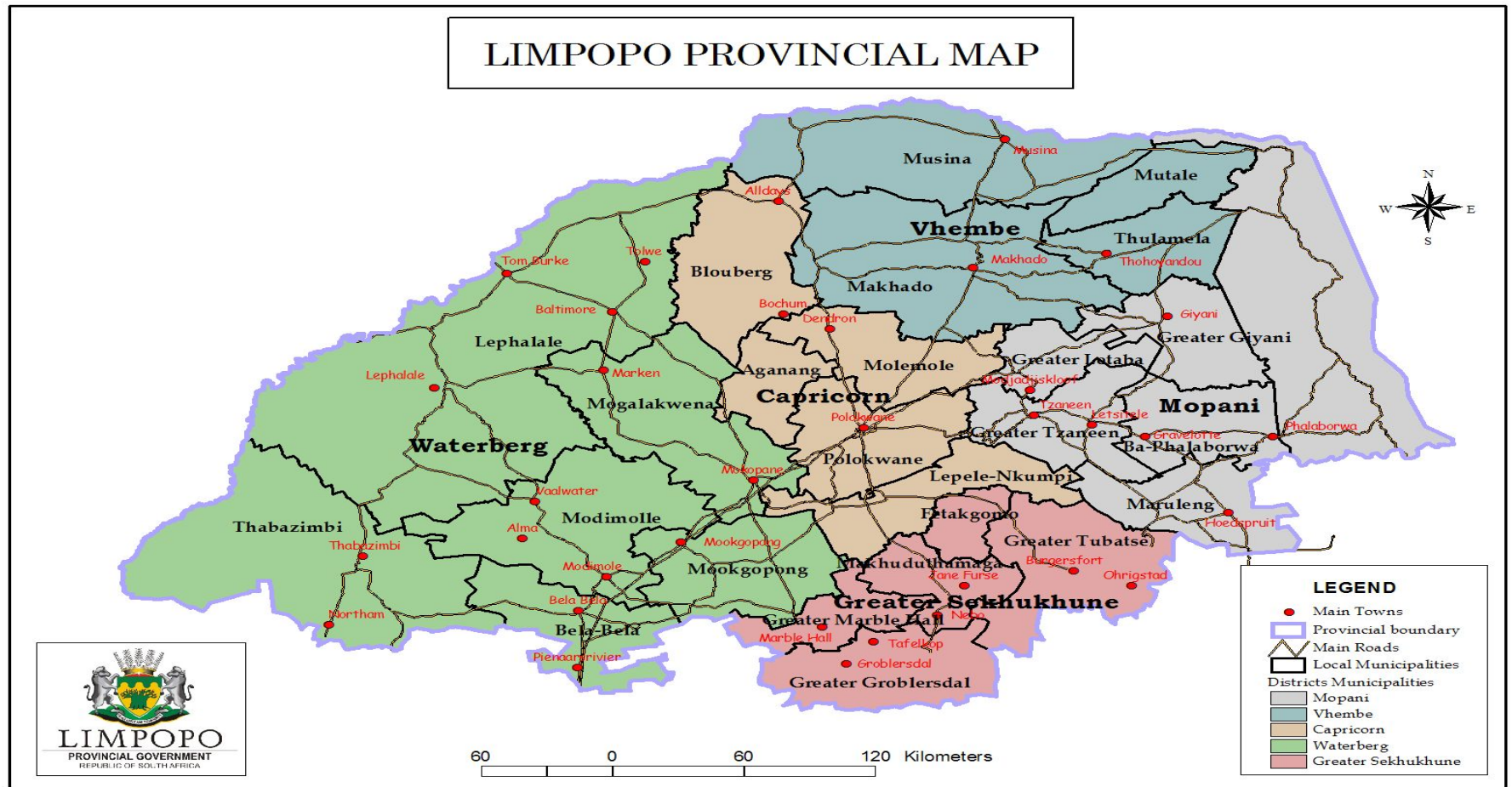


Figure 1.1 Area map of the research site, Limpopo Province

(<http://www.Limpopo.gov.za/index.php?option=com-content&view=article&i.d=1&itemid=3>)

1.2.1 Patient care

Quality patient care is “the appropriate execution of assessment and interventions intended to optimise patient outcomes and prevent adverse events” (Clarke & Donaldson 2008:5).

The media frequently criticise patient care in South African hospitals, such as women being left to bleed and losing their unborn babies (Thom 2011:1). In 2011, the Human Rights Watch (HRW) interviewed thirty nurses, mostly working in maternity units, emergency medical staff, quality assurance officials, facility managers and managers in maternity units, and reported some improvements (Thom 2011:1; Walker 2011:1). The HRW Report acknowledged that some government initiatives were beginning to yield positive results as there was an increase in pregnant women using government hospitals. Moreover, according to the 2008 and 2009 South African statistics, 92% of pregnant women attended antenatal clinics and almost 87% had delivered in hospital since the African National Congress (ANC) had come into power and introduced free health services for pregnant women and children (Thom 2011:1; Walker 2011:1).

The *South African Free Health Care for Pregnant Women and Children Policy* makes provision for pregnant women to be treated free in public health care facilities (Thom 2011:1). However, it has become dangerous to give birth in public sector health care institutions, because of the risks involved. In addition, corruption, incompetence and indifference have negatively affected service delivery in public hospitals all over South Africa, including Limpopo Province (Van Zyl 2006; Thom 2011).

1.2.2 Government intervention

The South African National Department of Health (DoH) introduced the *Hospital Rehabilitation Programme (HRP)* after an audit of health facilities was conducted in 1996. The HRP is one of the themes of the Department’s ten-point plan, and addresses the infrastructure, health technology, organisational development and quality assurance of hospitals. The objective of launching the HRP was to address backlogs existing in facilities caused by the previous government’s neglect to upgrade former homeland health institutions (DoH 2010:33).

Following complaints of substandard care provided to patients in public hospitals, the Limpopo Provincial Department of Health took the initiative to monitor the provision of patient care in the province based on the National Department of Health's ten-point plan point number three, improving quality of health services (DoH 2010:20). The Limpopo Provincial Department of Health employed Chief Professional Nurses who were initially appointed at post level 9 as Quality Assurance Nurse Manager (QANMs). Currently QANMs are employed in post levels 10 and 11 because of the demanding nature of the job. The requirements for these quality assurance manager positions at level 10 and 11 do not specifically require that only Professional Nurses be appointed to them, but also provide the opportunity for any person with a health-related degree, such as social workers, to apply.

The National Department of Health wished to implement a quality assurance programme (by adopting *A policy on quality in health care for South Africa* in 2007, discussed below) focusing on hospitals that should be centres of excellence, improving frontline services and clinical care, accreditation of health care facilities, reducing waiting times in hospitals and clinics, and adhering to the *Batho Pele* Principles (DoH 2007a:18). Based on the national initiative, the Limpopo Department of Health formulated strategic objectives to improve the quality of patient care in public hospitals in the province.

1.2.3 Quality Assurance (QA) in South African health care services

In 1994, the National Department of Health established the Quality Assurance Directorate when the draft of *A policy on quality in health care for South Africa* was tabled. The Directorate is responsible for establishing and developing systems and methods by which to strive for QA in health care institutions. The policy aimed to assure quality in health care and to continuously improve the care being provided. The policy was introduced in April 2007 (DoH 2007a:3).

Quality Assurance Teams (QATs) became fully functional after *A policy on quality in health care for South Africa* was published in 2007, in accordance with the stipulations on establishing QATs. The policy is intended for both public and private sectors because it aims at strengthening the partnership between the two sectors (DoH

2007a:2). The policy proposed the following governance structures to support quality health care improvement across the country (DoH 2007a:11):

- National Institute for Health Care Quality (NIHCQ)
- Provincial Advisory Board for Quality in Health Care (PABQHC)
- District/Local governments

1.3 PROBLEM STATEMENT

A research problem is a situation that is disturbing, or not clearly understood, and which needs to be investigated in order to be clear or understood (Polit & Hungler 2000:58). The problem statement identifies the nature of the problem and serves as the basis for the research design.

The *National Quality Assurance Programme* was introduced in 2007 in response to public and patient criticism of unacceptable and inferior quality patient care provided in South African public hospitals and health care services. However, since the introduction of QANMs to improve the quality of patient care in South African public hospitals and health care services, patient dissatisfaction with the nursing care has not declined significantly (Van Zyl 2006). From 4 to 22 June 2012 the South African Nursing Council (SANC) conducted a quality visit at selected Limpopo province hospitals. Verbal feedback, at which the researcher represented the Limpopo College of Nursing, revealed the following: nursing care plans were not congruent with the admission nursing diagnosis, doctor's prescriptions were not carried out, infection control standards were not followed, and nursing management was not up to the standards set (SANC Accreditation Report 2012:2). Despite Government intervention and the appointment of QANMs to improve patient care, it is clear that quality standards are not being met and the general public is still not satisfied with the health care received (Van Zyl 2006; Thom 2011).

1.4 RESEARCH QUESTIONS

Research questions guide researchers through research. The research question asks the question why one wishes to conduct a particular study (LoBiondo-Wood & Haber 2006:47).

Accordingly, the study wished to answer the following research questions:

- Did the QATs fulfil their stipulated functions under the guidance of the QANM?
- What effect did the appointment of QANMs have on the provision of quality patient care in the selected public hospitals in Limpopo Province?
- Could inputs be made to enhance the delivery of quality patient care in public hospitals of Limpopo Province?

1.5 PURPOSE OF THE STUDY

The researcher wished to investigate whether appointing QANMs enhanced the provision of quality patient care. The purpose of the study was to determine the effect of appointing QANMs on the provision of quality patient care in selected public hospitals in Limpopo Province and to make recommendations.

1.6 OBJECTIVES

In order to achieve the purpose, the objectives of the study were to

- determine whether the QATs fulfilled their stipulated functions under the guidance of the QANMs
- explore and describe the effect QANMs have had on the provision of quality patient care in selected public hospitals of the Limpopo Province
- make recommendations for enhancing the quality of patient care in public hospitals in Limpopo Province based on the findings

1.7 ASSUMPTIONS

Assumptions are basic principles that are assumed to be true based on logic and reason, without proof or verification (Brink 2006:25; Polit & Beck 2008:13-14). Sources of assumptions include universally accepted truths such as theories, previous research and nursing practice. In research, assumptions are embedded in the philosophical base of the framework, study design and interpretation of findings (Burns & Grove 2005:40). A theoretical framework is based on an existing theory and helps the researcher to

organise the study and provide a context in which a problem is examined, and data is gathered and analysed (Brink et al 2006:24). Donabedian's (2005:700) *model of quality* was used as the framework for the study. Assumptions influence the logic of the study which leads to more rigorous study development. Meta-theoretical, ontological and epistemological assumptions were posited in this study.

1.7.1 Meta-theoretical assumptions

Meta-theory is the analysis of a theory underpinning the study (Polit & Beck 2008:683). Meta-theoretical assumptions are about specific theories and methodological strategies that are not tested in the study (Mouton 2002:174).

1.7.2 Ontological assumptions

Ontology is the study of being or reality. Ontological assumptions are concerned with the reality that is being investigated (Mouton 2002:124). This study investigated the provision of patient care at selected public hospitals in Limpopo Province.

1.7.3 Epistemological assumptions

Epistemology is concerned with the nature of knowledge, its possibility, scope and general basis. Epistemological assumptions are assumptions about the nature of knowledge and science or about the content of truth and related reality (Mouton 2002:123). The researcher was independent from and had no influence on the respondents.

1.8 METAPARADIGM

A *metaparadigm* is the broadest perspective of the discipline, a way to describe the concepts that concern the profession or domain (Mouton 2002:36). The metaparadigm for nursing describes those concepts that define the discipline of nursing. Since the early 1970's, four concepts (person, health, nursing, and environment) have been considered essential in describing the parameters of the profession (Mouton 2002:36; George 2011:3).

This study was based on the appointment of QANMs with the aim of improving the quality of patient care. The four major concepts of nursing, namely the person (or being), health (well-being), environment (situation) and nursing, will be described next (George 2011:3).

1.8.1 Person

George (2011:591) refers to a person as “a whole being that cannot be reduced to a mind-body dualism”. In this study, the respondents were the persons and were regarded as whole beings throughout the study and the researcher’s interaction with them. The researcher believed that the respondents were persons who were free to choose, were unique, and had their own thoughts and understanding of the world in which they lived. In this study, the respondents worked in public hospitals, health service institutions that render primary, secondary and tertiary health care services in order to provide quality patient care to restore patients to a state of complete physical, mental and social well-being. It is assumed that the employment of QANMs and members of QATs should have a positive outcome in patient care delivery.

1.8.2 Health

Health is the absence of disease (George 2011:591). The World Health Organization (WHO 1946:100) defines health as “a state of complete physical, mental and social wellbeing and not merely the absence of disease and infirmity” (De Haan, Dennill & Vasuthevan 2005:1).

The researcher believes that patients should be given optimal care, the quality of which should be enhanced by the appointment of QANMs; at the same time, however all people should take responsibility for their own health.

1.8.3 Environment

George (2011:592) states that the ways in which people experience the environment impacts on their experience in that environment. The *Environmental Conservation Act, 73 of 1989* (South Africa 1989:3) refers to environment as “the aggregate of surrounding objects, conditions and influences that influence the life and habits of man or any other

organism or collection of organisms". When a patient is admitted in a public hospital, the process of healing is greatly dependent on the health care environment. The patient can feel lost and unwelcome in a strange and unfriendly environment; therefore it is the responsibility of nurses to provide quality patient care in a clean, safe and health-conducting environment. The public hospitals where the study was conducted represented the environment.

1.8.4 Nursing

The South African Nursing Council (SANC) (Mellish & Paton 1999:13) defines nursing as "a caring profession which supports and assists the patient, ill or well, at all stages of life, to achieve and maintain his/her potential for optimal health; where this is not possible the patient is cared for with dignity until death" (Mellish & Paton 1999:13). Nurses are knowledgeable practitioners who primarily promote the health and well-being of patients. Nurses understand the theoretical basis of disease, and have cognitive, interpersonal, technical and critical thinking skills to care for their patients in a scientific manner. The researcher, professional nurses, QANMs and members of the QATs all belong to the nursing profession and should thus aspire to continuously provide quality patient care to those allocated to them (George 2011:592).

1.9 THEORETICAL FRAMEWORK

A theoretical framework is based on prepositional statements resulting from an existing theory. It helps the researcher to organise the study and provide a context in which a problem is examined, and data is gathered and analysed (Brink et al 2006:24). Donabedian's (2005) *model of quality* was used in this study and guided the researcher to verify the components of quality assurance in the health care institution. Donabedian (2005:700) maintains that quality consists of three main components, namely structure, process and outcome. The components are interdependent and influence each other.

- **Structure** refers to the organisation and all its resources including material, human and premises which will be utilised during the execution of daily activities in order to provide quality care to patients. This includes peer review mechanisms, continuing education programmes for nursing staff, policy, and procedure manuals. The quality of structure also refers to the security and

validity of equipment, unit area, the patient level of knowledge and consciousness of health by all who are involved in health care; that is, patient/client, community, family members and health care professionals (Lundqvist & Axelsson 2007:52; Hunt, Keeley, Cobb & Ahmeedzai 2004:249).

- **Process** refers to the actions and behaviours required from the nursing staff in giving care. It relates to the manner in which care is delivered and expresses the attributes of the performance. During the quality assessment process, activities can be divided into preventive, diagnostic, treatment, nursing care, and rehabilitation activities (Lundqvist & Axelsson 2007:52; Hunt et al 2004:249).
- **Outcome** means what is achieved. The result is the change or improvement in a patient's health, attitude or behaviour conducive to future health, self-care abilities, functional abilities, and morbidity and mortality status. The outcome is attributed to structure and process activities during the delivery of care (Lundqvist & Axelsson 2007:52; Hunt et al 2004:249).

The researcher considered Donabedian's *model of quality* appropriate for this study as it addressed the inputs in terms of available facilities and resources, and the nursing actions as the means of accomplishing quality patient care (see chapter 2 for discussion of the model).

1.10 SIGNIFICANCE OF THE STUDY

A research study should be significant to the nursing profession and contribute to the body of knowledge (Brink et al 2006:61; LoBiondo-Wood & Haber 2002:56). In its quest for optimal patient care, the nursing fraternity continuously embark on studies through which evidence can be gathered on which to base improvement strategies. This study was important for the nursing profession as it sought to determine whether the statutory interventions of appointing QANMs had the anticipated positive effect on patient care delivery, or not.

The findings and recommendations of this study should assist the Limpopo Province Department of Health to improve patient care. Moreover, the findings and recommendations will be communicated to the institutions which participated in the

study, thereby assisting the different role players in the public hospital context to improve the provision of quality patient care.

1.11 RESEARCH DESIGN

A research design is the set of logical steps taken by the researcher to answer the research question (Brink et al 2012:217). A research design is an overall plan for obtaining answers to research questions (Polit & Beck 2008:66). The researcher used a quantitative, explorative and descriptive design in this study.

1.11.1 Quantitative

A quantitative design is rigorous and controlled in order to precisely measure and quantify data (Polit & Beck 2012:739). This study used a quantitative approach to determine the outcomes QANMs have had on the provision of quality patient care delivered at the selected public hospitals of Limpopo Province (Burns & Grove 2005:236; Polit & Beck 2012:739).

1.11.2 Exploratory

Exploratory research focuses on a phenomenon of interest and pursues the factors that influence, affect, cause or relate to the study (Polit & Hungler 2000:17). The exploratory design assisted the researcher in establishing whether QATs effectively fulfilled their functions under the guidance of QANMs, so that the quality of nursing care was improved.

1.11.3 Descriptive

The purpose of a descriptive design is to observe, describe and document aspects of a situation that occurs naturally. It aims at obtaining complete and accurate information through the use of instruments, such as a structured questionnaire (Burns & Grove 2009:237). The researcher considered a descriptive design appropriate as the study wished to describe the actual functions and activities of the QANMs and QATs as they occur, in order to determine whether they had an effect on the provision of quality patient care in the selected public hospitals (Polit, Beck & Hungler 2001:180).

1.12 RESEARCH METHODOLOGY

Research methodology refers to the methods or procedures used to acquire desired knowledge (Gill & Johnson 2002:227). Polit and Beck (2008:758) refer to research methodology as “steps, procedures and strategies taken to investigate the problem being studied and to analyse the collected data”. Quantitative data was collected and analysed to determine the outcome of appointing QANMs on the provision of quality patient care in the selected public hospitals (Polit & Beck 2008:14). The research methodology includes the population; sample and sampling; data collection and analysis; validity and reliability; pilot study or pre-test, and ethical considerations (see chapter 3 for detailed discussion).

1.12.1 Population

A research population refers to all the elements (individuals, objects or substances) of interest to the researcher and that meet certain criteria for inclusion in a given universe (Burns & Grove 2007:42; Brink et al 2006:123). In this study, the population consisted of two components, namely the site and the respondent populations. The site population was all public hospitals in Limpopo Province that employ QANMs, and the respondent population consisted of two strata: QANMs and QATs. Polit and Beck (2008:340) refer to strata as “mutually exclusive segments of a population”.

1.12.2 Sample and sampling

A sample is a set of elements that make up the population. LoBiondo-Wood and Haber (2006:261) describe sampling as “the process of selecting a portion or subset of the designated population to represent the entire population”. Probability sampling was used for both hospitals and QAT respondents. Probability sampling involves the random selection of elements from a population. The fishbowl technique was used where each name of an element within a specific population was written in a separate slip of paper, the slips were placed in a bowl, the bowl was then shaken and the slips of names selected until the required number was selected according to the sample size (Polit & Beck 2008:344).

The sample for this study consisted of two public hospitals per district that employ QANMs, which made ten (10) hospitals; the sample of QANMs was ten (10) respondents, and the sample of QATs resulted in one hundred and eighty (180) respondents, which then constituted a combined sample of 190.

Inclusion criteria are characteristics that a subject or element must possess to be included in the target population (Burns & Grove 2009:344). To be included in this study, the hospitals had to employ QANMs, and the respondents had to be QANMs or members of a QAT with at least one year's experience as such.

The researcher used probability or random sampling for the hospitals. The researcher selected the "fishbowl technique" of sampling in which the name of each hospital that employed QANMs was written on a piece of paper, placed in a bowl per district and two hospitals were individually and randomly selected per district (Brink et al 2006:127).

Stratified random sampling was used for the respondents. According to Polit and Beck (2008:767), stratified random sampling is the "selection of study participants from two or more strata of the population independently". Stratified sampling ensures that different segments of the population are represented (Mateo & Kirchhoff 2009:161). In this study, the researcher divided the respondents into two strata, namely QANMs and QATs. The QANMs were purposefully selected as there was one per hospital. The names of the different QATs per hospital were pooled and eighteen (18) team members were randomly selected per hospital.

1.12.3 Data collection

Data collection is the process of collecting data from respondents by means of a data-collection instrument (Polit & Beck 2012:191). In this study, the researcher chose a structured questionnaire as the data-collection instrument (see annexures D₁ & D₂ for the two questionnaires used). A questionnaire is a method of gathering self-reported information from respondents through the administration of questions in a paper-and-pencil format (Polit et al 2001:436).

1.12.4 Data analysis

Data analysis entails categorising, ordering, manipulating, summarising and describing the data in meaningful terms (Brink et al 2006:170). This study used descriptive statistics to describe and summarise the data. Descriptive statistics convert data into an organised, visual representation in a variety of ways to give meaning to the report. Descriptive statistics describe and synthesise data (Brink et al 2006:170). A statistician analysed the data using the Statistical Package for Social Sciences (SPSS version 12). The results were presented in frequencies, percentages, graphs and tables.

1.12.5 Validity and reliability

The quality of research is determined by its validity and reliability. Validity and reliability are the most important concepts of measurement (De Vos, Strydom, Fouché & Delpont 2005:110).

Validity is the degree to which an instrument measures what it is supposed to measure (Polit & Beck 2012:735). In this study face and content validity were considered (see chapter 3 for full discussion).

Reliability is “the extent to which measures are consistent or repeatable over time” (Brink et al 2006:157). Reliability refers to “the degree of consistency or dependability with which the instrument measures the attribute it is designed to measure. If the instrument is reliable, the results will be the same each time the test is repeated” (Polit & Hungler 2000:308). Reliability was evaluated by pre-testing the instruments to test if the questions were clear and concise for the main study.

1.12.6 Pre-test or pilot study

The preliminary data-collection instruments were submitted to the researcher’s supervisors and expert researchers for face and content validation. The researcher conducted a pre-test of the data-collection instruments with QANMs and QAT members who were not included in the main study. The rationale for pre-testing the instrument was to determine reliability and validity of the instrument, to establish how long it took to complete the questionnaire and to determine if the respondents understood the

questions. Based on the feedback, the researcher adjusted the questionnaires where necessary for clarity (Brink et al 2012:175).

1.12.7 Ethical considerations

Ethics deals with matters of right and wrong. Ethics refers to a set of moral principles which is suggested by an individual or group and offers rules and behavioural expectations about the correct conduct towards participants (De Vos et al 2005:57). Polit and Beck (2008:167) emphasise that when people are used as study respondents, “care must be exercised in ensuring that the rights of the respondents are protected”. In addition, the researcher adhered to the ethical standards for nurse researchers outlined by the Democratic Nursing Organisation of South Africa (DENOSA) (1998:232). Accordingly, the researcher obtained permission to conduct the study and upheld the respondents’ rights to respect for human dignity, beneficence and justice (Brink et al 2006:31). The ethical considerations are discussed in detail in chapter 3.

1.13 SCOPE AND LIMITATION OF THE STUDY

The study focused on determining the effect of appointing quality assurance nurse managers (QANMs) for the purpose of enhancing the provision of quality patient care in public hospitals in Limpopo Province. The study was limited to selected public hospitals in Limpopo Province who employed QANMs and made use of QATs. Thus the results are only applicable to the hospitals involved and generalisability to the whole province and/or elsewhere is not possible.

1.14 DEFINITION OF KEY TERMS

For the purposes of this study, the following terms are used as defined below:

- **Effect:** An effect is an outcome or influence which is the result or consequence of an action. According to Shongwe (2000:21), outcomes are the end results of an activity. For the purpose of this study effect will be the results of employing QANMs in the provision of patient care.

- **Manager:** A manager is a person who manages an organisation or a group of staff. He or she controls the activities of others in a team or an institution as a means of meeting the goals of the institution (*Concise Oxford Dictionary* 2010:864).
- **Nurse manager:** This is a professional nurse who is registered with the South African Nursing Council (SANC) and holds a diploma or degree in nursing administration/health service management (Lephoko 2004:10). The *Occupation Specific Dispensation (OSD) Determination* (DoH 2007b:4) divides nursing management posts into the following categories: senior manager, manager, deputy/assistant manager and unit/operational manager. In this study a nurse manager refers to the QANM who is among a team of managers, but is appointed in the selected public hospitals in Limpopo Province to specifically monitor the provision of quality care to patients.
- **Patient care:** Patient care refers to looking after a person who is sick and is under medical treatment and nursing care (*Concise Oxford Dictionary* 2010:873). According to Clarke and Donaldson (2008:5), patient care is “the appropriate execution of assessment and interventions intended to optimise patient outcomes and prevent adverse events”. Patient care in this study refers to the provision of holistic care to the sick person by members of the nursing profession with the aim of ensuring positive outcomes and prevention of medico-legal hazards.
- **Professional nurse:** This is a person who is qualified and competent to independently practise comprehensive nursing in the manner and to the level prescribed and who is capable of assuming responsibility and accountability for such practice (South Africa 2005:6). A Professional Nurse (PN) can fill different posts such as Senior Nurse Manager, Manager, Deputy/Assistant, Unit/Operational Manager, Chief Professional Nurse and Senior Professional Nurse (DoH 2007b:4). In this study Professional Nurse is a category of a nurse who is a member of QAT.
- **Public hospital:** This is a public institution for health care, providing patient treatment by specialised staff and equipment and often, but not always, providing for longer-term patient stay (Von Holdt & Murphy 2006:1). In this study, public hospitals will refer to all hospitals of the Limpopo Province that are managed by the Department of Health.

- **Quality assurance (QA):** QA is a process of establishing desirable standards of nursing care, and planning and providing the type of care that will meet those set standards (Meyer, Naude & Van Niekerk 2004:235). In this study, quality assurance means a method by which the delivery of patient care is evaluated for effectiveness against standards which are established to provide a basis for assessing potential risk, improving quality care and cost-effective safe nursing care in the public hospitals of Limpopo Province.
- **Quality assurance nurse manager (QANM):** A QANM is a person who oversees QA activities in the institution. He/she is amongst a team of Nurse Managers, but is specifically appointed in the selected public hospitals of Limpopo Province to monitor the provision of quality care to patients (DoH 2007a:18). In this study, QANM also includes professional nurses who act as deputy QANMs in instances where a quality assurance manager is not a nurse.
- **Quality assurance team:** This is a group of people who periodically assess and review the nursing and health care provided, against benchmarks and other local or national reference points (Offei, Bannerman & Kyeremeh 2004:12). In this study a **quality assurance team** will mean a team consisting of one Operational Manager, one Professional Nurse and one Staff Nurse for each patient unit/ward in the hospital (DoH 2007a:17). The QATs function under the guidance of QANMs.
- **Quality patient care:** This is safe, effective, timely, patient-centred and efficient care rendered to the patient (Mitchell 2005:1). For the purpose of this study the provision of quality patient care will be care that is rendered to the patient in a satisfactory manner.

1.15 STRUCTURE OF THE STUDY

Chapter 1 outlines the study, including the purpose, research design and methodology, and ethical considerations, and defines key concepts.

Chapter 2 discusses the theoretical framework and literature review conducted for the study.

Chapter 3 describes the research design and methodology.

Chapter 4 discusses the data analysis and interpretation.

Chapter 5 presents the findings, conclusions and recommendations.

1.16 CONCLUSION

The National and Provincial Department of Health introduced QANMs in order to set standards and monitor care for the purpose of improving the quality of patient care. This chapter briefly described the context, purpose, significance, research design and methodology, and ethical considerations of the study, and defined key terms.

Chapter 2 discusses the theoretical framework for and the literature review conducted for the study.

CHAPTER 2

Literature review

2.1 INTRODUCTION

This chapter discusses the literature review undertaken for the study. A literature review assists researchers to comprehend and extend their knowledge of the phenomenon under study (Polit & Beck 2008:105). In order to assess the effect of appointing quality assurance nurse managers (QANMs) on the provision of quality patient care in the selected public hospitals of Limpopo Province, the researcher undertook a literature review on quality in nursing care delivery.

A literature review involves researching, reading and understanding literature relevant to the study (Brink et al 2012:55). LoBiondo-Wood and Haber (2002:78) refer to a literature review as a systematic and critical review of published and unpublished literature on a topic. According to Meyer, Van Niekerk and Naudé (2004:274), the purpose of a literature review is to

- Enable the researcher to develop a theoretical framework for interpretation of the research study.
- Analyse and critically appraise current knowledge of the area of study and methodological procedures implemented in other studies.
- Determine the importance of the study in nursing and to apply the knowledge gained to relevant content in nursing.

This chapter discusses the literature review undertaken on

- The theoretical framework of the study (Donabedian's *model of quality*)
- Quality management
 - Quality of care
 - Standards and criteria
 - Quality planning

- Quality assurance
- Quality control
- Quality improvement

2.2 THEORETICAL FRAMEWORK

A framework is the general conceptual frame that supports a study (Polit & Beck 2008:142). The framework is based on propositional statements resulting from theory. This study was based on Donabedian's (1997) *model of quality*.

2.2.1 Donabedian's *model of quality*

After studying health care, Donabedian developed his *model of quality* to provide a framework to examine health services and evaluate the quality of care. He proposed that one could assess whether high quality of care is provided by examining the structure of the setting in which care is provided, by measuring the actual process of care, and by assessing the outcome of care (Donabedian 1997:1145). Donabedian's *model of quality* has been extensively used as theoretical framework on quality measurement, quality assurance and quality improvement. The researcher considered the model appropriate for this study on quality assurance.

Donabedian proposed that quality can be broken down into three main components, namely structure, process and outcome. He maintained that the components of the model are not independent but influence each other, and there is no precise separation of each. Good structure should promote good process and good process should, in turn, influence good outcome (see table 2.1). Table 2.1 illustrates Donabedian's *model of quality*.

Table 2.1 Donabedian's model of quality

Structure	Process	Outcome
<ul style="list-style-type: none">• Facilities and layout	<ul style="list-style-type: none">• The steps of nursing process	<ul style="list-style-type: none">• Health status of patients and population
<ul style="list-style-type: none">• Human resources	<ul style="list-style-type: none">• Recording of patients history	<ul style="list-style-type: none">• Improvement in patient's knowledge and behaviour
<ul style="list-style-type: none">• Material resources	<ul style="list-style-type: none">• Formulating goals	<ul style="list-style-type: none">• Patient and family satisfaction
<ul style="list-style-type: none">• Vision and mission of the organisation	<ul style="list-style-type: none">• Making nursing diagnosis	
<ul style="list-style-type: none">• Philosophy and goal of the organisation	<ul style="list-style-type: none">• Planning and implementing nursing care	
<ul style="list-style-type: none">• Policies and procedure	<ul style="list-style-type: none">• Evaluating nursing care	

Source: (El-haj,Lamrini & Rais 2013:20)

2.2.1.1 Structure standards

A structure standard refers to the characteristics of the setting in which care takes place. Structure standards include facilities, material resources, human resources and organisational structures (El-haj et al 2013:20).

Indicators of structural standards include financial resources, personnel, equipment, facilities and information systems. The structure standard is not only the way hospitals function but also the policies in place that influence the care given. The structure component contains the legal parameters that guide and govern the expected performance by means of the vision, mission, philosophy, goals, policies and job descriptions of the individuals in the institution/organisation (El-haj et al 2013:22).

2.2.1.1.1 Facilities and layout

Facilities refer to building structures (Booyens 2008:158). This study focused on health care facilities. A health care facility is a facility that provides health care service, which involves contact with patients for diagnosis and treatment provided by the health care professionals and not necessarily support services like catering, laundry and logistics

which are not the core business and therefore can be contracted (DoH 2006:5). Health facilities include clinics, day hospitals, health care centres, and hospices (DoH 2006:6).

Reiling, Hughes and Murphy (2008:1) maintain that the facility design with its equipment and technology has an impact on the quality of care and patients' safety. A nurse's station that is away from patients has an impact on patient care as patients' needs will not be attended to immediately as the call for help may not be heard because of the distance.

This study only utilised selected public hospitals of Limpopo Province. The hospitals used were mainly district hospitals. According to The National Department of Health (2006:10), district hospitals should provide diagnostic, treatment, care, counselling, and rehabilitation services. The public hospitals of Limpopo Province provide the following services:

- Family medicine and primary health care (PHC)
- Medicine
- Surgery
- Obstetrics
- Psychiatry
- Paediatric
- Eye care
- Geriatrics
- Rehabilitation

The clinical services offered depend on the needs of the catchment population being served (DoH 2006:10).

2.2.1.1.2 Human resources

The WHO (2009:2) defines human resources in a health care institution as "all people who are engaged in activities that improve health". Human resources in health care institutions refer to nurses, doctors, and administrative and support personnel. All the human resources in health care institutions play an important role in quality patient care.

Human resources are people who bring certain traits to the workplace (Muller, Bezuidenhout & Jooste 2006:235). These traits include knowledge and skills, ability to learn, commitment, intelligence and aptitude. Human resources have the ability to think, perceive and also have individual skills and knowledge; therefore they differ from other resources. Moreover, human resources also have the ability to assess and question management's decisions and conduct – therefore management should strive to gain their trust and cooperation in their dealings. Human resources in any health care institutions are the most valuable asset.

This study focused mainly on nurses as they are the ones who render the nursing care. Certain constraints can hinder nurses from providing quality nursing care to patients. These constraints include budget; absenteeism; lack of skilled nurses; high turnover, and low morale. Lack of adequate human resources (nurses) affects the provision of quality patient care. The nurses involved in this study were QANMs and the quality assurance teams (QATs). Their roles and functions will be discussed under human resources as part of the structural standards.

- *Quality assurance nurse managers*

Quality assurance nurse managers (QANM) are highly skilled and experienced nurses, who have experience in QA activities. They must demonstrate ability to coordinate and oversee QA activities in the institution. They are amongst a team of nurse managers, but are specifically appointed in the selected public hospitals of Limpopo Province to monitor the provision of quality care to patients (DoH 2007a:18).

In this study, QANMs also included professional nurses who acted as deputy QANMs in instances where a quality assurance manager was not a nurse.

- *Quality assurance team*

A quality assurance team (QAT) consists of different categories of nurses; their responsibility is to coordinate the implementation of QA policies and activities (Offei et al 2004:12).

In this study a QAT referred to a team consisting of one operational manager, one professional nurse and one staff nurse for each patient unit/ward in the hospital (DoH 2007a:17). The QATs function under the guidance of QANMs.

- *Role of QANMs*

QANMs will be discussed at provincial, district and hospital level. The role of management, health professionals (personnel) and QATs in QA activities at the hospital level will also be discussed.

- *Provincial level*

A policy on quality in health care for South Africa (DoH 2007a:18) makes provision for provincial health managers to play a crucial role in supporting district health managers in QA through facilitating, coaching, monitoring and supervising QANMs and QATs at facility/hospital level. The provincial level also supports the district level in implementing policies developed by the QA directorate at national level. Provincial QANMs have the following functions (DoH 2007a:18; Offei et al 2004:19; Ministry of Health 2007:3):

- Coordination, guidance and coaching
- Organising quality assurance workshops and seminars
- Training and facilitation during workshops
- Monitoring and supportive supervision of health facilities
- Encouraging high performance by comparing institutions and promoting best practice
- Developing region-specific standards and adapting national standards
- Giving feedback to districts
- Establishing reward/incentive systems

At the provincial level there is one QAM and one deputy QAM who in both instances may not be a nurse. The Limpopo Province QA Office is headed by the senior manager for monitoring and evaluation who is a nurse and acts as the provincial QANM. The provincial QANM assists QAMs at district level by supporting them when they monitor the institutions under their jurisdiction. The provincial and district QANMs give in-service training and workshops to institutional QANMs. Institutional QANMs then give workshops to QATs.

- *District level*

The policy on quality in health care makes provision for quality assurance managers (QAMs) to be appointed at district level because that level is close enough to the community, in order to cater to the needs of the community. The QAM should be a health professional who is strongly dedicated to caring for patients, knowledgeable, well trained and committed to continuous quality improvement. This description is best suited to Professional Nurses (PNs), hence PNs were seconded as QANMs and subsequently employment at district and hospital/facility level (DoH 2007a:17).

At the district level there is one QAM/QANM and one deputy QAM/QANM and the policy makes provision for the district level QAMs to co-ordinate and support health facilities in the district. The district level QAM achieves this through:

- Co-ordinating and giving guidance to the hospitals on QA
- Promoting QA awareness
- Monitoring performance of hospitals in QA
- Supporting the training of QA at the hospitals
- Encouraging high performance by comparing institutions and promoting best practice
- Organising training for health workers to improve their knowledge and skills

The QAMs at the district level monitor quality care at the hospitals by making support visits and then providing feedback of findings on QA inspections to the QANM and QATs at the specific hospital (DoH 2007a:18; Offei et al 2004:19; Ministry of Health 2007:3).

- *Role of QAMs at hospital level*

According to DoH (2007a:18), at the hospital level there is one QAM and one deputy QAM who in both instances may not be a nurse. If neither of them is a nurse, then there is a Quality Assurance Coordinator (QAC) who is a PN. If there is no QANM, the QAC shall be utilised. The QAC is a PN seconded to the position. The role of QANMs at hospital level is different from the one at national, provincial and district levels. The hospital QANM is given instructions by the QANMs at provincial and district levels. The responsibility of the hospital QAM is to coordinate the activities of the QATs at the hospital. She/he is the link person between the QAT and management team of the health care service. The role of QANM at hospital level is to:

- Ensure that quality standards are being met
- Ensure that quality improvement teams are established within the hospital
- Ensure that health professionals participate in the QA programmes
- Monitor patient care and QA programmes
- Develop and implement programmes to enhance patient care
- Supervise QATs
- Develop a budget for QA activities (DoH 2007a:18)

The QAMs at the hospital level plays a crucial role as they report quality activities to the hospital management and also to the QAM at district and provincial levels.

- *Role of QATs*

The policy on quality in health care makes provision for QATs at hospital level to carry out QA activities. QATs are responsible for:

- Coordinating and providing guidance and information on quality matters to professional health care personnel
- Promoting QA awareness
- Conducting patient satisfaction surveys
- Using facility data to improve quality of care

- Identifying quality problems and drawing up action plans
- Monitoring the implementation of quality activities
- Producing/adapting/updating relevant local standards, guidelines and protocols; disseminating information on quality assurance to staff (DoH 2007a:18; Offei et al 2004:19; Ministry of Health 2007:3)

QATs at the hospital are guided and led by a QANM. A QAT consists of one Operational Manager, one Professional Nurse and one Staff Nurse for each unit/ward in the hospital, such as medical, surgical, maternity, orthopaedic, paediatric, and ophthalmic units, as well as for the operating theatre, outpatient department and casualty. QATs of a hospital consist of three (3) members from each unit/ward. The total number of QAT members depends on the size of the hospital; that is, the number of units/wards in the hospital. QATs are important functional units as they are responsible for monitoring and evaluating quality care in hospital ward/units according to the Department of Health's set standards (DoH 2007a:18).

- *Role of health professionals in QA*

The policy on quality in health care requires all health professionals to be aware of the need to improve quality during their routine duties and patient activities. Health professionals should also bring to the attention of the QANM quality issues that require further analysis and planning. Members of staff assigned to carry out specific quality improvement tasks should see those tasks as part of their routine responsibilities rather than extra duties. For instance, they should be delegated to audit patients' records on a regular basis.

The unit QAT members are required to identify and solve problems related to QA that emerge in their specific unit. The QA-related problems are referred to the QANM if the QATs are unable to solve them in the unit (DoH 2007a:18; Offei et al 2004:19; Ministry of Health 2007:3).

2.2.1.1.3 *Material resources*

Material resources include equipment and supplies required to carry out nursing care activities. Drugs, medical equipment and supplies have an impact on the quality of patient care.

- *Equipment and supplies*

Kaur, Hall and Attawel (2001:17) describe equipment as capital and durable items that last for several years. Equipment includes items like patient beds, examination tables and X-ray machines.

Supplies, or consumables, are items that need replacing on a routine basis, such as disposable, single-use items like syringes, needles and surgical gloves (Kaur et al 2001:17).

Equipment is critical in the delivery of quality nursing care as it enables nurses to provide care. No or inadequate equipment impacts on the quality of care. Equipment should be in good working order. Faulty equipment puts both nurses and patients in danger and therefore should be reported in order to be replaced, repaired or condemned (Meyer, Naude & Van Niekerk 2004:235).

In August 2012, the *Mail and Guardian* (Shamase 2012:1) reported that the Limpopo Province Department of Health was one of five departments that were put under administration in December 2011 due to poor governance and financial mismanagement. The conditions of care in five public hospitals in Limpopo province were found to have deteriorated despite state intervention. Some radiology departments were not functioning because of broken equipment and orthopaedic patients were not receiving the required care. Furthermore, the maintenance and supply of medical equipment and the procurement of pharmaceutical supplies were the most severely hit by poor/inadequate administration processes. Consequently, patients were not receiving quality care as there were insufficient equipment, supplies and drugs.

2.2.1.1.4 Vision

A vision is an idea or a dream of a possible and desirable state of an organisation. The vision spells out how an organisation or service should function and motivates the personnel to work towards the goal. It functions as a framework that guides the planning process. The personnel should be monitored to assess whether they are working towards the vision of the institution and if not should be held accountable (Jooste 2008:39; Booyens 2008:23).

All personnel should be made aware of the vision of quality assurance since it focuses on provision of quality care and applies to all sections in the institution.

2.2.1.1.5 Mission

A mission turns a vision into reality. It states the purpose of the organisation. A mission must consist of operational, ethical and financial guides for the organisation. It should inspire and challenge personnel. It states the plan of delivering patient care (Jooste 2008:41; Booyens 2008:24).

The mission statement is the uppermost priority in the planning process. The purpose of the mission statement is to form the parameters of the organisation's activities. The mission will give direction to personnel on how to accomplish the vision of the organisation in terms of quality assurance activities (Jooste 2008:41; Booyens 2008:24).

2.2.1.1.6 Philosophy

Booyens (2008:24) describes a philosophy as "a guide for action". Nursing philosophy is based on the values and beliefs held by nursing personnel about the nature of their work in achieving the mission of the hospital. Nursing philosophy consists of four components, namely patient, nurse, nursing practice, and environment (see figure 2.1).

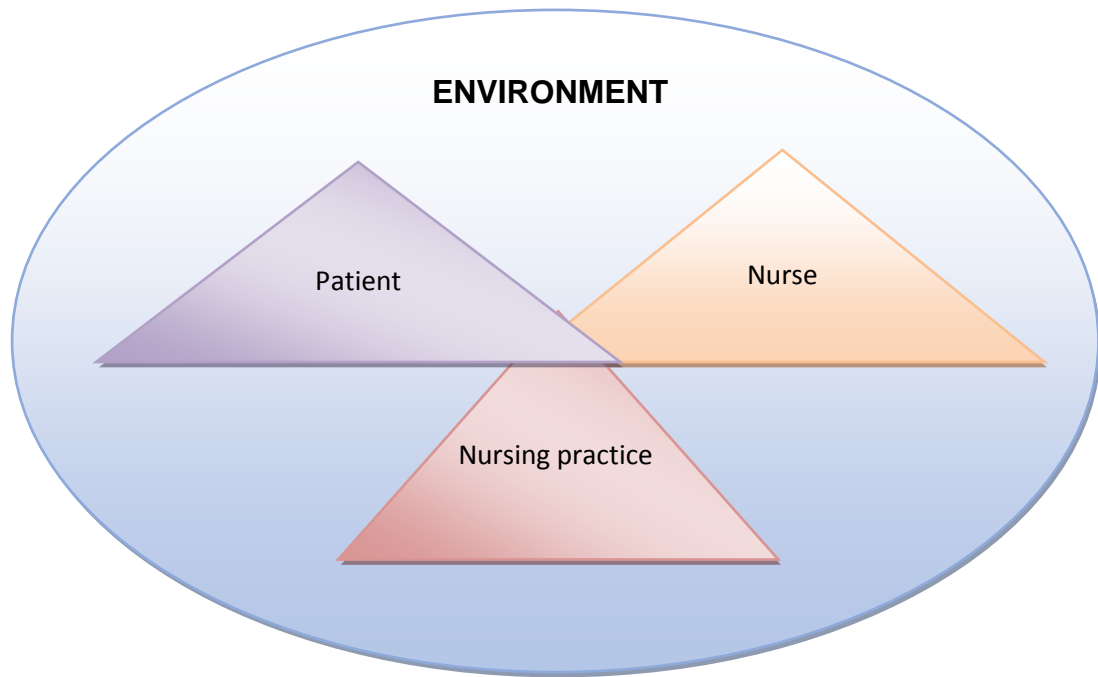


Figure 2.1 Components of nursing service philosophy
(Adapted from Booyens 2008:25)

- *Nursing practice*

Nursing practice is a professional, scientifically based caring action, and is aimed at the individual, family and community from conception and including the complete life-cycle. The aim of nursing practice is to conserve life, maintain and promote health, prevent illness, and care for the individual until a dignified and peaceful death. Nurses, in collaboration with members of the health team and other service providers, strengthen and address health variations to facilitate client maturation and adaptation (Booyens 2008:24).

- *Patient*

The patient is a unique being with physical, psychosocial, spiritual and cultural needs. Individuals are persons in their own right and responsible for their own health choices which should be acknowledged and respected at all times. Patients are capable of entering into reciprocal caring relationships which fosters health, growth and self-actualisation (Booyens 2008:24).

- *Nurse*

The nurse practitioner is expected to be a competent, caring, compassionate individual who delivers a comprehensive service within the legal and ethical parameters of society and the profession. It is the fundamental responsibility of nurse practitioners to conserve life, promote health and relieve suffering. Care must be delivered with respect for the dignity of people and nurses must accept accountability for their own acts and omissions (Booyens 2008:25).

- *Environment*

Environment is the milieu in which individuals, families, group and communities strive to live and achieve optimal health. As people attempt to mature and adapt within their environments, dynamic interactions serve as a source of growth. Environments encompass psychosocial, cultural, religious, political, economic and physical contexts which impact on the efforts of all (Booyens 2008:25).

2.2.1.1.7 Policy and procedure

Booyens (2008:41) describes a policy as a plan of action, an explanation of how goals will be achieved. A procedure is a short range of statements or techniques to be used in realising an institutional objective. A procedure indicates how a policy must be carried out.

The QANM should bring the policy manual of QA to the attention of all personnel, especially the QATs. The QANM must also ensure that all nursing personnel comply with policy guidelines.

2.2.1.2 Process standards

Process standards refer to activities that are carried out in rendering and receiving health care. The activities carried out in the nursing process are assessment, planning, implementation, evaluation and recording (Lundqvist & Axelsson 2007:52; Hunt et al 2004:249). Process standards also include interpersonal processes like providing information, emotional support and involving patients in decisions that pertain to their

care. Patients' actions in seeking care as well as health practitioners' actions in formulating a diagnosis and recommending or implementing treatment are also process standards (Lundqvist & Axelsson 2007:52; Hunt et al 2004:249).

The process component encompasses the following activities which are carried out by professional personnel, patients and/or the family (Donabedian 2003:1; Booyens 2008:267; Shongwe 2000:19):

- Assessment procedures
- Interpretation of signs and symptoms and applying appropriate interventions
- Education/teaching patients
- Recording of care given
- Utilisation of resources
- Effective communication

Process standards can be adapted based on the state and the ruling of the individual or work group responsible for making decisions within the background of that situation (Booyens 2008:267).

2.2.1.2.1 Patient care

Quality patient care is the appropriate execution of assessment and interventions intended to optimise patient outcomes and prevent adverse effects (Clarke & Donaldson 2008:5).

Patients should receive care and treatment that meets their basic needs and contributes to their recovery by ensuring that care standards and protocols are followed (DoH 2011c:8). Action should be taken to reduce unintended harm to patients and staff (adverse effects resulting from the care given, including operations performed and failures of the health care system and its workers through ignorance, inadequate inputs, system failure or, at times, from negligence). Patients with special needs or at high-risk, such as pregnant women, young children, the mentally ill and the elderly, should receive special attention.

The process standard activities can be divided into preventive, diagnostic, treatment, nursing care and rehabilitation (Lundqvist & Axelsson 2007:52; Hunt et al 2004:249). Nursing care refers to the care rendered to patients in the general medical and surgical as well as specialised units like intensive care units. Diagnostic and treatment support refers to the patient care that is rendered in operating theatres, and laboratory, pharmaceutical and radiological services. Rehabilitative care refers to the patient care that is rendered at clinic or community healthcare centres (Jooste 2008:267).

Donabedian (1997:45) further classifies the process component of quality assurance into technical and interpersonal aspects. Technical aspects refer to the application of current medical science and technology to obtain a balance between benefits and risks. Interpersonal aspects refer to the nurse-patient relationship, which includes the ethical standards specific to health and to the patients' expectations and involvement in the care provided by including them in making decisions on their care (El-haj, Lamrini & Rais 2013:20).

This study investigated whether there was adherence to technical and interpersonal aspects.

2.2.1.3 Outcome standards

Outcome standards refer to the patient's health status or a change of health status resulting from the medical/nursing care received. It includes intended outcomes, such as healing and the relief of pain, as well as unintended outcomes such as complications. It also includes the improvement of patient's knowledge and valuable changes in patient's behaviour (Hunt et al 2004:249).

The outcome standards seek to establish whether the goals of care have been achieved. The outcome is indicated by the health status, the cost of care and patient's satisfaction and wellbeing. A well-defined structure standard increases the chance of achieving the anticipated outcome. If there is enough equipment, qualified, experienced and competent staff, and the organisational structures are in place and do not pose any danger to both patients and health care providers, the intended outcome can be achieved; for instance, relief of pain or a healthy patient (Hunt et al 2004:249).

This study wished to investigate the standard of providing patient care. The researcher investigated the structure and process of care given in order to determine the outcome thereof.

2.3 QUALITY MANAGEMENT

Quality management refers to activities and functions involved in the determination of quality policy and its implementation through the four main components, namely quality planning, quality assurance, quality control, and quality improvement. These activities include formulating a quality policy and setting quality objectives (Moullin 2010: 37).

The South African policy on quality in health care is aimed at assuring quality in health care and continuously improving the care rendered to patients (DoH 2007a:2). Total quality management consists of four components: quality care; quality planning; quality assurance, and quality control. Although this study focused on quality assurance, the four components cannot be separated as they complement each other. They are therefore briefly discussed.

2.3.1 Quality care

The World Health Organization (WHO) (2006:9) defines quality as the level of attainment of health systems' intrinsic goals for health improvement and responsiveness to legitimate expectations of the population. The Department of Health (2007a:1) defines quality as getting the best results possible with the available resources.

Quality of care can be defined in different ways depending on the perspective followed. It can be defined in simply as "doing the right thing right away" (Offei, Banner & Kyeremeh 2004:3). According to Donabedian (1985:5), quality care can also be described as care that meets acceptable technical standards as well as the needs and expectations of users and communities. Donabedian (1985:5) emphasises that it is difficult to define quality care because health care providers and consumers, that is clients and patients, see the issue from their distinctive perspectives.

According to Donabedian (1985:5), patients define quality care differently to doctors and nurses. Doctors and nurses refer to quality care as how well they treat patients and

patients refer to quality of care as the interpersonal aspect of care. Patients refer to quality as appearance of environment and personnel; reliability, dependability of service delivery; responsiveness, competence, understanding of patient, access, courtesy, communication, credibility, security and all the *Batho Pele* principles (Tasso, Behar-Horestein, Aumuller, Gamble, Grimaudo, Guin, Mandell & Ramey 2005:4).

2.3.1.1 Dimensions of quality

Quality is the degree of excellence in health care. 'Excellence' has many dimensions but in health care it refers to safe, effective, patient centred, timely, efficient and equitable patient care (DoH 2007a:18).

- *Safety*

Safety means minimising the risk of injury, infection, harmful side effects or medico-legal risks. Safety involves both the patient and health care provider safety. Health care that is delivered to the patient should minimise risk; therefore care should be rendered by well-skilled and competent health care providers. Patients must be protected from acquiring nosocomial infections and from incompetent health care providers. Therefore, personnel should receive regular in-service education and training about inter alia, prevention of cross-infection and safe handling of blood and blood products in order to protect themselves from infection (Brown et al 2006:10; WHO 2006:10).

Safety also refers to the environment in which patient care is rendered; medico-legal hazards, such as falls due to slippery floors and shock due to faulty electric equipment, should proactively be prevented in patient care areas. Personnel should be taught how to use equipment and when to report faulty equipment like electrical equipment, leaking taps and non-functional lights. Personnel should be taught how to use fire extinguishers and to ensure that the fire extinguishers and hoses are serviced regularly by authorised personnel to ensure readiness in the event of a fire (Booyens 2008:128).

- *Effectiveness*

Effectiveness means that the services rendered must ensure that they accomplish what they were intended to accomplish and be acceptable in terms of total cost (Cromwell, Trisolini, Pope, Mitchell & Greenwald 2011:102). Effectiveness refers to the degree to which the health care services achieve the expected results.

The quality of health care depends on the effectiveness of the service delivery norms and clinical guidelines. It is an important dimension of quality at the central level where norms and specifications are defined (Shongwe 2000:23; Brown et al 2006:9).

Quality health care delivery standards should be adhered to. The care delivered should be evidence-based and result in outcomes that benefit the individual, family and communities, the care should also be based on individual, family and community needs (WHO 2006:9).

Based on scientific knowledge, health care services should be provided to all who could benefit and not provided to those who are not likely to benefit. This would then prevent underuse, misuse or overuse of services. Equipment should be used correctly to ensure maximum benefit. Effectiveness of care should be monitored and measured to evaluate whether it is the intended goal. The monitoring is done by setting standards which serve as a benchmark against which monitoring and evaluation can occur (Cromwell et al 2011:102).

- *Patient centred*

Patient-centred care refers to meeting patients' values, needs and preferences and providing education and support (Hinds 2013:1). Involving patients and families in their care promotes safety, saves time and builds relationships. Errors during care rendering are also avoided as the patient is fully involved in the care.

Patients are valued as persons in their own right, in their own social world, and in their specific context, so they need to be listened to, informed, respected and involved in their care (Epstein & Street 2011:1).

Delivery of health care should take into consideration the preferences and aspirations of individual health care users and the culture of their communities. The patient's values should guide all clinical decisions (WHO 2006:10; Cromwell et al 2011:102). The care rendered should respect and be responsive to the patient's preferences, needs and values. The patient should be consulted when planning the nursing care and treatment (WHO 2006:10; Cromwell et al 2011:102).

- *Timely*

Health care delivery should be delivered in time without undue delay. Time wasted is never regained. Health care providers should act promptly when rendering care (Brown et al 2006:9).

Patients should be attended to immediately when they seek care. Delays in rendering health care can result in patients, individuals and communities losing trust and confidence in health care providers. It is important to be timely because delays in providing care can deny people critically needed services and allow illness to progress and the patient's health condition to deteriorate. For example, bedridden patients could develop bedsores if back and pressure parts are not attended to. Bedsores may be difficult to treat and patients might even develop complications due to septicaemia. Health care delivery must be well organised to meet the needs of patients in a timely manner (Steinwachs & Hughes 2008:165).

Shamase (2012:3) reported that patients expressed disappointment and loss of confidence in the health care provided as they had to stand in long queues for hours to be attended to before receiving treatment.

- *Efficient*

Efficiency refers to the ability of rendering care without wasting resources, time and energy (Cromwell et al 2011:102). Efficiency is the measure of the relationship between the resources used to implement care and the outcome achieved. This dimension of quality affects product and service affordability where health care services are limited. Efficiency demands that necessary and appropriate care be provided to the applicable patient (Shongwe 2000:24; Brown et al 2006:9).

Health care providers should avoid waste, especially waste of equipment, supplies, ideas and energy. Resources should be used skilfully. The personnel should use time wisely in order to meet the various needs. For example, when bathing patients, nurses should assess their condition, communicate with them to obtain their history and give health advice based on the findings of the assessment (Cromwell et al 2011:102; WHO 2006:9).

- *Equity*

Equity refers to fairness in treating people. Quality services should be rendered to all who need care. Any form of discrimination should be avoided. All people should receive quality care whether rich, poor, young, old or disabled - all deserve the same standard of care. Quality health services should be available in all parts of the country whether in a village, town or city (Offei et al 2004:4).

Ensure that health care delivery is fair and does not discriminate against any group according to race, gender, ethnicity, age, sexual orientation (homosexuals) or geographic area (WHO 2006:10).

2.3.1.2 Standards and criteria

Structure, process and outcome standards were discussed in Donabedian's *model of quality* in terms of what they imply when striving for quality patient care. Standards and criteria as concepts, their functions and anticipated outcomes will be discussed next.

When discussing quality of patient care, standards should be set in order to monitor and measure the quality of care given. Standards are a measure of the expected level of care delivery. The standards reflect the ideal performance of a health care service in providing patient care. In considering standards, criteria are usually included. The concepts of standard and criteria are often used interchangeably, but do not have the same meaning. Criteria are developed for each standard to assess whether the standard has been achieved (Smith, Duell & Martin 2004:35).

- *Definition of standards*

Brown (2006:2), defines a standard as a statement of quality that is expected. Standards are measures that compare quantitative and qualitative values, criteria or norms. Furthermore, standards are performance models that result from integrating criteria with norms and are used to judge quality of nursing objectives, orders and methods. Standards are prescribed for patients, staff members and systems; therefore, there are standards for service, practice, and governance. This study focused on standards for practice affecting the delivery of patient care. Standards of care are statements of what good nursing care should be. They are considered the baseline for care delivery (Booyens 2008:268; Smith et al 2004:35).

Nursing standards are classified as structure, process and outcome standards (in line with Donabedian's *model of quality*), as they are descriptive statements of the desired level of resources and/or performance which affect and evaluate the quality of performances and outcomes (Booyens 2008:267; Smith et al 2004:35).

- *Definition of criteria*

Booyens (2008:267), defines criteria as descriptive statements of performance, behaviour, circumstances or clinical status that represent a satisfactory, positive or excellent state of affairs. Criteria are considered "mini-standards" because they serve as specific, measurable, achievable, realistic, and time focused (SMART) means of assessing performance and consequently the quality of care.

Criteria should be concrete, specific and also serve as a guideline for the collection and evaluation of data. Criteria can also be classified as structure, process and outcome like standards. The difference, however, is that the criteria give the details of how to achieve these standards (Booyens 2008:267).

2.3.2 Quality planning

Quality planning involves setting quality objectives and then specifying the operational processes and resources needed to achieve those objectives (Moullin 2010:36). Following complaints that care rendered in the health care services was not of good

quality, the Department of Health (2011b:15) identified six most critical areas of patient-centred care that would require attention in any health care facility.

In improving the quality of health care services, national health care standards were developed to fast-track the six areas for patient-centred care (DoH 2011b:15; 2011c:8):

- Values and attitude of staff
- Cleanliness
- Waiting time
- Patient safety and security
- Infection prevention and control
- Availability of basic medicines and supplies

Managers are expected to comply with the norms of these six areas in order to improve the quality of care. Careful long-term planning should be undertaken to achieve these norms since the improvement of quality is an ongoing process. Table 2.2 presents the six most critical areas for patient-centred care, complaints and resolutions.

Table 2.2 Six most critical areas for patient-centred care, complaint and resolution

FAST-TRACK AREA	CONCERN AND COMPLAINTS	DESCRIPTION	RESOLUTION
1. Values and attitude of staff	Caring staff and a feeling of better care	<ul style="list-style-type: none"> • Health workers are very rude and uncaring to their patients. • Patients feel that they are not treated with respect nor in a caring way 	<ul style="list-style-type: none"> • Improving values and attitudes: <ul style="list-style-type: none"> - All personnel to respect patients, visitors, family members and colleagues. - Management to address patients' concerns in a respectful manner (DoH 2011b: 4).
2. Cleanliness	Cleanliness of facilities	<ul style="list-style-type: none"> • Hospitals found to be dirty, untidy and unhygienic. • Inadequate/lack of cleaning materials and equipment • Lack of maintenance of facilities and equipment. 	<ul style="list-style-type: none"> • Cleanliness of hospitals and clinics: <ul style="list-style-type: none"> - The hospital to be spotless, clean and tidy. - This includes the building, grounds, amenities and staff. - Buildings to be maintained and equipment cared for and cleaned per manufacturer's instructions. - Cleaning materials and equipment to be purchased (DoH 2011b: 4).
3. Waiting time	Waiting time to receive treatment	<ul style="list-style-type: none"> • Waiting for hours to get files, see the nurse or doctor and to get medicines. • Even having to come back the following day for consultation 	<ul style="list-style-type: none"> • Reducing waiting time <ul style="list-style-type: none"> - Reduce time that patients wait to get files, to be assessed and diagnosed, to get treatment at the

FAST-TRACK AREA	CONCERN AND COMPLAINTS	DESCRIPTION	RESOLUTION
		<p>or to get medication.</p> <ul style="list-style-type: none"> • Some unfortunate patients dying in the queue without being seen. • Delay in referring patients. • Long waiting lists for specific treatment. 	<p>pharmacy and waiting list for surgery or specific treatment.</p> <ul style="list-style-type: none"> - Reduce delays in referring and transferring patients for further management where needed (DoH 2011b: 4).
4. Patient safety and security	Safety from accidental harm or medical error	<ul style="list-style-type: none"> • Patients not receiving best possible care because guidelines and protocols are not implemented. • Patients being harmed due to professional negligence and through acts and omissions. • No tight/good security in hospitals for both patients and staff. 	<ul style="list-style-type: none"> • Keep patients safe and provide reliable care: <ul style="list-style-type: none"> - Personnel to follow guidelines and protocols. - Disciplinary action to be instituted for negligence, acts and omissions committed. - Quality improvement measures to be implemented for all identified patient risk. - Adequate physical security and access control to hospital (DoH 2011b: 5).
5. Infection prevention and control	The risk of being infected in hospital	<ul style="list-style-type: none"> • No aseptic techniques and prevention of cross-infections in the hospitals. • Lack/inadequate supplies of essential disinfectants and equipment. • Improper disposal of medical waste. 	<ul style="list-style-type: none"> • Prevent infections from being passed on in hospitals: <ul style="list-style-type: none"> - Establish an infection prevention and control programme to reduce healthcare-associated infection. - Strict infection control

FAST-TRACK AREA	CONCERN AND COMPLAINTS	DESCRIPTION	RESOLUTION
			practices. <ul style="list-style-type: none"> - Specific precautions to reduce or prevent the spread of respiratory infection including Tuberculosis (TB). - Sterilisation services to be available and effective. - Proper handling and disposal of health care waste (DoH 2011b: 5).
6. Availability of basic medicines and supplies	Shortage of medicines	<ul style="list-style-type: none"> • Lack of medicine due to: <ul style="list-style-type: none"> - Supplier problems - Budget problems - Lack of funds - Failure to order from suppliers - Failure to distribute drugs to facilities - Ordering drugs/supplies late (Patients' conditions deteriorate and it is also costly as they use transport to visit hospitals.)	<ul style="list-style-type: none"> • Making sure medicines, supplies and equipment are available. <ul style="list-style-type: none"> - Order medicines and medical supply as needed. - Ordering, procurement procedures and delivery should be conducted on time. - Contingency plans to maintain cold chains for vaccines and drugs (DoH 2011b: 4).

Source: (Department of Health 2011b:4)

2.3.3 Quality assurance

The second component of quality management is quality assurance. Quality assurance monitors and evaluates aspects of health care and ensures that service standards are met. It is the responsibility of the QANM to ensure that these activities are carried out. This study focused on quality assurance and activities involved.

2.3.3.1 Definition of quality assurance

Sandle (2005:141) defines quality assurance (QA) as “the managed process whereby patient care is compared against the predetermined set standards.” These set standards are guaranteed to lead the action of implementing changes and ensuring that changes produce the desired improvement in the patient’s condition in health care services.

QA involves the activities that contribute to defining, designing, assessing, monitoring and improving the quality of health care provided by the healthcare professionals to be taken as part of the accreditation of the facilities, supervision of the facilities, supervision of the performance of health workers and the quality of health services (Muller et al 2009:491).

QA refers to the processes and procedures that systematically monitor different aspects of service to correct and ensure that service standards are being met (Kaarna, Kalda, Karu, Lember, Lindmate, Maroos, Maiste, Polluste, Raiend & Ratsep 2005:4). Moreover, QA is the part of quality management which focuses on providing confidence that quality requirements are being fulfilled (Kaarna et al 2005:4).

Donabedian (2005:692) describes QA as the systematic monitoring and evaluation of patient care delivery whereby any problems identified will be accompanied by action that will be implemented to resolve them.

The Department of Health (2007a:1) refers to QA as a set of activities that are carried out according to set standards in order to improve care provided to be effective and safe.

QA involves setting standards, monitoring to see if there is a gap between what is being done now and what is anticipated, and addressing the gap on a regular basis (Offei et al 2004:8).

QA is thus defined as a system, setting of standards and continuous monitoring of care in order to assess whether the set standards have been met.

2.3.3.2 Principles of quality assurance

According to Offei et al (2004:9), there are five principles of QA, namely that it:

- Is oriented towards meeting the needs and expectations of the patient/client.
- Focuses on systems and processes.
- Uses data to analyse service delivery.
- Encourages the use of teams in problem solving and quality improvement.
- Uses effective communication to improve service delivery.

2.3.3.3 Quality assurance in health services internationally

South Africa is not the only country facing challenges in achieving quality health care delivery. The literature review indicated that some countries face serious challenges while others had measures in place to enhance their quality assurance measures. In this section the researcher will briefly describe the QA situation in Kenya, the United Kingdom (UK), and Chicago, USA.

(a) Kenya

Quality health care is a priority in Kenya. Kenya has a good health care structure and health care is distributed equally in the country, in spite of major challenges like emerging HIV/AIDS, drug-resistant malaria, tough economic climate and increased population (Whittaker, Burns, Doyle & Lynam 1998:265). Kenya has the following problems with the provision of quality health care services:

- Poor supervision of service.
- Unavailability of emergency and other equipment.
- Health care providers do not provide the quality care expected.
- Poor morale of health care providers affects their productivity.
- Poor reporting of feedback due to lack of clear reporting systems and stationery.
- Poor implementation of infection control measures during execution of daily activities to prevent spread of infection.
- Poor methods of sharing information, report giving and scant information material to reach more people.
- Ineffective use of available resources which has an impact on the financial resources.

(b) The United Kingdom

In the United Kingdom (UK), quality assurance and clinical governance requires a team that will be responsible throughout the process of setting standards and monitoring of the quality assurance package to improve patient care. Furthermore the team should be allocated a manager to whom they report and who will supervise the whole process (Hunt, Keeley, Cobb & Ahmeddzai: 2004:248).

(c) Chicago

The Institute of Medicine (IOM) in Chicago stipulates that all health care professionals should be educated to deliver patient-centred care as members of an interdisciplinary team, emphasising evidence-based practice, quality improvement approaches and informatics. Provision of patient care is monitored to confirm whether care provided is up to or below expectation (Hughes 2008:2).

2.3.3.4 Quality assurance in South African health care services

A Policy on quality in health care for South Africa (DoH 2007a:1) makes provision for 8% or more of the gross national product (GNP) to be allocated to the public and private health care sectors. After inefficient use of resources, under- and overuse of services, poor record-keeping and other health care problems had been identified in both private

and public health sectors, the policy was introduced to improve the quality of care in both health sectors.

Since the first democratic elections in South Africa in 1994, health care service has undergone radical changes as a result of vital political and social change. Hospitals were reutilised in order to address backlogs in facilities caused by the neglect in upgrading of former homeland healthcare institutions under the apartheid government. The revitalisation did not immediately bring improvement in service delivery, especially provision of quality patient care. Nevertheless, the Department of Health developed the means to introduce and bring about the necessary improvement by establishing the Quality Assurance Directorate within the Department (Harrison 2009:17; DoH QA Directorate [organogra.htm](#).accessed:2010/09/16). This directorate is responsible for developing and implementing systems and methods to enhance quality assurance. The QA Directorate consists of national, provincial, district and facility levels and structures (Harrison 2009:17).

The National Directorate of QA gives direction and support to the provincial level in implementing QA measures through teamwork. The provincial level of QA, in turn, has a supporting role to the district level through facilitation, coaching, monitoring and supervision. Table 2.3 illustrates the levels of QA, the role players and their functions.

Table 2.3 Levels of QA, role players and their functions

QUALITY ASSURANCE LEVEL	ROLE PLAYERS	FUNCTIONS
National	National quality assurance directorate	<ul style="list-style-type: none"> • Define the norms and standards of healthcare service • Develop, implement and evaluate systems and methods of quality assurance • Strengthen national and international partnership within the QA domain • Facilitate interpersonal cooperation on quality-related matters for improvement in the provision of quality care (DoH QA Directorate organogra.htm.accessed:2010/09/16)
Provincial	QANM/QAM	<ul style="list-style-type: none"> • Co-ordination, guidance and coaching of QA activities • Organising quality assurance workshops and seminars • Training and facilitation during workshops • Monitoring and supportive supervision of health facilities • Encouraging high performance by comparing institutions and promoting best practice • Developing region-specific standards and adapting national standards • Giving feedback to districts and establishing reward/incentive systems (DoH 2007a:18; Offei et al 2004:19; Ministry of Health 2007:3).
District	QANM	<ul style="list-style-type: none"> • Co-ordinating and giving guidance to the hospitals on QA matters • Promoting QA awareness • Monitoring performance of hospitals in QA • Supporting the training of QA at the hospitals • Encouraging high performance by comparing institutions and promoting best practice • Organising training for health workers to improve their knowledge and skills (DoH 2007a:18; Offei et al 2004:19; Ministry of Health 2007:3).
Facility/hospital	QANM	<ul style="list-style-type: none"> • Ensure that quality standards are being met

QUALITY ASSURANCE LEVEL	ROLE PLAYERS	FUNCTIONS
		<ul style="list-style-type: none"> • Ensure that quality improvement teams are established within the hospital • Ensure that health professionals participate in the QA programmes • Monitor patient care and QA programmes • Develop and implement programmes to enhance patient care • Supervise QATs • Develop budget for QA activities (DoH 2007a:18)
	QATs	<ul style="list-style-type: none"> • Co-ordinating QA activities and providing guidance and information to professional health care personnel • Promoting QA awareness • Conducting patient satisfaction surveys • Using facility data to improve quality of care • Identifying quality problems and drawing up action plans • Monitoring the implementation of quality activities • Producing/adapting/updating relevant local standards, guidelines and protocols and disseminating information on quality assurance to staff (DoH 2007a:18; Offei et al 2004:19; Ministry of Health 2007:3)

Adapted from: DoH (2007a:18); Offei et al (2004:19); Ministry of Health (2007:3)

2.3.4 Quality control

Quality control is “proactive, continuous and reactive control by means of: setting standards, measuring actual performance against the standards, evaluating deviation and rectifying deviation” (Muller et al 2007:522).

Qotba (2012:9) states that quality control in health care organisations refers to activities that evaluate, monitor or regulate services rendered to patients/clients.

Parsley and Corrigan (1994:220) define quality control as “an effective method for coordinating the quality maintenance and quality improvement efforts of the different groups in an organisation so as to allow production at the most cost-effective level which allows for full client/patient satisfaction”.

Quality control is a set of activities intended to ensure that quality requirements are actually being met. Quality control can be done through peer reviews, patient satisfaction surveys and audits (Moullin 2010:36).

QANMs together with QAT members function as quality controllers.

2.3.4.1 Objectives of quality control

According to Qotba (2012:9), the objectives of quality control are to

- observe the process
- identify the variable characteristics
- track variables through statistical methods
- compare with the set standards

The QANMs and QATS conduct QA activities in order to meet the above activities.

2.3.4.2 Steps of the quality control process

Based on the set standards, Qotba (2012:10) states that quality control is conducted through the following steps:

- Establish criteria
- Identify the information relevant to the criteria
- Determine ways to collect the information
- Collect and analyse the information
- Compare collected information with the established criteria
- Make a decision about quality achievement or not
- Provide information and if necessary take corrective action
- Determine when there is a need for re-evaluation

All these steps are carried out by the QANMs and QAT members through monitoring and evaluation processes.

2.3.5 Quality improvement

Quality improvement refers to anything that enhances an organisation's ability to meet the quality requirements (Muller et al 2007:499). Quality improvement is a process whereby standards are set, and work performance is measured and evaluated against the set standards. It is a complex process consisting of principles, methods and techniques. Health service providers need to set standards, evaluate the performance and take action where necessary during provision of care to patients (Muller et al 2007:499).

Besides the QA Directorate, the *Patient's Rights Charter* and *Batho Pele Principles* also formed part of policy and steps to improve the quality of health care service delivery as a guide to providing customer-focused services. Table 2.4 presents policy and steps that indicate the Government and DoH's commitment to improving quality in the health sector.

Table 2.4 Policy and steps to improve the quality of health care in South Africa

DATE	NAME OF POLICY/-DOCUMENT/ACT	LEVEL	PURPOSE	RESPONSIBLE PERSONS
2000	Primary health care package for South Africa: a set of norms and standards	National	<ul style="list-style-type: none"> • To promote equity in health care. • Act as a guideline for provincial and district authorities to provide services. • To guide provincial government in allocation of resources. • To help to assess the unmet needs of the population. • To draw up plans to bring services up to national standards. 	Clinics/Primary health care (PHC) services Community District and provincial planner Provincial government
2007a	A Policy on quality in health care for South Africa	National	<ul style="list-style-type: none"> • To assure quality in health care. • To continuously improve the care that is being provided. 	Health care professionals Support staff Patients Community
2011c	National core standards	National	<ul style="list-style-type: none"> • Develop a common definition of quality care which should be found in all health establishments in South Africa, as a guide to the public and to managers and staff at all levels. • Establish a benchmark against which health establishments can be assessed, gaps identified and strengths appraised and • Provide for the national certification of compliance of health establishments with mandatory standards (South Africa 2011:8). 	All South African health care personnel

DATE	NAME OF POLICY/- DOCUMENT/ACT	LEVEL	PURPOSE	RESPONSIBLE PERSONS
2011b	Fast track to quality: the six most critical areas for patient- centred care	National	<ul style="list-style-type: none"> • To improve the health status of the community. • To strengthen the effectiveness of health care system. • To improve the quality of care provided. 	All South African health care personnel
2011	Policy on the management of public hospitals	National	<ul style="list-style-type: none"> • To ensure application/promulgation of applicable legislation and policies to improve functionalities of the hospital. • To ensure appointment of competent and skilled managers. • To provide for decentralisation of management. • To provide for development of accountability frame work. • To ensure training of managers in leadership, management and governance. 	Hospital management
2013	Self-assessment guide	Provincial	<ul style="list-style-type: none"> • Provide an overview of the purpose and benefits of doing self-assessments. • Provide guidelines for doing self-assessments in a thorough and efficient manner to get an accurate reflection of how the quality of care at a health establishment measures against the national core standards. • Provide guidelines on how to use the self-assessments as a tool for quality improvement (Limpopo 2013). 	QANM CEOs of the hospitals

The Provincial Department of Health QAM conducts support visits to the institutions to assess whether QA activities adhere to the national core standards. If not, remedial action is taken. The remedial action is the third step in the quality improvement cycle (Muller et al 2006:499). Figure 2.2 illustrates the quality improvement cycle.

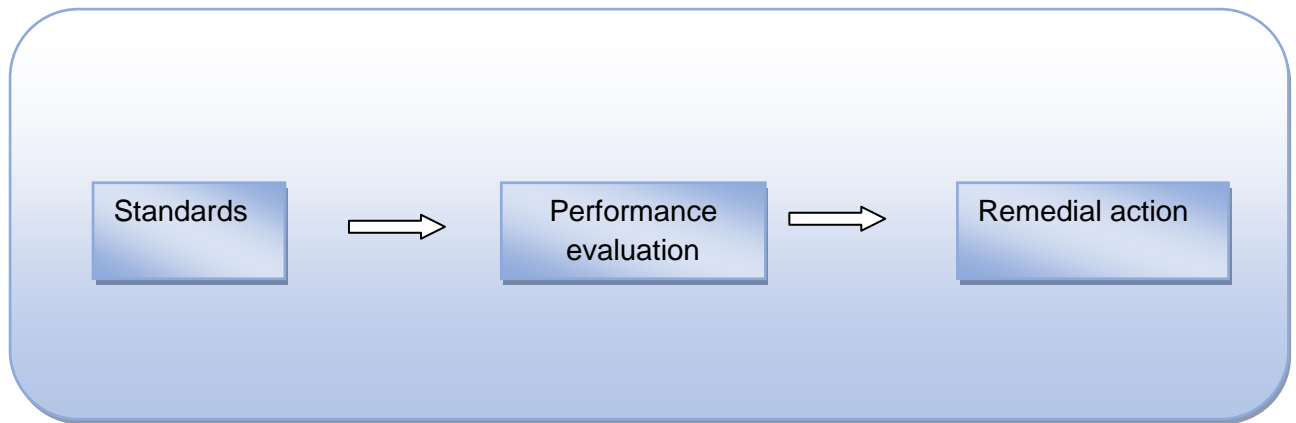


Figure 2.2 A quality improvement cycle
(Muller et al 2006:499)

2.4 CONCLUSION

This chapter discussed the literature review conducted for the study. The literature review covered Donabedian's *model of quality*, which formed the theoretical framework for the study, and definitions of quality, quality of health care, standards and criteria, and quality management. The four components of quality management, namely quality planning, quality assurance (QA), quality control, and quality improvement were discussed with special emphasis on QA as it was fundamental to the study. The review revealed that QA and the implementation of QA programmes is a necessity in order to provide quality patient care, not only in South Africa but also in Kenya, the UK, and Chicago, USA.

Chapter 3 describes the research design and methodology.

CHAPTER 3

Research design and methodology

3.1 INTRODUCTION

This chapter describes the research design and methodology of the study.

3.2 RESEARCH QUESTIONS, PURPOSE AND OBJECTIVES OF THE STUDY

Research questions guide researchers through research (LoBiondo-Wood & Haber 2006:47). Accordingly, the study wished to answer the following research questions:

- Did the QATs fulfil their stipulated functions under the guidance of the QANM?
- What effect did the appointment of QANMs have on the provision of quality patient care in the selected public hospitals in Limpopo Province?
- What are the aims, objectives, implementation and outcome of QA programme?
- What recommendations could be made from the study findings in enhancing the delivery of quality patient care in public hospitals of Limpopo Province?

The researcher wished to investigate whether appointing Quality Assurance Nurse Managers (QANMs) enhanced the provision of quality patient care. The purpose of the study was to determine the effect of appointing QANMs on the provision of quality patient care in selected public hospitals in Limpopo Province and to make recommendations.

A research objective is a statement that is clear, concise, declarative and written in the present tense (Brink et al 2012:217). The research objective focuses on one or two variables and indicates whether variables are to be identified, analysed, explored or described. In order to achieve the purpose, the objectives of the study were to

- determine whether the QATs fulfilled their stipulated functions under the guidance of the QANMs

- explore and describe the effect QANMs have had on the provision of quality patient care in selected public hospitals of the Limpopo Province
- explore and describe the aims, objectives, implementation and outcome of QA programme
- make recommendations for enhancing the quality of patient care in public hospitals in Limpopo Province based on the findings

3.3 RESEARCH DESIGN

A research design is an overall plan for obtaining answers to research questions and for handling some of the difficulties encountered during the research process (Polit & Beck 2008:765; Babbie & Mouton 2009:72; Grove, Burns & Gray 2013:195). In this study the researcher adopted a quantitative approach with an explorative and descriptive design to explore and describe the effect QANMs have had on the provision of quality patient care in selected public hospitals of the Limpopo Province.

3.3.1 Quantitative

A quantitative design refers to the general set up of organised and controlled procedures used to acquire information. The information acquired is numerical in nature and also acquired from formal measurement and analysed statistical (Polit & Beck 2012:14). Quantitative research uses numerical data to obtain information, describe the variables and examine the relationships between variables (Burns & Grove 2009:22).

The characteristics of quantitative research are as follows (Grove, Burns & Gray 2013:24):

- It answers the research question through data gathered by means of structured instruments such as interviews, questionnaires, observations, scales and physiological measures.
- It uses a deductive form of reasoning.
- Data is easy to quantify because it is presented in figures.

- The phenomenon under study is controlled in order to get accurate findings that relate to reality, thus reducing errors and enhancing the reliability and validity of research results.
- The researcher gives meaning to the research results when interpreting the numbers.

Quantitative research uses numbers and frequencies to provide statistics therefore numerical and approved statistical procedures were used in the collection and analysis of data.

3.3.2 Exploratory

Exploratory research focuses on a phenomenon of interest, investigates its nature and pursues the factors that influence, affect, cause or relate to the study (Polit & Hungler 2000:17; Polit et al 2001:23).

The researcher selected an exploratory design to establish what effect QANMs have had on the provision of quality patient care in selected public hospitals of Limpopo Province (Mouton 2002:103; De Vos et al 2005:24). The researcher explored the effect of employing QANMs in public hospitals as a means of improving the provision of patient care. This design enabled the researcher to collect detailed descriptive data, using a structured questionnaire to describe the activities of QANMs and QATs in performing QA functions.

3.3.3 Descriptive

The purpose of descriptive research is to “describe phenomena in real-life situations. Through descriptive research, concepts are described and relationships identified” (Burns & Grove 2005:52). Descriptive designs are commonly used in nursing research to gain more information about characteristics. Their purpose is to provide a picture of situations as they naturally occur and/or the rate at which they happen (Brink et al 2006:102, Burns & Grove 2005:237; Polit & Beck 2008:274; Grove et al 2013:26).

Descriptive designs focus on the prevalence, incidence, size, and measurable attributes of a phenomenon. The purpose is to gain a full picture of situations as they naturally

happen. The researcher selected a descriptive design to describe the role and functions of QANMs and the QATs and to describe the effect QANMs have had on the provision of quality patient care (Grove et al 2013:26). This study collected detailed descriptive information about the activities of the QANMs and QATs, using Donabedian's *model of quality* to structure the data-collection instrument.

3.4 RESEARCH METHODOLOGY

Research methodology refers to the methods or procedures used to acquire desired knowledge (Gill & Johnson 2002:227). Polit and Beck (2008:758) refer to research methodology as “steps, procedures and strategies taken to investigate the problem being studied and to analyse the collected data”. Quantitative data was collected and analysed to determine the outcome of appointing QANMs on the provision of quality patient care in the selected public hospitals (Polit & Beck 2008:14). The research methodology includes the population; sample and sampling; data collection and analysis; validity and reliability; pilot study or pre-test, and ethical considerations (De Vos et al 2012:252).

The research setting for this study was public hospitals in the Limpopo Province.

3.5 POPULATION

A research population refers to all the elements (individuals, objects or substances) of interest to the researcher and that meet certain criteria for inclusion in a given universe (Burns & Grove 2007:42; Brink et al 2012:131). In this study, there were two populations, namely the site or hospital population and the respondent population.

3.5.1 Site population

Limpopo Province is divided into five (5) districts, namely Capricorn, Sekhukhune, Vhembe, Mopani and Waterberg. The province has forty (40) public hospitals which are classified as follows: two (2) tertiary hospitals, three (3) specialised psychiatric hospitals, five (5) regional hospitals and thirty (30) district hospitals.

A target population is a group of individuals or institutions who meet the sampling criteria and to which the study findings will be generalised (Burns & Grove 2005:724). To be included in this study, the hospitals must have employed QANMs.

Of the 40 public hospitals in Limpopo Province, 23 employed QANMs. These hospitals are scattered around the five (5) districts, and were all accessible to the researcher thus they formed the site target population.

3.5.2 Respondent population

The respondent population consisted of two strata, namely QANMs and the QATs. There is one QANM per hospital. A QAT consists of an operational manager, a professional nurse, and a staff.

3.6 SAMPLE AND SAMPLING

A sample is a subset of the population and is selected from the accessible population. A sample is part of a whole or a subset of the total set of objects, events or persons, selected by the researcher to participate in a study (Burns & Grove 2005:42; Polit & Beck 2008:339; De Vos et al 2005:194).

Sampling means taking any portion of a population or universe as representative of that population or universe (Burns & Grove 2005:35; Polit & Beck 2008:339; De Vos et al 2005:193). LoBiondo-Wood and Haber (2006:261) describe sampling as “the process of selecting a portion or subset of the designated population to represent the entire population”. Probability sampling was used for both hospitals and respondents. Probability sampling involves the random selection of elements from a population (Polit & Beck 2008:344).

In the case of the sites/hospitals, the researcher used the “fishbowl technique” of sampling where the name of each hospital that employed QANMs was written on a piece of paper which was placed in a bowl per district and two hospitals were randomly selected one at a time per district (Brink et al 2012:127). This resulted in a sample of ten (10) public hospitals.

After selecting the hospitals, stratified sampling was used for the respondent population. Stratified sampling ensures that different segments of the population are represented (Mateo & Kirchhoff 2009:161). The researcher divided the respondents into two strata, namely QANMs and QATs. The QANMs were purposefully selected as there is only one per hospital. The QATs formed the second strata; the names of the team members were written per hospital and then pooled, and 18 team members were randomly selected per hospital. Table 3.1 indicates the number of respondents selected.

Table 3.1 Number of respondents

District	Number of hospitals	Number of QANM	Number of QAT members	TOTAL PER DISTRICT
Capricorn	2	2	36	38
Mopani	2	2	36	38
Sekhukhune	2	2	36	38
Vhembe	2	2	36	38
Waterberg	2	2	36	38
TOTAL	10	10	180	190

3.7 DATA COLLECTION

Data collection is “the precise, systematic gathering of information relevant to the research purpose or specific objectives, questions or hypothesis of a study” (Polit & Beck 2008:67). Data is collected from the respondents by means of a data-collection instrument (Polit & Beck 2012:191).

3.7.1 Data collection instrument

The researcher developed a structured questionnaire as data-collection tool in line with the research objectives in order to minimise subjectivity (information bias). In structured questionnaires the wording of both the questions and response alternatives are predetermined (Polit & Beck 2008:414).

Questionnaires have advantages and disadvantages. According to Polit and Beck (2012:305), questionnaires have the following advantages:

- Data can be gathered from a large number of respondents in a relatively short time.
- Standardised data that is gathered is easy to analyse.
- It is possible to compare the results to similar studies that have been conducted.
- The whole process can be administered by one person who has the necessary skills.

Polit and Beck (2012:305) point out the following disadvantages of questionnaires:

- People may be reluctant to fill a questionnaire.
- They may take time to respond and follow-up by the researcher may be necessary, which is time consuming.
- The response rate may be poor and may thus compromise the study.
- Questions may be misinterpreted which gives inaccurate responses.
- Designing, producing and distributing the questionnaire is expensive and time consuming.

The researcher developed two questionnaires: one for the QANMs and one for the members of the QATs. Both questionnaires were divided into the same sections but the questions were phrased differently to acquire the information pertinent to the respondents' roles and responsibilities. The questionnaire was developed from the literature review. The questionnaire took twenty (20) minutes to complete which was within the length of completion. According to Brink et al (2012:157), the questionnaire should not take more than 20 to 25 minutes to complete. The questionnaires contained closed and open-ended questions (see annexures D₁ and D₂) and consisted of five sections:

Section A: Biographical information.

Section B: Availability of QA documents

Section C: QANM's roles, functions and activities

Section D: effect of QANM on quality of patient care

Section E: Open-ended questions on the aims, objectives, implementation and outcome of QA programme

3.7.1.1 Validity and reliability of the data collection instrument

The quality of research is determined by its validity and reliability (De Vos et al 2005:110). In this study, the researcher adhered to the principles of reliability and validity. In order to obtain valid and reliable data, researchers must ensure that the measuring instruments are at the acceptable levels of validity and reliability before utilising them.

3.7.1.1.1 Validity

Validity is the degree to which an instrument measures what it is supposed to measure. It is the measure of the truth or accuracy of what it claims, thus validity serves as verification that the instrument measures the concept in question and the concept is measured accurately (Polit & Hungler 2000:308). There are four types of validity, namely internal, external, content, and face validity (Polit & Hungler 2000:308; De Vos et al 2005:166). In this study, face and content validity applied to the data collection instrument.

Face validity refers to whether an instrument appears to measure the construct appropriately and is adequately representative of the conceptual variables (Jackson 2006:44). The instrument should be a relevant measure of the attributes of interest to the study and even to the respondents (Polit & Beck 2008:458). It is determined by inspecting the items in the questionnaire to ascertain whether the instrument contains items that measure the relevant variables appropriate to the study (Polit & Hungler 2000:418).

Content validity refers to whether the items or questions measure what the instrument is supposed to measure (Polit & Beck 2008:458-459). Content validity refers to the extent to which the instrument represents the factors of the study. In this study, the questionnaire contained items that measured the aspects under study appropriately and adequately. The questions were developed in line with the study objectives, the theoretical framework and the literature review.

The researcher developed the questionnaire and submitted it to the research supervisors and the statistician to evaluate the content and ensure adequacy and relevance of questions. The researcher requested inputs from colleagues and research experts in order to enhance the content validity of the questions.

3.7.1.1.2 Reliability

Reliability refers to the consistency with which an instrument measures attributes or variables relevant to the study. Reliability is associated with a measure's stability, consistency or dependability (Polit & Beck 2008:452).

According to LoBiondo-Wood and Haber (2002:192, 317), reliability refers to coherence, precision, stability, equivalence and homogeneity of the instrument's content. Reliability is a measure that can produce the same results if the behaviour is measured repeatedly by means of the same scale. It is the level at which the instrument produces the same results over repeated measurements. The instruments' reliability was tested by means of the Cronbach's Correlation Coefficient/Cronbach's Alpha value (see chapter 4 for full discussion).

3.7.1.2 Pre-testing the data collection instrument

A pre-test is a small-scale trial with participants who are not included in the final study (Polit & Hungler 2000:320). The researcher pre-tested the data-collection instruments with QANMs and QATs in a hospital not included in the study. The rationale for testing the instrument was to determine the validity and reliability of the instrument, how long it took for the respondents to complete the questionnaire, and whether they understood all the questions.

The preliminary data-collection instruments were submitted to the researcher's supervisors, expert researchers and colleagues for content validation. After the pre-test the researcher amended the questionnaires according to the respondents' feedback (Brink et al 2012:174).

3.9.2 Data collection process

Prior to data collection, the researcher obtained background information about the nature of the research field in order to know how to approach the respondents (De Vos et al 2005:257). The main aim was to ensure that there was a contact person to direct the researcher on where to reach the respondents in order to orientate them and hand over the questionnaires and also where to collect them after completion (Watson, McKenna, Cowman & Keady 2008:284). The researcher contacted the CEOs in this regard and was directed to the Nursing Service Managers (NSMs) as the study was aimed at the QANMs and QATs, thus involving nursing care. The NSMs and nursing personnel were warm, welcoming, positive and interested after discussing the objectives with them. The respondents were gathered within the hospital during lunch time to discuss the study with them. The researcher explained the purpose of the study, how the data would be collected, their right to privacy, anonymity and confidentiality, and that participation was voluntary to the respondents. The respondents then signed the informed consent form (annexure E). The respondents were given time to complete the questionnaires. The questionnaires were collected on the date that was set with the contact person. In some hospitals, the return rate was poor.

3.10 DATA ANALYSIS

Data analysis means categorising, ordering, manipulating, and summarising data and then describing data in meaningful terms (Brink et al 2006:170). The aim of data analysis is to reduce data to an understandable and interpretable form so that the origin of the research problems can be deliberated and verified and decisions taken about the study conducted. Data analysis can be analysed manually or by computer (De Vos et al 2012:16).

A statistician captured and analysed the data using the SAS/JMP version 10 program. Data were summarised by means of factor analysis, frequency distributions and descriptive statistics. According to Brink et al (2006:170), descriptive statistics describe data using frequencies and percentages and convert and summarise data into an organised visual representation or picture in order to provide meaning. Descriptive statistics employ frequency distribution, measures of central tendency, dispersion or variability and measures of relationship. Examples of descriptive statistics are averages

and percentages. Descriptive statistics describe and synthesise data (Brink et al 2006:170; Polit & Beck 2008:556).

Inferential statistics refer to a method that permits inferences on whether the results observed in a sample are likely to occur in the larger population (Botma, Greeff, Mulaudzi & Wright 2010:166-167). Inferential statistics has two kinds of test, namely parametric and non-parametric tests. The study used factor analysis as a parametric type test and the chi-square as a non-parametric test (Brink et al 2012:190).

The chi-square test determines whether the views of the QANMs and QATs on specific matters were different. The Chi-square test is a nonparametric test of statistical significance used to assess whether there is a relationship between two groups of variables. The Chi-square test is used to test frequencies about group differences in quantities when contingency tables have been created (LoBiondo-Wood 2006:377; Polit & Beck 2012:420; Grove et al 2013:586). Refer to chapter 4 page 69.

Factor analysis was also performed. Factor analysis studies interrelationships among large numbers of variables and unravels those relationships to identify groups of variables most closely related together (Grove et al 2013:566). These closely related variables are grouped together into a factor. Several factors may be identified within a data set. Once the factors have been identified mathematically, the researcher explains why the variables are grouped as they are. Thus factor analysis assists in the identification of theoretical concepts and is also used in an attempt to make sense of responses from a large number of questions (refer to chapter 4 page 69).

3.11 ETHICAL CONSIDERATIONS

Ethics deals with matters of right and wrong. Research that involves human beings as subjects should be conducted in an ethical manner to protect their rights. Polit and Beck (2008:167) emphasise that when people are used as study respondents, “care must be exercised in ensuring that the rights of the respondents are protected”. Accordingly, the researcher upheld the four fundamental ethical principles (Brink et al 2012:35):

- Permission to conduct the study
- Respect for human dignity

- Beneficence
- Justice
- **Permission to conduct the study**

The researcher obtained ethical clearance and permission to conduct the study from the Health Studies' Higher Degrees Committee of the University of South Africa (UNISA) (see annexure F), the Provincial Office of Department of Health Ethics Committee, Limpopo Province (see annexure A and B), and the chief executive officers (CEOs) of the selected hospitals (see annexure C).

- **Respect for human dignity**

The respondents had the right to decide whether to participate in the study, or not. Informed, voluntary and written consent was obtained from the respondents before they could participate in the study (see annexure E). The researcher met the respondents in each selected hospital in a venue, and explained the purpose of the study before asking them to commit themselves by signing the consent form and completing the questionnaire (Burns & Grove 2001:206; Polit et al 2001:140).

The respondents were protected from exploitation and unfair treatment by explaining the purpose of the study, and that they were free to participate or not, without any undue pressure (Polit et al 2001:134). The researcher explained that there was no stipend and they were free to withdraw from the study if they felt threatened (Brink et al 2012:35).

- **Beneficence**

The principle of beneficence means "to do well and not to harm". The principle was adhered to by securing the well-being of the respondents, who had the right to protection from discomfort and harm. The respondents were not harmed in any physical or emotional manner (De Vos et al 2012:58; Burns & Grove 2005:188; Brink et al 2012:32).

- **Justice**

The respondents had the right to fair selection and treatment. The hospitals and population were selected in a scientific manner, thus supporting fairness. Confidentiality and anonymity were observed during data collection, analysis and publication of results. Confidentiality refers to the researcher's responsibility to prevent all data gathered during the study being linked to any participant or being divulged (Brink et al 2012:35). The researcher ensured that the questionnaires were kept safe and no other person could gain access to the data. Anonymity refers to the identities and names of the participant not being known even to the researcher (Brink et al 2012:35). This was ensured by separating the consent forms from the questionnaires and not allowing respondents to write their names on the questionnaires. The names of the hospitals were also omitted in the final reports, thereby ensuring fair treatment and the right to privacy for the respondents and the selected public hospitals (Grove, Burns & Grey 2013:162).

3.12 CONCLUSION

This chapter discussed the research design and methodology. The population, sample and sampling, data collection and analysis, validity and reliability of the questionnaires, and ethical considerations were all described.

Chapter 4 presents the data analysis and interpretation, and the findings.

CHAPTER 4

Data analysis and interpretation

4.1 INTRODUCTION

This chapter describes the data analysis and interpretation. The purpose of the study was to determine the effect of appointing QANMs on the provision of quality patient care in the selected public hospitals of Limpopo Province and to make recommendations, where appropriate. Data was collected from QANMs and QATs in ten public hospitals of the Limpopo Province. The objectives of this study were to

- determine whether the QATs fulfilled their stipulated functions under the guidance of the QANMs
- explore and describe the effect QANMs have had on the provision of quality patient care in selected public hospitals of Limpopo Province
- make recommendations to enhance the delivery of quality patient care in public hospitals of Limpopo Province based on the findings

4.2 DATA ANALYSIS

Data analysis involves classifying, organising, controlling, summarising and describing the data in meaningful terms (Brink et al 2006:170). The aim of data analysis is to reduce data to an intelligible and interpretable arrangement so that the significance of the research problem can be studied and verified, and conclusions drawn. Data analysis can be analysed manually or by computer (De Vos et al 2012:249).

A statistician analysed the data, using the SAS/JMP version 10 program. One hundred and eighty (180) questionnaires were distributed to the QATs and 102 were returned, representing a 57.00% response rate. Ten questionnaires distributed to the QANMs were all returned, giving a 100.00% response rate.

The data was summarised by factor analysis, frequency distributions and descriptive statistics, using frequencies and percentages, and presented in tables and pie graphs. Percentages were rounded off to the second decimal point.

The data was further subjected to a Chi-square test to determine whether the views of the QANMs and QATs on specific matters were different. The chi-square test is explained in details in chapter 3 (LoBiondo-Wood 2006:377; Polit & Beck 2012:420; Grove et al 2013:586).

The reliability of the questionnaires was determined using Cronbach's Coefficient Alpha. Cronbach's Alpha is a coefficient of internal consistency that provides a measure of consistency of a test or a scale. Internal consistency describes the degree to which all the items in a test measure the same concept or construct therefore reliability is a necessary but not sufficient condition of validity. Reliability is concerned with how well an instrument measures, therefore, the more reliable the instrument, the more reliable the results will be. Cronbach's Alpha is expressed as a number between 0 and 1; the larger the overall alpha coefficient, the more likely those items contribute to a reliable scale (De Vos et al 2012:177).

In the analysis of both questionnaires (for the QAT and QANM respondents), the alpha coefficient was 0.87, thereby reinforcing the reliability of both instruments.

Factor analysis was also performed. *Factor analysis* assists in the identification of theoretical concepts and is also used in an attempt to make sense of responses from a large number of questions. *Factor analysis* is explained in details in chapter 3 (Grove et al 2013:566).

This study used two questionnaires, one for the QATs and one for the QANMs. The results of the data collected for both sets will be discussed comparing similar content, where applicable. The rationale for using two questionnaires was to differentiate between the functions of QANMs and QATs.

4.3 DATA ANALYSIS AND RESULTS

This section discusses the research findings. Data was collected by means of two structured questionnaires, using a five-point Likert scale, ranging from strongly agree to strongly disagree, yes and no, and open-ended questions. The response alternatives of strongly agree, agree, do not know, disagree, and strongly disagree were reduced to three categories, namely *agree*, *do not know* and *disagree* to facilitate discussion.

Both questionnaires contained the following sections, and the results are discussed under the sections:

- Section A: Biographical information
- Section B: Functions of QANMs or QATs
- Section C: Outcomes of QA activities

4.3.1 Section A: Biographical information

The respondents' biographical information covered the type of institution, current nursing position, and years of experience as QANM or QAT member.

4.3.1.1 Type of institution at which respondents were employed

The respondents were employed at regional or community/district hospitals (see table 4.1). Of the respondents, 40.00% (n=4) of the QANMs and 10.78% (n=11) of the QAT members were employed at regional hospitals and 60.00% (n=6) of the QANMs and 89.22% (n=91) of the QAT members were from community/district hospitals.

Table 4.1 Institution in which the QANM respondents (n=10) and QAT respondents (n=102) were employed

Institution	QANMs		QATs	
	n	%	n	%
Regional hospital	4	40.00	11	10.78
Community/District hospital	6	60.00	91	89.22
Total	10	100.00	102	100.00

- Limpopo Province has two tertiary hospitals, which were not included in this study. The reason for not using tertiary hospitals is that they have their own ethical committee and all studies conducted in these hospitals must obtain ethical clearance from the hospital's ethical committee even if permission was granted by the Provincial Department of Health. Only regional and district/community hospitals were utilised in this study. The majority of the respondents were from community/district hospitals (Limpopo Province Annual Performance Plan 2008: 89).

4.3.1.2 Respondents' current post in the institution

Of the respondents, 3.57% (n=4) were employed as Deputy/Assistant Managers; 2.67% (n=3) were Unit/Operational Managers; 1.78% (n=2) were Chief Professional Nurses; 34.82% (n=39) were Senior Professional Nurses; 41.07% (n=46) were Professional Nurses, and 16.07% (n=18) were Staff Nurses (see table 4.2) (Limpopo Province Annual Performance Plan 2008:89).

Table 4.2 Respondents' current rank/post (n=112)

Current rank/post	n	%
Deputy/Assistant Managers	4	3.57
Unit/Operational Managers	3	2.67
Chief Professional Nurse	2	1.78
Senior Professional Nurse	39	34.82
Professional Nurse	46	41.07
Staff Nurse	18	16.07
Total	112	99.98

4.3.1.3 Respondents' years of experience as QANM or QAT member

The respondents were required to indicate how long they have been a QANM or a QAT member. This would indicate the duration of their experience as the latter normally leads to better performance.

Of the respondents, 60.00% (n=6) of the QANMs and 61.76% (n=63) of the QATs had been in their positions for three years or longer (see table 4.3). It could, therefore, be assumed that they knew what was expected of them and knew their employing hospitals well (Limpopo Province Annual Performance Plan 2008:89).

Table 4.3 Respondents' years of experience as a QANM or QAT member (n=112)

Years	QANM		QAT members	
	n	%	n	%
1 year	1	10.00	19	18.63
2 years	3	30.00	20	19.61
3 years	3	30.00	11	10.78
4 years	-	-	2	1.96
5 + years	3	30.00	50	49.02
Total	10	100.00	102	100.00

4.3.2 Section B: Functions of QANMs and QATs

The functions of the QANMs and QATs stipulated by the DoH (2007a:18) were applied to Donabedian's *model of quality* resulting in them being divided into structure, process and outcome standards. The results of the two groups of respondents will be discussed separately under each standard.

4.3.2.1 Structure standards

Structure standards refer to the organisation and all its resources, including material, human and premises, which will be utilised during the execution of daily activities in order to provide quality care to patients. This includes peer review mechanisms, continuing education programmes for nursing staff, and policy and procedure manuals.

Structural components also refer to the security and rationality of equipment, condition of the ward or unit and type of patient, and level of knowledge and consciousness of health of all who are involved in health care, such as the patient or client, community and family members and healthcare professionals.

Nine statements gauged the respondents' views of the QA structure standards in their institutions. The findings on the three standards will be discussed separately for the QAT and QANM respondents in each standard.

4.3.2.1.1 QAT respondents' views of structure standards

QAT members were required to respond with regard to structure standards. Table 4.4 summarises the QAT respondents' responses on structure standards.

Table 4.4 QAT respondents' views of structure standards (n=102)

Structure items/statements	Agree f (%)	Don't know f (%)	Disagree f (%)	Total responses f (%)
A1 The institution has a QA programme	97 (95.10)	4 (3.92)	1 (0.98)	102 (100.00)
A2 The institution has a QA vision	89 (87.25)	11 (10.78)	2 (1.96)	102 (99.99)
A3 The institution has a QA mission	86 (84.31)	14 (13.73)	2 (1.96)	102 (100.00)
A4 The institution has QA related goals	90 (88.24)	9 (8.82)	3 (2.94)	102 (100.00)
A5 The institution has QA procedure manuals	86 (84.31)	12 (11.76)	4 (3.92)	102 (100.00)
A6 Equipment in the unit is sufficient to provide quality patient care	48 (47.06)	5 (4.90)	49 (48.04)	102 (100.00)
A7 Equipment in the unit is generally in good working order	58 (56.86)	6 (5.88)	38 (37.25)	102 (99.99)
A8 Medical supplies are adequate in the unit	36 (35.29)	6 (5.88)	60 (58.82)	102 (99.99)
A9 The environment in the unit is conducive to the provision of quality patient care	58 (56.86)	4 (3.92)	40 (39.22)	102 (100.00)

Figures 4.1 to 4.7 illustrate the QAT respondents' views of the structure standards.

- **Item A1: The institution has a QA programme**

The respondents were required to indicate whether the institution has a QA programme (see figure 4.1). Of the QAT respondents, 95.10% (n=97) *agreed* and 0.98% (n=1) *disagreed* that the institution has a QA programme, and 3.92% (n=4) *did not know*. The findings indicate that the institutions have a QA programme and can thus be expected to be focused on enhancing quality service delivery (DoH 2007a: 20).

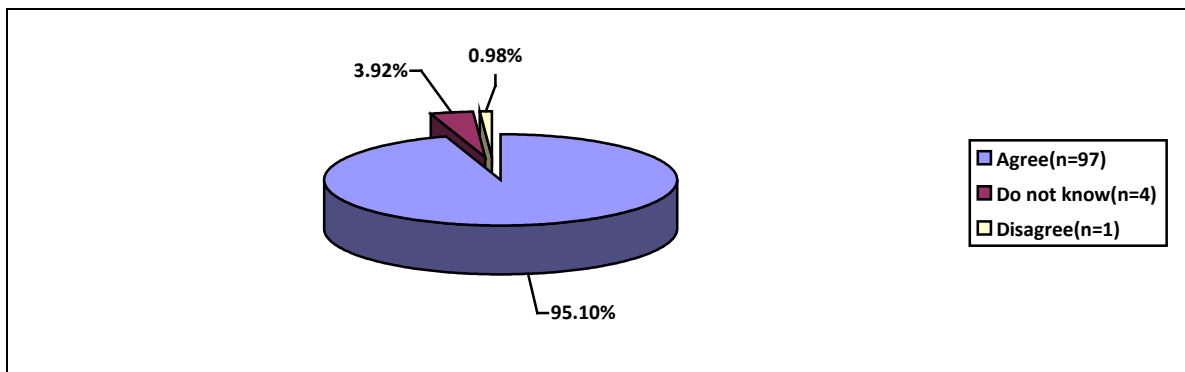


Figure 4.1 QAT respondents' knowledge of the availability of a QA programme (n=102)

- **Item A2: The institution has a QA vision**

The respondents were required to indicate if their institution had a QA vision. Figure 4.2 indicates that of the QAT respondents, 87.25% (n=89) *agreed*, 10.78% (n=11) *did not know* and 1.96% (n=2) *disagreed* that the institution had a vision. A vision motivates personnel to work towards the goal (Jooste 2008:39; Booyens 2008:23).

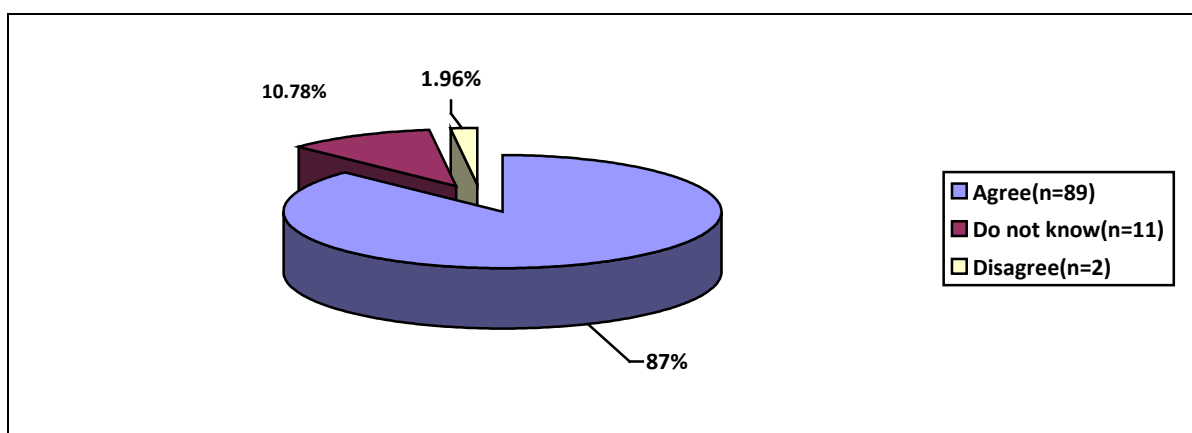


Figure 4.2 QAT respondents' knowledge of the availability of a QA vision (n=102)

- **Item A3: The institution has a QA mission**

Of the QAT respondents, 84.31% (n=86) *agreed* that the institution had a QA mission, 13.73% (n=14) *did not know*, and 1.95% *disagreed* (see figure 4.3). A QA mission gives direction to personnel on how to accomplish the organisational quality assurance activities (Jooste 2008:41; Booyens 2008:24).

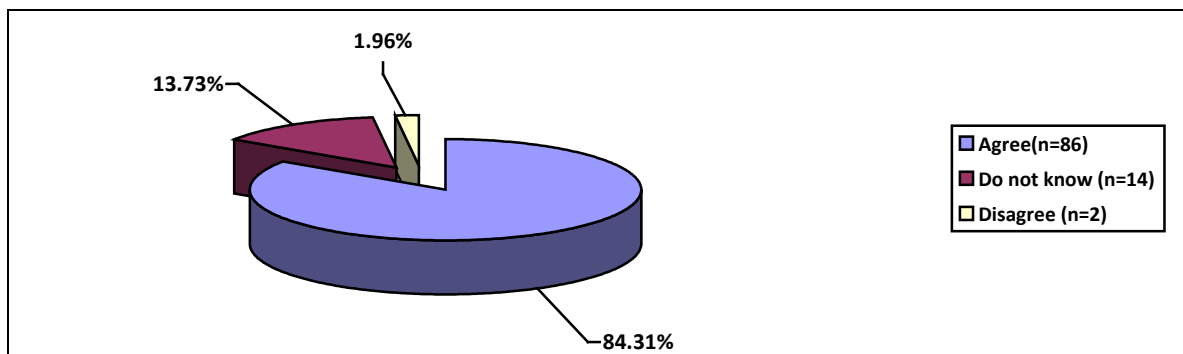


Figure 4.3 QAT respondents' knowledge of the availability of a QA mission (n=102)

- **Item A4: The institution has QA-related goals**

Of the QAT respondents, 88.24% (n=90) *agreed*, 8.82% (n=9) *did not know*, and 2.94% (n=3) *disagreed* that the institution had QA-related goals (see figure 4.4). Goals are used to determine the standard of service delivery (Muller et al 2007:52). The availability of goals makes it possible to evaluate the quality of nursing care provided.

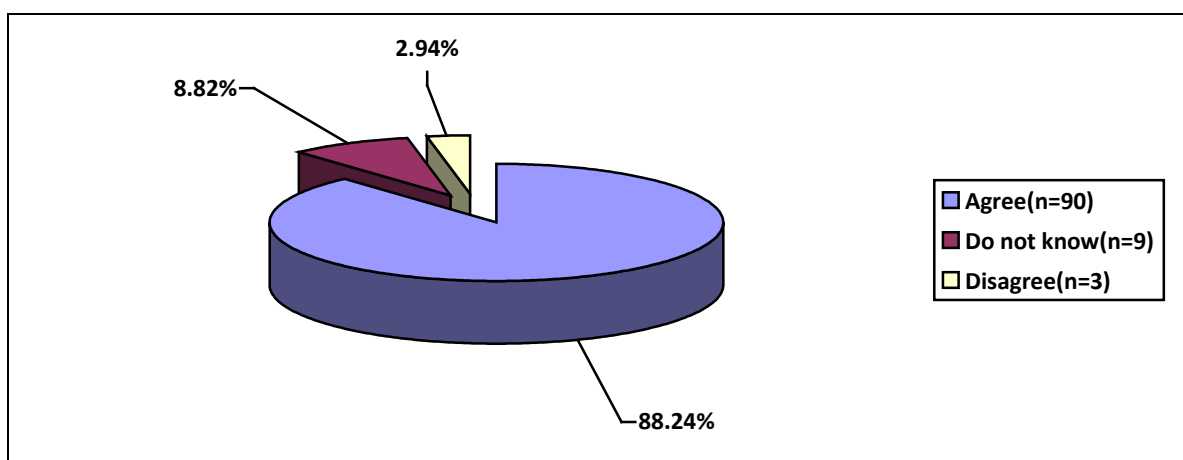


Figure 4.4 QAT respondents' knowledge of QA-related goals (n=102)

- **Item A5: The institution has a QA procedure manual**

The QAT respondents were required to indicate whether there was a QA procedure manual in their institution to guide them. Of the QAT respondents, 84.31% (n=86) *agreed*, 11.76% (n=12) *did not know*, and 3.92% (n=4) *disagreed* that their institution had a QA procedure manual (see figure 4.5). The results indicated that QA procedure manuals are available in most of the selected hospitals, thus providing the necessary guidelines and procedures to follow in delivering nursing care (DoH 2007a: 20).

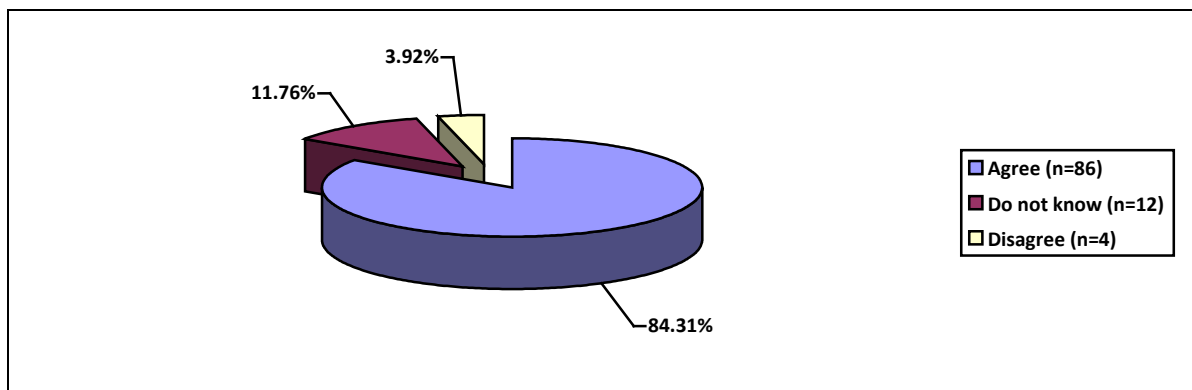


Figure 4.5 QAT respondents' views of QA-related goals (n=102)

- **Item A6: Equipment in the unit is sufficient to provide quality patient care**

The respondents were almost equally divided on whether there was sufficient equipment or not. Of the QAT respondents, 47.04% (n=48) *agreed* while 48.04% (n=49) *disagreed* that there was sufficient equipment available and 4.90% (n=5) *did not know* (see figure 4.6). This concurred with Shamase's (2012:1) report that the five public hospitals of Limpopo Province visited had a problem with maintenance and supply of medical equipment and that patients did not receive quality care as no equipment, supplies and drugs were available. Some of the hospitals mentioned in the report were included in this study.

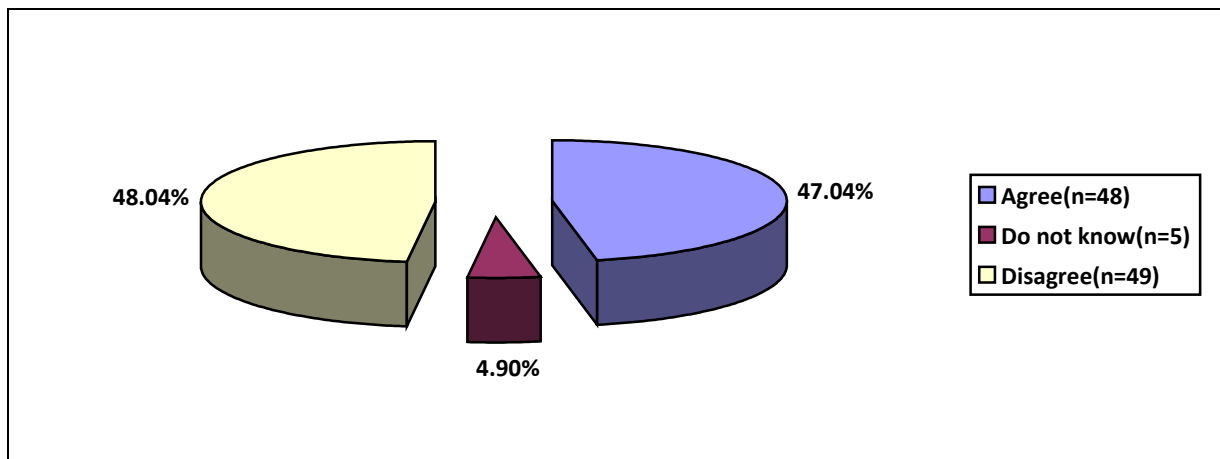


Figure 4.6 QAT respondents' knowledge of sufficiency of equipment (n=102)

- Item A7: Equipment in the unit is generally in good working order**

Of the QAT respondents, 56.86% (n=59) *agreed* and 37.25% (n=38) *disagreed* that equipment in the unit was generally in good working order, and 5.88% (n=5) *did not know*, which poses a serious threat to the delivery of quality patient care (see figure 4.7). Shamase (2012:1) reported that the radiology departments of some public hospitals in Limpopo Province were not functioning because of broken X-ray machines and orthopaedic patients did not receive the deserved care as they were not properly diagnosed and treated according to their proper diagnoses.

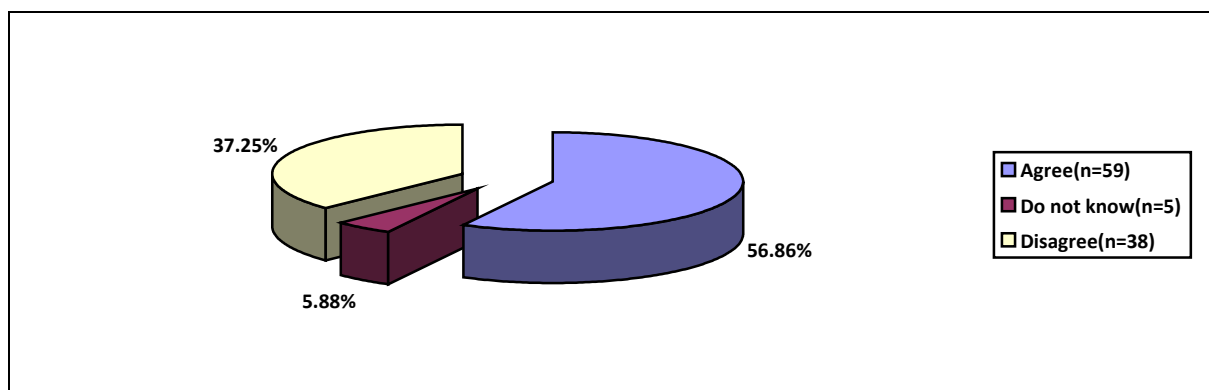


Figure 4.7 QAT respondents' knowledge of the functionality of equipment in their units (n=102)

- Item A8: Medical supplies are adequate in the unit**

Of the QAT respondents, 58.82% (n=60) *disagreed* and 35.29% (n=36) *agreed* that there were adequate medical supplies in the unit, and 5.88% (n=6) *did not know* (see

figure 4.8). The Limpopo Department of Health has been placed under administrative measure since 5 December 2011. Administrative measure (commonly known as being ‘placed under administration’) is the process of administration and settlement of individual cases by executive and administrative bodies of state authority (Kopane 2012:1). The South African Government deployed knowledgeable administrators to Limpopo Province to identify, correct and improve administrative policies, procedures and conduct so that the public service could function effectively and efficiently.

One of the six most critical areas for patient-centred care is the availability of basic medicines and supplies (DoH 2011b:4). This study found a shortage of medical supplies.

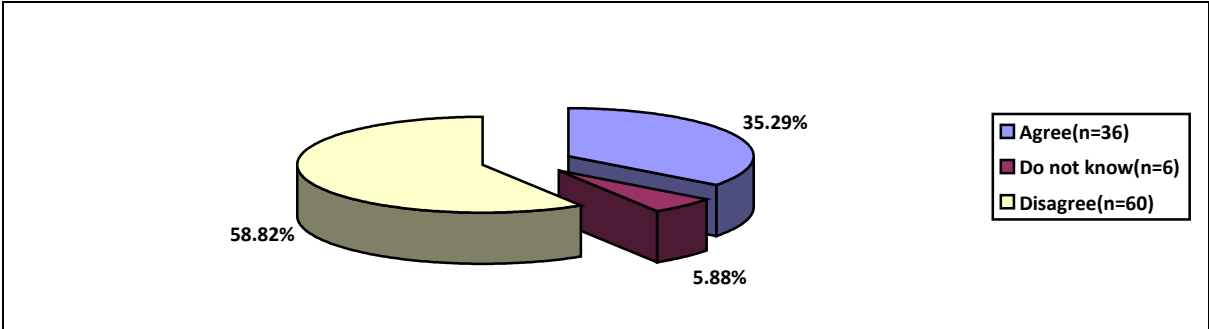


Figure 4.8 QAT respondents’ knowledge of the adequacy of medical supplies in the unit (n=102)

- **Item A9: The environment in the unit is conducive to the provision of quality patient care**

Of the QAT respondents, 56.86% (n=58) *agreed* and 39.22% (n=40) *disagreed* that the environment in their unit was conducive to providing quality patient care. In addition, 3.92% (n=4) *did not know* if the environment in the unit was conducive to providing quality patient care. This finding poses a serious threat to the quality of patient care that can be delivered (see figure 4.9). e The environment is conducive in a health care setting when it is free from noise, has efficient rooms and unit layout, effective ventilation, adequate staffing and good leadership style (Reiling, Hughes & Murphy 2008:283).

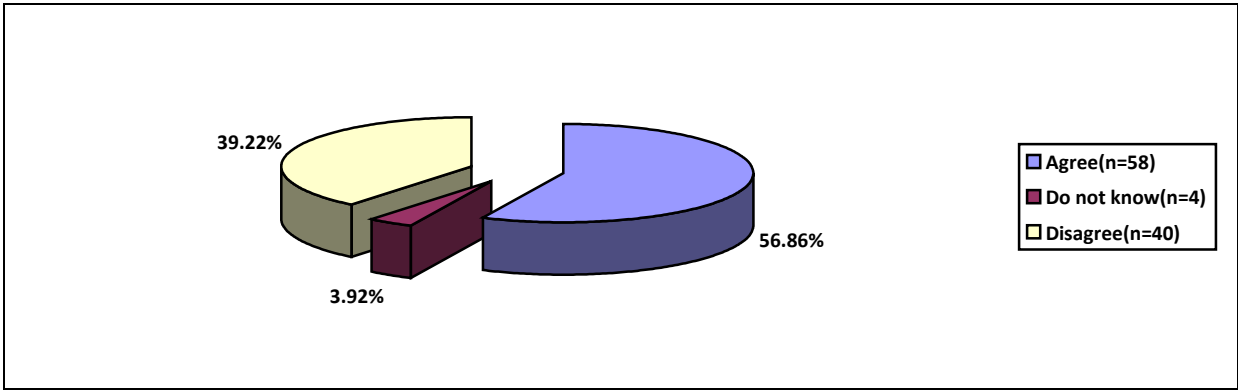


Figure 4.9 QAT respondents' perception of the environment's conduciveness to the provision of quality patient care (n=102)

On the share chart, statements A1 to A5 pertaining to the structure standards discussed above, were viewed as predominantly positive (*Agree*) whereas items A6-A9 were negative (*Disagree*) (see figure 4.10). Equipment, supplies and the environment are the main areas of concern in this section.

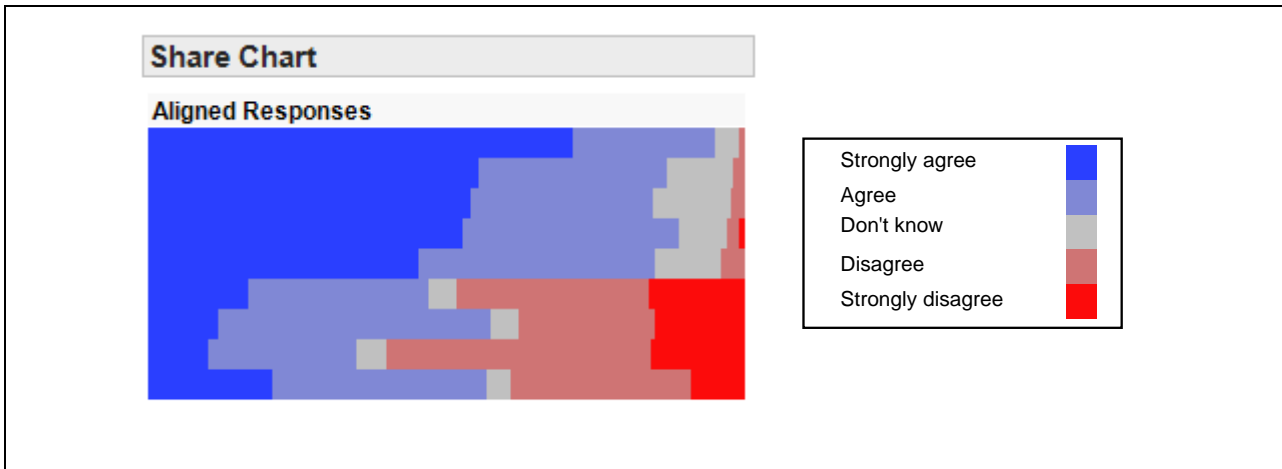


Figure 4.10 QAT respondents' views of structure standards

Chi-square test results of QAT respondents' views

- Of the QAT respondents, Senior Professional Nurses and Professional Nurses in particular *disagreed* with the statement that medical supplies in their units were adequate. This was evident from a Chi-square test between the 'Current Rank' and Item A8 conducted at the 0.05 level of significance (*Chi-Square value=15.993, DF=8, p-value=0.0425*). The Chi-square test is used to analyse

nominal data to determine significant differences between observed frequencies within the data set and frequencies that were expected (Grove et al 2013:587). The Chi-square test indicates that a significantly larger proportion of Senior Professional Nurses than Professional Nurses *disagreed* that medical supplies were adequate.

- More Nurses with five and more years of experience (48.5%; n=48) than those with four years and less experience (2.0%; n=2) *agreed* that the institution had QA procedure manuals. This was concluded from a Chi-Square test between years of experience and Item A5 at the 0.05 level of significance (*Chi-Square value=27.056, DF=12, p-value=0.0076*).

Exploratory Factor Analysis (EFA)

Factor analysis was performed on items A1 to A9. Exploratory Factor Analysis (EFA) is a data reduction exercise. This statistical technique searches for joint variations in response to unobserved latent variables (Grove et al 2013:567).

Item A1 to A9 are as follows:

- A1 The institution has a QA programme
- A2 The institution has a QA vision
- A3 The institution has a QA mission
- A4 The institution has QA related goals
- A5 The institution has QA procedure manuals
- A6 Equipment in the unit is sufficient to provide quality patient care
- A7 Equipment in the unit is generally in good working order
- A8 Medical supplies are adequate in the unit
- A9 The environment in the unit is conducive to the provision of quality patient care

Component analysis is a statistical technique in the factor analysis test designed to examine interrelationships among large numbers of variables to reduce them to a smaller set of variables (Grove et al 2013:567). Varimax extraction and rotation

techniques were employed to investigate the existence of latent variables or factors in the items/statements and to simplify the factor structure A1 to A9.

The *Eigen value* is a relatively important value of the factor analysis. Eigen values are most commonly reported in factor analyses (Grove et al 2013:568). They are calculated and used in deciding how many factors to extract in the overall factor analysis. The variance for a given factor measures all the variables accounted for by that factor (Grove et al 2013:568) (see table 4.5).

Table 4.5 Eigen values of structural standards

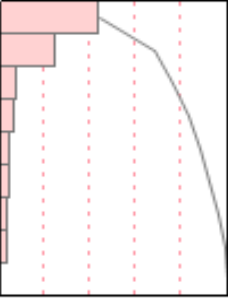
Eigenvalues							
Number	Eigenvalue	Percent	20	40	60	80	Cum Percent
1	3.9618	44.020					44.020
2	2.2057	24.508					68.528
3	0.7012	7.791					76.319
4	0.5968	6.631					82.950
5	0.4488	4.987					87.937
6	0.4218	4.687					92.624
7	0.3358	3.731					96.355
8	0.2803	3.114					99.469
9	0.0478	0.531					100.000

Table 4.5 is interpreted as follows: 68.5% of joint variation is explained by the presence of 2 latent variables in these 9 items. Only Eigen values > 1.0 are considered, thus two factors will be extracted to explain the construct of structural standards (Polit & Beck 2012:363).

4.3.2.1.2 Statistical analysis of findings on structure standards provided by the QANMs

Table 4.6 summarises the QANM respondents' (n=10) responses to each statement on structure standards. Figures 4.11 to 4.25 depict their responses.

Table 4.6 QANM respondents' views of structure standards (n=10)

Structure items/statements	Agree f (%)	Don't know f (%)	Dis-agree f (%)	Total Responses f (%)
A1 I coordinate the development of the institution's QA programme	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
A2 I make sure that the institution has a QA vision	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
A3 I make sure that the institution has a QA mission	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
A4 I make sure that the institution has QA-related goals	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
A5 I make sure that the institution has a QA procedure manual	5 (50.00)	2 (20.0)	3 (30.0)	10 (100.00)
A6 I give direction to institution(s) on implementing QA measures	8 (80.00)	1 (10.00)	1 (10.00)	10 (100.00)
A7 I establish QA teams	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
A8 I develop policies and strategies for QA activities/processes	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
A9 I develop clinical guidelines and protocols for QA activities/processes	7 (70.00)	2 (20.00)	1 (10.00)	10 (100.00)
A10 I make sure that the institution has formulated nursing standards	8 (80.00)	1 (10.00)	1 (10.00)	10 (100.00)
A11 I aspire to see that there are enough material resources to carry out QA activities	8 (80.00)	0 (0.00)	2 (20.00)	10 (100.00)
A12 I aspire to see that equipment in the unit is sufficient for patient care	7 (70.00)	0 (0.00)	3 (30.00)	10 (100.00)
A13 I aspire to see that equipment in the unit is generally in good working order	8 (80.00)	0 (0.00)	2 (20.00)	10 (100.00)

The QANM respondents' views are depicted in figures 4.11 to 4.25.

- **Item A1: I coordinate the development of the institution's QA programme**

One of the functions of the QANM is to coordinate the development of the QA programme for the institution (DoH 2007a:18). Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they fulfilled this function (see figure 4.11).

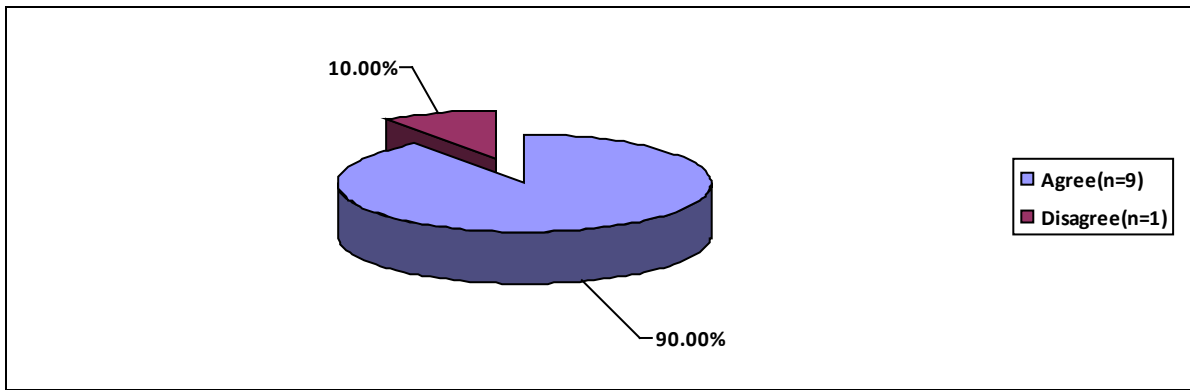


Figure 4.11 QANM respondents coordinate the development of the institution's QA programme (n=10)

- **Item A2: I make sure that the institution has a QA vision**

The respondents were required to indicate whether they made sure that their institution had a QA vision (see figure 4.12). Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they made sure that a QA vision was available in their institutions. A vision serves as a framework that guides the planning process (Booyens 2008:23). QANMs monitor QATs to assess whether they are working towards the institution's vision.

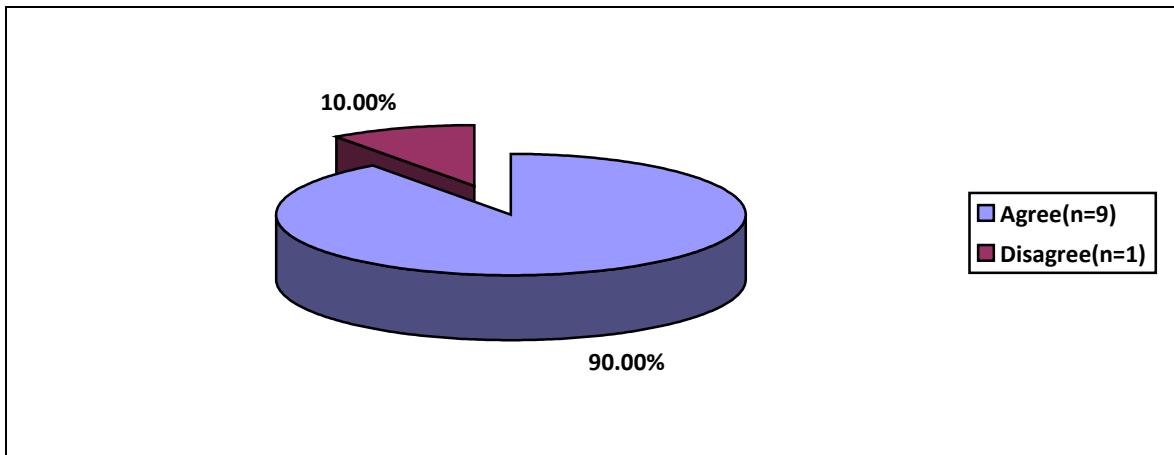


Figure 4.12 QANM respondents ensure that the institution has a QA vision (n=10)

- **Item A3: I make sure that the institution has a QA mission**

One of the QANM's functions is to develop a budget for QA activities (DoH 2007a:18). The budgetary plan should be in line with the institution's QA mission. Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they made sure that the institution had a QA mission (see figure 4.13).

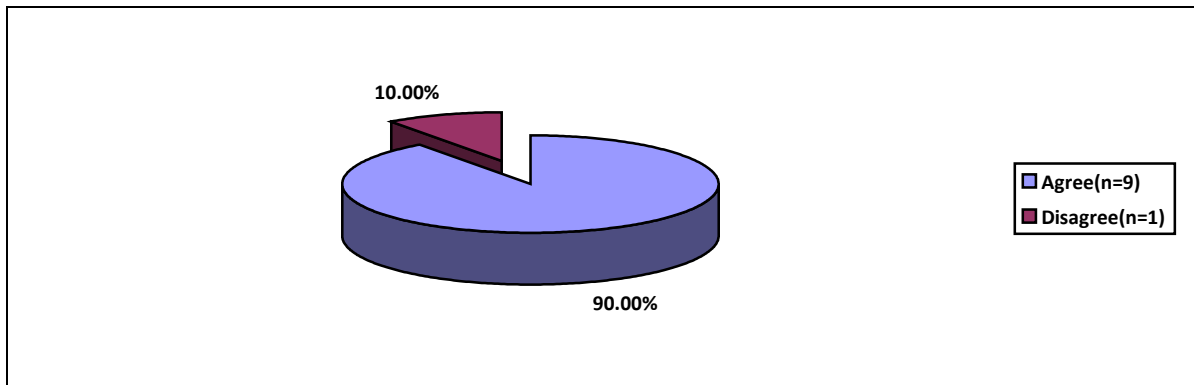


Figure 4.13 QANM respondents made sure the institution had a QA mission (n=10)

- **Item A4: I make sure that the institution has QA-related goals**

Goals are important in giving direction and as they enable the evaluation of the nursing care (Muller et al 2007:52). Having goals thus provides a good basis for enhancing the quality of service delivery. Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they ensure their institutions have a QA programme, vision and goals – thereby setting the ground rules for enhancing quality assurance in the hospitals (see figure 4.14).

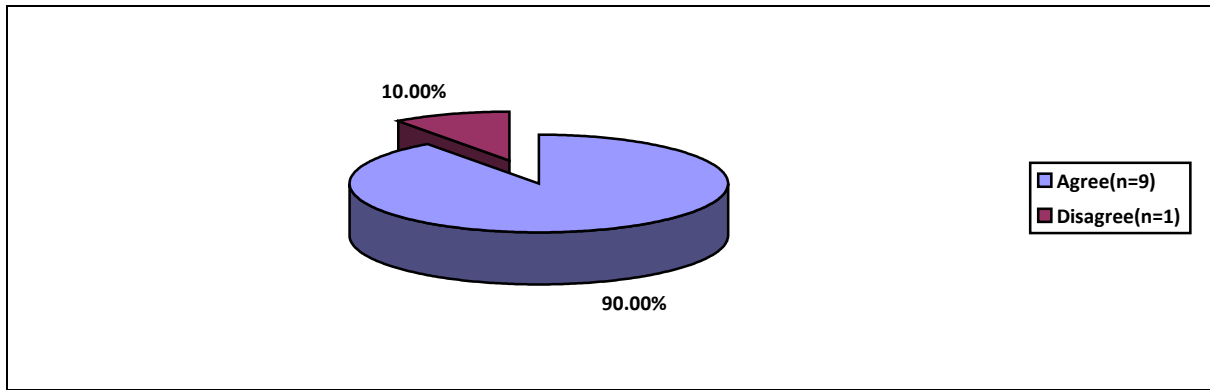


Figure 4.14 QANM respondents ensure that the institution has QA-related goals (n=10)

- **Item A5: I make sure that the institution has a QA procedure manual**

Booyens (2008:23) points out that a procedure manual provides guidelines for ensuring adherence to consistent, recognised standards of nursing practice, which supports the QA principles in an institution. Of the QANM respondents, 50.00% (n=5) *agreed* and 30.00% (n=3) *disagreed* that they ensured that QA procedure manuals are available in the institutions and 20.0% (n=2) *did not know* (see figure 4.15).

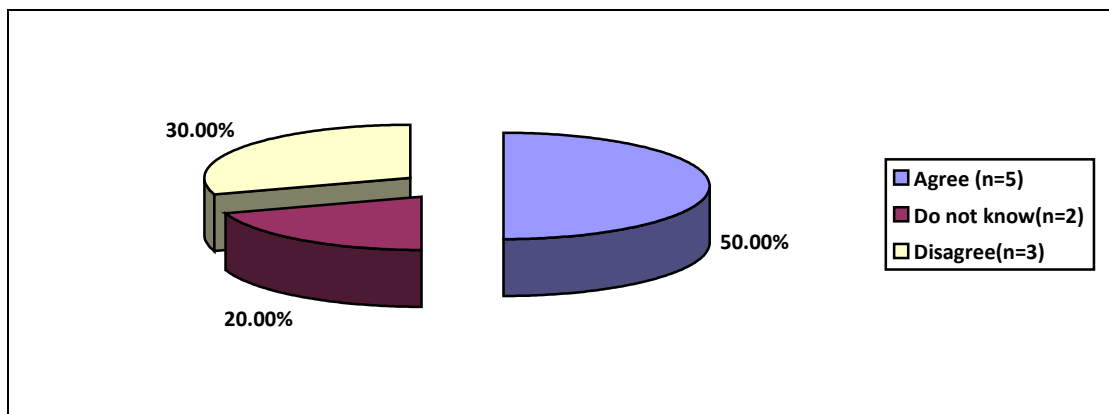


Figure 4.15 QANM respondents ensure that institution has QA procedure manual (n=10)

- **Item A6: I give direction to the institution on implementing QA measures**

The functions of QANMs at hospital level are to ensure that quality standards are met, that quality improvement teams are established in the hospital, and that health professionals participate in the QA programmes (DoH 2007a:18). Of the respondents, 80.00% (n=8) *agreed* that they give direction on the implementation of QA measures, (10.00%; n=1) *disagreed* and (10.00%; n=1) *did not know*. The respondents who *did not know* and who *disagreed* might not have understood the question. It was noted that the formulation of this question might have been confusing and was therefore indicated as a limitation in the study (see chapter 5).

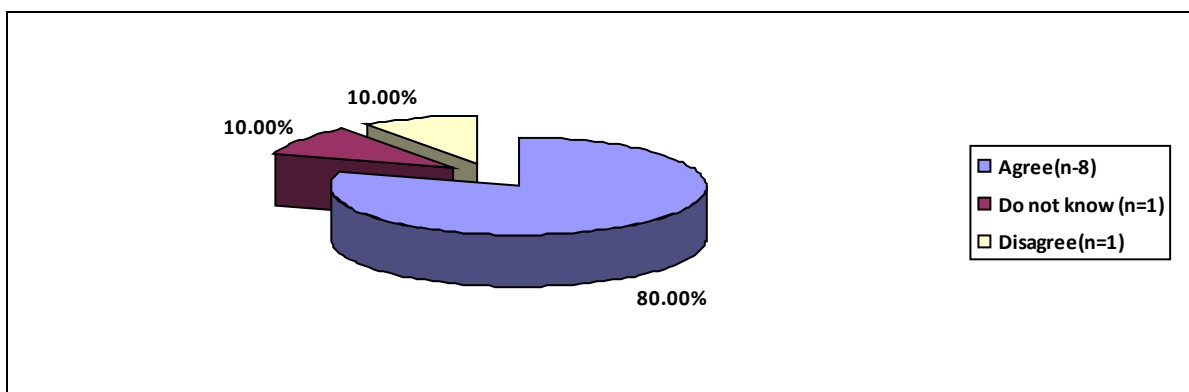


Figure 4.16 QANM respondents give direction on implementing QA measures (n=10)

- **Item A7: I establish QA teams**

According to DoH (2007a: 18), at hospital level, QANMs are required to ensure that QATs are established in the hospital. Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they established QA teams (see figure 4.17).

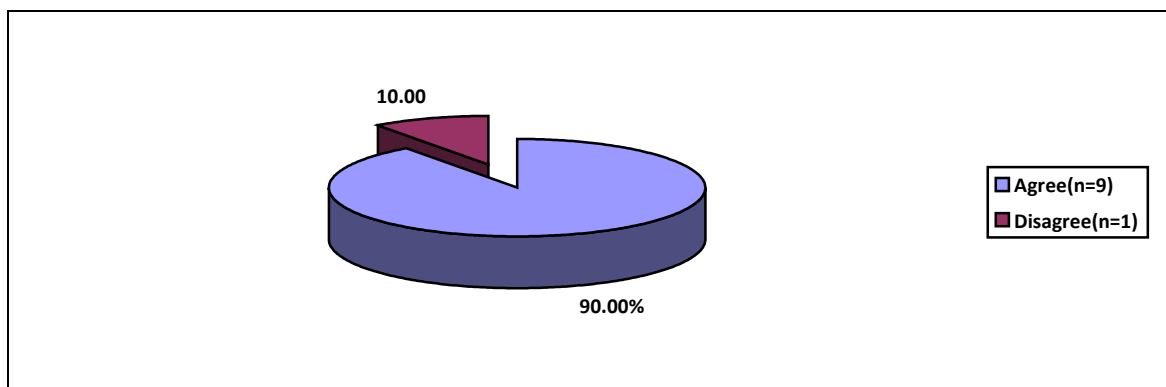


Figure 4.17 QANM respondents establish QA teams (n=10)

- **Item A8: I develop policies and strategies for QA**

Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they develop policies and strategies for QA (see figure 4.8). This confirmed that most of the QANM respondents complied with the function of developing QA-related policies and strategies (DoH 2007a:18).

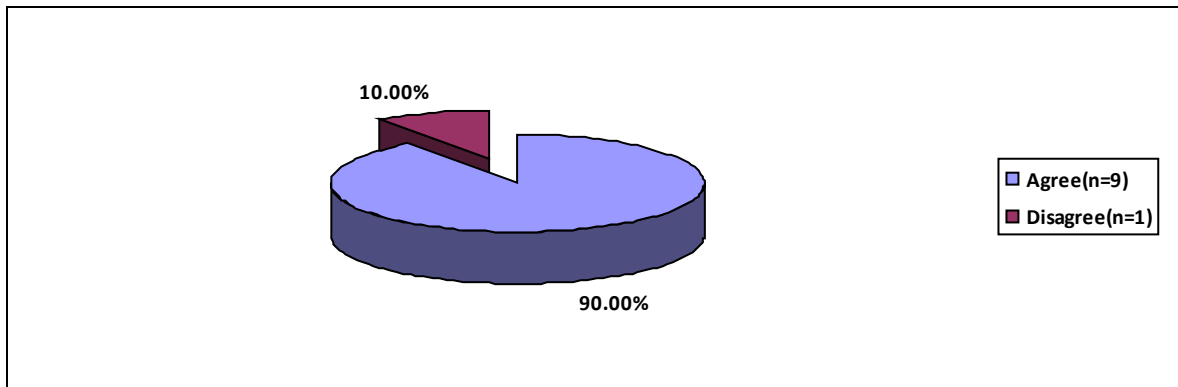


Figure 4.18 QANM respondents develop QA-related policies and strategies (n=10)

- **Item A9: I develop clinical guidelines and protocols for QA**

One of the functions of QANMs is to develop QA-related guidelines and protocols (DoH 2007a:18). Of the QANM respondents, 70.00% (n=7) *agreed* and 10.00% (n=1) *disagreed* that they develop clinical guidelines and protocols for QA measures, and 20.00% (n=2) *did not know* (see figure 4.19).

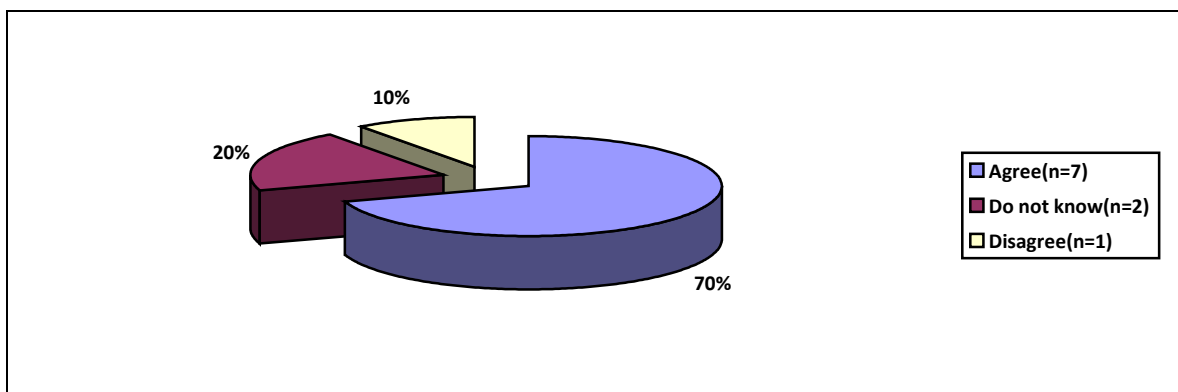


Figure 4.19 QANM respondents develop QA-related clinical guidelines and protocols (n=10)

- **Item A10: I make sure that the institution has formulated nursing standards**

The QA Directorate formulates QA standards at national level that should be followed at the institutional level. QANMs have a role in ensuring that institutions have formulated QA nursing standards specific to their institutions (DoH 2007a:18). Of the QANM respondents, only 10.00% (n=1) *agreed* that the institution had formulated nursing standards; 10.00% (n=1) did *not know*, and 80.00% (n=8) *disagreed* that their institutions had nursing standards (see figure 4.20). This is of serious concern.

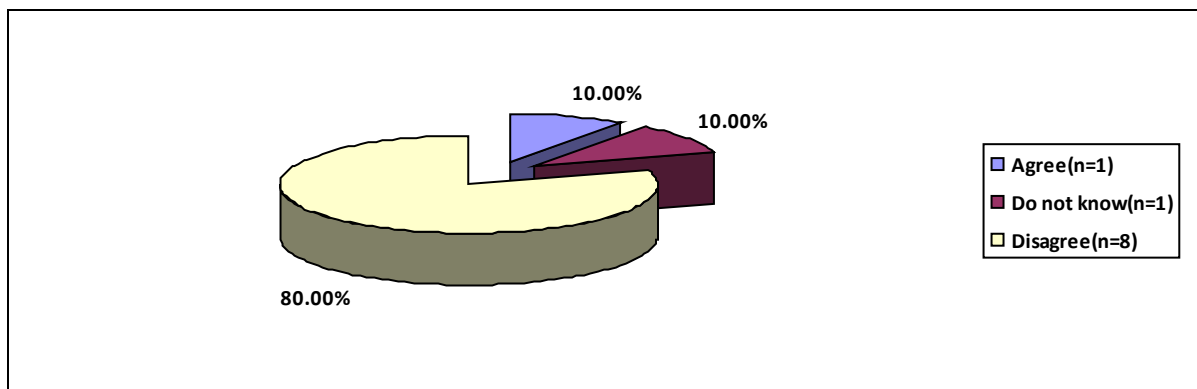


Figure 4.20 QANM respondents' knowledge of the institution having formulated nursing standards (n=10)

- **Item A11: I aspire to have enough material resources to carry out QA activities**

Material resources include equipment and supplies required to carry out the nursing care activities (Kaur, Hall & Attawel 2001:17). The availability of sufficient drugs, medical equipment and supplies has an impact on the provision of quality patient care.

In the questions about sufficiency of supplies and equipment, the word “aspiring” was used instead of “ensuring” because the reason why success was not always achieved did not rest solely with the QANM.

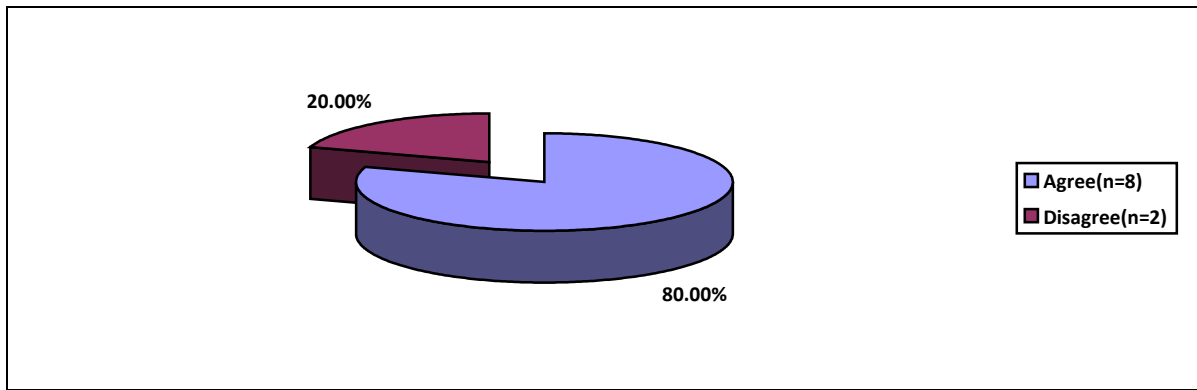


Figure 4.21 QANM respondents' aspiration to have enough material resources to carry out QA activities (n=10)

Of the QANM respondents, 70.00% (n=7) *agreed* while 30.00% (n=3) *disagreed* that they aspired to have sufficient equipment available in the units to enable optimum patient care (see figure 4.22). Availability of equipment supports that quality nursing care is rendered, due to poor management equipment was either not ordered, or there were no funds due to mismanagement, therefore it is not possible to render quality nursing care (Shamase 2012:1).

- **Item A12: I aspire to have sufficient equipment in the unit for patient care**

Of the QANM respondents, 70.00% (n=7) *agreed* while 30.00% (n=3) *disagreed* that they aspired to have sufficient equipment available in the units to enable optimum patient care (see figure 4.22). Availability of equipment ensures that quality nursing care is rendered, but because of the administrative measures there was inadequate equipment therefore it is not possible to render quality nursing care (Shamase 2012:1).

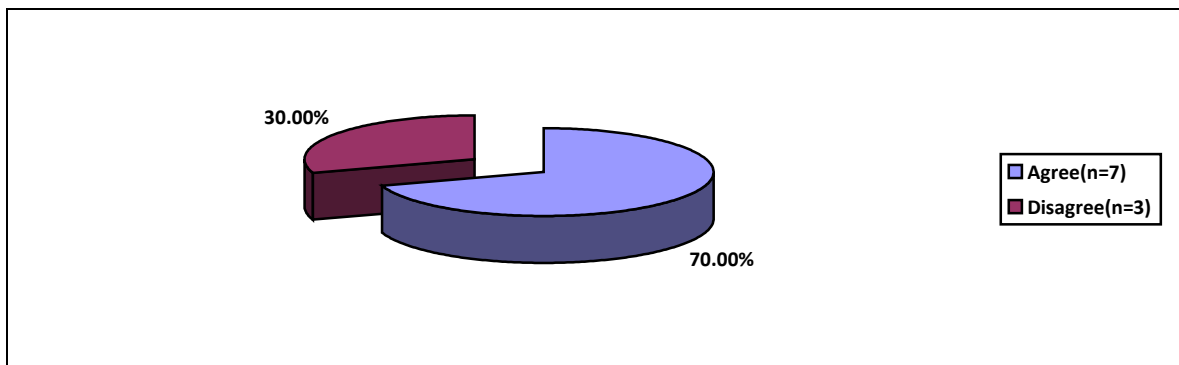


Figure 4.22 QANM respondents' aspiration to have sufficient equipment in the unit for patient care (n=10)

- **Item A13: I aspire to have the equipment in the unit generally in good working order**

Of the QANM respondents, 80.0% (n=8) *agreed* and 20.0% (n=2) *disagreed* that they aspired to have equipment in the unit generally in good working order (see figure 4.23). Of the QAT respondents, 37.25% (n=38) indicated that equipment was not in good working order due to a lack of maintenance.

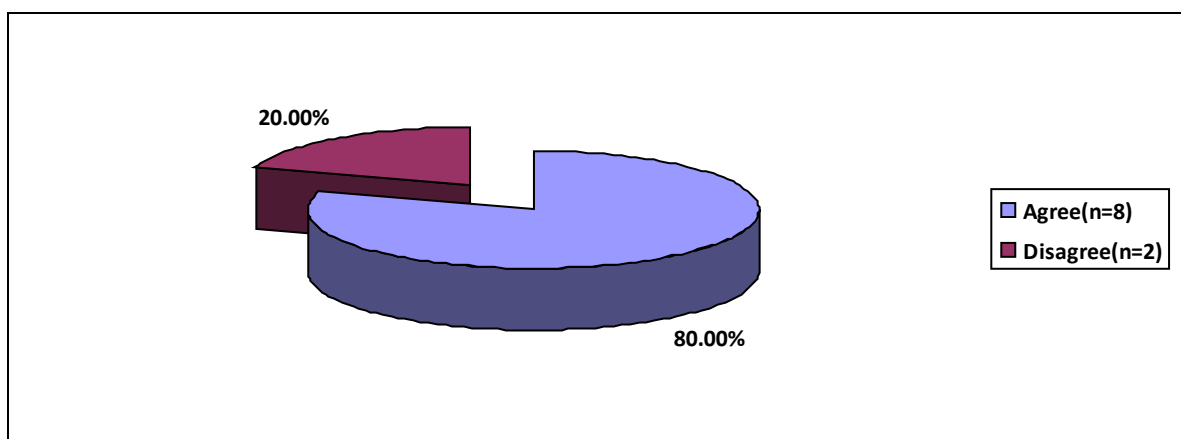


Figure 4.23 QANM respondents' aspiration to have equipment in the unit generally in good working order

Kopane (2012:1) found a lack of equipment in some of Limpopo public hospitals with important equipment damaged beyond repair. Patients consequently did not receive the deserved care because of broken equipment and lack of funds due to poor management.

- **Item A14: I aspire to have adequate medical supplies in the units**

Of the QANM respondents, 60.00% (n=6) *agreed* and 40.00% (n=4) *disagreed* that they aspired to have adequate medical supplies in the units (see figure 4.24). Even if QANMs aspire to have sufficient and appropriate medical equipment available, medical equipment can nevertheless be inappropriate, technically unsuitable, ineffective and/or insufficient due to lack of management and/or financial skill (Kaur et al 2001:1).

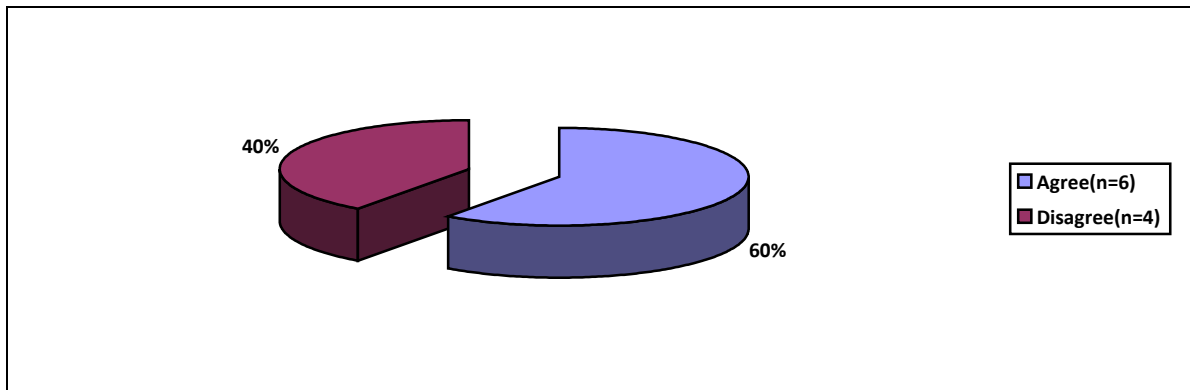


Figure 4.24 QANM respondents' aspiration to have adequate medical supplies in the units (n=10)

In May 2012, Limpopo Province hospitals were hard hit by a lack of medical supplies. Hospitals need to order all medicines and medical supplies well in time. The procurement section did not follow the correct procedures in procuring, which led to audit queries and consequent administrative measures (Rampedi 2012:1). The availability of basic medicines and supplies is one of the six most critical areas of patient-centred care (DoH 2011b:4).

- **Item A15: I aspire to have the environment in the units conducive to providing optimal patient care**

Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they aspired to have the environment in the units conducive to providing optimal patient care (see figure 4.25).

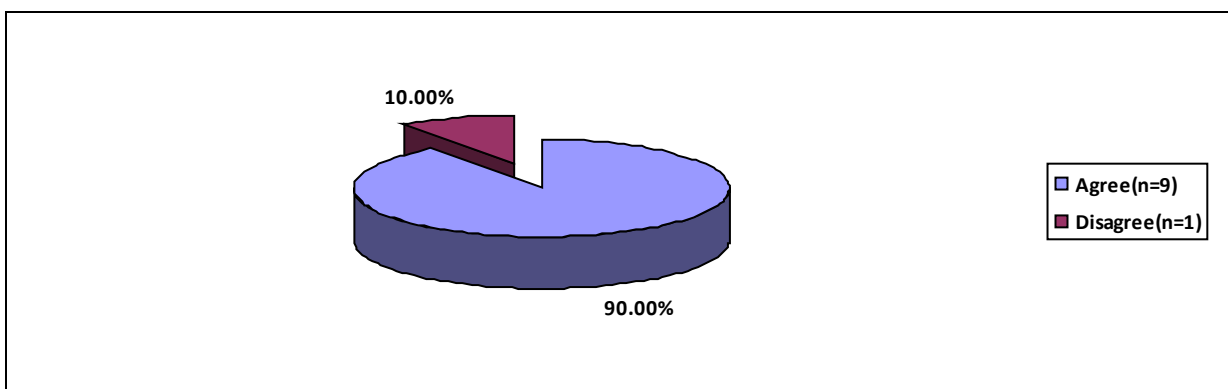


Figure 4.25 QANM respondents' aspiration to have the environment in the units conducive to providing optimal patient care (n=10)

With regard to structure standards, the majority of the QANM respondents (90.00%; n=9) *agreed* that they attempted to comply with the set requirements by ensuring that their institutions had a QA programme, vision and goals – thereby setting the ground rules for enhancing quality assurance in their hospitals.

4.3.2.2 Process standards

Process refers to the actions and behaviours required from the nursing staff in giving care. Process relates to the manner in which care is delivered and expresses the attributes of the performance. The quality assessment process consists of preventive, diagnostic, treatment, nursing care and rehabilitation activities. Process standards include the patient's actions in seeking care and carrying it out as well as health practitioners' actions in formulating a diagnosis and recommending or implementing treatment (Lundqvist & Axelsson 2007:52; Hunt et al 2004:249).

The QAT respondents will be discussed first and then the QANM respondents because their roles are different. The role of QANMs is mainly supervisory/ managerial in process standards and activities.

4.3.2.2.1 Process standards for QATs

Twenty-five questions examined the QAT respondents' views of the process standards of QA in their institutions. Section B of the QAT questionnaire covered the process standards under five (5) distinct themes or factors. The results of the 25 questions were grouped under these five factors. Only factor loadings > 0.4 are meaningful and were thus considered. They are highlighted in blue in table 4.7. Item B12 appeared to be ambiguous as it loads on two factors, namely standards and guidelines, and problem-solving.

Table 4.7 Sub-themes of the construct: Process standards according to the QAT respondents (n=102)

Process standard questions/statements	Professional practice and conduct Factor 1	Standards and guidelines Factor 2	Problem-solving Factor 3	Training and teamwork Factor 4	Awareness and satisfaction Factor 5
B1 I develop relevant local QA standards	0.0535	0.9204	0.0742	0.0317	0.0305
B2 I update relevant local QA standards	0.1293	0.9078	0.0637	-0.0053	0.0280
B3 I provide guidelines on QA	-0.0194	0.8334	0.2522	0.0618	0.0907
B4 I provide protocols on QA.	-0.0302	0.7923	0.2019	0.0663	0.2591
B5 I coordinate QA activities	0.0855	0.6889	0.2009	0.1416	0.3056
B6 I provide guidance on QA to health care personnel	0.1803	0.6668	0.1513	0.2918	0.2197
B7 I promote QA awareness	0.1212	0.3088	0.2307	0.1497	0.7262
B8 I conduct patient satisfaction surveys	0.1850	0.2828	0.1395	0.0440	0.8201
B9 I conduct auditing of patients' records	0.4337	0.0515	0.6297	0.1327	0.2576
B10 I identify quality-related problems in the unit	0.2855	0.0531	0.7523	0.1421	0.3528
B11 I draw up action plans for QA	0.0361	0.3635	0.7206	-0.0702	0.1726
B12 I disseminate information on QA to nursing personnel	0.2041	0.5463	0.5150	0.0946	-0.0805
B13 I consciously follow the procedures contained in the QA procedure manual	0.3192	0.2462	0.6868	0.2125	0.0116
B14 I have enough time to carry out QA activities with other QA team members	-0.0734	0.2205	0.3749	0.5027	-0.2503
B15 I document the QA activities	0.0918	0.3158	0.5683	-0.2576	-0.0286
B16 I practise according to my Scope and Practice of the South African Nursing Council (SANC)	0.4680	0.0382	0.4116	0.1975	0.1753
B17 I approach patients in a respectful and caring manner	0.7590	0.1441	0.1626	-0.0794	0.2138
B18 I help patients to adjust to the hospital environment by orientating, explaining procedures and allowing them to make decisions on their care.	0.8645	0.0099	0.0952	-0.0376	0.1075
B19 I teach patients about follow-up care	0.8907	0.1287	0.2005	-0.0147	0.0951

Process standard questions/statements	Professional practice and conduct Factor 1	Standards and guidelines Factor 2	Problem-solving Factor 3	Training and teamwork Factor 4	Awareness and satisfaction Factor 5
B20 I involve patients in planning their care because they have the final say in their care	0.7793	-0.0628	0.1574	0.1669	-0.1153
B21 I attend in-service education on QA-related topics in the hospital once per quarter	0.2587	0.2225	-0.0445	0.6946	0.1791
B22 There is a record of attendance for in-service training in QA topics	0.2157	0.0228	0.0426	0.8529	0.1214
B23 I plan nursing care of patients according to the nursing process	0.7339	0.1170	0.0897	0.2477	-0.0622
B24 I attend to patients' additional needs e.g. spiritual or social by referring them to relevant people if possible.	0.7461	0.0558	0.0315	0.2288	0.0607
B25 I always comfort bereaved family members	0.7949	0.0854	0.1643	0.0784	0.1896

- Factor 1: items B16, B17, B18, B19, B20, B23, B24 and B25 address issues of **Professional practice and conduct**.
- Factor 2: items B1, B2, B3, B4, B5, B6 and B12 address issues of the development of QA activities which prevents adverse patient effects and will be called **Standards and guidelines**.
- Factor 3: items B9, B10, B11, B13 and B15 address issues of rendering treatment and taking action. This sub-theme will be called **Problem-solving**.
- Factor 4: items B14, B21 and B22 address issues of in-service training and this sub-theme will be referred to as **Training and teamwork**.
- Factor 5: contained only items B7 and B8 and the reliability of these 2 items cannot be determined as there should be more than two items for further analysis because two have a low loading on factor (Polit et al 2012:366). This sub-theme labelled **Awareness and satisfaction** will thus be omitted from the discussion.

Reliability of the process sub-themes

Cronbach's alpha coefficient was used to test the reliability of all the process themes. The results are discussed in this section and represented in tables 4.8 to 4.11.

- ***Professional practice and conduct***

An overall Cronbach's alpha of 0.9172 was obtained during item analysis of the items of this construct. This represents good internal consistency for the theme: professional practice and conduct (see table 4.8).

Table 4.8 Cronbach’s alpha results for construct: Process: professional practice and conduct

Item	A
B16 I practise according to my Scope of Practice of the South African Nursing Council (SANC)	0.917
B17 I approach patients in a respectful and caring manner	0.9043
B18 I help patients to adjust to the hospital environment by orientating, explaining procedures and allowing them to make decisions about their care.	0.8963
B19 I teach patients about follow-up care	0.8889
B20 I involve patients in planning their care because they have a final say in their care	0.8984
B23 I plan nursing care of patients according to the nursing process	0.9048
B24 I attend to patients’ additional needs, e.g. spiritual or social needs, by referring them to relevant people, if possible.	0.9036
B25 I always comfort bereaved family members	0.8973

- **Standards and guidelines**

An overall Cronbach’s alpha of 0.9162 was obtained with item analysis of the items of this construct. This represents good internal consistency for the theme: standards and guidelines (see table 4.9).

Table 4.9 Cronbach’s alpha results for construct: Process: standards and guidelines

Item	A
B1 I develop relevant local QA standards	0.8947
B2 I update relevant local QA standards	0.8950
B3 I provide guidelines on QA	0.8968
B4 I provide protocols on QA.	0.9003
B5 I coordinate QA activities	0.9077
B6 I provide guidance on QA to health care personnel	0.9100
B12 I disseminate information on QA to nursing personnel	0.9177

- **Problem-solving**

An overall Cronbach's alpha of 0.6426 was obtained with item analysis for the items of this construct. This represents acceptable internal consistency for the theme: problem solving (see table 4.10).

Table 4.10 Cronbach's alpha results for construct: Process: Problem-solving

Item	A
B8 I conduct patient satisfaction surveys	0.6434
B9 I conduct auditing of patients' records	0.6131
B21 I attend in-service education on QA-related topics in the hospital once per quarter	0.5000
B22 There is a record of attendance for in-service training in QA topics	0.5190

- **Training and teamwork**

An overall Cronbach's alpha of 0.5878 was obtained with item analysis for the items of this construct. This represents an unacceptable level of internal consistency for the theme: training and teamwork (see table 4.11).

Table 4.11 Cronbach's alpha results for construct: Process: Training and teamwork

Item	A
B14 I have enough time to carry out QA activities with other QA team members	0.7493
B21 I attend in-service education on QA-related topics in the hospital once per quarter	0.4770
B22 There is a record of attendance for in-service training in QA topics	0.1836

The removal of item B14 increased the Cronbach's alpha value to 0.75. This represented an increase of 27.5%. Item B14 therefore did not contribute adequately to this sub-theme. The reliability of the remaining two items could not be determined consequently this sub-theme was discarded.

- **Awareness and satisfaction**

The awareness and satisfaction factor was dropped because it consisted of only two items, namely B7 and B8, therefore the reliability of these items could not be determined.

4.3.2.2.2 Process section of QANM

The process section of the QANM questionnaire was not divided into themes due to a lack of adequate observations as there were only 10 QANM respondents. The findings were therefore analysed per question (see table 4.12 and figures 4.27 to 4.46).

Table 4.12 presents the QANM respondents' responses to the process standards of the questionnaire.

Table 4.12 QANM respondents' responses to the process standards

Process question/statement	Agree f (%)	Don't know f (%)	Disagree f (%)	n of Responses f (%)
B1 I make sure that the procedure manual on QA is kept up to date	8 (80.00)	1 (10.00)	1 (10.0)	10 (100.00)
B2 I make sure that procedures contained in QA procedure manuals are followed	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
B3 I make sure that national QA standards are met by health care personnel	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
B4 I adapt the national QA standards	9 (90.00)	0 (0.00)	1 (90.00)	10 (100.00)
B5 I monitor QA programmes	8 (80.00)	1 (10.00)	1 (10.00)	10 (100.00)
B6 I implement policies developed by the QA directorate	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
B7 I organise QA workshops and seminars	6 (60.00)	1 (100.0)	3 (30.00)	10 (100.00)
B8 I facilitate QA workshops and seminars	5 (50.00)	1 (10.00)	4 (40.00)	10 (100.00)
B9 I provide in-service training to health care service personnel on QA-related topics on a quarterly basis	7 (70.00)	2 (20.00)	1 (10.00)	10 (100.00)
B10 I keep record of in-service training attendance on QA-related topics	6 (60.00)	0 (0.00)	4 (40.00)	10 (100.00)
B11 I ensure that QATs are established	8 (80.00)	0 (00.0)	2 (20.00)	10 (100.00)
B12 I supervise QATs	8	0	2	10

Process question/statement	Agree f (%)	Don't know f (%)	Disagree f (%)	n of Responses f (%)
	(80.00)	(0.00)	(20.00)	(100.00)
B13 I mobilise resources for QA activities	7 (70.00)	1 (10.00)	2 (20.00)	10 (100.00)
B14 I make sure that health professionals participate in the QA programmes	8 (80.00)	0 (0.00)	2 (20.00)	10 (100.00)
B15 I develop a budget for QA activities	5 (50.00)	2 (20.00)	3 (30.00)	10 (100.00)
B16 I hold QA meetings with nursing personnel to discuss the care of patients on a monthly basis	9 (90.00)	1 (10.00)	0 (0.00)	10 (100.00)
B17 I expect nurses to teach patients about their follow-up care	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
B18 I encourage patients to be involved in planning of their care because they have the final say in their care	8 (80.00)	1 (10.00)	1 (10.00)	10 (100.00)
B19 I expect nurses to plan nursing care of patients according to the nursing process	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
B20 I expect nurses to develop nursing care plans for all patients	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
B21 I monitor that the catering staff provide patients with the right and adequate amount of food	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
B22 I encourage nurses to attend to patients' additional needs, such as psychological and social needs.	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)

The responses are illustrated in figures 4.27 to 4.46.

- **Item B1: I make sure that the procedure manual on QA is kept up to date**

Procedure manuals provide guidelines to ensure adherence to the standards (Booyens 2008:59). Of the QANM respondents, 80.00% (n=8) *agreed* and 10.00% (n=1) *disagreed* that they made sure that the procedure manual on QA is kept up to date while 10.00% (n=1) *did not know* (see figure 4.26).

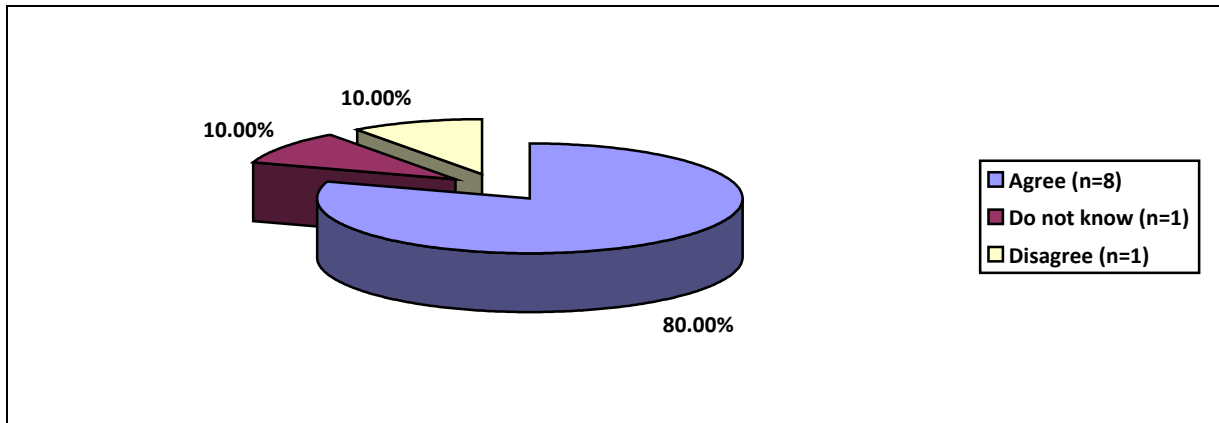


Figure 4.26 QANM respondents' responses to keeping the procedure manual on QA up to date (n=10)

- **Item B2: I make sure that procedures contained in QA procedure manuals are followed**

Leaders should ensure that all staff members comply with the guidelines provided in procedure manuals (Booyens 2008:69). Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they ensured compliance with set procedures (see figure 4.27).

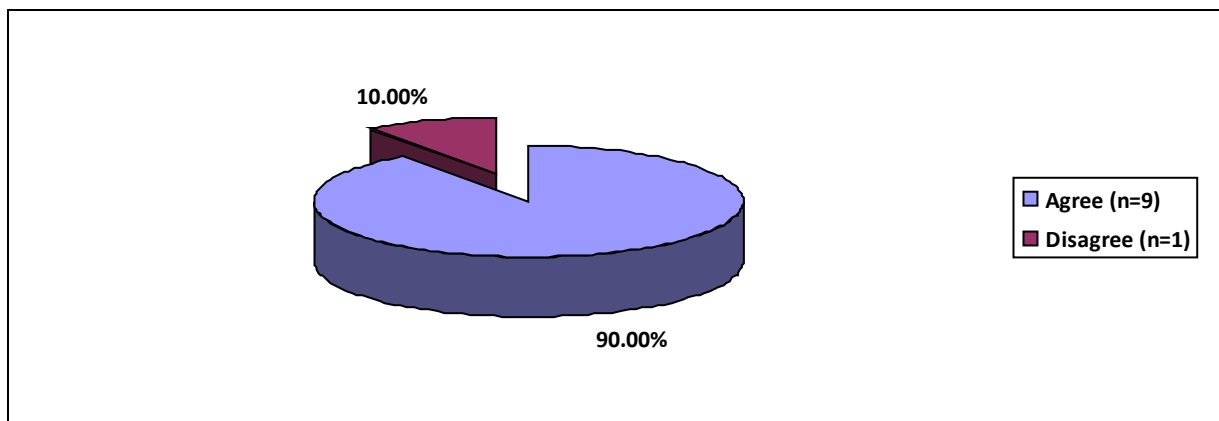


Figure 4.27 QANM respondents' responses to making sure that procedures contained in QA procedure manuals are followed (n=10)

- **Item B3: I make sure that national QA standards are met by health care personnel**

Of the QANM respondents, 90.00% (n=9) *agreed* that they made sure that health care personnel met national QA standards, while 10.00% (n=1) *disagreed* (see figure 4.28). The QANM respondents fulfilled their role and responsibility of bringing the policy and procedures to the attention of all personnel and striving towards ensuring adherence to standards (Booyens 2008:69).

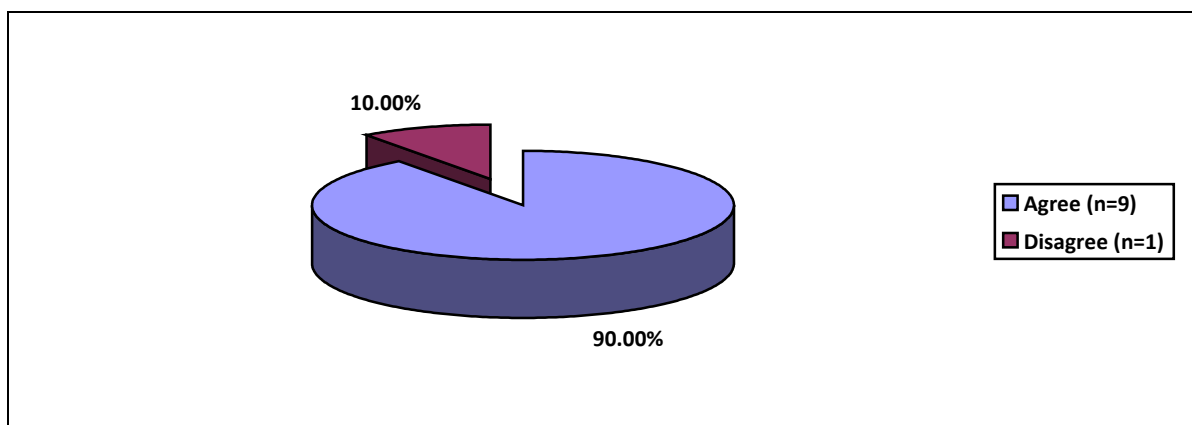


Figure 4.28 QANM respondents ensure that health care personnel met national QA standards (n=10)

- **Item B4: I adapt the national QA standards**

One of the functions of QANMs is to ensure that national QA standards are adapted to the needs/circumstances of individual health facilities (DoH 2007a:18). Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they adapted the national QA standards (see figure 4.29).

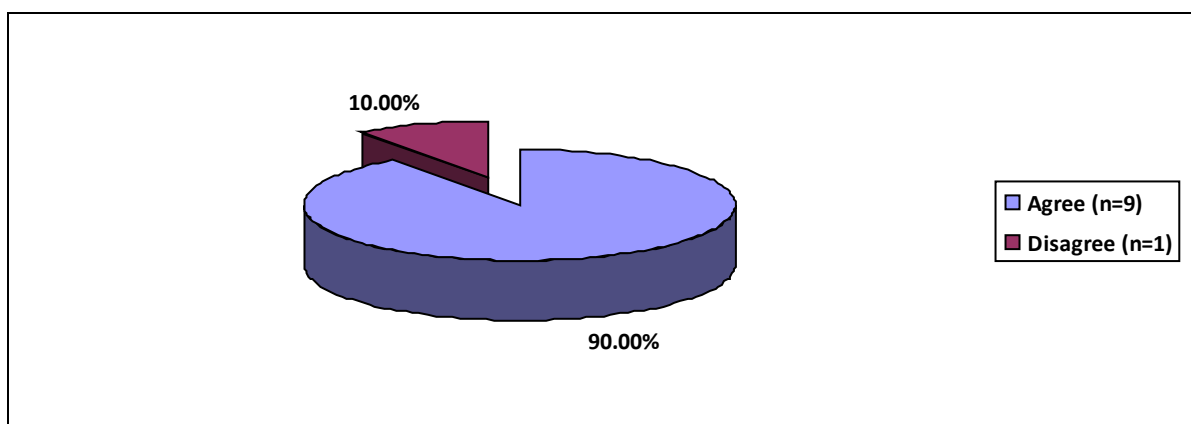


Figure 4.29 QANM respondents' adapting the national QA standards (n=10)

- Item B5: I monitor QA programmes**

Of the QANM respondents, 80.00% (n=8) *agreed* and 10.00% (n=1) *disagreed* that they monitored the QA programmes, while 10.00% (n=1) *did not know* (see figure 4.30). Monitoring QA programmes is one of the stipulated functions of QANMs (DoH 2007a:18).

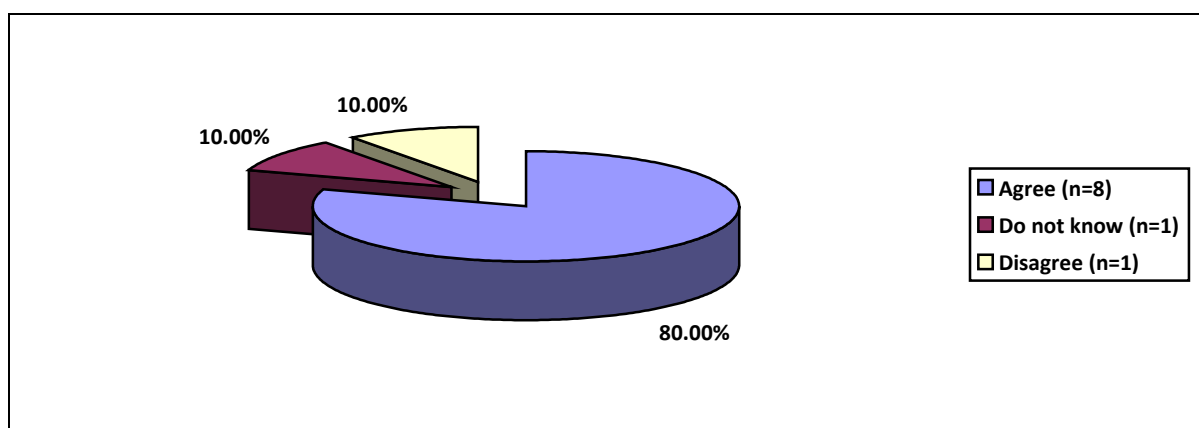


Figure 4.30 QANM respondents monitor QA programmes (n=10)

- Item B6: I implement policies developed by the QA Directorate**

The QA directorate develops, introduces and evaluates systems and methods of QA (Directorate Quality Assurance organogra.htm.accessed:2010/09/16). The Directorate gives directives to QANMs at different levels to implement the developed policies. Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they

implemented policies developed by the QA directorate, which indicated adherence to policy guidelines by most of the QANMs (see figure 4.31).

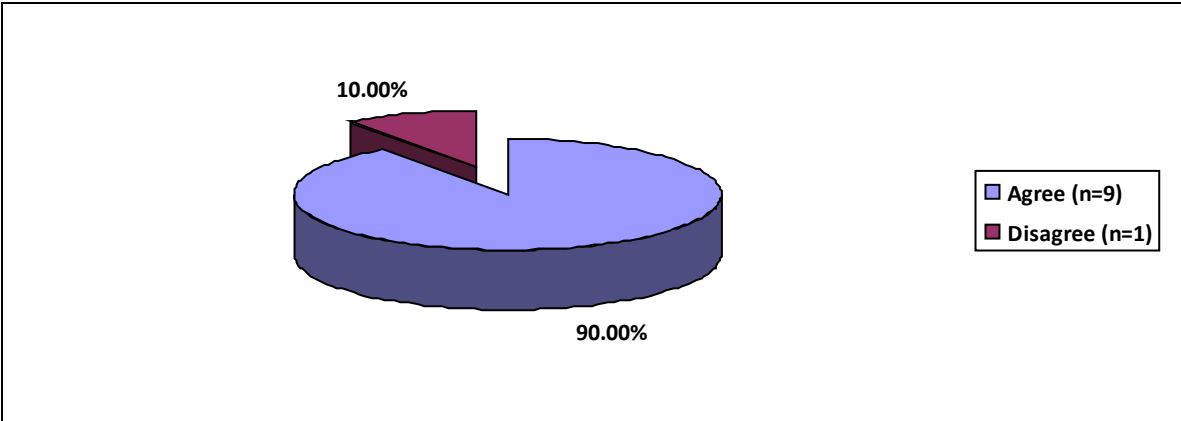


Figure 4.31 QANM respondents implement policies developed by QA Directorate (n=10)

- Item B7: I organise QA workshops and seminars**

Of the QANM respondents, 60.00% (n=6) *agreed* and 30.00% (n=3) *disagreed* that they organised QA workshops and seminars as stipulated and 10.00% (n=1) *did not know* (DoH 2007a:18) (see figure 4.32).

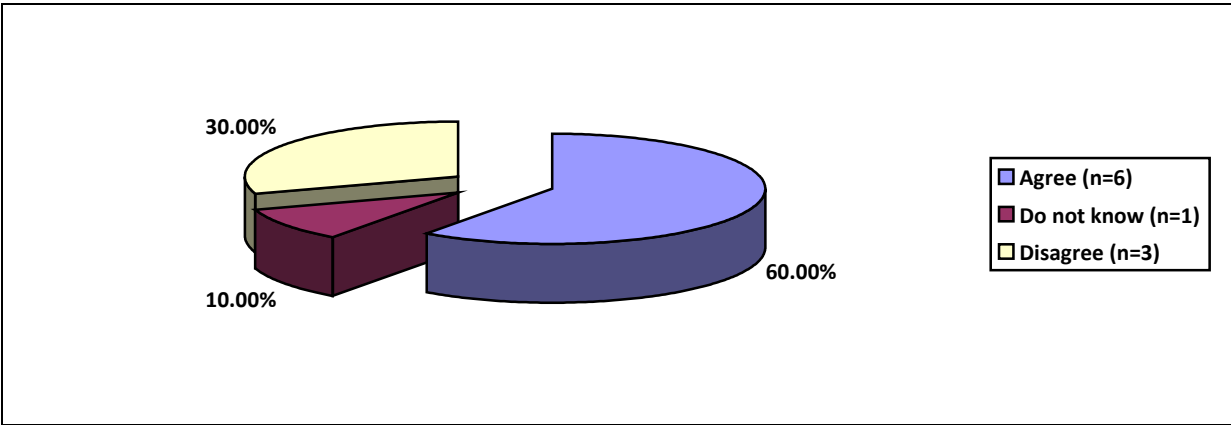


Figure 4.32 QANM respondents organise QA workshops and seminars (n=10)

There was some uncertainty about the above responses, however, on account of the administrative control measures (Shamase 2012:1), most activities in Limpopo Province public hospitals were put on hold because of budgetary constraints.

- **Item B8: I facilitate QA workshops and seminars**

Of the QANM respondents, 50.00% (n=5) *agreed* and 10.00% (n=1) *disagreed* that they facilitated QA workshops and seminars, while 40.00% (n=4) *did not know*, (see figure 4.33). The uncertainty over whether workshops were conducted was attributed to the austerity measures imposed to reduce the budget deficit (Kopane 2012:1).

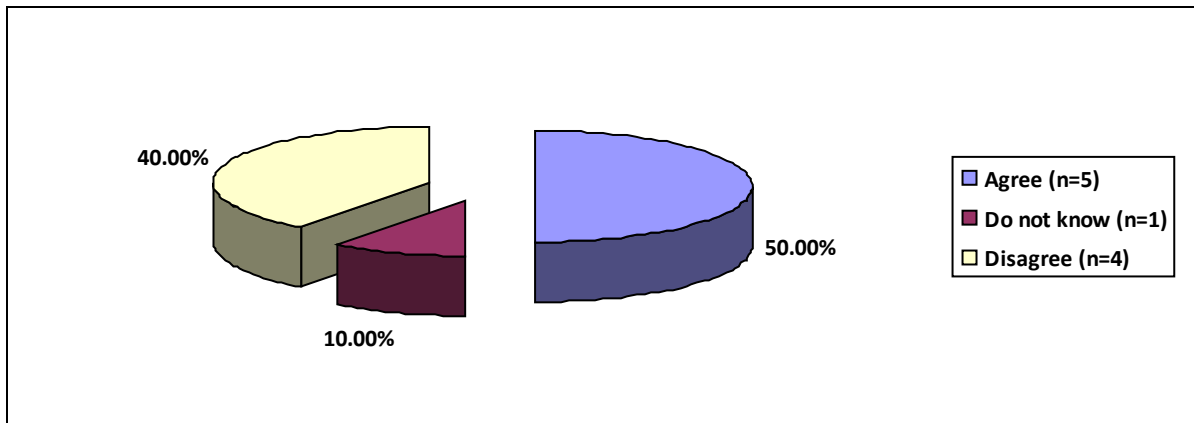


Figure 4.33 QANM respondents facilitate QA workshops and seminars (n=10)

- **Item B9: I provide in-service training on QA-related topics to health care personnel on a quarterly basis**

Of the QANM respondents, 60.00% (n=6) *agreed* and 20.00% (n=2) *disagreed* that they provided in-service training on QA-related topics, while 20.00% (n=2) *did not know* (see figure 4.34).

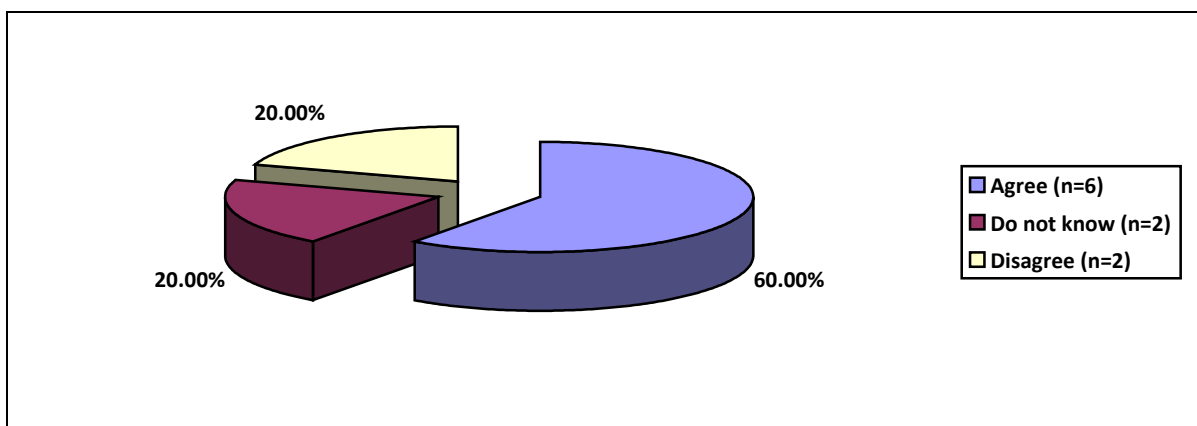


Figure 4.34 QANM respondents provide in-service training on QA-related topics to health care personnel on a quarterly basis (n=10)

- **Item B10: I keep a record of in-service training attendance on QA-related topics**

Of the QANM respondents, 60.00% (n=6) *agreed* while 40.00% (n=4) *disagreed* that they kept a record of in-service training attendance on QA-related topics (see figure 4.35). Quality health care depends on accurate record-keeping. Record-keeping is important to ensure effective communication between everyone involved in the delivery of health care (Booyens 2008:132), and so does proper record keeping substantiate the training and development of employees.

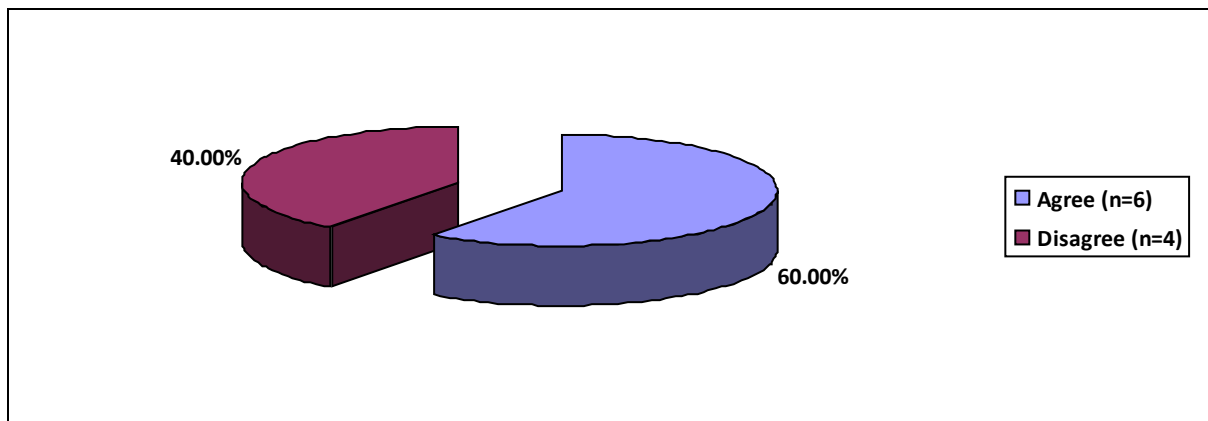


Figure 4.35 QANM respondents keep a record of in-service training attendance on QA-related topics (n=10)

- **Item B11: I ensure that QATs are established**

Of the QANM respondents, 80.00% (n=8) *agreed* while 20.00% (n=2) *disagreed* that they ensured that QATs were established (see figure 4.36). One of the functions of QANMs is to establish QATs in the institutions where they are placed (DoH 2007a:18).

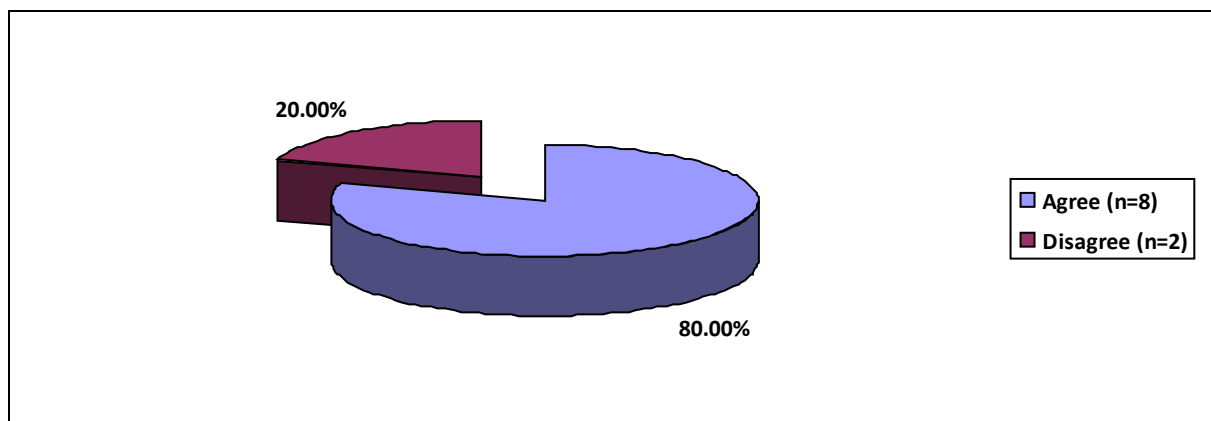


Figure 4.36 QANM respondents establish QATs (n=10)

- **Item B12: I supervise QATs**

Of the QANM respondents, 80.00% (n=8) *agreed* and 20.00% (n=2) *disagreed* that they supervised QATs (see figure 4.37). The results confirmed that most of the QANMs adhered to the policy guidelines (DoH 2007a:18; Offei et al 2004:19; Ministry of Health 2007:3).

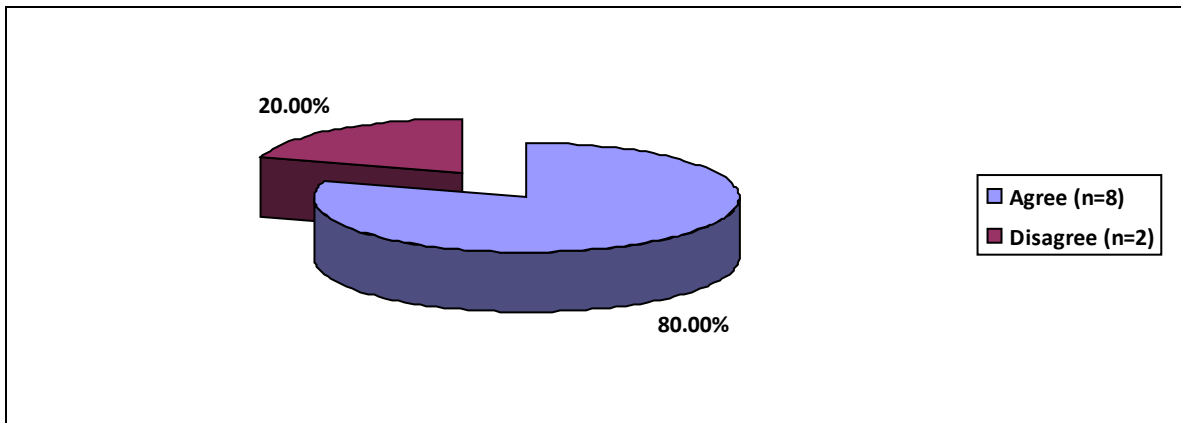


Figure 4.37 QANM respondents supervise QATs (n=10)

- **Item B13: I mobilise resources for QA activities**

Of the QANM respondents, 70.00% (n=7) *agreed* 20.00% (n=2) *disagreed* that they mobilised resources for QA activities, and 10.00% (n=1) *did not know* (see figure 4.38). The results confirmed Shamase's (2012:3) finding of a lack of material resources in public hospitals of Limpopo Province.

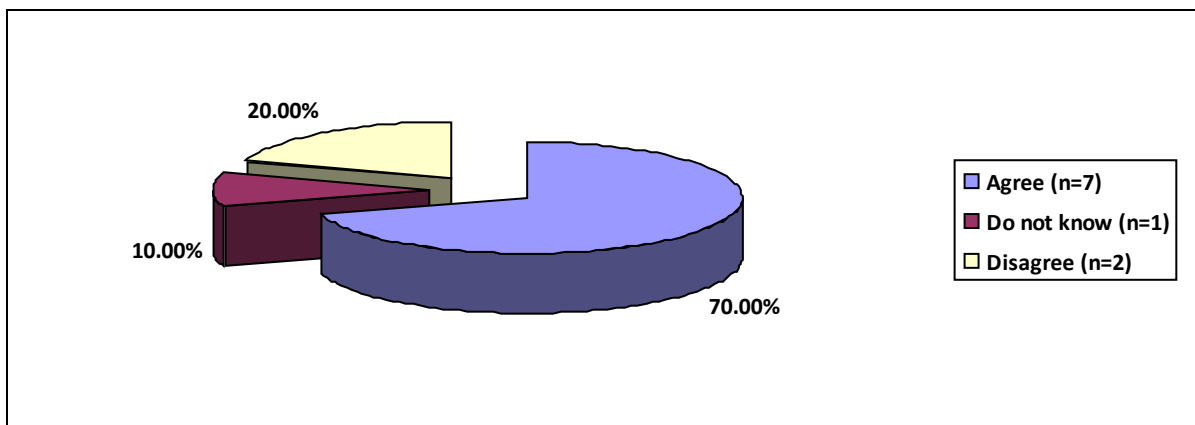


Figure 4.38 QANM respondents mobilised resources for QA activities (n=10)

- **Item B14: I make sure that health professionals participate in the QA programmes**

Of the QANM respondents, 80.00% (n=8) *agreed* and 20.00% (n=2) *disagreed* that they made sure that health care professionals participated in QA programmes (see figure 4.39). All health care professionals should be involved in QA programmes (DoH 2007a:15).

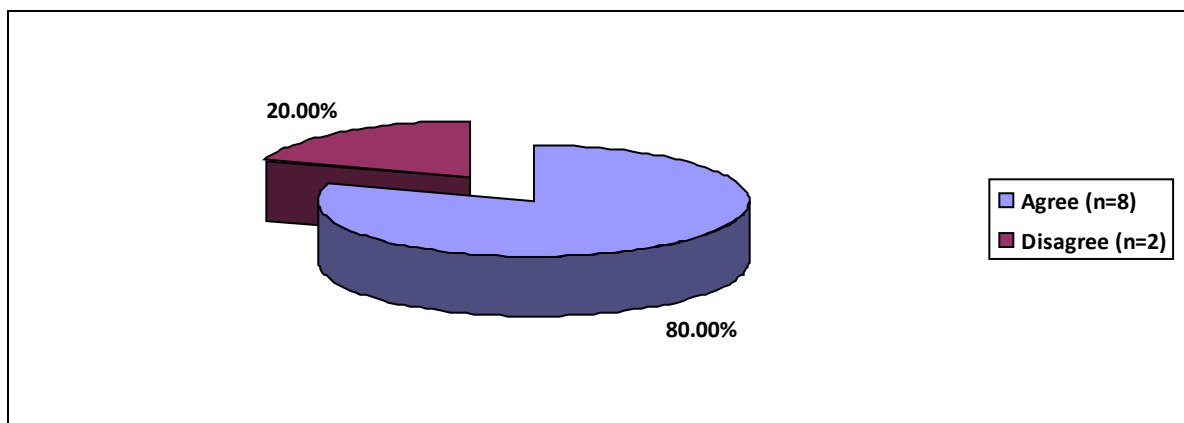


Figure 4.39 QANM respondents made sure that health care professionals participated in QA programmes (n=10)

- **Item B15: I develop a budget for QA activities**

According to *Public Finance Management (PFMA) Act, 1 of 1999*, the budget is the responsibility of a person entrusted with financial management. Of the QANM respondents, 50.00% (n=5) *agreed* that they developed a budget for QA activities; 30.00% (n=3) *disagreed*, and 20.00% (n=2) *did not know* (see figure 4.40).

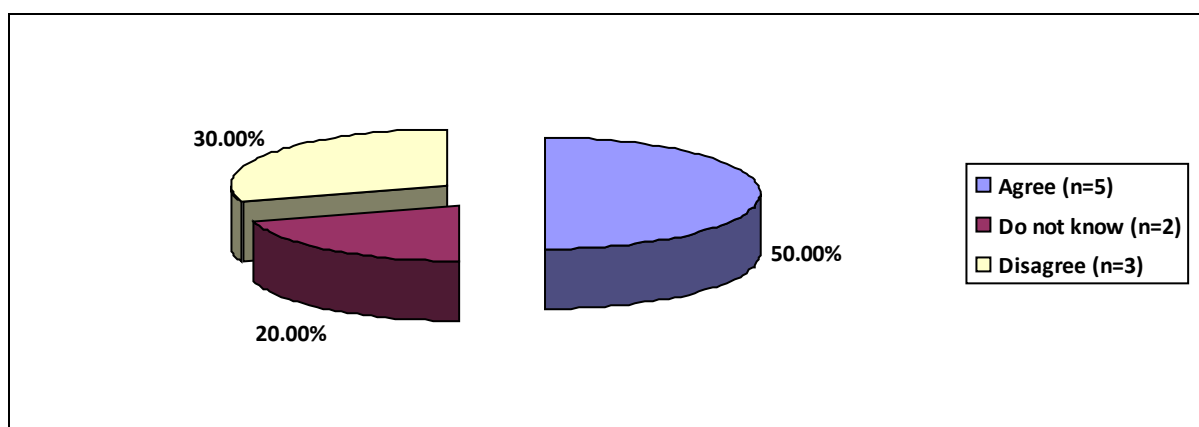


Figure 4.40 QANM respondents develop a budget for QA activities (n=10)

- **Item B16: I hold QA meetings with nursing personnel to discuss the care of patients on a monthly basis**

QANMs' functions include developing QA activities, and conducting meetings is one of the QA activities (DoH 2007a:3). Of the QANM respondents, 90.00% (n=9) *agreed* that they hold monthly meetings and only 10.00% (n=1) *disagreed* (see figure 4.41).

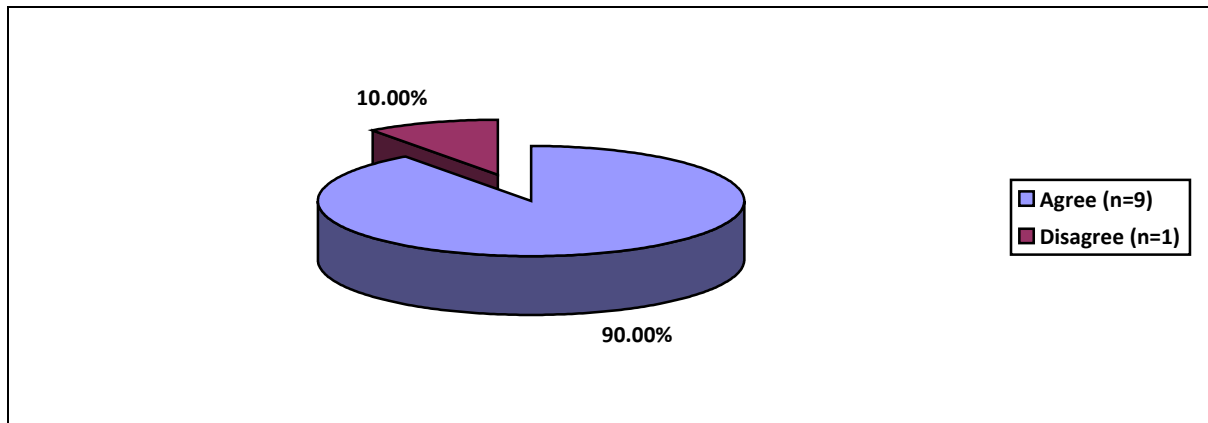


Figure 4.41 QANM respondents hold monthly QA meetings with nursing personnel regarding patient care (n=10)

- **Item B17: I expect nurses to teach patients about their follow-up care**

Patients often leave the health care service without sufficient information on their diagnosis, treatment and follow-up (Booyens 2008:269). Patients should be taught about their medical condition and follow-up care before discharge. Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they expect nurses to teach patients about their follow-up care (see figure 4.42).

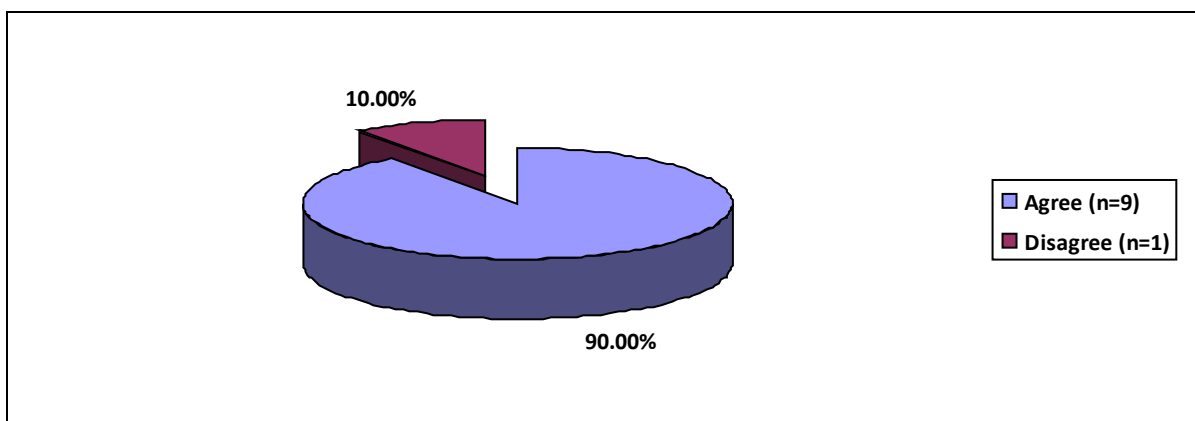


Figure 4.42 QANM respondents expect nurses to teach patients about their follow-up care (n=10)

- **Item B18: I encourage patients to be involved in planning of their care because they have the final say in their care**

According to the *Batho Pele Principles* (Department of Public Service and Administration 1997b:18), patients should be consulted about their nursing care plan and must also have a final say on the care that they receive. Of the QANM respondents, 80.00% (n=8) *agreed* and 10.00% (n=1) *disagreed* that they encouraged patients to be involved in their care while 10.00% (n=1) *did not know* (see figure 4.43).

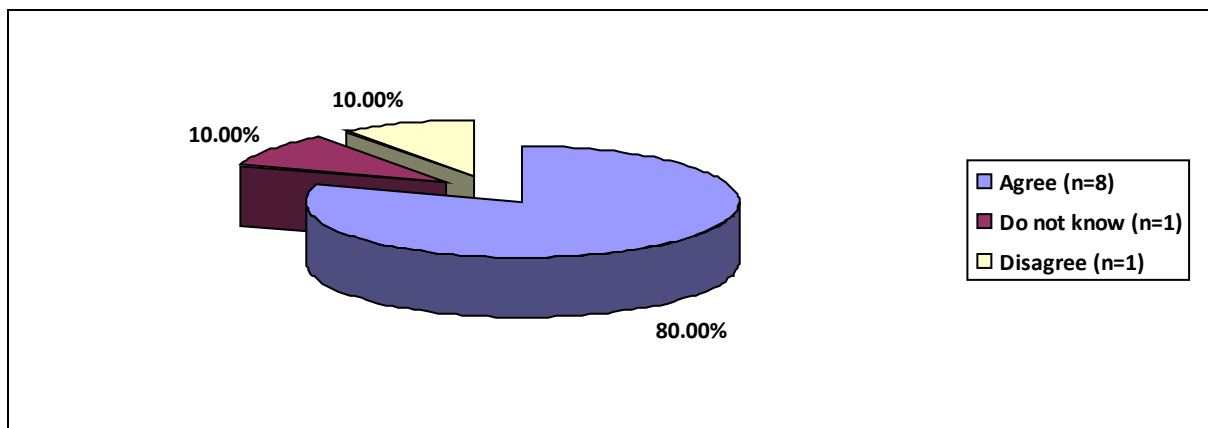


Figure 4.43 QANM respondents encourage patients to be involved in planning of their care (n=10)

- **Item B19: I expect nurses to plan nursing care of patients according to the nursing process**

Parahoo (2006:106) emphasises that the nursing process is used to ensure that patients get quality care. Nurses gather information to assess the patient's problem and evaluate the care given. Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they expect nurses to plan nursing care of patients according to the nursing process (see figure 4.44).

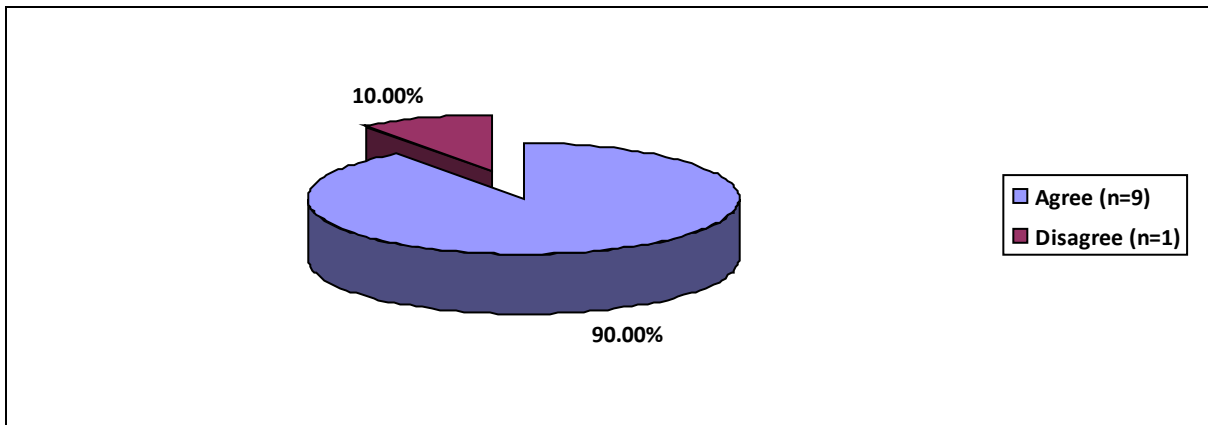


Figure 4.44 QANM respondents expect nurses to plan nursing care of patients according to the nursing process (n=10)

- **Item B20: I expect nurses to develop nursing care plans for all patients**

Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they expect nurses to develop nursing care plans for all patients (see figure 4.45). Developing nursing care plans assists nurses in knowing their patients well, providing nursing care in a scientific manner based on set process and also in being able to present them to other health care providers during case presentations (Hall 2009:4).

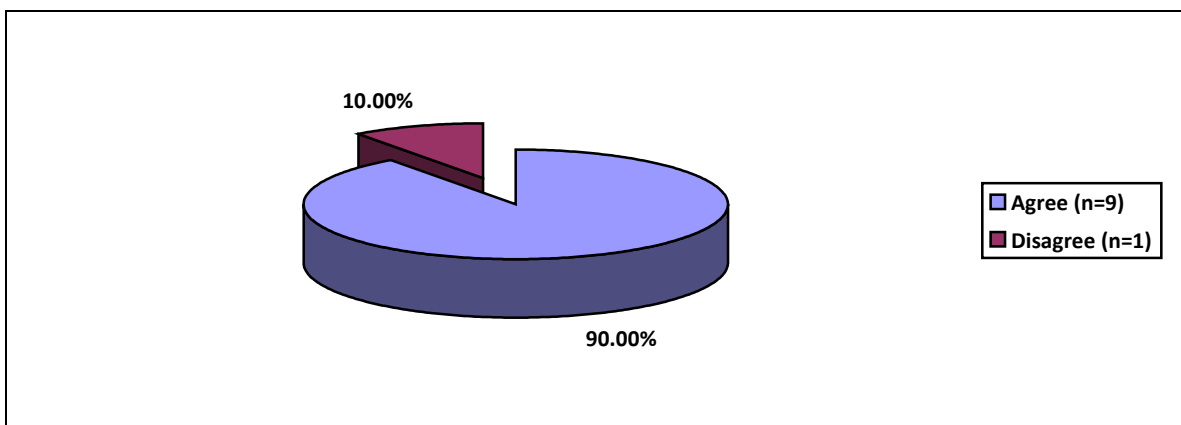


Figure 4.45 QANM respondents expect nurses to develop nursing care plans for all patients (n=10)

- **Item B21: I monitor that the catering staff provide patients with the right and adequate amount of food**

Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they monitored that the catering staff provided patients with the right and adequate amount of food (see figure 4.46).

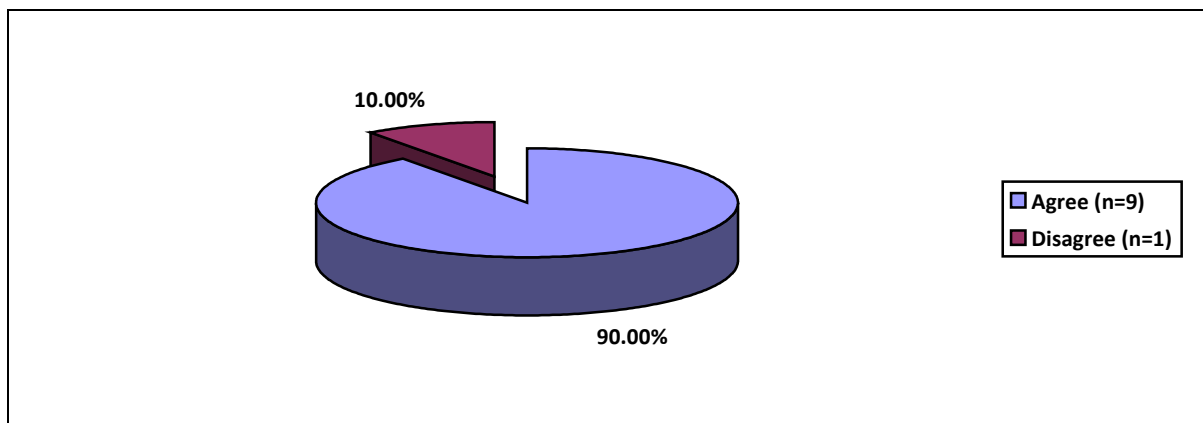


Figure 4.46 QANM respondents monitor that the catering staff provide patients with the right and adequate amount of food (n=10)

- **Item B22: I encourage nurses to attend to patients' additional needs, such as psychological and social needs**

Each patient is a unique being with physical, psychosocial, spiritual and cultural needs. When the patient is admitted to the hospital, their needs must be catered for. It is the responsibility of the person in charge to encourage nurses to attend to the patient's additional needs, such as psychological and social needs (Booyens 2008:24). Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they encourage nurses to attend to patients' additional needs (see figure 4.47).

The findings on process standards for QANMs indicate that the majority of the QANM respondents agreed with most process standards.

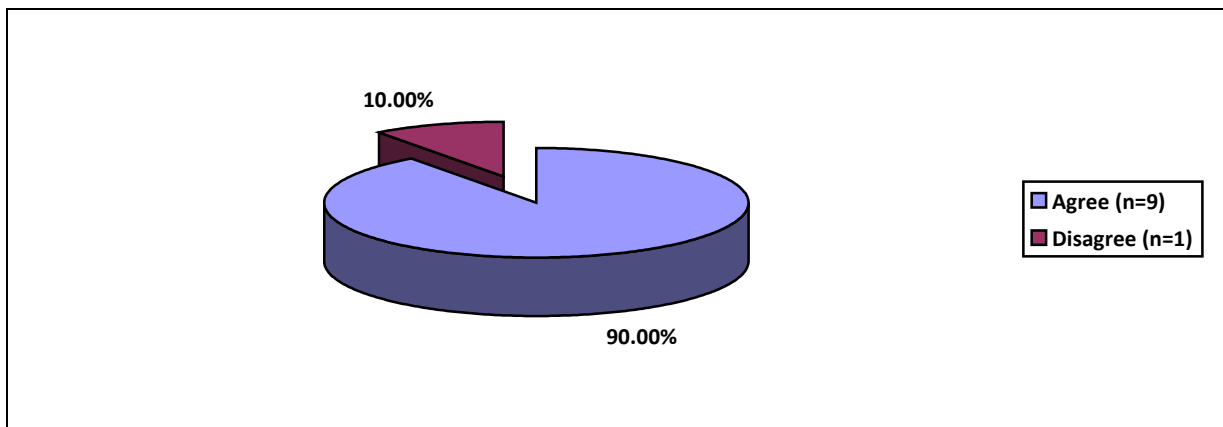


Figure 4.47 QANM respondents encourage nurses to attend to patients' additional needs, such as psychological and social needs (n=10)

4.3.2.3 Outcome standards

Outcome means what is achieved (Lundqvist & Axelsson 2007:52). In health care provision, the result is the change or improvement in a patient's health, attitude or behaviour conducive to future health, self-care abilities, functional abilities, morbidity and mortality status. The outcome is affected by structure and process activities during the delivery of care. The QAT respondents' responses will be discussed first and then those of the QANM respondents.

4.3.2.3.1 Outcome standards of QAT respondents

The responses to each statement on outcome standards for QATs are summarised in table 4.13 and illustrated in figures 4.49 to 4.53. Table 4.13 presents the QAT respondents' responses to QA outcome standards.

Table 4.13 QAT respondents' responses on QA outcome standards (n=102)

Outcomes questions/statements	Agree f (%)	Don't know f (%)	Disagree f (%)	Responses f (%)
C1 I give feedback to nursing personnel after auditing of patients' records	96 (94.12)	3 (2.94)	3 (2.94)	102 (100.00)
C2 I give feedback to nursing personnel after conducting patients' satisfaction survey	90 (88.24)	3 (2.94)	9 (8.82)	102 (100.00)
C3 I am given opportunity to attend in-service training about quality improvement at least once per quarter	61 (59.80)	12 (11.76)	29 (28.43)	102 (99.99)
C4 Patients frequently express their satisfaction with the care given to them on discharge	94 (92.16)	4 (3.92)	4 (3.92)	102 (100.00)
C5 I encourage patients to express their feelings about the care they received by letting them fill in the discharge questionnaire	90 (88.24)	2 (1.96)	10 (9.80)	102 (100.00)

- **Item C1: I give feedback to nursing personnel after auditing of patients' records**

Booyens (2008:263) points out that quality audits do not only mean auditing of patients records, but include interviewing patients and nursing personnel as well. Quality audits are conducted in four phases, namely plan the audit, execute the audit, report on the audit, and correct any problem. Giving feedback falls under the third phase that is report on audit. During feedback findings are presented and recommendations made (Booyens 2008:264).

Of the QAT respondents, 94.12% (n=96) *agreed* and 2.94% (n=3) *disagreed* that they give feedback to nursing personnel after auditing of patient records, while 2.94% (n=3) *did not know* (see figure 4.48).

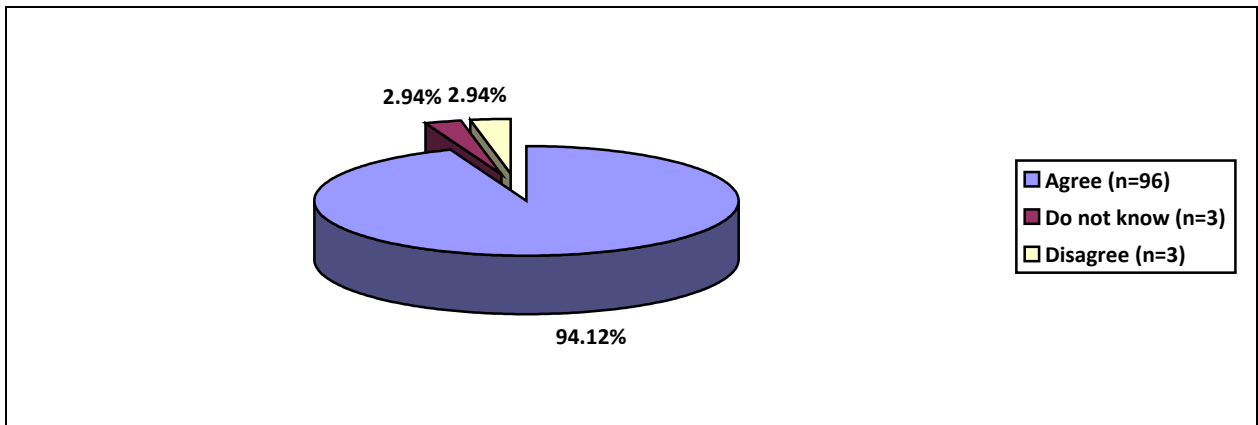


Figure 4.48 QAT respondents give feedback to nursing personnel after auditing of patients' records (n=102)

- **Item C2: I give feedback to nursing personnel after conducting patients' satisfaction survey**

Morris, Jahangir and Sethi (2013:1) emphasise that patient satisfaction refers to the patient's overall experience with the health care service. It is a key determination of quality care and of patient outcomes. Findings and recommendations after the survey are critical in order to implement improvements. Of the QAT respondents, 88.24% (n=90) *agreed* and 8.82% (n=9) *disagreed* that they give feedback to nursing personnel after conducting patients' satisfaction survey, while 2.94% (n=3) *did not know* (see figure 4.49).

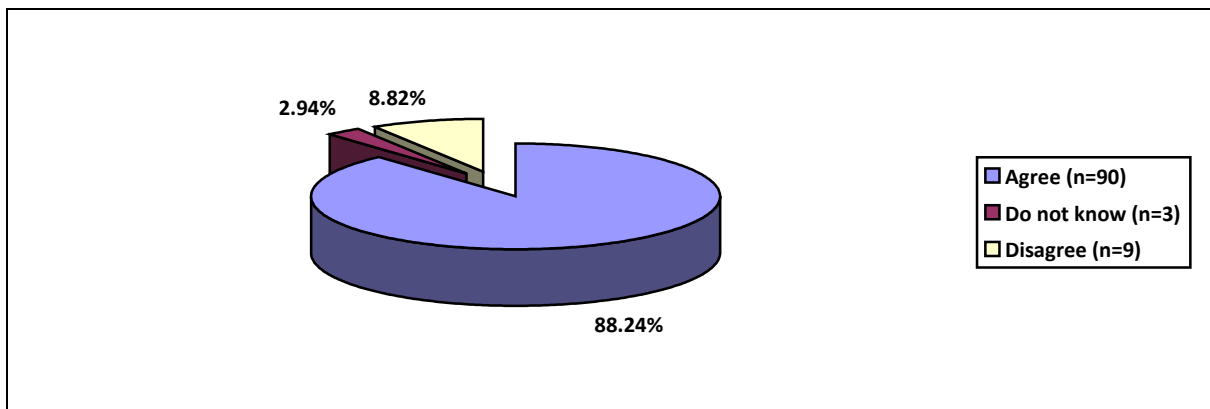


Figure 4.49 QAT respondents give feedback to nursing personnel after conducting patients' satisfaction survey (n=102)

- **Item C3: I am given opportunity to attend in-service training about quality improvement at least once per quarter**

Of the QAT respondents, 59.80% (n=61) *agreed* and 28.43% (n=29) *disagreed* that they are given opportunity to attend in-service training about quality improvement at least once per quarter, while 11.76% (n=12) *did not know* (see figure 4.50).

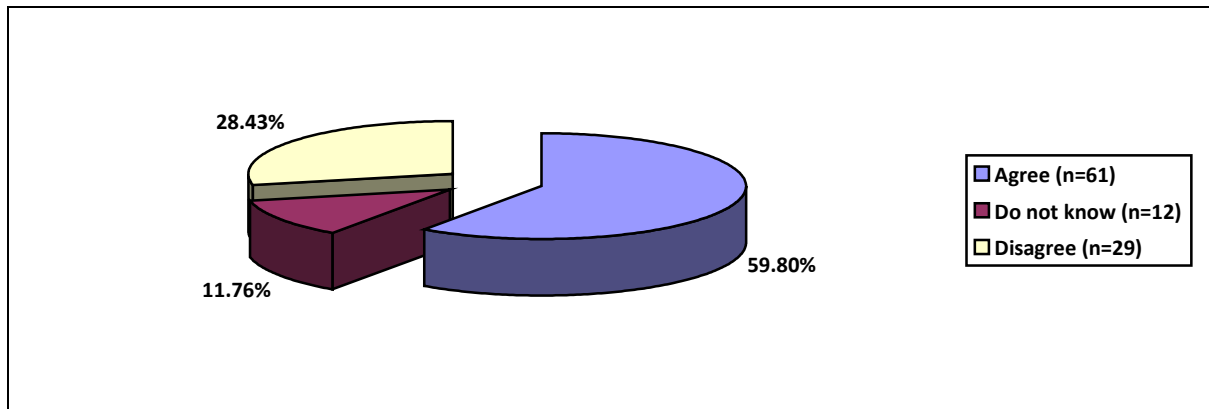


Figure 4.50 QAT respondents are given opportunity to attend in-service training about quality improvement at least once per quarter (n=102)

- **Item C4: Patients frequently express their satisfaction with the care given to them on discharge**

When there is good interaction with the patients during their stay in hospital, it will be expressed by their satisfaction on discharge (Morris et al 2013:2). Of the QAT respondents, 92.16% (n=94) *agreed* and 3.92% (n=4) *disagreed* that patients frequently express their satisfaction with the care given to them on discharge, while 3.92% (n=4) *did not know* (see figure 4.51).

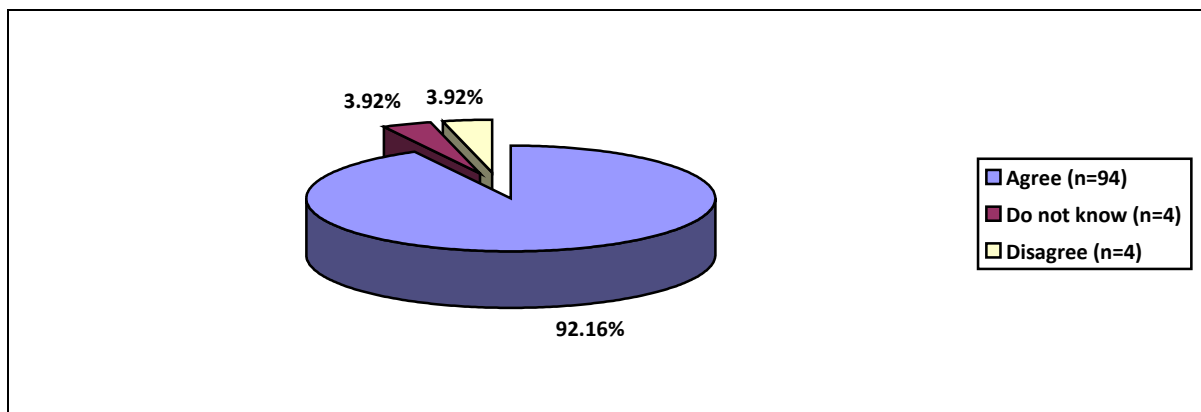


Figure 4.51 QAT respondents' response to patients frequently expressing their satisfaction of the care given to them on discharge (n=102)

- **Item C5: I encourage patients to express their feelings about the care they received by letting them fill in the discharge questionnaire**

A patient satisfaction questionnaire is completed on discharge. The patients express their experiences during their stay at the hospital (Morris et al 2013:2). Of the QAT respondents, 88.24% (n=97) *agreed* and 9.80% (n=10) *disagreed* that they encourage patients to express their feelings about the care they received by letting them fill in the discharge questionnaire, and 1.96% (n=2) *did not know* (see figure 4.52).

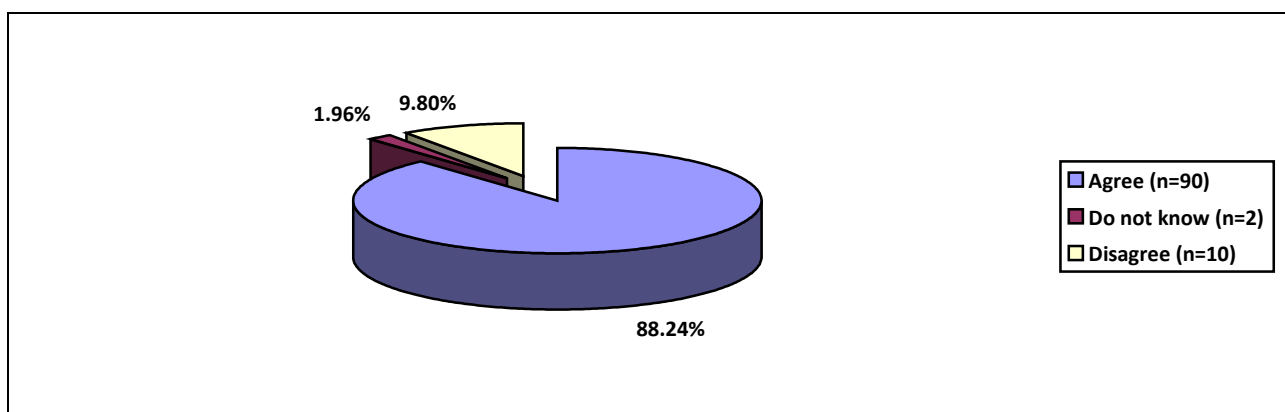


Figure 4.52 QAT respondents encourage patients to express their feelings about the care they received (n=102)

4.3.2.3.2 Outcome standards for QANMs

The responses to each statement on outcome standards for QANMs are summarised in table 4.14 and illustrated in figures 4.53 to 4.60. Table 4.14 contains the survey questions and the QANM respondents' responses on QA outcome standards.

Table 4.14 QANM respondents' responses on QA outcome standards

Outcome questions/Statements	Agree f (%)	Don't know f (%)	Disagree f (%)	Responses f (%)
C1 At quarterly intervals I evaluate whether the set QA goals are met	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
C2 I always document the results of evaluating the achievement of QA goals	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
C3 I ensure that the results of evaluated QA goals are communicated to the personnel of the evaluated institutions	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
C4 I have established a reward/incentive system for the institution(s)	6 (60.00)	2 (20.00)	2 (20.00)	10 (100.00)
C5 I encourage nurses to compile a report on maternal deaths that occur in maternity wards/units.	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
C6 I provide patients with the opportunity to evaluate and report on the care they received during their hospitalisation, at the time of their discharge	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
C7 I encourage patients to express their feelings about the care they received by filling in the discharge questionnaire	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)
C8 I ensure that the patients' responses to the nursing interventions and care received during their hospitalisation, guides future nursing action	9 (90.00)	0 (0.00)	1 (10.00)	10 (100.00)

Figures 4.53 to 4.60 illustrate the responses to these items.

- **Item C1: At quarterly intervals I evaluate whether the set QA goals are met**

The availability of goals makes it possible to evaluate the quality of nursing care provided (Hunt et al 2004:249). Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they evaluate whether the set goals are met (see figure 4.53).

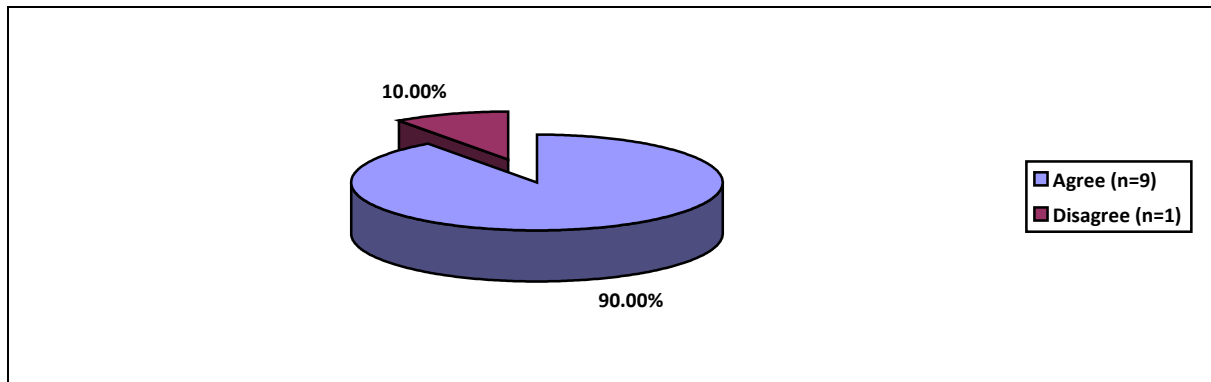


Figure 4.53 QANM respondents evaluate at quarterly intervals whether the set QA goals are met (n=10)

- **Item C2: I always document the results of evaluating the achievement of QA goals (n=10)**

Of the QANM respondents, 90.00% (n=9) *agreed* that they always document the results of evaluating the achievement of QA goals and 10.00% (n=1) *disagreed* (see figure 4.54). The findings indicate that the majority of the respondents evaluated the QA goal achievement and documented the results.

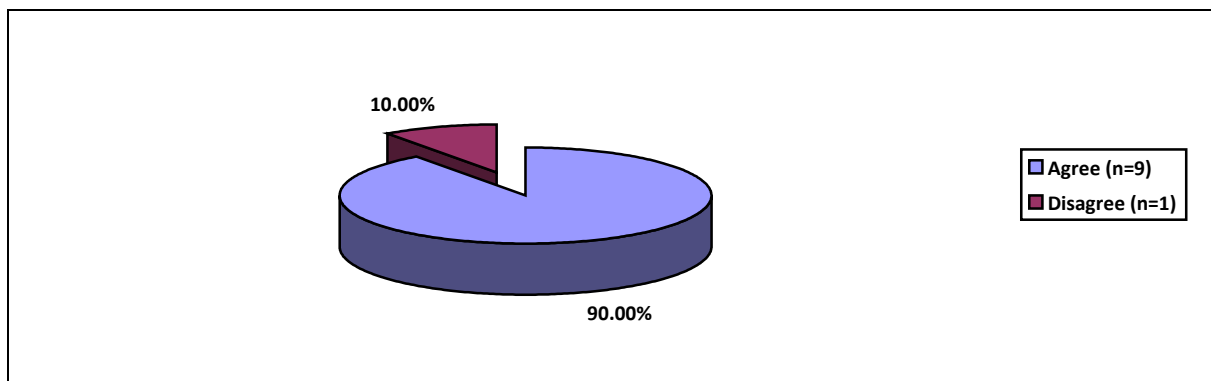


Figure 4.54 QANM respondents document the results of evaluating the achievement of QA goals (n=10)

- **Item C3: I ensure that the results of evaluated QA goals are communicated to the personnel of the institution (n=10)**

The purpose of evaluation is to determine whether QA goals were met (Kozier, Erbs, Berman & Synder 2007:235). Evaluation is primarily directed at evaluating the outcomes of care and not the plan of, or care delivered.

Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they give feedback on the results of QA goal evaluation to the personnel (see figure 4.55).

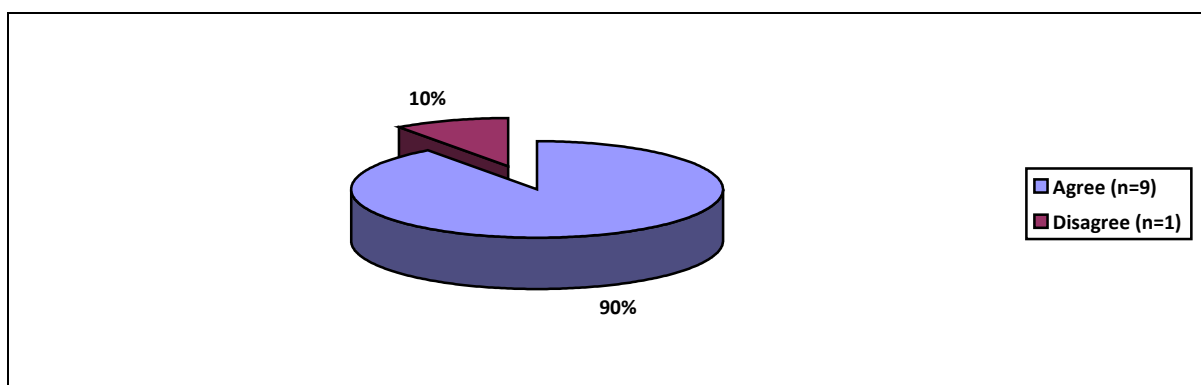


Figure 4.55 QANM respondents ensure that the results of evaluated QA goals are communicated to the personnel of the institutions

- **Item C4: I have established a reward/incentive system for the institution(s)**

Incentives are external measures designed and established to influence motivation and behaviour of individuals or groups (UNDP 2006:5). The QANM respondents referred to performance incentives, where QAT members are assessed and rated quarterly on their work performance. QAT members are then paid according to the outcome of the assessment. Of the QANM respondents, 60.00% (n=6) *agreed* and 20.00% (n=2) *disagreed* that they establish incentives, while 20.00% (n=2) *did not know* (see figure 4.56).

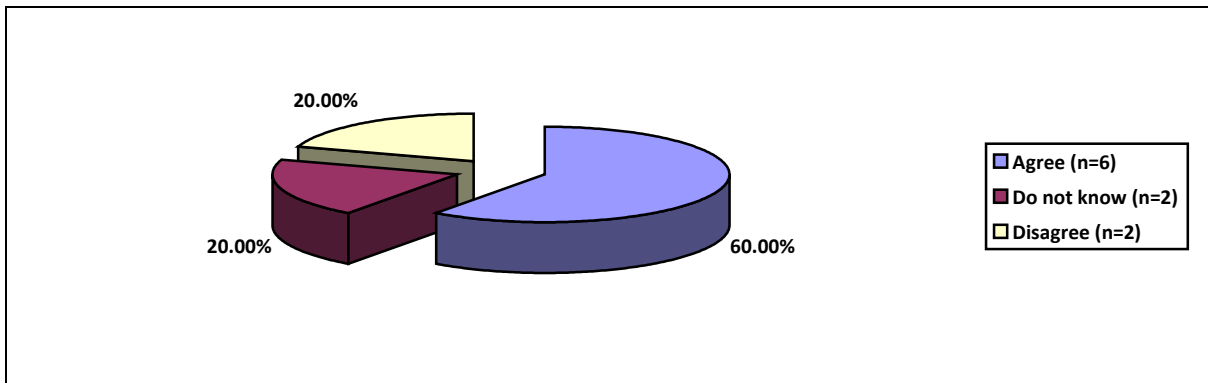


Figure 4.56 QANM respondents establish a reward/incentive system for the institution(s) (n=10)

- **Item C5: I encourage nurses to compile a report on maternal deaths that occur in maternity wards/units**

Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they encourage nurses to compile a report on maternal deaths that occur in maternity wards/units (see figure 4.57).

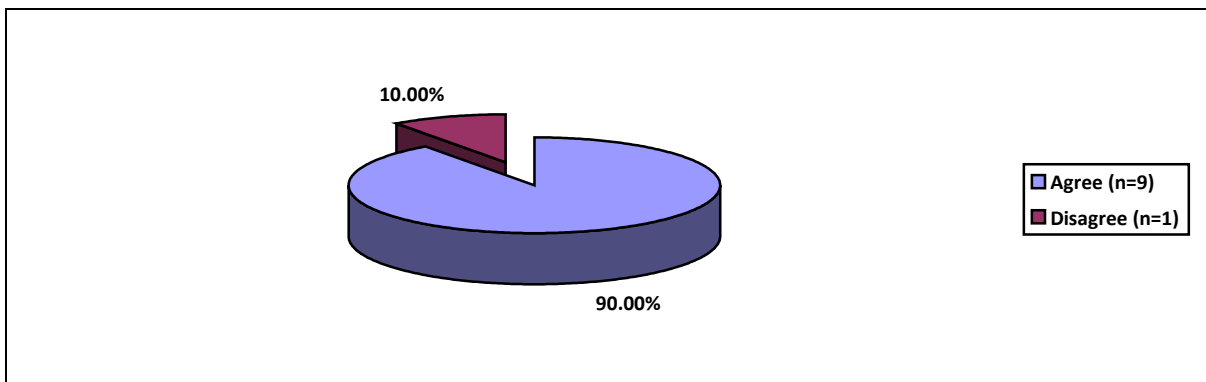


Figure 4.57 QANM respondents encourage nurses to compile a report on maternal deaths that occur in maternity wards/units (n=10)

- **Item C6: I provide patients with the opportunity to evaluate and report on the care they received during their hospitalisation, at the time of their discharge**

Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they provide patients with the opportunity to evaluate and report on the care they received during their hospitalisation, at the time of their discharge (see figure 4.58). Hall (2009:4) emphasises that patients should be included in their treatment and also be given a chance to evaluate the care received or the lack thereof.

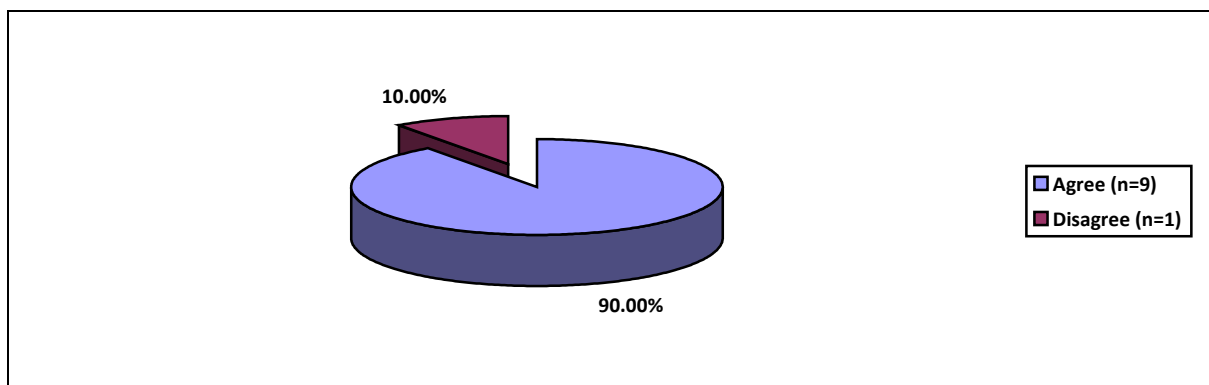


Figure 4.58 QANM respondents provide patients with the opportunity to evaluate and report on care received (n=10)

- **Item C7: I encourage patients to express their feelings about the care they received by filling in the discharge questionnaire**

Of the QANM respondents, 90.00% (n=9) *agreed* and 10.00% (n=1) *disagreed* that they encouraged patients to fill in the discharge questionnaire (see figure 4.59). The aim of patients' satisfaction surveys is to give patients the opportunity to express their feelings about the care that they received and also to assist nurses in improving the nursing care (Morris et al 2013:2).

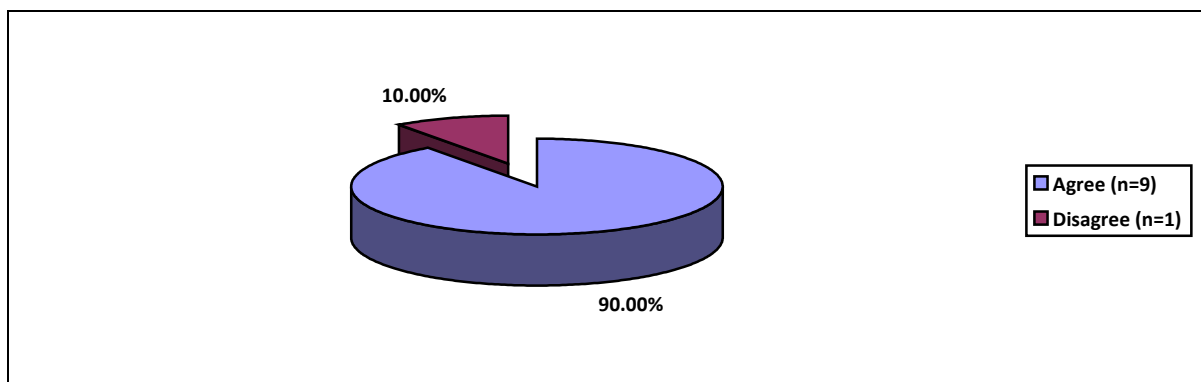


Figure 4.59 QANM respondents encourage patients to express their feelings about the care they received by filling in the discharge questionnaire (n=10)

- **Item C8: I ensure that patients’ responses to the nursing interventions and care received during their hospitalisation guide future nursing action (n=10)**

Of the QANM respondents, 90.00% (n=9) ensure that patients’ responses to the nursing interventions and care received during their hospitalisation, guide future nursing action (see figure 4.60). The presentations of case studies on patients give personnel chance to analyse the care rendered and make recommendations. The outcomes of the case studies give nursing personnel a chance to make future plans (Morris et al 2013:3).

The majority of the QANMs responded positively to most questions posed on the outcome standards.

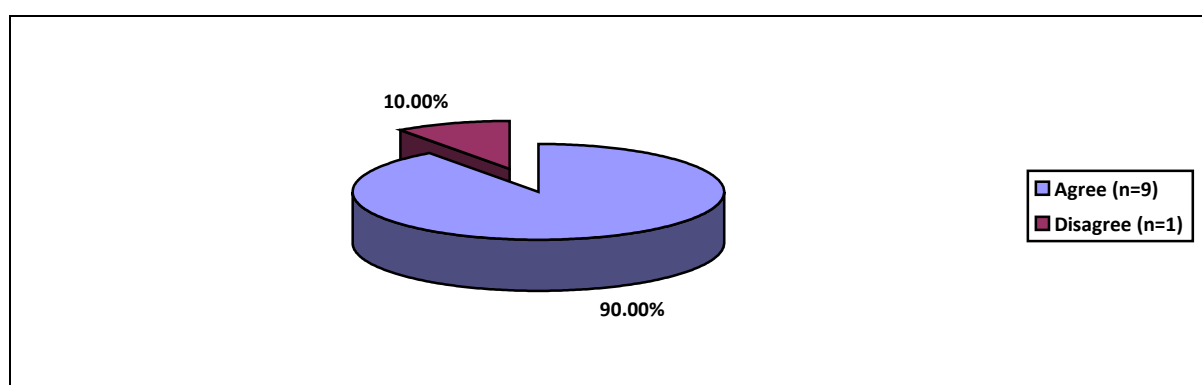


Figure 4.60 QANM respondents ensure that patients’ responses to the nursing interventions and care received during their hospitalisation, guide future nursing action (n=10)

4.3.3 Section C: General information on the outcome of QA activities

Section C of the questionnaires dealt with general information on QA activities. The questions required a “Yes” or “No” response and some questions were open-ended. Findings in this section were analysed by comparing QANM and QAT respondents’ responses as the questions were similar.

The responses to each statement on general information pertaining to the outcome of QA activities for QATs and QANMs are summarised in table 4.15 and 4.16. They are also visually illustrated in figures 4.61 to 4.70. Table 4.15 and 4.16 present the survey questions and responses of QAT and QANM respondents, respectively, to general information on the outcome of QA activities.

Table 4.15 QAT respondents’ responses to general information on the outcome of QA activities (n=102)

QA activities	Yes f (%)	No f (%)	Responses f (%)
1. Did the QANM introduce the quality assurance programme in your institution?	82 (80.39)	20 (19.61)	102 (100.00)
2. Did the QANM disseminate the aims and objectives of quality assurance in your institution?	82 (80.39)	20 (19.61)	102 (100.00)
3. Did the appointment of QANM bring any changes in patient care?	85 (83.33)	17 (16.67)	102 (100.00)
4. Are there any factors that you think contribute to the success of the QANM performance?	80 (78.43)	22 (21.57)	102 (100.00)

Table 4.16 QANM respondents’ responses to general information on the outcome of QA activities (n=10)

QA activities	Yes f (%)	No f (%)	Responses f (%)
1. Did you introduce the quality assurance programme in your institution?	9 (90.00)	1 (10.00)	10 (100.00)
2. Did you disseminate the aims and objectives of quality assurance in your institution?	7 (70.00)	3 (30.00)	10 (100.0)
3. Did you observe any improvement in the provision of nursing care since your appointment?	8 (80.00)	2 (20.00)	10 (100.0)
4. Are there any factors that you think contribute to the success of QANM’s (own) performance?	9 (90,00)	1 (10.00)	10 (100.0)

Figures 4.61 to 4.68 depict the responses of the QAT and QANM respondents respectively, after which a combined discussion of each item will be provided.

- **Did the QANM introduce the quality assurance programme in your institution?**

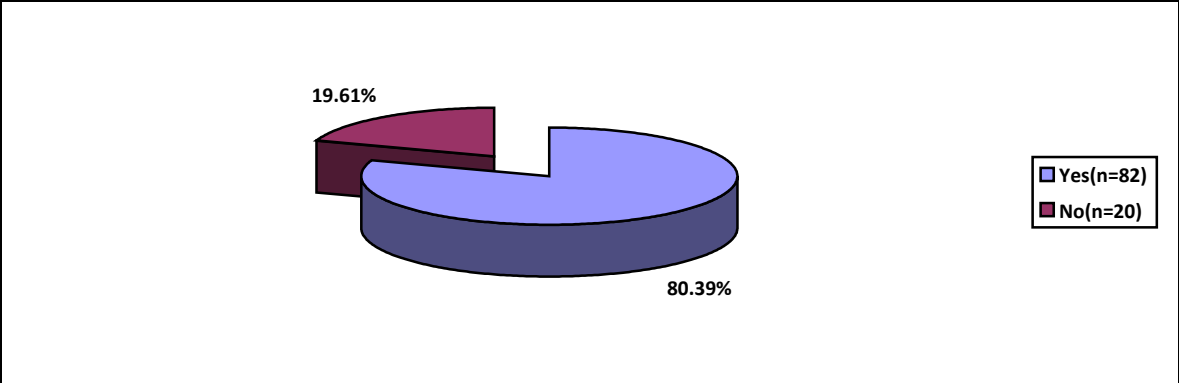


Figure 4.61 QAT respondents on QANMs' introduction of the QA programme in the institution (n=102)

- **Did you introduce the quality assurance programme in your institution? (n=10)**

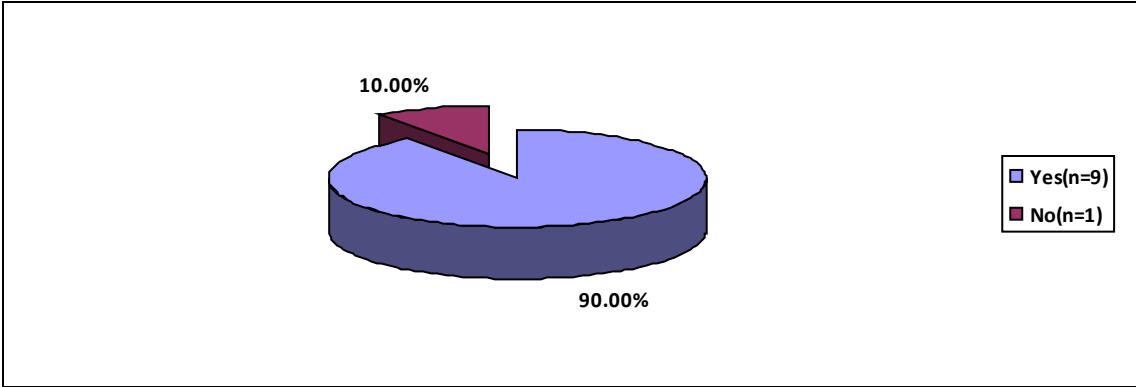


Figure 4.62 QANM respondents' introduction of the QA programme in the institution (n=10)

Of the QAT respondents, 80.39% (n=82) indicated that the QANM introduced a QA programme in their institution, whereas 19.61% (n=20) replied negatively (*No*) (see figure 4.61). Of the QANM respondents, 90.00% (n=9) confirmed that they instituted such a programme while 10.00% (n=1) did not do so by responding negatively (*No*)

(see figure 4.62). The results endorse that most of the QANMs did in fact introduce a QA programme in the various institutions (South Africa 2007a:16). The QANMs however indicated that they did better in instituting a QA programme that was considered by the QAT members.

- **Did the QANM disseminate the aims and objectives of QA in your institution?**

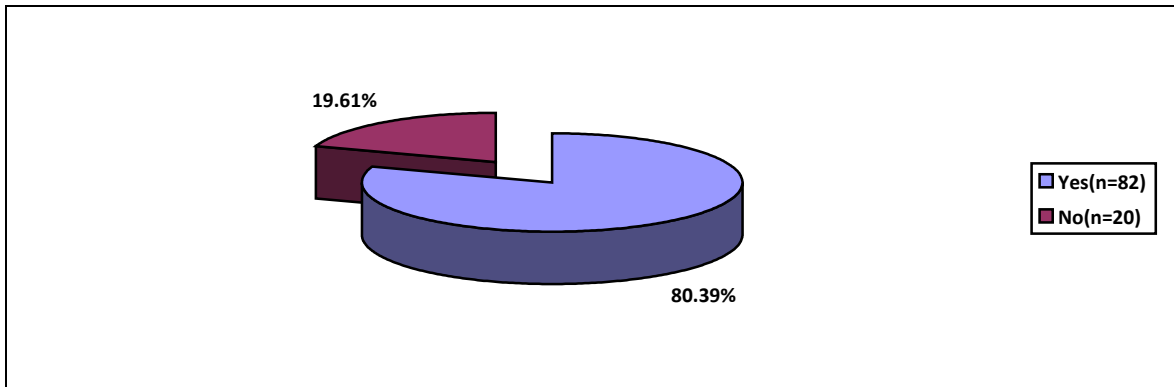


Figure 4.63 QAT respondents on QANMs' dissemination of aims and objectives of QA in the institution (n=102)

- **Did you disseminate the aims and objectives of QA in your institution?**

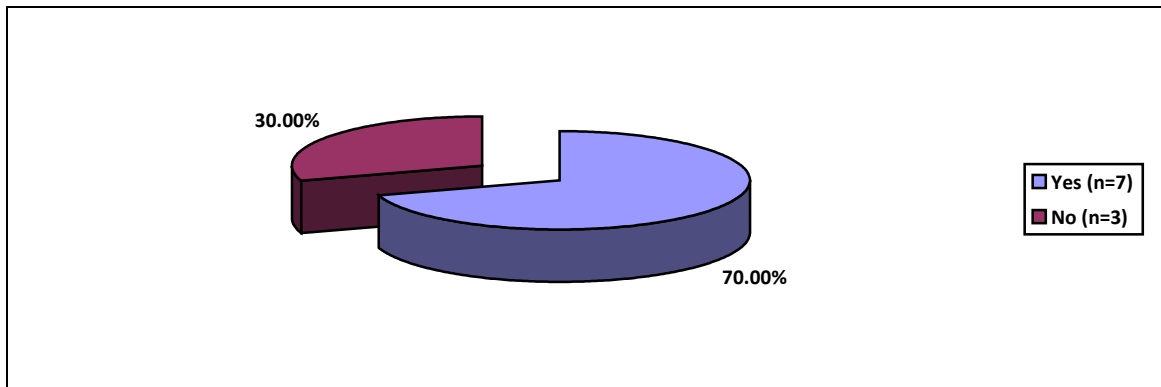


Figure 4.64 QANM respondents' dissemination of aims and objectives of QA in the institution (n=10)

Offei et al (2007:40) emphasise that QA aims and objectives should be disseminated to all personnel in the institution directing behaviour, conduct and performance, so that all staff can knowingly participate in the QA activities. Regarding the dissemination of the aims and objectives of QA, 80.39% (n=82) of the QAT and 70.00% (n=7) of the QANM respondents indicated Yes. Only 19.61% (n=20) of the QAT and 30.00% (n=3) of the

QANM respondents indicated *No* (see figure 4.63 and 4.64, respectively). It appears that the QAT members are of the opinion that the QANMs did better in this regard than the self-evaluation of the QANMs.

- **Did the appointment of the QANM bring any changes in patient care?**

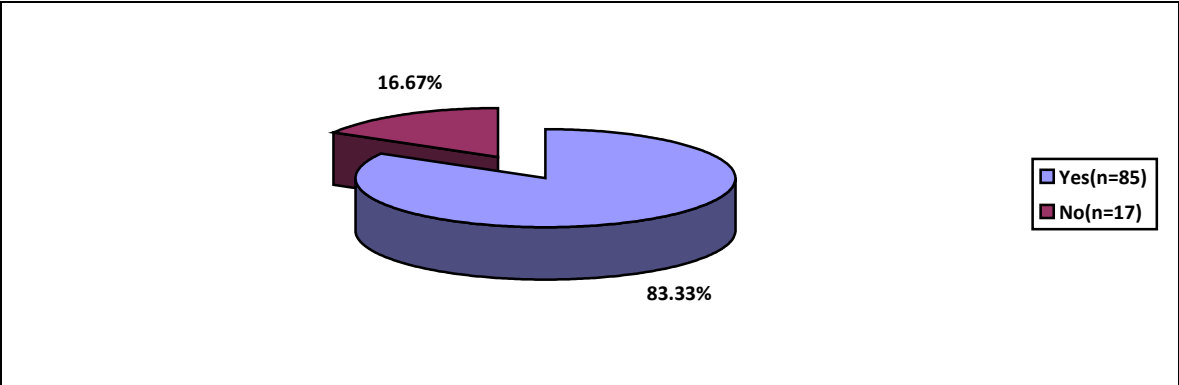


Figure 4.65 QAT respondents on QANMs’ bringing changes in patient care (n=102)

- **Did you observe any improvement in the provision of nursing care since your appointment?**

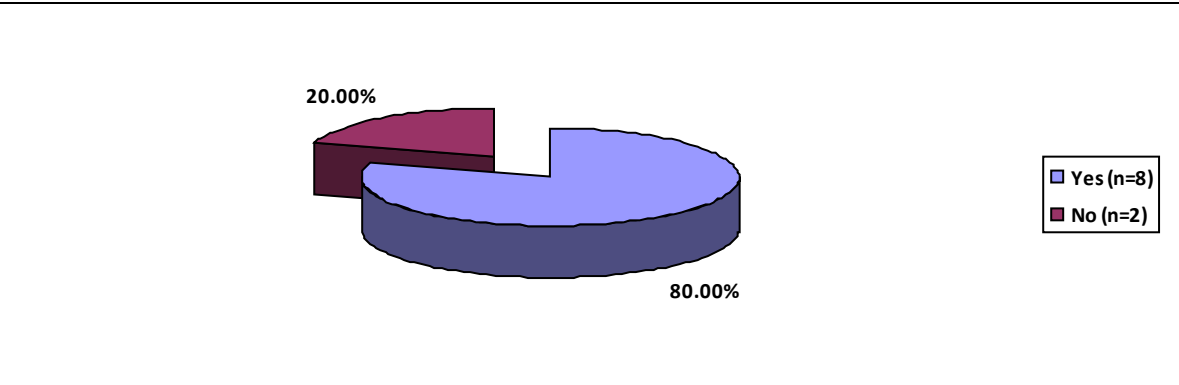


Figure 4.66 QANM respondents’ observation of improvement in the provision of nursing care since their appointment (n=10)

Regarding the appointment of QANMs and changes in patient care, 83.33% (n=85) of the QAT respondents indicated *Yes* and 16.67% (n=17) indicated *No* (see figure 4.65). Of the QANM respondents, 80.00% (n=8) had observed an improvement in the provision of patient care since their appointment (*Yes*) while 20.00% (n=2) had not (*No*) (see figure 4.66). The aim of appointing QANMs was to improve nursing care (DoH

2007a:18), and it is evident that both groups of respondents strongly agree that there has been an improvement in the delivery of patient care since the appointment of the QANMs.

- **Are there any factors that you think contribute to the success of the QANM performance?**

Regarding factors that contributed to QANM performance, 78.43% (n=80) of the QAT respondents agreed (Yes) that there were factors that contributed to the success of the QANMs, while 21.57% (n=22) did not (No) (see figure 4.67). Of the QANM respondents, 90.00% (n=9) agreed (Yes) while 10.00% (n=1) disagreed (No) (see figure 4.68). Discussion of the specific factors follows later.

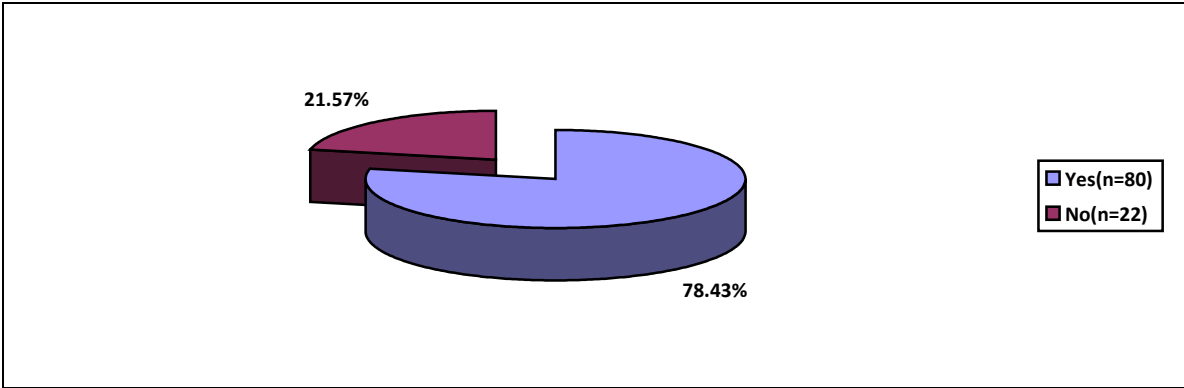


Figure 4.67 QAT respondents on confirming that factors contributed to the success of the QANMs' performance (n=102)

- **Are there any factors that you think contribute to the success of your performance (n=10)**

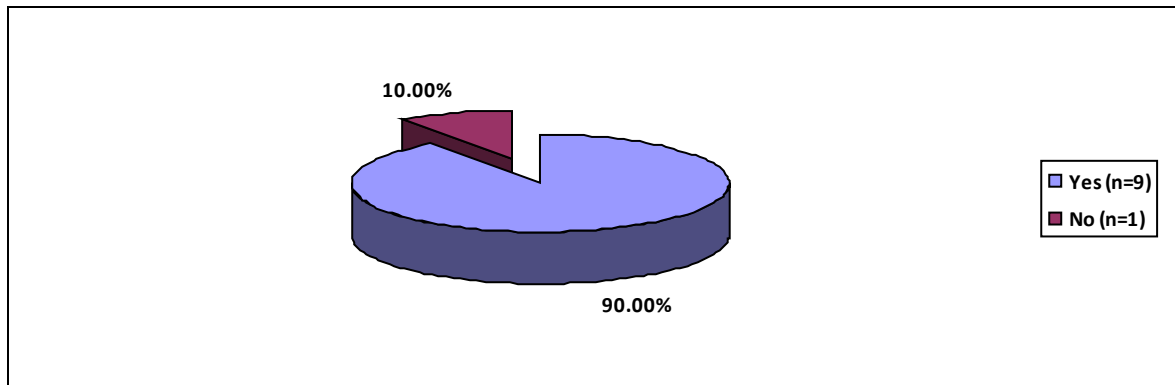


Figure 4.68 QANM respondents on confirming that factors contributed to the success of their performance (n=10)

In their questionnaire, question 5 required the QAT respondents to elaborate on whether the appointment of the QANM brought any change in patient care. The QANM respondents were required in question 7 to elaborate on their observation of any improvement in the provision of nursing care since their appointment. The responses to this question were grouped together although the wording was not exactly the same:

- Patients' complaints about nursing care are now minimal (QANMs 90.00%; n=9; QATs 78.43%; n=80)
- The in-service training conducted by QANMs assisted in improving nursing care (QANMs 90.00%; n=9; QATs 67.96%; n=70)
- Patients are nursed in totality because of the quality guidelines in the QA manual (QANMs 80.00%; n=8; QATs 73.53%; n=75)

Regarding special factors that they thought contributed to the success of the QANMs' performance, question 6 in their questionnaire required the QAT respondents to elaborate and question 8 in their questionnaire required the QANM respondents to do the same. The responses indicated that:

- The cooperation of nursing personnel made a major impact (QANMs 90.00%; n=9; QATs 78.43%; n=80)
- Conducting patient satisfaction surveys made it possible to identify areas that need improvement (QANMs 90.00%; n=9; QATs 68.63%; n=70)
- Support by CEOs, nursing managers and nursing personnel (QANMs 90.00%; n=9; QATs 78.43%; n=80)

Question 5 of their questionnaire required the QANM respondents to explain the methods followed in the introduction of a QA programme in their institution (DoH 2007a:13). The QANM respondents indicated that QA programmes are introduced by the following methods:

- Management meetings (90.00%; n=9)
- Staff meetings (90.00%; n=9)
- Health educations to the community (90.00%; n=9)
- In-service training (50.00%; n=5)
- Workshops (50.00%; n=5)

Question 6 required the QANM respondents to describe how they disseminated the aims and objectives of the QA programme in their institution. The QANM respondents indicated the following methods:

- Management meetings (90.00%;n=9)
- Staff meetings (90.00%; n=90)
- In-service training (50.00%; n=5)
- Workshops (50.00%; n=5)

The aims and objectives of QA programmes are disseminated during the introduction of the programme hence the responses to question 6 were similar to those in question 5.

Question 7 of their questionnaire required the QAT respondents to identify the innovation that QANMS brought during the implementation of quality improvement strategies. Of the QAT respondents, 59.80% (n=61) did not answer this question. Those (40.20%; n=41) who did answer indicated:

- Introduction of time management strategy, that is
 - monitoring consultation time and
 - time for nursing routines (49.02%; n=50)
- Repairing facilities that can endanger both patient and personnel (56.86%; n=58)
- In-service training on QA activities (59.80%; n=61)

Question 8 of their questionnaire required the QAT respondents to identify strategies that they could advise the QANM to utilise in improving the quality of patient care. The QAT respondents responded as follows:

- Time management strategies (80.39%; n=82)
- Giving praise to nursing personnel where praise is due (78.43%; n=80)
- Issuing letters of appreciation to nursing personnel as a form of motivation (68.63%; n=70)
- Nursing personnel to rotate in serving as QAT member (88.24%; n=90)
- Communicating audit report findings and giving recommendations (73.53%; n=75)
- In-service training on common nursing care topics (93.14%; n=95)
- Making relevant follow-ups on complaints raised by patients (78.43%; n=80)
- Develop audit programme for patient records (88.24%; n=90)

According to the literature, monitoring strategies to improve quality patient care include (Offei et al 2004:19; DoH 2007a:22):

- Client satisfaction surveys
- Patient complaint system
- Reviewing critical incidents – adverse events
- Supervision

In question 9 of their questionnaire the QANM respondents had to briefly explain innovative activities that they, as QANMs, can implement during the application of the QA programme and in question 10 they had to make recommendations that would guide QANMs in other institutions to improve the quality of patient care in their

institutions. The responses were analysed and grouped together. Table 4.17 reflects the similar topics that led to grouping of data according to main themes and sub-themes.

Table 4.17 Themes and sub-themes reflecting innovative strategies and activities utilised by the QANM respondents

THEMES		SUB-THEMES	
1.	Forum related to QA activities 70.00% (n=7)	1.1	Workshops on QA conducted versus not conducted
		1.2	Availability versus unavailability of records for workshops conducted
		1.3	Interdisciplinary meetings held for discussion of patients
		1.4	Monitoring and evaluation of care provided
2.	Prescripts for QA activities 80.00% (=8)	2.1	Policies for maintenance of quality care available
		2.2	Protocols and procedure manuals available
		2.3	Adherence to national QA standards
3.	Implementation of national QA Standards 80.00% (n=8)	3.1	Guidelines for implementation of national standards

The QANM respondents recommended the following three strategies for improving patient care delivery:

- Establishing a forum that deals with QA activities (70.00%; n=7)
- The availability of prescripts for QA activities (80.00%; n=8)
- Implementation of National QA Standards (80.00%; n=8)

Figures 4.69 and 4.70 illustrate the findings of section C of the questionnaires which requested general information on the outcome of QA activities. The density charts indicate the strong positive responses of both groups of respondents (by replying Yes to the posed questions) as to whether they comply with standards and or initiate strategies to improve the delivery of patient care.

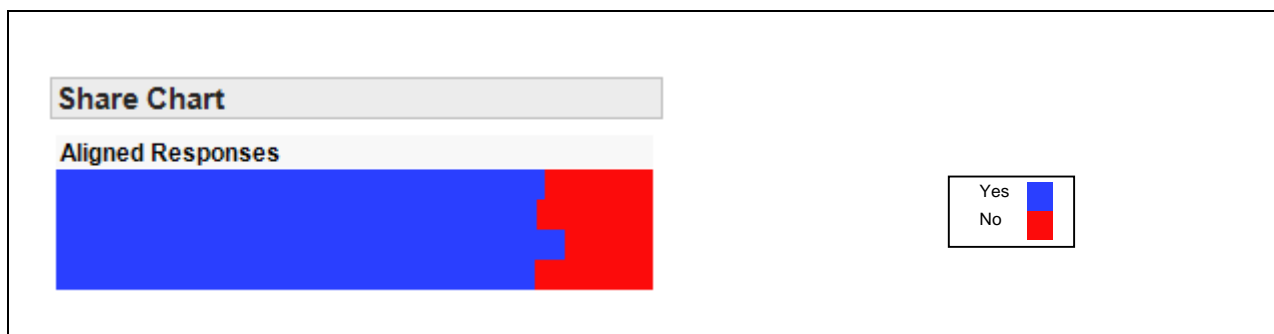


Figure 4.69 QAT respondents' responses to QA activities

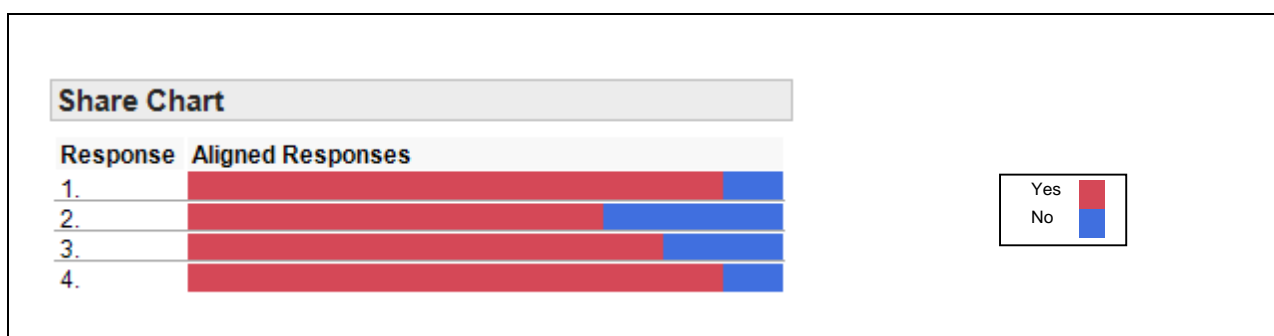


Figure 4.70 QANM respondents' responses to QA activities

The above density chart provides a visual view of the responses to the QA activities. The responses are predominantly positive.

4.4 CONCLUSION

This chapter covered the data analysis and interpretation of the results. The data were summarised by means of frequency distributions, descriptive statistics and factor analysis, and the results were presented in tables and pie diagrams. The findings indicated that the QANM respondents brought innovative changes and used different strategies to improve nursing care. Most of the QANM respondents carried out their prescribed QA duties in the selected public hospitals in Limpopo Province. Their appointment brought positive changes through the QA programmes and activities. If these programmes and activities are monitored and evaluated on an ongoing base, patient care will steadily improve.

Chapter 5 presents the findings, conclusion and limitations, and makes recommendations for practice and further research.

CHAPTER 5

Findings, conclusion and recommendations

5.1 INTRODUCTION

Negative media reports on public and patient dissatisfaction with the nursing care rendered at public hospitals in Limpopo Province led to the appointment of QANMs to improve the quality of patient care. The purpose of the study was to determine the effect of appointing QANMs on the provision of quality patient care in selected public hospitals in Limpopo Province and to make recommendations. In order to achieve the purpose, the objectives of the study were to

- determine whether the QATs fulfilled their stipulated functions under the guidance of the QANMs.
- explore and describe the effect QANMs have had on the provision of quality patient care in selected public hospitals of the Limpopo Province
- make recommendations for enhancing the quality of patient care in public hospitals in Limpopo Province based on the findings

This chapter presents the findings, conclusions and limitations and makes recommendations for practice and further research.

5.2 SUMMARY OF FINDINGS

The researcher purposefully selected the ten (10) QANMs (1 per hospital) and randomly selected 18 QATs per hospital resulting in 180 QAT members as respondents. Ten QANM questionnaires were distributed and all were completed and returned, giving a 100% return rate. Of the 180 QAT member questionnaires distributed, 102 were completed and returned, giving a 57% response rate.

The results are discussed according to the three sections of the questionnaires, namely:

- Section A: Biographical information
- Section B: Functions of QANMs and QAT members
- Section C: General information on the outcome of QA activities

5.2.1 Section A: Biographical information

The biographical information covered the type of institution, current nursing position and years of experience as QANMs or QAT members.

5.2.1.1 Respondents' type of institution

Regarding the type of institution, 60.00% (n=6) of the QANMs and 89.22% (n=91) of the QATs were employed at district hospitals, while 40.00% (n=4) of the QANMs and 10.78% (n=11) of the QATs worked in regional hospitals. The majority (84.82%; n=95) of the respondents were therefore employed by district hospitals.

5.2.1.2 Respondents' current nursing position

Of the 112 respondents, 41.07% (n=46) were Professional Nurses and only 1.79% (n=2) were Chief Professional Nurses. The findings indicate that more Professional Nurses were involved in the study than any other category of nursing personnel.

5.2.1.3 Respondents' years of experience as QANMs or QATs

Regarding experience, 61.76% (n=63) of the QAT members had been part of a QAT for three years or longer, thus one could assume they knew what was expected of them as QAT members and that they knew their employing hospitals well.

5.2.2 Section B: Functions of QANMs and QATs

The functions of QANMs and QATs (DoH 2007a:18) were applied to Donabedian's *model of quality*. The results will be presented under Donabedian's three components, namely structure, process and outcome standards.

5.2.2.1 Structure standards

The questions on structure standards mainly referred to organisational aspects, including the vision and mission, philosophy, goals, policies, material and human resources as well as job descriptions of the QANMs and QATs in the institution. The QANM and QAT respondents' findings will be discussed in a combined fashion as their responses complement each other except for items A6, A7, A8 and A9.

5.2.2.1.1 Structure standards of QANMs and QATs

The findings indicate that the majority of the hospitals have a QA programme (93.75%; n=105), vision (86.61%; n=97), mission (83.93%; n=94) and goals (87.50%; n=98). Most of the respondents (81.25%; n=91) indicated that their institutions have QA procedure manuals. Regarding availability of equipment, the respondents provided the following: a shortage of equipment (48.21%; n=54); non-functional equipment (58.04%; n=65), and insufficient medical equipment for the needs of the particular hospital (38.39%; 43).

The additional questions on structure standards for the QANM respondents found the following:

Of the QANM respondents, 80.00% (n=8) give direction to their institutions on the implementation of QA measures; 90.00% (n=9) ensure that QATs are established in the hospital and develop policies and strategies for QA, 70.00% (n=7) develop clinical guidelines, and 90.0% (n=9) formulate QA standards. However, the QA directorate formulates QA standards to be followed at institutional level and therefor can be amended by individual hospitals (DoH 2007a:18). QANMs have a role in ensuring that institutions have the formulated QA standards available. These are QA standards and **NOT** nursing standards.

5.2.2.2 Process standards

Regarding the set process standards, the responses of the QATs and QANMs will be discussed separately.

5.2.2.2.1 *Process standards of QATs*

The QAT respondents' process standards were divided into five themes or factors by means of factor analysis:

- **Theme 1: Professional practice and conduct** (items B16, B17, B18, B19, B20, B23, B24 and B25). The findings reveal that there is adherence to QA activities which as performed in accordance with the professional norms, with a good internal consistency for this theme as an overall Cronbach's alpha of 0.9172 was obtained with item analysis.
- **Theme 2: Standards and guidelines** (items B1, B2, B3, B4, B5, B6 and B12). QA activities are performed in accordance with the set standards and guidelines. An overall Cronbach's alpha of 0.9162 was obtained with item analysis which represents good internal consistency for this theme.
- **Theme 3: Problem-solving** (items B9, B10, B11 and B13). The responses of QAT members indicated that these items were performed to identify and solve problems in view of ensuring quality patient care delivery. An overall Cronbach's alpha of 0.6426 was obtained with item analysis, which represents acceptable internal consistency for this theme.
- **Theme 4: Learning and growth** (items B14, B21 and B22). The results indicate that conducting, organising and facilitation of in-service training sessions; workshops and seminars in the respondents' hospitals were not carried out as required. An overall Cronbach's alpha of 0.5878 was obtained with Item analysis.
- **Theme 5: Awareness and satisfaction** (items B7 and B8). This factor was not further analysed because it only had two items (see chapter 4).

The most reliable of the five themes were identified by means of an Exploratory Factor Analysis (EFA) test (Polit et al 2012:366). The three most reliable themes were professional practice and conduct, standards and guidelines, and problem-solving. The QAT responses indicate that QA activities are carried out in accordance with DoH (2007a:18) stipulations.

5.2.2.2.2 *Process standards of QANMs*

Sixty percent (n=6) of the QANMs did not organise, facilitate and conduct workshops, seminars and in-service training for health care service personnel on quality assurance-related topics on a quarterly basis.

The QANM responses to section B of their questionnaire were not divided into themes or factors as there were only 10 QANMs. The findings indicate that of the QANM respondents,

- 80.00% (n=8) make sure that the procedure manual on QA is kept up to date
- 90.00% (n=9) make sure that the health care personnel meet the national QA standards
- 90.00% (n=9) implement QA policies as directed by the QA directorate
- 60.00% (n=6) did not organise and 50.0% (n=5) did not facilitate workshops and seminars
- 60.00% (n=6) did not provide in-service training to health care personnel on QA-related topics on a quarterly basis
- 60.00% (n=6) keep record of in-service training attendance on QA-related topics
- 80.00% (n=8) establish and supervise QATs in the institution
- 70.00% (n=7) mobilise resources for QA activities
- 80.00% (n=8) make sure that health care professionals participate in the QA programmes
- 50.00% (n=5) develop a budget for QA activities
- 90.00% (n=9) hold QA meetings to discuss patient care on a monthly basis
- 90.00% (n=9) expect nurses to teach patients about their follow-up care
- 80.00% (n=8) encourage patients to be involved in planning of their care
- 90.00% (n=9) expect nurses to plan nursing care of patients according to the nursing process and develop nursing care plans for all patients
- 90.00% (n=9) monitor that the catering staff provide patients with the right and adequate amount of food
- 90.00% (n=9) encourage nurses to attend to patients' needs in totality

These findings were encouraging, however there was one respondent in most cases from a particular hospital who did not do as required.

5.2.2.3 Outcome standards

The QAT and QANM respondents' results of the outcome standards are presented separately.

5.2.2.3.1 QAT respondents' outcome standards

Of the QAT respondents,

- 94.12% (n=96) give feedback to nursing personnel after auditing patient records
- 88.24% (n=90) give feedback after conducting patient satisfaction surveys
- 59.80% (n=61) are given opportunity to attend in-service training
- 88.24% (n=90) encourage patients to fill in patient satisfaction questionnaires
- 92.16% (n=94) indicate that patients frequently express satisfaction with the care

5.2.2.3.2 QANM respondents' outcome standards

Of the QANM respondents,

- 90.00% (n=9) evaluate whether the set QA goals are met at quarterly intervals, document the results of the evaluation, and ensure that the results are communicated to the personnel
- 60.00% (n=6) have established a reward/incentive system for the institution
- 90.00% (n=9) encourage nurses to record maternal deaths
- 90.00% (n=9) encourage patients to express their feelings about the care received by filling in the discharge questionnaire
- 90.00% (n=9) ensure that patients' responses to the nursing interventions and care received during their hospitalisation guide future nursing action

The findings on outcome standards for the QANM and QAT respondents were mainly positive.

5.2.3 Section C: General information on the outcome of QA activities

The questions in section C of both questionnaires were similar therefore the data analysis was done simultaneously. The findings were analysed by comparing the QANM and QAT responses.

Of the respondents,

- 90.00% (n=9) of the QANMs and 80.39% (n=82) of the QAT members agreed that the QANMs introduced the QA programme in the institution
- 70.00% (n=7) of the QANMs and 80.39% (n=82) of the QAT members agreed that the QANMs disseminated the aims and objectives of QA in the institution
- 80.00% (n=8) of the QANMs observed an improvement in the provision of nursing care since their appointment and 83.33% (n=85) of the QAT members agreed that the QANMs' appointment brought changes in patient care
- 90.00% (n=9) of the QANMs and 78.43% (n=80) of the QAT members agreed that there were factors that contributed to the success of the QANMs' performance.

Regarding the improvement and change in the provision of nursing care,

- 90.00% (n=9) of the QANMs and 78.43% (n=80) of the QAT members indicated that patients' complaints about nursing care were now reduced.
- 90.00% (n=9) of the QANMs and 67.96% (n=70) of the QAT members indicated that the in-service training assisted in improving nursing care.
- 80.00% (n=8) of the QANMs and 73.53% (n=75) of the QATs members indicated that patients were nursed in totality because of the quality guidelines in the QA manuals

Regarding the factors that contributed to the success of the QANMs' performance,

- 90.00% (n=9) of the QANMs and 78.43% (n=80) of the QAT members indicated the cooperation between nursing personnel

- 90.00% (n=9) of the QANMs and 68.63% (n=70) of the QAT members indicated that conducting a patient satisfaction survey made it possible to identify areas that need improvement
- 90.00% (n=9) of the QANMs and 78.43% (n=80) of the QAT members indicated the support received from the CEO, Nursing Managers and nursing personnel

Of the QANMs, 90.00% (n=9) introduced the QA programme through management meetings, staff meetings, in-service training and workshops, as well as health education sessions in the community, and disseminated the aims and objectives during the introduction of the QA programme.

Regarding the innovation that the QANMS brought during the implementation of quality improvement strategies, 60.00% (n=62) of the QAT members did not answer this question, while 40.19% (n=41) indicated:

- Introduction of time management strategy, namely monitoring of consultation time for the patients to assess how long it takes for the patient to take bed letter, see a doctor, undergo diagnosis and collect medication.
- Repairing of hospital buildings (cracking walls, falling ceiling and broken wall tiles) that can endanger both patient and personnel.
- In-service training on QA activities.

With regard to strategies that the QAT respondents can advise the QANM to utilise in improving the quality of patient care, of the QAT members,

- 78.43% (n=80) indicated giving praise to nursing personnel where praise is due
- 68.63% (n=70) indicated issuing letters of appreciation to nursing personnel as a form of motivation
- 88.24% (n=90) indicated that nursing personnel should be given a chance to rotate in serving as QAT member
- 73.53% (n=75) indicated communicating audit report findings and giving recommendations where necessary
- 93.14% (n=95) indicated in-service training on common nursing care topics
- 78.43% (n=80) indicated making regular follow-ups on patient complaints

- 88.24% (n=90) indicated developing an audit programme for patient records

The QANM respondents had to briefly explain the innovative activities that they, as QANMs, could implement during the application of the QA programme, and to make recommendations that could guide QANMs in other institutions to improve the quality of patient care in their institutions. Of the QANMs respondents,

- 70.00% (n=7) recommended that there should be a forum to deal with QA activities, such as workshops, interdisciplinary meetings, and monitoring and evaluation of care provided, as it could enhance QA within the hospital
- 80.00% (n=8) recommended record-keeping of QA activities on policies, protocols and procedures, and adherence to QA national standards
- 80.00% (n=8) recommended guidelines for the implementation of the national QA standards, as there were no guidelines (DoH 2007a:12).

5.3 GENERAL CONCLUSIONS

The findings of the study led to the following general conclusions:

5.3.1 Section A: Biographical information

- 86.60% (n=97) of the respondents worked in district hospitals
- 41.07% (n=46) of the QAT respondents were professional nurses
- 61.76% (n=63) of the QAT members had been part of a QAT for three years or longer

5.3.2 Section B: Functions of QANM and QATs

The functions of the QANMs and QATs were analysed in terms of *Donabedian's quality model*, by means of structure, process and outcome standards.

5.3.2.1 Structure standards

The findings indicated that

- the hospitals have a QA programme (n=105; 93.75%)
- they have a vision (86.61%; n=97) and a mission (83.93%; n=94)
- they have QA-related goals (87.50%; n=98)
- they have QA procedure manuals (76.79%; n=86)
- there is shortage of equipment in the wards/units (48.21%; n=54)
- equipment available in the unit is not in good working order (58.04%; n=65)
- medical supplies are not adequate in the units (38.39%; n=43)
- patients are nursed in an environment conducive to provision of quality care (58.93%; n=66)
- of the QANMs, 90.00% (n=9) established QA teams
- of the QANMs, 90.00% (n=9) developed QA-related policies and strategies
- of the QANMs, 70.00% (n=70) developed QA-related clinical guidelines and protocols
- of the QANMs, (80.00%; n=8) **did not** develop QA standards in their institutions

In respect of the structure standards, then, the selected hospitals have a good QA foundation with a vision and mission, QA programme and manuals. The shortage of equipment and supplies, which interferes with the delivery of quality patient care, is a problem that hinders the programme and needs to be attended to.

5.3.2.2 Process standards

The QAT and QANM respondents' process standards findings are presented separately.

5.3.2.2.1 QAT process standards

The process standards of the larger group of respondents were categorised in the following five themes:

- *Professional practice and conduct* indicate good internal consistency with an overall Cronbach's alpha of 0.9172

- *Standards and guidelines* indicate good internal consistency with an overall Cronbach's alpha of 0.9162
- *Problem-solving* is acceptable in terms of internal consistency with an overall Cronbach's alpha of 0.6426
- *Learning and growth* indicate unacceptable internal consistency with an overall Cronbach's alpha of 0.5878
- *Awareness and satisfaction* was not further analysed because the theme only had two items.

5.3.2.2.2 QANM process standards

The QANM process standards were not divided into themes or factors due to small sample size.

- Procedure manual on QA is kept up to date (80.00%; n=8).
- National QA standards are brought to the attention of health care personnel (90.00%; n=9).
- **Did not** develop the national QA standards (90.00%; n=9).
- Monitor QA programmes (80.00%; n=8).
- Implement policies developed by QA directorate (90.00%; n=9).
- Conduct QA workshops and seminars (60.00%; n=6).
- Provide in-service training to health care service personnel on QA-related topics on a quarterly basis (60.00%; n=6).
- Keep record of in-service training attendance on QA-related topics (60.00%; n=6).
- Ensure that QATs are established (80.00%; n=8).
- Supervise QATs in the institutions (80.00%; n=8).
- Mobilise resources for QA activities (70.00%; n=7).
- Ensure that health professionals participate in the QA programmes (80.00%; n=8).
- Develop a budget for QA activities (50.00%; n=5).
- Conduct QA meetings with nursing personnel to discuss the care of patients on a monthly basis (90.00%; n=9).

- Encourage nurses to teach patients about their diagnosis, treatment and follow-up (90.00%; n=9).
- Encourage patients to be involved in planning of their care (80.00%; n=8).
- Expect nurses to plan nursing care for patients according to the nursing process (90.00%; n=9).
- Expect nurses to develop nursing care plans for all patients (90.00%; n=9).
- Monitor that the catering staff provide patients with the right and adequate amount of food (90.00%; n=9).
- Encourage nurses to attend to patients' additional needs, such as psychological and social needs (90.00%; n=9).

The findings indicate that QA standards, guidelines and protocols are in place in most of the selected hospitals.

5.3.2.3 Outcome standards

The findings on the outcome standards are presented separately for the QANMs and QATs.

5.3.2.3.1 QATs' outcome standards

- Give nursing personnel feedback after auditing of patients records (94.12%; n=96).
- Give nursing personnel feedback after conducting patient satisfaction surveys (88.24%; n=90).
- Are given opportunity to attend in-service training on quality improvement at least once per quarter (59.80%; n=61).
- Patients frequently express their satisfaction with the care given to them on discharge (92.16%; n=94).
- Encourage patients to express their feelings about the care they received by letting them complete the discharge questionnaire (88.24%; n=90).

The findings indicate that the most of the QAT respondents carry out discharge activities as indicated in the QA policy guidelines.

5.3.2.3.2 QANMs' outcome standards

- Evaluate whether the set QA goals are met at quarterly intervals (90.00%; n=9).
- Always document the results of evaluated QA goals achieved (90.00%; n=9).
- Communicate the results of evaluated QA goals to the personnel (90.00%; n=9).
- Established a reward/incentive system for outstanding personnel performance (60.00%; n=6).
- Expect nurses to compile reports on maternal deaths that occur in the maternity ward/unit (90.00%; n=9).
- Provide patients with the opportunity to evaluate and report on the care they received during their hospitalisation, at the time of their discharge (n=9; 90.00%).
- Encourage patients to express their feelings about the care they received by completing the discharge questionnaire (90.00%; n=9).
- Ensure that the patients' responses to the nursing interventions and care received during their hospitalisation guide future nursing action (90.00%; n=9).

The QANM outcome responses are mostly positive.

5.3.3 Section C: General information on the outcome of QA activities

The responses of the QANMs and QATs are combined because the questions are the same unless otherwise stated.

- QANM introduced the QA programme in the hospital (81.25%; n=91).
- QANM disseminates the aims and objectives of QA in the hospital (79.46%; n=89).
- The appointment of the QANM brought about improvement in patient care (83.03%; n=93).
- There are factors that contributed to the success of the QANMs' performance (79.46%; n=89).

It was found that the QANMs generally brought about and initiated innovative changes and used different strategies to improve nursing care. QA programmes and activities

were introduced and ongoing, regular monitoring and evaluation thereof will improve patient care.

5.4 LIMITATIONS OF THE STUDY

The following limitations were identified during the course of the study:

- The study was restricted to ten of the forty public hospitals of Limpopo Province, therefore the results cannot be generalised.
- A low response rate (57.00%; n=102) was achieved for QAT respondents.
- Only ten QANMs were selected therefore only their descriptive views were established hence a meaningful comparison between the QANMs and QATs could not be made.
- The question on QANMs' aspirations to have enough material resources to carry out QA activities should have been open-ended to enquire what strategies they employed to provide the material resources. The QANMs would then have been given a chance to elaborate on and explain the real reasons for the shortage of material resources.
- The data collected was reported by the respondents and not observed; therefore, what is actually happening in practice could not be ascertained.

5.5 RECOMMENDATIONS

Based on the findings of the study, the researcher makes the following recommendations for practice and further research.

5.4.1 Practice

Table 5.1 summarises and describes the findings, presents the proposed recommendations, where to implement them and the person responsible for their implementation.

Table 5.1 Recommendations for improvement of patient care

Findings	Description of findings	Recommendation	Where to implement	Responsible person
Violation of the right of the patients	<ul style="list-style-type: none"> • Patients not involved in their care • Patient satisfaction questionnaire not completed by all patients • Discharge questionnaire not completed by all patients 	<ul style="list-style-type: none"> • Request patient's consent before conducting any nursing action • Request patients' input in their care • Encourage patients to complete the patient satisfaction/discharge questionnaire • Consider patients' views on the care rendered to them 	<ul style="list-style-type: none"> • In the hospital ward/unit 	<ul style="list-style-type: none"> • All health care personnel monitored by QATs and QANMS
Shortage of medical resources	A lack of essential drugs and supplies	<ul style="list-style-type: none"> • Monitor sound procurement practices • Order medicines and supplies on time and keep them at pre-determined level and in accordance with correct procurement policies and procedures to prevent shortage (DoH 2011b:4) • Establish a committee which must meet at regular intervals to deal with shortage of drugs to address problems 	<ul style="list-style-type: none"> • In the hospital • Procurement office • Pharmacy 	<ul style="list-style-type: none"> • CEOs to ensure that correct procurement procedures are followed • Procurement officers • Pharmacists • Hospital management

Findings	Description of findings	Recommendation	Where to implement	Responsible person
		regarding supply of medication <ul style="list-style-type: none"> • Monitor that ordering of drugs and supplies is done timeously by pharmacy and that suppliers consistently provide vital medication and supplies 		
Shortage of equipment	Equipment not available, not in good working order, broken and not maintained	<ul style="list-style-type: none"> • Follow correct procurement processes in accordance with <i>Public Finance Management (PFMA) Act, 1 of 1999</i> and policy • Monitor and evaluate current stock level, condition of equipment, maintenance programme, and efficiency of care • Orientate and provide in-service training to nursing personnel and cleaners on the use and maintenance of equipment to prevent unnecessary breakage and injury to patients 	<ul style="list-style-type: none"> • In the hospital wards/units. • Procurement office 	<ul style="list-style-type: none"> • CEOs to ensure adherence to PFMA policy • Procurement officers • Nursing management • Nursing personnel • QANMs • Administration officer • Sister in charge

Findings	Description of findings	Recommendation	Where to implement	Responsible person
		<ul style="list-style-type: none"> • Service equipment at regular intervals, e.g. ventilators on monthly basis and after use • Compile a service and maintenance programme and record • Outsource equipment from well-established dealers with guarantee of after care and service 		
<p>Limited organising, conducting and facilitation of in-service training/education sessions, and workshops and seminars on QA activities as required</p>	<p>Not all QANMs conduct in-service training, workshops and seminars on QA activities as required</p>	<ul style="list-style-type: none"> • Conduct quarterly In-service training sessions, workshops and seminars on QA activities in the hospitals to <ul style="list-style-type: none"> - deliver quality care - make staff aware of policies and procedures - discuss negative incidents • Update personnel on new developments, guidelines and changes in the health environment. 	<ul style="list-style-type: none"> • In the hospital 	<ul style="list-style-type: none"> • QAMNs • QATs

Findings	Description of findings	Recommendation	Where to implement	Responsible person
Lack of experienced personnel in terms of QA activities	Of the respondents, 38.39% (n=43) have one to two years' experience as QAT members	<ul style="list-style-type: none"> • Recruit experienced personnel where possible • Introduce/set a culture of caring and quality • Good role modelling, supervision, monitoring and evaluation by senior nurses • Immediate and strict follow-up of all reported incidents • Utilise good employment and retention strategies, such as providing good working environment • Provide excellence awards and encourage career development • Give other personnel a chance to serve as QAT members by allowing each member to rotate for two years 	<ul style="list-style-type: none"> • In the hospital • Human resource office 	<ul style="list-style-type: none"> • Nursing Service Managers • QANMs • Human resource personnel

Findings	Description of findings	Recommendation	Where to implement	Responsible person
QANMs do not carry out their management functions as stipulated	Not all the QANM respondents comply with some of the management functions	<ul style="list-style-type: none"> • Conduct workshops for QANMs about their functions and responsibilities in order to function effectively in improving patient care 	<ul style="list-style-type: none"> • National QA Directorate • Provincial, district and • Facility/ institutional level 	<ul style="list-style-type: none"> • QA Directorate • QANMs at Provincial District facility/ hospital levels
Negative press reports	Still public dissatisfaction with the state of nursing in Limpopo Province public hospitals	<ul style="list-style-type: none"> • Report incidents and dissatisfaction by patients and the public and effectively attend to these matters as soon as possible • QANMs to make daily rounds in the wards to review quality measures and to note the emotional state/ level of dissatisfaction of patients • Treat all patients with patience, respect and friendliness. • All personnel to be empathetic, compassionate and understanding towards patients' needs, anxiety and fatigue 	<ul style="list-style-type: none"> • Public hospitals and • Waiting areas outside the hospital 	<ul style="list-style-type: none"> • Health service managers • Sister in charge • QANMs • All categories of nursing personnel

5.5.2 Further research

Further research should be conducted on the following topics:

- A qualitative investigation into QANMs' perceptions of QA and patient care
- An investigation into professional nurses' understanding perceptions of quality assurance
- Nurses' perceptions and experience of barriers to the provision of quality patient care
- Patients' perceptions of quality patient care and the provision thereof

5.5.3 Contribution of the study

The study contributes towards to the nursing science body of knowledge in terms of improving the provision of quality patient care in public hospitals. The recommendations, if well implemented, will assist in improving patient care in public hospitals.

5.6 FINAL CONCLUSION

The study wished to determine whether the QATs fulfilled their stipulated functions under the guidance of the QANMs as well as to explore and describe the effect QANMs have had on the provision of quality patient care in selected public hospitals of Limpopo Province. It was found that QA programmes were in place in most of the selected hospitals but the respondents indicated that the shortage of material and human resources were serious obstacles to the provision of quality patient care.

The findings and recommendations of the study should assist in improving the provision and quality of patient care not only in Limpopo Province but throughout the country.

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Annexure A

Letter requesting permission to conduct research: Limpopo Province
Department of Health Ethics committee

Annexure B

Permission to conduct research granted by Limpopo Province
Department of Health Ethics committee

Annexure C

Letter requesting permission to conduct research: CEOs of public hospitals of Limpopo Province

Annexure D₁

Questionnaire: QANMs

Annexure D₂

Questionnaire: QATs

Annexure E

Informed consent form for respondents

Annexure F

Ethical clearance from University of South Africa

ANNEXURE A

PO Box 286
Elim Hospital
0960
3 September 2012

The Head of Department
Department of Health
P/bag x 9316
Polokwane
0700

Attention: Provincial Research Ethics Committee Co-ordinator

Request for permission to conduct a research study at the public hospitals of the Limpopo Province

Dear Sir/ \Madam

My name is Rynnet Doris Mavanyisi, a Masters (MA CUR) student at the University of South Africa. I'm conducting a research study entitled: **The effect of Quality Assurance Nurse Managers on the provision of patient care at selected public hospitals in the Limpopo Province**. The purpose of this study is to determine the effect of appointing QANMs in view of enhancing the quality of patient care in the public hospitals of the Limpopo Province and to make recommendations where appropriate.

I am hereby requesting permission to conduct the study at ten public hospitals within the Limpopo Province (a list of the specific hospitals are attached). The QANMs and the QATs working at these hospitals will each be expected to complete one questionnaire which will take approximately 20 minutes of their time. Anonymity will be ensured as respondents' names and the name of the hospital will not appear on the questionnaire.

The results will be made available on request.

Please find attached the following supporting documents:

- The research proposal
- The ethical clearance certificate
- Questionnaire for the quality assurance nurse managers
- Questionnaire for the quality assurance teams

I trust that my application will receive your favourable consideration.

Yours Sincerely

Ms RYNNET DORIS MAVANYISI

My contact details are as follows:

Telephone: Work: (015) 812 0330
 Home: (015) 556 4135
 Cell 0722110306
Fax: (015) 812 0330
E-mail address: rynnetdoris@yahoo.com



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Enquiries: Selamolela Donald

Ref:4/2/2

Mavanyisi RD
P O Box 286
Elim hospital
3960

Dear Ms Mavanyisi RD

Re: Permission to conduct the study titled: The effect of quality assurance nurse manager on the provision of patient care at selected public hospitals in the 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.

General Manager: Strategic Planning, Policy and Monitoring

Date: 11/01/2013

P.O box 286
Elim Hospital
0960
29 – 01 - 2013

Jane Furse Hospital
P/Bag X 429
Jane Furse
1085

Attention: Chief Executive Officer (CEO)

Request for permission to conduct a research study at your hospital

Dear Sir/ Madam

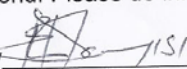
My name is **Rynnet Doris Mavanyisi**, a Masters (MA CUR) student at the University of South Africa (UNISA). I'm conducting a research study entitled: **The effect of Quality Assurance Nurse Managers (QANMs) on the provision of patient care at selected public hospitals in the Limpopo Province**. The purpose of this study is to determine the effect of appointing QANMs in view of enhancing the quality of patient care in the public hospitals of the Limpopo Province and to make recommendations where appropriate.

I am hereby requesting permission to conduct the study at your hospital. The QANMs and the Quality Assurance Teams (QATs) will be expected to complete one questionnaire which will take approximately 20 minutes of their time. Anonymity will be ensured as respondents' names and the name of the hospital will not appear on the questionnaire.

I have already acquired permission from Provincial Research Ethics Committee (see attached). The results will be made available on request.

I trust that my request will receive your favourable consideration. The tentative dates to collect data can be any day from the 30th January 2013 to the 8th February 2013 excluding weekend. Please do inform me to make arrangements.

Yours Sincerely



Ms RYNNET DORIS MAVANYISI

My contact details are as follows:

Telephone: Work: (015) 812 0330
Home: (015) 556 4135
Cell 0722110306
Fax: (015) 812 0330
E-mail address: rynnetdoris@yahoo.com

QUESTIONNAIRE FOR QUALITY ASSURANCE TEAM (QAT)

QUESTIONNAIRE NUMBER

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1 2 3

SECTION A: BIOGRAPHICAL INFORMATION

*Please answer by marking X next to the corresponding answer***1. In which type of institution are you working at present?**

1.1 Tertiary hospital	1
1.2 Regional hospital	2
1.3 Community hospital	3

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2. What is your current rank/post within the institution?

2.1 Senior Professional Nurse	1
2.2 Professional Nurse	2
2.3 Staff Nurse/ Enrolled Nurse	3

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3. What is your number of years as a QAT member?

3.1 1 year	1
3.2 2 years	2
3.3 3 years	3
3.4 4 years	4
3.5 5+ years	5

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SECTION B: FUNCTIONS OF QAT

As a member of a QAT, please answer the following questions using the rating below:

Strongly Agree : SA

Agree : A

Do not know : DNK

Disagree : D

Strongly Disagree : SD

A Structure		SA	A	DNK	D	SD		
A1	The institution has a QA programme							7
A2	The institution has a QA vision							8
A3	The institution has a QA mission							9
A4	The institution has quality related goals							10
A5	The institution has QA procedure manuals							11
A6	Equipment in the unit is sufficient to provide quality patient care							12
A7	Equipment in the unit is generally in good working order							13
A8	Medical supplies are adequate in the unit							14
A9	The environment in the unit is conducive for the provision of quality patient care							15
B. Process		SA	A	DNK	D	SD		
B1	I develop relevant local QA standards							16
B2	I update relevant local QA standards							17

B3	I provide guidelines on QA								18
B4	I provide protocols on QA								19
B5	I coordinate QA activities								20
B6	I provide guidance on QA to health care personnel								21
B7	I promote quality assurance awareness								22
B8	I conduct patient satisfaction surveys								23
B9	I conduct auditing of patients' records								24
B10	I identify quality related problems in the unit								25
B11	I draw up action plans for QA								26
B12	I disseminate information on QA to nursing personnel								27
B13	I consciously follow the procedures contained in the quality assurance procedure manual								28
B14	I have enough time to carry out quality assurance activities with other quality assurance team members								29
B15	I document the quality assurance activities								30
B16	I practice according to my Scope of Practice as determined by the South African Nursing Council (SANC)								31
B17	I approach patients in a respectful and caring manner								32
B18	I help patients to adjust to the hospital environment by orientating, explaining procedures and allowing them to make decisions about their care.								33

B19	I teach patients about follow- up care							34
B20	I involve patients in planning their care because they have a final say in their care							35
B21	I attend in-service education with regard to quality assurance related topics within the hospital at least once per quarter							36
B22	There is a record of attendance for in-service training regarding quality assurance topics							37
B23	I plan nursing care of patients according to the nursing process							38
B24	I attend to patient's additional needs e.g. spiritual or social needs by referring them to relevant people if possible							39
B25	I always comfort bereaved family members							40

C. OUTCOMES		SA	A	DNK	D	SD		
C1	I give feedback to nursing personnel after auditing their patient records							41
C2	I give feedback to nursing personnel after conducting patients' satisfaction surveys							42
C3	I am given opportunity to attend in-service training about quality improvement at least once per quarter							43
C4	Patients frequently express their satisfaction with the care given to them on discharge							44
C5	I encourage patients to express their feelings about the care they received by letting them fill the discharge questionnaire							45

SECTION C

General information on the outcome of QA activities

	YES	NO	
1. Did the QANM introduce quality management strategies to all nursing personnel at your institution?			46
2. Did the QANM disseminate the aims and objectives of the Quality Management programme?			47
3. Did the appointment of the QANM bring any change in patient care?			48
4. Are there any special factors that you think contribute to the success of QANMs' performance?			49

5. Please elaborate on your response to question 3

6. Please elaborate on your response to question 4

7. What innovation did the QANM bring during the implementation of the quality improvement strategies?

8. What strategies can you advise the QANM to utilise in improving the quality of patient care?

Thank you for completing this questionnaire

QUESTIONNAIRE FOR QUALITY ASSURANCE NURSE MANAGERS (QANMs)

QUESTIONNAIRE NUMBER

1 2 3

Section A: Biographical information

*Please answer by marking X next to the corresponding answer***1. In which type of institution are you working at present?**

1.1 Tertiary hospital	1
1.2 Regional hospital	2
1.3 Community hospital	3
1.4 Provincial office	4

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2. What is your current rank/post within the institution?

2.1 Senior nursing service manager	1
2.2 Nursing service manager	2
2.3 Deputy manager/ Assistant manager	3
2.4 Unit/Operational manager	4
2.5 Chief professional nurse	5

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3. How long have you been appointed as a Quality Assurance Nurse Manager?

3.1 1 year	1
3.2 2 years	2
3.3 3 years	3
3.4 4 years	4
3.5 5+ years	5

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4. How many Quality Assurance Teams (QATs) are under your supervision?

4.1 1 Quality Assurance Team	1
4.2 2 Quality Assurance Teams	2
4.3 3 Quality Assurance Teams	3
4.4 4 Quality Assurance Teams	4
4.5 5+ Quality Assurance Teams	5

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SECTION B: THE FUNCTIONS OF THE QANMs

You are asked to respond to each of the following statements according to your level of agreement by using the rating scale below. The statements pertain to your specific position and the institutions/ units/ wards/ personnel under your jurisdiction.

Strongly Disagree : SD
 Disagree : D
 Do not know : DNK
 Agree : A
 Strongly Agree : SA

A Structure		SD	D	DNK	A	SA
A1	I ensure the development of the institution's Quality Assurance (QA) programme					
A2	I make sure that the institution has a quality assurance vision					
A3	I make sure that the institution has a quality assurance mission					
A4	I make sure that the institution has quality assurance related goals					
A5	I make sure that the institution has a procedure manual for QA activities					
A6	I give direction to institution(s) on implementing QA measures					
A7	I establish QA teams					
A8	I develop policies and strategies for QA activities/processes					
A9	I develop clinical guidelines and protocols for QA activities/processes					
A10	I make sure that the institution has formulated nursing standards					
A11	I aspire that there are enough material resources to carry out quality assurance activities					

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A. Structure		SD	D	DNK	A	SA
A12	I aspire that equipment in the unit/institution is sufficient for patient care					
A13	I aspire that equipment in the unit/institution is generally in good working order					
A14	I aspire that medical supplies are adequate in the units/institutions					
A15	I aspire that the environment in the units/institutions should be conducive for providing optimal patient care					
B. Process		SD	D	DNK	A	SA
B1	I make sure that the procedure manual on Quality Assurance is kept up to date					
B2	I make sure that procedures contained in Quality Assurance procedure manuals are followed					
B3	I make sure that national QA standards are met by QATs by means of regular nursing care audits					
B4	I adapt to the national QA standards					
B5	I monitor QA programmes					
B6	I implement policies developed by the QA directorate					
B7	I organise QA workshops and seminars					
B8	I facilitate QA workshops and seminars					
B9	I provide in-service training for QATs with regard to quality assurance related topics on at least a quarterly bases					
B10	I keep record of in-service training attendance on QA related topics					
B11	I ensure that QATs are established					
B12	I supervise the functioning of QATs					

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B. Process		SD	D	DNK	A	SA
B13	I mobilise resources for QA activities					
B14	I make sure that QAT members participate in the QA programmes					
B15	I develop a budget for QA activities					
B16	I hold QA meetings with nursing personnel to discuss the care of patients on a monthly basis					
B17	I expect nurses to teach patients about their follow-up care					
B18	I encourage patients to be involved in planning of their care because they have the final say in their care					
B19	I expect nurses to plan the nursing care of patients according to the nursing process					
B20	I expect nurses to develop nursing care plans for all patients					
B21	I monitor that the catering staff provide patients with the correct and adequate amount of food					
B22	I encourage nurses to attend to patients' additional needs, such as psychological and social needs					

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C. Outcome		SD	D	DNK	A	SA
C1	At quarterly intervals I evaluate whether the set QA goals are met by means of nursing care audits					
C2	I always document the results of evaluating the achievement of QA goals					
C3	I ensure that the results of evaluated QA goals are communicated to the personnel of the evaluated unit/institution(s)					
C4	I have established a reward/incentive system for the unit/institution(s) in view of reaching QA goals					

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C5	I expect nurses to compile a report on maternal deaths that occur in maternity wards/units								49
C6	At the time of their discharge, I provide patients with the opportunity to evaluate and report on the care they received during their hospitalisation								50
C7	I encourage patients to express their feelings about the care they received by filling the discharge questionnaire								51
C8	I ensure that the patients' responses to the nursing interventions and care received during their hospitalisation, guides future nursing action								52

SECTION C

General information on the outcome of QA activities

	YES	NO		
1. Did you introduce a Quality Assurance Programme in your institution?				53
2. Did you disseminate the aims and objectives of the Quality Assurance Programme in your institution?				54
3. Did you observe any improvement in the provision of nursing care since your appointment?				55
4. Are there any factors that you think contribute to the success of QANM's performance?				56

5. If your response to Question 1 was YES, please explain the methods followed.

6. If your response to Question 2 was YES, then please describe how this was done.

7. Please elaborate on your response to question 3

8. If you answered yes to question 4, please list the factors

9. Briefly explain the innovative activities you, as the QANM, implemented during the application of the Quality Assurance Programme?

10. What recommendations can you (QANM) make to guide nurse managers in other institutions to improve the quality of patient care in their institutions?

Thank you for completing this questionnaire

ANNEXURE E

PO Box 286
Elim Hospital
0960

Phone: (W) 015 812 0330
(C) 072 211 0306
Fax: 015 812 0332
Email: rynnnetdoris@yahoo.com

INFORMED CONSENT FORM

TITLE: THE EFFECT OF QUALITY ASSURANCE NURSE MANAGER ON THE PROVISION OF PATIENT CARE AT SELECTED PUBLIC HOSPITALS IN THE LIMPOPO PROVINCE

Dear Respondent

My name is Rynnet Doris Mavanyisi, a Masters (MA CUR) student at the University of South Africa. I'm conducting a study on the effect Quality Assurance Nurse Managers have had on the provision of patient care at selected public hospitals in the Limpopo Province, and to make recommendations where appropriate.

I am hereby requesting you to participate in this study by completing a questionnaire on the topic. This will take approximately 20 minutes of your time. Your anonymity will be ensured as your name and the name of your hospital will not appear on the questionnaire.

I _____ agree to participate in the above-study. I understand:

- The study objectives.
- That the participation is voluntary.
- That I can withdraw from the study at any time without penalty.

I freely and voluntarily consent to participate in this study.

NAME: _____ **SIGNATURE:** _____ **DATE:** _____

RESEARCHER'S SIGNATURE: _____ **DATE:** _____



**UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE**

HSHDC/118/2012

Date: 12 December 2012 Student No: 729-987-7

Project Title: The effect of quality assurance nurse managers on the provision of patient care at selected public hospitals in the Limpopo Province

Researcher: Rynnet Doris Mavanyisi

Degree: MA Cur Code: DIS702M

Supervisor: Prof MC Bezuidenhout
Qualification: D Litt et Phil
Joint Supervisor: Dr EN Monama

DECISION OF COMMITTEE

Approved

Conditionally Approved

CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

Dr MM Moleki
ACTING ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES