

FACTORS AFFECTING QUALITY OF CARE IN A MIDWIFERY PRACTICE

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DECLARATION

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ABSTRACT

The midwives are the backbone of midwifery practice with needs and opportunities to create a tradition of caring in midwifery. However, there are problems that affect the midwifery practice. These problems include the increased maternal and perinatal mortality rate, shortage of material and human resources and poor implementation of policies and guidelines. The purpose of this study was to investigate factors that affect quality of care in a midwifery practice at a hospital complex in the Eastern Cape Province, South Africa.

The objectives of the study focused on the structure and process standards

1 **Structure Standards: To determine whether**

- policies and procedure manuals are available and updated
- support from the supervisor is available
- there is adequate staff
- the required qualifications were available
- the required experience of registered midwives were available
- in-service training was being given

2 **Process standards : To determine whether**

- patients were assessed according to the national guidelines for maternity care
- patients were diagnosed according to the national guidelines for maternity care
- patients' care plans were formulated according to the national guidelines for maternity care

The descriptive research design with a quantitative approach was applied in this study. The target population (N=172) were the registered midwives working in the maternity department at a particular hospital in the Eastern Cape Province. A specific sampling method was not applied in this study as the total population of 155 was included and 17 in the pilot study with a response rate of 81.3%.

A self-administered structured questionnaire was used to collect the data. The researcher distributed the questionnaires personally to all respondents who met the criteria.

Reliability and validity were assessed by means of a pilot study and the use of experts in Nursing Education, Midwifery, Research Methodology and Statistics. Ethical approval was

obtained from Stellenbosch University and all other relevant parties. Computerized data analysis software namely the SPSS programmes and Stastica version 9 were used to analyze the data. The results of the study were interpreted, discussed and presented in tables and frequencies. The data was predominantly presented in a quantitative form with responses to a few close-ended questions.

A confirmatory analysis to test the quality of properties across a level of variables was carried out. The Chi-square test was used to test association of variables between demographic data and the responses of midwives to factors affecting quality of care.

A p-value of $p < 0.05$ represents statistical significance in hypothesis testing and 95% confidence intervals were used to describe the estimation of unknown parameters.

Results showed that the majority of respondents had an experience of 2 to 5 years ($n=34/27.0\%$) and ($n=32/25.4\%$) more than 14 years working in the maternity department. The minority of respondents were those that are highly skilled. Only ($n=4/3.2\%$) of the midwives were registered in neonatology nursing and ($n=9/7.1\%$) in advanced midwifery. The majority of respondents ($n=118/93.7\%$) recorded that there was not enough staff to provide quality nursing care. Some respondents recorded that comprehensive in-service education was not offered in the hospital ($n=18/14.3\%$).

Recommendations include improvement of staffing, adherence to policies and guidelines, proper implementation of staff development and quality improvement programmes.

In conclusion, in order to reduce high infant and maternal mortality rates and to reach the millennium development goals, shortcomings in midwifery should urgently be addressed.

OPSOMMING

Die vroedvroue is die ruggraat van die verloskunde-praktyk met behoeftes en geleenthede om 'n tradisie van versorging in verloskunde te skep. Nietemin is daar uitdagings wat die praktisering van verloskunde beïnvloed. Hierdie uitdagings sluit in die toenemende moeder en perinatale mortaliteit, 'n tekort aan materiële en menslike hulpbronne, en die swak toepassing van beleid en riglyne. Die doel van hierdie studie was om die faktore te ondersoek wat die kwaliteit van sorg in 'n verloskunde-praktyk by 'n hospitaalkompleks in die Oos-Kaap in Suid-Afrika, beïnvloed.

Die doelwitte van die studie was op struktuur en proses standarde gefokus.

1 **Struktuur standarde: Om te bepaal of**

- beleid en prosedure handleidings beskikbaar en opgedateer is
- daar ondersteuning van die toesighouer is
- daar voldoende personeel is
- daar voldoen is aan die vereiste kwalifikasies
- die vereiste ondervinding van geregistreerde vroedvroue teenwoordig
- is indiensopleiding gegee

2 **Proses standarde: Om te bepaal of**

- pasiënte assesseer is volgens die nasionale riglyne vir verloskunde
- pasiënte gediagnoseer is volgens die nasionale riglyne
- pasiëntversorgingsplanne geformuleer is volgens die nasionale riglyne vir verloskunde.

Die beskrywende navorsingsontwerp met 'n kwantitatiewe benadering is in hierdie studie toegepas. Die teikenbevolking (N=172) is die geregistreerde vroedvroue wat in die kraamafdeling van die spesifieke hospitaal in die provinsie van die Oos-Kaap werk. 'n Spesifieke steekproefmetode is nie vir die studie toegepas nie maar wel die hele populasie is betrek van 155 en 17 in die lootsstudie met 'n respons van 81.3%.

'n Self-gedadministreerde gestruktureerde vraelys is gebruik om die data te versamel. Die navorser het die vraelyste persoonlik aan al die beskikbare respondente wat aan die kriteria voldoen het, versprei.

Betroubaarheid en geldigheid is geassesseer deur middel van 'n loodsondersoek en deur gebruik te maak van spesialiste in Verpleegopleiding, die Navorsingsentrum en Statistiek.

Etiese goedkeuring is verkry van die Universiteit Stellenbosch en al die ander relevante partye. Gerekenariseerde data-analise sagteware, naamlik die SPSS programme en Statistica uitgawe 9 is gebruik om die data te analiseer. Die resultate van die studie is geïnterpreteer, bespreek en aangebied in tabelle en frekwensies. Die data is oorwegend in 'n kwantitatiewe formaat aangebied met response op 'n paar geslote vrae. 'n Bekragtigungsanalise om die eienskappe oor 'n vlak van veranderlikes te toets, is gedoen. Die Chi-kwadraat toets is gebruik om assosiasie van veranderlikes te toets tussen demografiese data en die response van vroedvroue vir faktore wat die kwaliteit van versorging beïnvloed.

'n P-waarde van $p < 0.05$ verteenwoordig statistiese beduidendheid in hipotese-toetsing en 95% sekerheidsintervalle is gebruik om die beraming van onbekende parameters te beskryf. Resultate dui aan dat die meerderheid van respondente 2 tot 5 jaar werkervaring ($n=34/27.0\%$) het en ($n=32/25.4\%$) meer as 14 jaar in die kraamafdeling het. Die minderheid respondente is diegene wat hoogsbekwaam is. Alleenlik ($n=4/1.0\%$) vroedvroue is in neonatale verpleging gereistreer en ($n=9/7.1\%$) in gevorderde verloskunde geregistreer is. Die meeste respondente ($n=118/93.7\%$) het aangedui dat daar nie voldoende personeel is om kwaliteit verpleegsorg te gee nie. Sommige respondente het aangedui dat omvattende indiensopleiding nie in die hospitaal aangebied is nie ($n=18/14.3\%$).

Aanbevelings sluit in die verbetering van personeelvoorsiening, die nakoming van beleid en riglyne, behoorlike implementering van personeelontwikkeling en gehalte verbeteringsprogramme.

Ten slotte, om die hoë insidensie in moeder en kind mortaliteit te verminder en die millennium ontwikkelingsdoelwitte te bereik, moet die tekortkomings in verloskunde dringend aangespreek word.

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ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
HIV	Human immunodeficiency virus
ILO	International Labour Office
SANC	South African Nursing Council
SPSS	Software Package for Social Science

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CHAPTER 1: SCIENTIFIC FOUNDATION OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

The Eastern Cape Department of Health is experiencing many problems influencing the service delivery. These problems influence the quality of maternal and child care as highlighted by the national guidelines on maternity care. Problems identified include the increase in maternal and perinatal mortality rates, which is a national issue (National Department of Health, 2007a:6).

The statistics of maternal deaths in developing countries is 440 per 100 000 live births as compared to 12 per 100 000 live births in developed countries. Maternal and perinatal mortality rates are perceived as an important indicator of the quality of maternal and child health care services internationally. An increase in maternal and perinatal mortality rates is an indicator of poor quality care in midwifery practice (National Department of Health, 2006a:16). The annual global statistics declared evidences of 10.7 million perinatal deaths under the age of 5 years. Four (4) million of these die within the first four weeks of life (Zupan, 2007:27-28).

An increase in the maternal mortality rate has been identified as a challenge that affects midwifery practice (Ireland, 2007:50). Preventable maternal diseases such as Human immunodeficiency virus / acquired immunodeficiency syndrome (HIV/AIDS), hypertensive disorders, obstetric haemorrhage and pregnancy related infections aggravate the problem of maternal mortality (Ireland, 2007:50). According to Ngwekazi (2010:72-74), knowledge of midwives as regards to hypertensive disorders and the management thereof is inadequate. This poses a challenge as midwives are responsible for provision of support and quality maternity care throughout the perinatal period (National Council for the Professional Development of Nursing and Midwifery, 2008:2). Huge work load, staff shortage, budgetary constraints, lack of material and human resources exacerbate the problem (Proctor, 2002:1).

The problem of shortage of health professionals, especially midwives and lack of security have resulted in obstetric managers reducing the number of facilities that offer emergency obstetric care twenty four hours a day (Gerein, Green & Pearson, 2006:2). According to the researcher's observation this has also resulted in a shortage of primary health care clinics in the Buffalo City Local Service Area. Gerein, et al. (2006:3) reported that staff shortage and poor development lead to adverse events such as personal injury and near missed opportunities, such as a delay in carrying out an emergency caesarian section.

During the sixth Annual Congress of Midwives of South Africa which was held in 2006 the need for more dedicated midwives with advanced training was highlighted. The reason for this was cited as being able to address ominous maternal mortality statistics, so as to improve quality of maternal care in South Africa (Ireland, 2007:50). It is against this background that the researcher undertook to conduct a study to investigate the factors influencing the quality of care in midwifery practice in the Buffalo City Local Service Area in the Eastern Cape Province.

1.2 RATIONALE OF THE STUDY

Access to good quality care has been identified as critical in achieving a low maternal and perinatal mortality rate (Pitroff, Oona, Campbell & Fillipi, 2006:3). The client's ability to access quality midwifery services during pregnancy, labour and puerperium is the key factor in midwifery care (Sinclair, 2011:1). According to the National Department of Health (2001a:157), aspects that need to be considered to ensure that the health care facility is utilized effectively and efficiently include accessibility, acceptability and appropriateness of the organization. In order to ensure effectiveness and efficiency of care rendered to women in midwifery practice the Batho Pele principles (National Department of Health, 1997:7), the Patients Right Charter (Booyens, Erasmus & Van Zyl, 2004:9) and the Millennium Development Goals (National Department of Health, 2005:7) should be applied. The principles are aligned with the Constitutional ideals of

- promoting and maintaining high standards of professional ethics;
- providing service impartially, fairly, equitably and without bias;
- utilizing resources efficiently and effectively;
- responding to people's needs;
- the citizens are encouraged to participate in policy-making; and
- rendering an accountable, transparent and development-oriented public administration (Booyens et al., 2004:9).

The Batho Pele principles include: consultation, setting service standards, increasing access, ensuring access, provision of information, openness and transparency, redress and value for money (National Department of Health, 1997:1). However, it is the responsibility of every maternity department to implement measures to improve the quality of care. This can be done by employing measurers to achieve the millennium development goals specifically millennium development goal no. 4, 5 and 6 which are discussed in chapter 2.

Continuous education and skills training are required in order to improve the quality of perinatal care. The expectation is that good quality care is provided at all times (Fullerton, Thompson & Severino, 2011:339). Many support programmes for midwifery practice have been tested and implemented to improve quality care countrywide. These programmes include better birth initiative, kangaroo mother care and many more (Farrell & Pattinson, 2005:51). In under-resourced areas strategies include the training and development of traditional birth assistants (Fereday & Oster, 2008:312). Farrell and Pattinson (2005:16) identified a lack of clinical skills in the use of partogram during labour. The authors mentioned that these documents were incompletely recorded and utilized inappropriately. This was cited as often leading to misdiagnosis.

According to Fereday and Oster (2008:312), studies conducted in England revealed that the absence of recruitment and retention strategies for midwives aggravate the shortage of midwives which results in high levels of stress and burnout. Midwives find it difficult to balance their work and personal lives which lead to burnout. The reason for burnout is fatigue and exhaustion (Kristensen, Borritz, Villadsen & Christensen, 2005:192). It is further postulated that burnout adversely affects the work environment.

In a study conducted in a midwifery obstetrics unit in the Western Cape Province it was identified that the environment where the women were treated was characterized by the humiliation of patients and physical abuse (Farrell & Pattinson, 2005:3).

It has been highlighted in different studies that have been conducted in different provinces of South Africa that there is a consistent overall poor quality of care (Farrell & Pattinson, 2005:57). Poor quality was attributed to poor recording, observations that were not done correctly, poor decision making during the antenatal period and puerperium (Farrell & Pattinson, 2005:60). It is also asserted that the quality of patient care could be adversely affected by patients seeking medical care at a late stage during pregnancy or not at all (Fereday & Oster, 2008:312). The infrastructure may affect the quality of service delivery as observed by the researcher. This occurred as a result of the formation of a hospital complex by merging two hospitals in the Buffalo City Local Service Area in 2004. One hospital is in the urban environment while the other is in the peri-urban environment. The difficulty experienced by obstetric specialists was the distance they had to travel at times between the two hospitals on a daily basis.

According to Fraser, Cooper and Nolte (2006:269) patients lacked adequate health education about recognizing dangerous complications, like early rupture of membranes and decreased fetal movements. It is also noted that some clients do not book early for

antenatal care and some do not book at all. These factors may predispose the woman and fetus to complications during pregnancy, labour, puerperium and neonatal period. In contrast to other countries limited research has been done on the investigation of factors affecting quality of care in midwifery practices and the midwife's perspective. This study is therefore critical for health care managers to enhance services provided to people attending the East London hospital complex. The expectation is continuous provision of high quality care to counteract problems arising during the perinatal period. To achieve good outcomes of care, challenges that affect quality of care need to be monitored and managed (Pitroff et al., 2006:3). The following are some of the factors influencing the quality of care rendered in the East London hospital complex:

- High client turnover
- Lack of material and human resources
- Lack of support to midwives from the managers.

Muller, Bezuidenhout and Jooste (2007:201-206) state that continuous quality improvement is essential in a nursing unit. This could be achieved by introducing standards of care. However, these standards should be realistic and valid. The author asserts that management of a health care service should focus on promotion and maintenance of quality (Muller et al., 2007:475).

According to Warwick (2009:9), midwives are generally highly respected by the community. It is important that the midwives do their best when providing quality of care so that the respect they receive from the community is sustained. They should understand and have insight into the patient's needs and concerns. By so doing the quality of care will be improved (Proctor, 2002:1).

The process of quality improvement in health care involves setting standards, evaluating and introducing remedial steps to improve service delivery (Muller et al., 2007a:203). Various indicators are used to measure the quality of a health care service. These include the impact on society, customer satisfaction, people satisfaction and supplier and partnership performance (Muller et al., 2007:478-479). In addition to measuring quality of care within a nursing unit patient satisfaction, auditing of records and infection control should be included (Booyesen, Erasmus & Van Zyl, 2004:388).

1.3 SIGNIFICANCE OF THE STUDY

Factors influencing the quality of care in midwifery practice were identified. These factors will guide managers and policy-makers in introducing measures to improve the quality of care in midwifery practice.

1.4 PROBLEM STATEMENT

Various factors influence the quality of care in midwifery practice. These factors have an adverse effect as they increase the maternal and perinatal mortality rates. As such it has become necessary to investigate these factors scientifically.

1.5 RESEARCH QUESTION

The research question which guided this research was “What are the factors that influence the quality of care in a midwifery practice at a hospital complex in the Eastern Cape Province, South Africa?”

1.6 PURPOSE OF THE STUDY

The purpose was to investigate the factors that influence quality of care in a midwifery practice at a hospital complex in the Eastern Cape Province, South Africa.

1.7 OBJECTIVES OF THE STUDY

The objectives of the study focused on the structure and process standards

1.7.1 Structure Standards: To determine whether

- policies and procedure manuals are available and updated
- support from the supervisor is available
- there was adequate staff
- the required qualifications were available
- the required experience of registered midwives were available
- in-service training was being given

1.7.2 Process standards: To determine whether

- patients were assessed according to the national guidelines for maternity for maternity care
- patients were diagnosed according to the national guidelines for maternity care
- patients' care plans were formulated according to the national guidelines for maternity care.

1.8 Definition of terms

For the purpose of this study, the following terms were used as defined below.

Advanced midwife

An advanced midwife is a midwife who is a clinical nurse specialist in midwifery, who has furthered her studies after the basic qualification of general nurse and midwifery and is registered with the South African Nursing Council R212 of February 1993, as amended by R74 of January 1998 (Republic of South Africa, 1998).

Antenatal care

It is care given to a pregnant woman from time of conception until the commencement of labour (Fraser, Cooper & Nolte, 2006:247).

Labour

According to Sellers (2002:575), labour is the period from the commencement of labour till delivery of the baby, placenta and membranes through the vaginal orifice.

Maternal mortality

Fraser et al. (2006:918) define this term as death that occurs as a result of pregnancy or childbirth and includes the 1st six weeks of puerperium. The National Department of Health (2007a:4) refers to maternal mortality as the number of women who die as a result of childbearing, during the pregnancy or within 42 days of delivery or termination of pregnancy in one year.

Midwife

A midwife is a person who is qualified, competent to independently practise midwifery in the manner and the level prescribed who is capable of assuming responsibility and accountability for such practice according to section 31 subsection 1(b) of the Nursing Act 33 of 2005 (Republic of South Africa, 2005).

Midwifery department

It is a unit / ward or mobile obstetrical unit where a midwife takes care of the woman during pregnancy, labour, puerperium and neonate (Fraser, Cooper & Nolte, 2006:7).

Midwifery practice

Midwifery is not just a service but also an art, being scientific, as well as a humanitarian discipline with a holistic viewpoint based on fundamental ethics of caring for the midwifery patients and communities (Beischer & Mackay, 1997:721).

Perinatal mortality

Fraser et al. (2006:970) define perinatal mortality as death that occurs either to the fetus from 22 weeks of pregnancy or when the fetal weight is 500 grams above or to the newborn baby from first day to the twenty-eighth day after birth.

Puerperium

It is the period after the delivery of the placenta until 6 weeks post delivery (Sellers, 2002:586).

Quality assurance

It refers to a guarantee of compliance with predetermined standards and usually relates to legal requirements (Muller et al., 2007:534).

Quality of care

High quality of care maternity services involves providing a minimum level of care to all pregnant women and their newborn babies and a higher level of care to those who need it. Such care should maintain sound managerial and financial performance and develop existing services in order to raise the standards of care provided to all women (Pitroff et al., 2006:4).

Quality improvement

It is a formal process whereby standards are set, work performance is measured against these set standards and remedial steps are taken to solve problems in order to improve performance outcomes (Muller et al., 2007:535).

Registered midwife

A registered midwife is a person registered in terms of the Nursing Act (Act 33 of 2005), (Republic of South Africa, 2005).

1.9 RESEARCH METHODOLOGY

A brief description of the research methodology is described in chapter 1 and in more depth in chapter 3.

1.9.1 Research design

For the purpose of this study a descriptive research design with a quantitative approach was applied to investigate the factors affecting the quality of care in midwifery practice.

1.9.2 Population and sample

The target population (N=172) were the registered midwives and area managers working in the maternity department at the hospital complex in the Eastern Cape Province. It was decided that all midwives who met the criteria be included in the study. A specific sampling method was not applied in this study as the total population of 155 was included and 17 in the pilot study.

1.9.3 Inclusion criteria

Registered midwives (females and males) were included if they worked in the midwifery department at the two hospitals, with an experience in the department of at least 6 months.

1.9.4 Exclusion criteria

Midwives with an experience of less than 6 months working in maternity department were excluded. The midwives who are operational managers were also excluded from this study as they participated in the pilot study. The midwives who were not willing to participate in the study were also excluded in this study.

1.9.5 Pilot study

The researcher conducted a pilot study which included (n=17/10%) of the population, under similar circumstances as the actual study, in order to determine the feasibility of the study and to test the methodology. Convenient sampling was applied to the pilot study.

1.9.6 Reliability and validity

The researcher ensured reliability and validity of the study by taking several precautionary measures.

1.9.6.1 Reliability

Brink (2006a:107) states that reliability refers to the consistency and dependability of the research instrument to measure a variable, type of reliability, stability, equivalence and internal consistency. The questionnaire was pretested through a pilot study.

1.9.6.2 Validity

According to (Polit & Beck, 2010:422) validity refers to the degree to which an instrument measures what it is supposed to measure. To ensure face, construct, criterion and content validity, experts in the field of midwifery, research methodology and statistics were consulted.

1.9.7 Data collection instrument

A self-administered questionnaire was designed based on the objectives of the study, supported by the literature and the researcher's clinical experience.

1.9.8 Collection of data

The researcher distributed the questionnaires personally to all available respondents who voluntarily agreed to participate and who met the criteria. Staff working on both day and night shifts participated in the study. The data collection occurred from 01 October 2010 to 15 November 2010.

1.10. Data analysis

The statistician was consulted for data analysis. Data were entered into an excel worksheet. A statistical Software Package for Social Science (SPSS) and Statistica Version 9 were used to analyze the data. Data were presented in frequencies, means, standard deviation and ranges. Quantitative data analysis techniques were applied and descriptive statistics were also used to explain the data. Tables were used to illustrate and summarize the findings. A further analysis was applied to determine whether there was a statistical difference between the variables.

1.11 ETHICAL CONSIDERATIONS

Permission was obtained from the Heads of Service Providers, as well as the Ethics Committee at Stellenbosch University. The researcher also obtained the permission to conduct the study from the Local Research Committee and Superintendent of the East London hospital complex. Respondents were informed about the purpose of the study. An informed consent was obtained from the respondents before distributing the questionnaire. More detail will be provided in chapter 3.

1.12 OUTLAY OF THE STUDY

Chapter 1: It provides the scientific foundation which included the rationale, problem statement, goal, objectives and brief overview of the methodology.

Chapter 2: In this chapter a literature review about the factors affecting the quality of care in midwifery practice and the conceptual framework which guided the study are described.

Chapter 3: In chapter 3 the research methodology applied in this study is described

Chapter 4: The data analysis, interpretation and discussion are described in chapter 4.

Chapter 5: Objectives and recommendations based on the results are described.

1.13 CONCLUSION

The study sought to outline the factors that influence the quality of midwifery practice in the Eastern Cape Province. These factors include increase in maternal and perinatal mortality rates, which is a national issue (National Department of Health, 2006a:6). Also the factors influencing the quality of care in midwifery practice were described briefly. A brief overview of the research methodology and ethical considerations were given. In the next chapter a literature review based on the objectives of the study and the conceptual framework will be discussed.

CHAPTER 2: LITERATURE STUDY

2.1 INTRODUCTION

In this chapter a literature review of the factors influencing the quality of midwifery practice is discussed, including the conceptual framework which guided the study.

According to Burns and Grove (2007:93), a literature review is an organized written presentation of what has been published on a particular topic by different scholars. The aim of the review is to communicate to the reader any relevant and current information about the topic under study. The references used in this literature search were predominantly between 2001 to 2012 excluding primary reports, legislation and theories.

Quality of care is defined as provision of safe, affordable and highly productive interventions that are guided by stipulated standards of care (Pitroff et al., 2006:1). Several studies relating to factors influencing the quality of care in midwifery practice were identified. The studies revealed that there are a number of challenges in midwifery practice to overcome, so as to ensure that quality of care is delivered. The burden of disease specifically HIV and AIDS, midwife migration, staff shortages and high maternal and infant mortality rates have been identified as the challenges that affect quality of care in midwifery (National Department of Health, 2006b:11). It is further stated that South Africa's health system is highly challenged by financial mismanagement, poor payment of health workers, HIV/AIDS and patient abuse (National Department of Health, 2007b:1). Poor infrastructure, lack of material resources, standard procedures, policy guidelines and the lack of support from the management contribute to poor service delivery (National Department of Health, 2006b:6). Midwives are responsible for advancing strategies that are designed for survival of the mother and the baby (Fullerton et al., 2011:24).

During the 8th Annual Congress of Midwives of South Africa in 2008 held in Limpopo, it was highlighted that midwives were expected to advocate for their clients, to save lives of mothers and babies in order to achieve the millennium development goals particularly millennium development goal numbers 3, 4, 5 and 6 by 2015. The fact that South Africa is still struggling to achieve these goals is a cause for concern (Majeke, 2007:15).

Failure to address challenges in midwifery practice has been identified as having serious implications for accessibility and quality of care. The well-being of the mothers and the babies who are the clients in midwifery services are seriously compromised. Consequently, it may deter South Africa from reaching the millennium development goals

(Warwick, 2009:1). The authors substantiate that the delivery of quality care is a priority in midwifery practice to ensure the safety and care of the mother and baby. If the desired outcome is influenced by these challenges remedial action is required (Jewkes, Naeemah & Mvo, 2003:3).

The conceptual framework which guided this study was based on Donabedian's tripartite framework of quality (1990:1116) and supported by Muller (2007:203). This framework (refer to figure 2.1) is used by some hospital managers to assess the effectiveness of the health care delivery system and it is based on a triad of structure, process and outcome entities (Jewkes et al., 2003:1). It is important to consider the revitalization of the health delivery system in any health care organization so that there is quality improvement (National Department of Health, 2006a:32). It is further substantiated that improvement of infrastructure, equipment norms and strengthening management systems are integral for quality improvement (National Department of Health, 2001b:18)

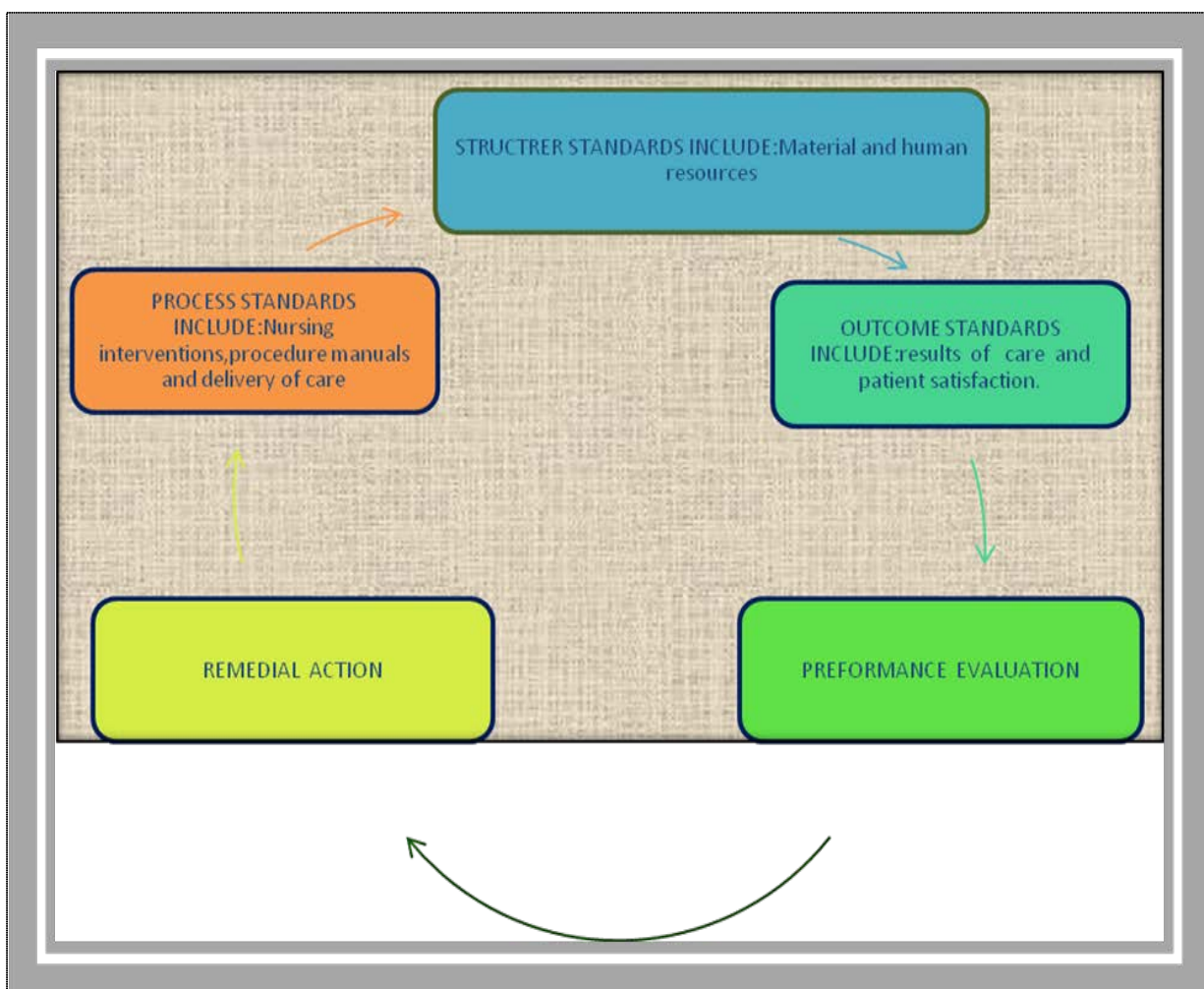


Figure 2.1: Quality of care theoretical framework. (Illustrated by the researcher) (Donabedian, 1990:1116 & Muller, 2007:203).

2.2 Standards

Standards are health care systems and actions which are designed to improve health or the wellbeing of the patient (Donabedian, 1990:1117). The proposed framework as displayed in figure 2.1 is guided by a system-based framework of structure, process and outcome standards (Campbell & Lees, 2002:1611). The types of standards as emphasized by Booyens (2004:316) are structure, process and outcome standards.

According to Muller (2007:203) a fourth and fifth step, namely performance and remedial action could be added to the quality assurance programme. Standards should be continually revised using evaluation of work performance and implementing remedial action for problems identified (Muller, 2009:257).

2.2.1 Structure standards

A structure standard relates to organizational issues dealing with facilities, resources, equipment, patient occupancy, availability of other categories of personnel and quality of general nursing management (Searle, 2006:229). The physical environment includes equipment, stock, policies, and personnel and these are enabling conditions for quality of care. Equipment required for the management of the obstetric patient include: fetoscopes, a cardiotocograph machine, an ultrasound machine, a hemoglobinometer and a baumanometer (National Department of Health, 2001a:23).

An unbalanced development of health services in South Africa was identified hence there was a necessity to redistribute public health resources from high technology hospitals to district health services (National Department of Health, 2006a:31-32).

Provision of quality of care in midwifery depends on the availability of the workforce which includes skilled midwives and other multidisciplinary team members. There should be planning teams of a maternity department which are multifaceted. These teams should be influenced by the complexity and intensity of care delivery. The planning should be inclusive of women's choice, risks status, model of care and infrastructure (Scottish Government Department of Health, Social Services and Public Safety, 2010:30).

2.2.1.1 Staffing

- **Qualifications, education levels and staff development**

South Africa was the first country to have midwives registered by the state in 1891 and should therefore have been a leading country in good maternity care (Fraser, Cooper & Crowford, 2009:643). However, access to care and the extent to which care meets the

social and psychological needs of the patient, depend to a large extent on the nature and training of those who provide care during labour and childbirth (Dulley, Hohett, Hofmeyer, Campbell & Lees, 2002:21).

A comprehensive maternity service requires competent and educated midwives who will be able to manage a client holistically. The focus of skill requirements is therefore dependent on registered midwives trained to practice neonatology and advanced midwifery (Wildschut & Mqolozana, 2008:12).

Currently, the undergraduate or basic training of midwives occurs at university and at college levels respectively. These programmes form part of the four-year comprehensive basic nursing programme. In addition, the basic midwifery course is also offered as a one-year basic diploma programme. Advanced midwifery and neonatology programmes are offered at a post-basic, post-graduate or honours level (Gerein et al., 2006:6). It is further stated that while midwives are expected to provide best quality care after completing their training, the preparation they receive is not adequate enough to deal with challenges they are faced with during their midwifery practice (Sellers, 2002:137). Furthermore, it is not acceptable to be a midwife without adequate preparation for this role. It is therefore essential that midwifery clinical specialists and advanced midwives are trained to provide continuity of care (Scottish Government National Council for Professional Development of Nursing and Midwifery, 2008:1-2).

- **Continuous professional development**

Staff development forms an integral component of human resources. It ensures the optimal utilization and closure of the gap in lack of knowledge where possible (Booyens, 2004:168). Managers should however ensure that staff development programmes are implemented to maximize effective utilization of staff (Muller, 2007:154). The improvement of job performance is dependent on continuous staff development and training (Booyens, 2004:169). A staff development programme is defined by Booyens (2004:171) as a planned purposeful method whereby midwives prepare competent preceptors for their work situation. Consequently, the development of the midwives contributes to the improvement of care given in midwifery practice. This is further substantiated when midwives engage in continuous learning; continuous development, innovative thinking and improvement of service delivery will be achieved (Scottish Government Department of Health, Social Services and Public Safety, 2010:30).

- **Highly skilled and experienced personnel**

A workplace environment with sufficient qualified staff and staff members supporting each other contribute to a feeling of security and provision of quality care (Hallin & Danielson, 2006:1242). Working with a midwife who has more than six (6) years of experience and who is highly skilled makes the subordinates feel secured and they consequently tend to work with insight especially when proper guidance is offered (Hallin & Danielson, 2006:1226). Furthermore, midwives with 2 to 5 years of experience working in the maternity department tend to be competent to proficient according to Benner (2001:20-32).

Midwives are the core professionals in midwifery practice. This notion is further supported by the revelation of the published results in a meta-analysis of 34 clinical studies conducted and published in Britain. In this study it was revealed that patients were more satisfied with the care rendered by midwives than that rendered by the doctors. Patients reported that midwives were able to give patients more information and education and were doing more investigations than doctors. However, it is stated that the midwives were able to satisfy their patients because they were skilled and were offered continuous skills development (Hawthorne, 2008:1).

- **Shortage of personnel**

It is essential that skilled health providers particularly the midwives and obstetricians are available so that high quality care is assured in midwifery practice (Gerein et al., 2006:3).

Dippenaar and Da Serra (2012:14), define the midwife as a skilled attendant who has emergency and midwifery skills that are utilized in a well-resourced environment and supported by political will. During a Midwifery Congress which was held in Limpopo in December 2008, a question was posed as to whether there are enough midwives in midwifery clinical practice to provide optimal care and patient education in the maternity units in the public sector in South Africa. This question originated from the fact that there is an understanding that maternity units are understaffed in terms of highly skilled midwives. Understaffing of maternity units leads to sub-standard care (Greenfield, 2007:12).

According to Wildschut and Mqolozana (2008:8), midwifery, advanced midwifery and neonatology are scarce skills in a health sector. A scarce skill is defined as an inability to find suitably qualified and experienced people to fill an occupational post either at absolute level or relative level. Furthermore, the retention of skilled personnel is critical in the clinical environment which warrants incentives to retain skilled personnel (Cullinan, 2006:8). However, the Democratic Nurses Union of South Africa was concerned that

there was still an overburdened category working in Primary Health Care, which includes midwifery services who was still not offered any incentive (Wildschut & Mqolozana, 2008:8). Additional strategies of strengthening human resources for health include recruitment and retention (National Department of Health, 2007b:22).

Furthermore, inequitable distribution of human resources remains a major challenge in provision of proper quality care and it has been identified as a shortcoming of the National Health Bill (National Department of Health, 2002:3).

It has been identified that nurses are unhappy both in the public and private sectors. The unhappiness is caused by poor remuneration in the public sector and a business focus environment in the private sector. In addition, poor material resources, human resources and exposure to infections increase job frustration. These factors result in high staff turnover and unbearable pressure which result in patient abuse (Wildschut & Mqolozana, 2008:48-52).

According to the results of a quantitative study done in one of the urban hospitals in Kenya the nurses reported a staff shortage in the maternity department handling 80 deliveries within 24 hours. Customer satisfaction was impossible which could have lead to the nurses being frustrated (Gerein et al., 2006:4). According to the Democratic Nursing Organization of South Africa the shortage of nurses in South Africa impacts negatively on service delivery (Wildschut & Mqolozana, 2008:9).

It is recommended that for every one hundred patients registered per month there should be three midwives on the staff establishment, who will only manage antenatal patients (Greenfield, 2007:14).

Staffing in the public sector is seriously depleted due to a loss of staff to the private sector and other countries. The increased number of clients who need quality care and the loss of experienced staff have the potential for sub-standard care (Maketa, 2007:48). Migration between international health sectors is becoming increasingly important. This raises concerns about the adverse impact of the flows of skilled professionals from poorer to richer countries which have thrust the migration of health workers to the forefront of the policy agenda in recent years (National Department of Health, 2006b: 98).

A heavy workload remains a problem in the maternity departments and is due to four reasons, namely: the increased demand for nurses and midwives, the inadequate supply of nurses and midwives, reduced staffing and an increase in overtime, and the reduction in patient length of stay (Kuehn, 2007:298). This is further aggravated by midwives and

doctors moonlighting in the private sector, trying to augment their salaries during working hours (Kwast, 2003:12).

It is further postulated that unavailability of staffing norms in some maternity departments results in the inability to assess whether staffing is adequate or not. It therefore becomes difficult to assess the workload of midwives (Nsingwane & Greenfield, 2008:26). Furthermore, managers fail to retain even unskilled health workers. Consequently, this directly increases the workload of midwives, as they are then expected to do non-nursing duties like the jobs of porters and cleaners. Sometimes there are only two or three registered nurses in the unit to look after 70 babies. Moreover, nurses become tired and burnt-out. They absent themselves, resulting in poor quality care being rendered (Adams, 2005:2).

It was identified that a severe staff shortage was a major challenge in one of the hospitals in the Eastern Cape, which lead to negligence of key health aspects such as wearing sterile gloves and washing hands between patients which was not adhered to at times. These practices compromise the patient's health (Adams, 2005: 8-10).

The inability to provide quality care, lack of job satisfaction, stress, demotivation and intentions to seek other employment, create a vicious cycle of staff attrition. This may have an effect on the increased rate of staff turnover. Existing staff may have to take on new roles, whether outside their usual scope of practice, or inappropriate to their level of experience which will then reduce the quality of care rendered (Scottish Government Department of Health, Social Services and Public Safety, 2010:8).

The midwives have diverse and flexible functions which depend on the legislative, structural and economic factors that influence their midwifery practice. However, research studies revealed that midwives have challenges in their practice, namely: fragmentation of care, obligation to perform non-nursing duties and lack of support from the managers (Dippenaar & Da Serra, 2012:12). The culture of midwifery has been identified as a female culture of caring expressed through service and sacrifice, operating within institutions that do not acknowledge the importance of such caring work (Stapleton, et al., 2003:15). However, inadequate supervision of the junior personnel has been identified as one of the stressful situations to the novice nurse. It has been recorded in one of the studies conducted in South Africa that the senior staff members claim to be very much busy at times and are unable to supervise the junior or newly appointed nurses. Consequently, poorly supervised nurses feel unsupported and frustrated (Philpot,

2005:69). As such, unsupported and frustrated nurses develop personal burnout (Freeneey & Tierman, 2009:1558).

It is prevalent that the needs of the midwives are not catered for and concurrently lack of midwife support is a problem (Stapleton et al., 2003:18).

Addressing the lack of skilled professionals, the challenges that affect quality of care in midwifery practice and the closure of coverage gaps are the major solutions in the improvement of maternal quality care (Koblinsky, Matthews, Hussein, Maulanskers, Mrinha, Anwar, Acha, Adjei, Padmanabhan & Van Lerberghe, 2006:16).

- **Budgetary constraints and personnel**

Staffing places a major constraint on the budget of a health facility as it absorbs 71% of the budget. Consequently, measures are introduced to scale down staffing expenditure specifically highly skilled personnel by employing lower skilled personnel. Patient care is therefore compromised because of budgetary constraints (National Department of Health, 2002:32). However, provision of an adequate number of skilled, well motivated and appropriately remunerated human resources is believed to improve maternity care (National Department of Health, 2007a:36).

It has been published that in South Africa there were 5 (five) hospitals where it was identified that poor patient care was rendered. It was in one of these hospitals where it was identified that the hospital's budget was reportedly barely enough to pay for salaries and maintenance, leaving virtually no money for medication, and nurses were obliged to pay for stationary out of their own pockets (Adams, 2005:8). Nevertheless, a challenge of poor remuneration of employees, lack of expertise required and lack of commitment by the managers to maintain health facilities remain a problem in the public sector (Wildschut & Mqolozana, 2008: 26).

However, an implementation of an occupational specific dispensation policy in 2007 was an effort to address the challenge of poor remuneration of nurses. Substantiated further occupational specific dispensation is a strategy to improve the career path, retain and recruit the nurses (Wildschut & Mqolozana, 2008:24).

2.2.1.2 Equipment

Shortage of drugs and supplies and non-functional equipment has been identified as compromising quality of care (Kwast, 2003:20).

However, it is important that care rendered to patients is of quality, but this cannot be achieved if there is insufficient equipment. Availability of equipment of high quality plays an important role in staff motivation (Booyens, 2004:266).

Midwives were identified in a study conducted in Swaziland as not being able to provide basic care during labour due to lack of resources. A shortage in the basic equipment for providing care to women during labour was found, such as a cardiotocograph machine in the maternity unit (Nsingwane & Greenfield, 2008:26). Jantjies (2007:13) in her study conducted in one of the Eastern Cape hospitals revealed that the ambulances were delayed for 4 to 6 hours and sometimes even 12 hours. In addition high risk mothers were not accompanied by midwives and a lack of equipment to resuscitate high risk patients during patient referral was found.

In some hospitals in the Eastern Cape Province doctors are forced to refer patients to other hospitals at times because of lack of equipment. It is further stated that the Eastern Cape has the worst record of poor health care delivery in the country. Limited resources at times are used as a reason not to attend to the needs of patients (Adams, 2005: 8-10). Consequently, the lack of resources is a challenge in midwifery practice as it hinders the midwife's effort to offer high quality care (Fraser et al., 2006:613).

2.2.1.3 Infrastructure

A hospital building forms part of the infrastructure of the health organization and it is there where the patients' needs are to be considered (Booyens, 2004:116). A health care organization provides an opportunity for an individual to receive health care. However, this cannot always be guaranteed as at times the service user's expectations are sometimes not met (Campbel & Lees, 2002:2011). Overcrowding has been reported to be a problem in some public hospitals of South Africa. It has been recorded that in these hospitals admission of patients in some wards is around 110%, and at times it goes up to 140% (Adams, 2005: 8-10).

2.2.1.4 Policies, guidelines and procedure manuals

Policies and guidelines are formalized statements of the manner in which certain skills or procedures are carried out according to the conditions or diseases managed in that particular ward or hospital (Cooke, Walters, Dyer, Lawler & Picone, 2004:21). According to Booyens (2004:28), policy manuals and documents are designed to allow the operational manager of a unit to conduct the activities of the unit according to those of the organization. The purpose of the policy is to ensure standardization and proper guidance in a nursing unit or department (Booyens, 2004:28).

Policy, guidelines and protocols are used interchangeably in a nursing department. Guidelines are defined as the principles, and protocols are then more detailed than guidelines. For an example, a guideline on management of hypertensive disorders will stipulate measures on how to control blood pressure and drugs that are used, and the protocol will stipulate the type of drugs, dosage regime of when and in which levels of care the drugs must be used.

It is further stated that there are three tier systems of guidelines namely:

- A policy guideline which indicates the policy regarding a certain condition;
- A management policy which stipulates details on management of conditions so that an institution is able to choose what is suitable in that particular institution;
- An institutional protocol where the management guidelines have been adapted to suit the particular institution (National Department of Health, 2001a:8).

Decreasing maternal and perinatal death rates is the prerogative of the midwives, hence the development and implementation of the maternity guidelines. It is therefore important for the midwives to implement measures to decrease maternal death rates. This can be achieved by utilizing the existing national guidelines for maternity care in South Africa when caring for women during pregnancy, labour and puerperium, especially those with HIV /AIDS (National Department of Health, 2007a:8). Furthermore, a policy coordinating unit has been established to facilitate the effective implementation of policies. Its responsibility is to coordinate, integrate, synthesize, review and monitor fundamental strategic health policy matters and institutional relationships within the National Health System (National Department of Health, 2001a:8).

According to the (National Department of Health, 2002:42), midwives and doctors are not following protocols, especially in terms of the use of the partogram which is the most important document that should be used properly during labour. However, improper use of guidelines, policies and relevant documents may lead to misdiagnosis and mismanagement of clients (Pattinson & Carpenter, 2005:56).

Lack of consultation with frontline service providers, poor communication and poor interpretation of policies can impact badly on the care provided to patients. Consequently, substandard care may be rendered to patients. This is validated by the findings of a study that was conducted in one of the district hospitals of South Africa. In this study it was identified that nurses who were overworked ill-treated the patients and policy guidelines were at times not properly implemented (Penn–Kekana, Blaaw, Tint, Monarteng & Chenge, 2005:15).

However, it has been identified that mistreatment and substandard care is still practised in some public health facilities, especially in the Eastern Cape Province. This consequently puts the patient at risk of maternal death and injury and subsequently it violates the patient's right to respectful and dignified care (National Department of Health, 2006a:21).

The patients right charter was formulated by the Department of Health with the aim of informing the service users about their rights and responsibilities in improving the health care delivery system (National Department of Health, 2007b:35). The focus of the latter is as follows: a healthy and safe environment, access to healthcare, maintenance of privacy and confidentiality and continuity of care (Booyens et al., 2004:7-8).

When several strategies are initiated and implemented effectively quality care becomes sustainable. Furthermore, the development of the Batho Pele principles and the millennium development goals, specifically goal nos. 5, 6 and 7 are one of the government's initiatives to ensure effective quality of care. Batho Pele principles focus on: consultation, setting service standards, increasing access to healthcare, encouragement of courtesy by service providers, provision of information, openness and transparency, value for money and redress.

The millennium development goals that are relevant to maternal care are as follows:

Millennium development goal 4- Focuses on the reduction of the under-five mortality rates between 1990 and 2015.

Millennium development goal 5- Focuses on the reduction of maternal mortality rate by three-quarters, between 1990 and 2015.

Millennium development 6- Focuses on reversing the spread of HIV and AIDS by 2015 (Republic of South Africa, 2007:8).

It is believed that protocols and guidelines regarding maternal and child care be developed and implemented in each maternity department and these are to be formulated according to the stipulated rules and regulations of the governing body (National Department of Health, 2007b:6).

There are different types of policies that are needed for smooth running of any nursing division or department. These include: personnel policy, public staff code, administrative ward policy and manual, patient care policy, ward manual policy, hospital policy and unit policy manuals (Booyens, 2004:33-46).

2.2.1.5 *Legislation*

A number of regulations have been introduced by the South African Nursing Council which needs to be adhered to by midwives in their practice. These rules have been promulgated from the Nursing Act 50 of 1978 and the regulations are: R2488 of 1990 which stipulate the conditions under which a registered midwife can practise (Republic of South Africa, 1990), SANC R2598 of 1984 stipulates the scope of practice (Republic of South Africa, 1984), SANC R387 18 February 1985, stipulates the acts and omissions (Republic of South Africa, 1985), stipulates notification of births and deaths, Act 51 of 1992 (Republic of South Africa, 1992).

However, standards should be regulated to ensure that the registered midwives are able to demonstrate essential competencies for basic midwifery practice set out by the International Confederation of Midwives (Walsh, Schuiling & Downe, 2011:69). Nevertheless, it was found that there is no congruence between the development and implementation of legislation in health care services. Legislation should be drafted before the development of the policy for guided information pertaining to the policy (National Department of Health, 2002:14). Poor adherence to legislation leads to litigation. It is reported that in the United States of America in 2007, 600 midwives were involved in litigation and an increase in litigation has been noted in South Africa (Dippenaar & Da Serra, 2012:19).

It is important to develop and implement a quality improvement programme in order to determine the nature, scope and intensity of nursing care in the unit (Muller, 2009:269).

2.2.1.6 *Support for the midwife*

The midwives have diverse and flexible functions which depend on the legislative, structural and economic factors that influence their midwifery practice. However, research studies revealed that midwives have challenges in their practice, namely: fragmentation of care, obligation to perform non-nursing duties and lack of support (Dippenaar & da Serra, 2012:12). The situation is further aggravated by the fact that the culture of midwifery has been identified as a female culture of caring expressed through service and sacrifice, operating within institutions that do not acknowledge the importance of such caring work (Stapleton et al., 2003:15). Consequently, the nursing profession is considered as the stressful profession in the health care division as nurses are confronted with challenges such as death of the patient, grief and performance of painful procedures (Freeney & Tierman, 2009:1557).

2.3 PROCESS STANDARDS

Process standards are described as actions taken to perform nursing actions and these include procedure manuals. Procedure manuals on performance of certain skills are essential requirements in a maternity department as it gives guidance on the various procedures such as vacuum extraction, breech delivery and induction of labour (National Department of Health, 2001a:2). Furthermore, the process standards cover the scientific principles of nursing which are the process of assessment, planning, implementation and evaluation (Muller, 2007:206).

2.3.1 Assessment parameters

An assessment and monitoring of maternal and fetal wellbeing, as well as the progress of pregnancy and labour have been identified as important in midwifery practice. As stated by the National Department of Health (2007b:35), the general care of women during labour includes the assessment of the progress of labour during all stages.

It is essential that an initial assessment is done of all women during pregnancy, labour and puerperium. However, this is an opportunity for the midwife to: take detailed history from the woman; ascertain the baseline recording of blood pressure, temperature, fetal heart rate, fetal growth and wellbeing, fundal height measurement, blood tests, urinalysis maternal weight and give health education and support (Fraser et al., 2006:241).

However, the document on the Report on Confidential Enquiries into maternal deaths indicated that the frequent inappropriate use of the partogram such as incomplete or improper recording of observation is a problem encountered in South Africa which leads to poor quality care in maternity (Farrell & Pattinson, 2005:17). In contrast, appropriate care rendered during any stage in maternity enables the midwives to identify potential obstetrical problems as early as possible. Midwives are then able to implement immediate interventions to prevent further complications (Nsingwane & Greenfield, 2008:26). However, poor initial assessment, risk assessment or a delay in diagnosis still remain as the challenges that contribute to an increased maternal death rate. These challenges are further aggravated by a delay in referring the patients from level one hospital to level two or three hospitals. This is further aggravated by a lack of proper resuscitation skills and equipment (Fraser, et al., 2006:270). Poor maternal care during any stage in midwifery care contributes to a high maternal and perinatal mortality rate (Cooke et al., 2004: 21).

A study conducted in the KwaZulu-Natal province revealed that there are many challenges affecting maternity quality care. Challenges include: generally poor quality of midwifery

care, consistent poor recording of observations, poor decision-making, poor management during labour and a high absenteeism rate of staff members (Farrell & Pattinson, 2005:67).

The consequences of substandard care is further shown in a study done in the Eastern Cape which revealed that the outcome of the babies that were exposed to prolonged labour and poorly performed vacuum extraction had a low Apgar score and often suffer from severe hypoxic ischemic encephalopathy (Campbell & Lees, 2002:26). Poor monitoring of clients during labour can lead to misdiagnosis of prolonged labour which may consequently lead to low Apgar score or even intra-uterine fetal death and early neonatal death (Sellers, 2002:1056). It is therefore of importance to assess accurately and to diagnose accordingly (National Department of Health, 2007a:52).

Proper assessment of the newborn baby assists the midwife in identifying high risk neonatal and any abnormalities, such as congenital anomalies (National Department of Health, 2007a:62). Results of studies conducted in South Africa show that about 75% of neonatal deaths (death at age less than 28 days) occur in the first 24 hours after birth and are often due to obvious malformations or diseases, 25% of babies die after 24 hours after birth. Adequate assessment assists with the identification of high risks indicators and problems (Beischer & Mackay, 1997:259). Sellers (2002:596) substantiates that it is essential that assessment of all systems is done so that abnormal features are not missed. In addition, the parents' first observation of their newborn babies provide them an opportunity to discuss any concerns they may have and the midwife's duty is to reassure them that their baby is normal and healthy (Fraser, 2009:780).

Assessment of maternal and fetal well-being is vital during pregnancy and labour in order to prevent complications (Cooke et al., 2004:24). Furthermore pregnancy, labour and puerperium can be a hazardous journey for the fetus and the woman if close monitoring is not done (Campbell & Lees, 2007:101).

According to Magingxa (2009:25), there are circumstances where the standards are set but are not adhered to by the midwives. Midwives at times focus on weighing and immunizing the baby and fail to do a full assessment of both the mother and the baby during the postnatal period. Poor human and material resources may also deter midwives from not assessing the patient according to the set standards and guidelines. Nevertheless, the midwives have to work efficiently and effectively whilst putting the interests of the patient first and preventing complications in midwifery practice (Warwick, 2009:11).

During the phase of implementation the process standards, monitoring and evaluations should be done to check whether the set objectives were met (Booyens, 2004:317). According to Muller (2009:261), monitoring and evaluation of the set standards should be implemented to check if the nursing practitioners do conform to the standards. The lack of monitoring, evaluation and implementation of the quality of service is common and it leads to poor maternity care (Fraser et al., 2006:270). Furthermore, midwifery practice is guided by a statutory body, the South African Nursing Council, it is thus important that the midwife ensures that care provided to the patient is within the activities stipulated by the council regulations (Fraser, et al., 2009). Process standards include the processes of assessment, planning, implementation and evaluation (Muller, 2009:259).

2.4 OUTCOME STANDARDS

Outcome standards are expected outcomes that relate to measurement of care provided and expected performance after quality care has been rendered (Searle, 2006:155). These include objectives that need to be achieved and are measurable (Muller, 2007:207). The objective in a maternity department is to provide good quality care to patients during pregnancy, labour and puerperium and to ensure the delivery of a normal and a healthy baby (National Department of Health, 2002:4). The outcomes of reproductive health must be positive and rewarding regardless of the challenges facing the midwives in their practice. In addition, pregnancy is sometimes the result of a planned experience by two people that are in love and with a joint lifetime commitment to raise a child, which may contribute to a better birth outcome when management is done appropriately (Hlongwane, 2009:6).

However, the outcome standards are expected results of the nursing care rendered (Muller, 2009:259). As substantiated further by Booyens (2004:312) the outcome criteria are: patient behaviour and responses, the patient's level of knowledge of the patient's health status. Standards should be monitored and evaluated using different strategies or approaches such as the patient satisfaction survey (Muller, 2009:261-262). This is validated by the results of a study conducted in the Eastern Cape Province, East London Health Complex which revealed that women preferred to stay away from the formal care structures for their deliveries as they felt that they were not being treated with respect, they spent hours of labour alone in any stage of labour. It was also noted that women were subjected at times to unpleasant practices and sometimes shouted at or slapped by health care workers (Farrell & Pattinson, 2005:96-97).

However, the midwives should be aware of the fact that when managing the pregnant woman in maternity there are two lives to take care of. Therefore, the midwives are expected to advocate by standing up for what they know to be correct for their patients (Hlongwane, 2009:7).

However different studies conducted in South Africa revealed that women using maternity services in South Africa are dissatisfied with the care that they receive. The pregnant woman expects to be cared for by the midwife, yet this very care includes verbal, emotional and physical abuse by midwives. Harmful practice is routinely practised in public hospitals (Farrell & Pattinson, 2005:11-15).

Consequently, fear and anxiety are mentioned as predisposing causes into prolonged labour because at times the pregnant woman is inclined to cause tension on her uterine muscles leading to a disordered uterine action. It is therefore essential that midwives give support to the woman during pregnancy, labour and puerperium (Sellers, 2002:659).

Clinical risk management is the natural development of a best practice approach to antenatal care (Campbell & Lees, 2002:98). When midwifery practice is not guided and monitored it is likely to reduce poor quality care (Gerein et al., 2006:6). According to (Proctor et al., 2002:1) maternity care differs from other areas of health care because most users of maternity services are in good health. Good quality care is therefore required in order to prevent complications. Midwifery care is aimed at delivering good quality care for both the woman and the baby.

An increased number of complications in midwifery practice is an indicator of poor maternal and newborn care (Dippenaar & Da Serra, 2012:8). However, complications occur because of failure to act immediately when there is a problem. These complications can occur during pregnancy, labour and puerperium (Sellers, 2002:957). The complications that can occur during pregnancy include placenta abruptio, antepartum haemorrhage, pulmonary embolism, eclampsia, prelabour rupture of membranes. These need immediate attention and referral (Fraser et al., 2006:540).

According to the published report by (Adams, 2005:5) statistics show that, with 61.2 out of every 100 000 babies under the age of one year, and 80% of those under the age of five, died in one of the provincial hospitals. This was significantly higher than the national averages of 45.4 and 59.4 respectively. Furthermore, it was reported that in September 2004, 76 children out of the 363 children who were admitted, died at the hospital over a three month period. Many of them died from easily preventable infections.

Maternal and perinatal deaths remain a challenge and are complications that sometimes arise from poor maternal care. Nevertheless common causes of prenatal deaths are avoidable (Fraser et al., 2006:972). This could be illustrated by the increase that was noticed in maternal deaths when expressed as per 100 000 live births. The increase was noted in 2005 by non-pregnancy related infections (75.6%) pregnancy related infections (48.9%), obstetric haemorrhage (40.7%) and hypertension 34.1% (Rigorous, 2007:62). Substantiated further by Rigorous (2007:62) 50% of new and existing HIV infection cases worldwide are women and more than two million women who are HIV infected become pregnant each year particularly in developing countries. Also in South Africa death is associated with poverty, infections, and cardiovascular diseases (Bradshaw, Schneider, Dorrington, Bourne, David & Laubescher, 2002:1618). The maternal morbidity rate in the Netherlands was recorded at 7.1 per 1000 deliveries. The causes of death were highlighted as obstetric complications (Richards, 2008:5) Uterine rupture, major obstetric haemorrhage and hypertensive disorders were reported as major causes of maternal mortality (Richards, 2008:5).

A study done in Swaziland in 2002 revealed that respondents had high levels (69%) of knowledge on the Prevention of Mother to Child Transmission (PMTCT) despite the fact that this is a new concept in Swaziland. Also women lacked clarity on the mode of transmission of the virus from the mother to the unborn baby (Ithembu, 2007:38).

HIV and AIDS have been identified as the first leading cause of maternal deaths. Prevention of mother to child transmission of HIV would concurrently reduce the perinatal mortality rate (Bradshaw et al., 2002:1622). Nevertheless, unexplained stillbirths are the most common recorded category or cause of perinatal death (Snyman, Strumper, Pattinson & Malah, 2007:27).

In South Africa people in poor environments seldom have adequate facilities for safe formula feeding, which exposes the baby to gastrointestinal tract infections like diarrhoea and vomiting. This illness may lead to an increase in neonatal deaths. (National Department of Health, 2003:189). According to Dippenaar & Da Serra (2012:10), the main indirect cause of maternal deaths in South Africa is currently HIV/AIDS at 43.7%. Different strategies are implemented to monitor and evaluate if the set standards are adhered to. The strategies include: self-evaluation, direct observation, document analysis and auditing, peer group evaluation and patient satisfaction survey (Muller, 2009:263). This is validated by the results of a study that was conducted in the obstetric hospitals of the Nepal district in which direct observation, document analysis and auditing were used. A report on this monitoring and evaluation revealed that in some hospitals equipment and staffing norms

were improved. However, a poor communication skill was the problem that was identified amongst the staff, especially during patient high turnover periods. Antenatal clinics were opening very late leading to patient overcrowding and patients had to wait a long time before they received care. It was also identified that the hierarchical structure of the hospital was a hindrance in developing a teamwork method as it was not easy to question the decision done by the managers (Clapham, Basnet, Pathak & McCall, 2004:93-96).

A lack of proper implementation of set standards results in negative outcomes of care provided. Poor management in health care institutions may lead to poor quality care which predisposes patients to complications such as neonatal deaths and infection. An infection and neonatal death are the negative outcomes of quality care. It is therefore critical that quality improvement is implemented to monitor, evaluate and implement remedial actions when the problems have been identified (Muller, 2007:203). The quality improvement programme is therefore a strategy to enhance customer satisfaction, improve environmental performance and improve quality of care (Muller, 2009:259).

2.5 SUMMARY

This chapter discussed the literature reviewed on factors affecting quality of care in midwifery practice during pregnancy, labour, puerperium and the neonatal period. The tripartite model of Donabedian (1990:1116), supported by Muller (2007:203) was used to guide this study as illustrated in various phases of the study.

The next chapter, chapter 3 addressed the research methodology, which was used to conduct this study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The literature study for this research was discussed in chapter 2. Relevant literature was reviewed and a rationale was described for the study to justify the significance and explain how the study would promote the knowledge base of nursing science. The purpose of this chapter is to describe the research methodology applied and the ethical considerations of this study.

3.2 RESEARCH GOAL

The goal of this study was to explore the factors affecting the quality of midwifery practice in a hospital in the Eastern Cape Province.

3.3 OBJECTIVES

The objectives of the study focused on the structure and process standards

3.3.1 Structure Standards: To determine whether

- policies and procedure manuals are available and updated
- support from the supervisor is available
- there was adequate staff
- the required qualifications were available
- the required experience of registered midwives were available
- in-service training was being given

3.3.2 Process standards: To determine whether

- patients were assessed according to the national guidelines for maternity for maternity care
- patients were diagnosed according to the national guidelines for maternity care
- patients' care plans were formulated according to the national guidelines for maternity care

3.4 RESEARCH METHODOLOGY

3.4.1 Research design

A quantitative method of conducting the study was selected. Burns and Grove (2009:26) state that quantitative research is a formal, objective, systematic process in which numerical data is used to obtain information about the world. For the purpose of this study a descriptive research design was used (Brink, 2006b:92). A research design is the blueprint for the study. The characteristics of a single sample could be examined using the descriptive design (Burns & Grove, 2009:237). The methodology applied was to investigate the factors affecting the quality of a midwifery practice.

3.4.2 Research setting

The research setting for this study was a hospital maternity department in the Eastern Cape Province. The complex consists of two hospitals that are thirty kilometres apart. Hospital A is located in a semi-rural area, Mdantsane Township and Hospital B is in the urban area of East London. The population size served by hospital A is 9 111 576 and for hospital B it is 1 678 942. Bed occupancy in hospital A is 89% and in hospital B it is 100%. The total number of beds available for maternity patients is 127 in hospital A and 129 beds with 53 cribs in hospital B.

3.4.3 Population and sample

According to Brink (2006a:123) population is the entire group of persons or objects that is of interest to the researcher and which met the researcher's interest. The target population (N=172) for this study was the registered midwives working in the maternity department of a hospital in the Eastern Cape Province. Brink further states that a sample is a part or fraction, whole or a subset of a larger set selected by the researcher to participate in a study. The total population was included in the study provided that the respondents met the criteria, willing to participate in the study and were not on leave at the time of data collection. However n=17(10.0%) of the participants took part in the pilot study with a remainder of 155 for the actual study. All the registered midwives were invited to participate in this research project – personnel on leave or sick leave and not willing to participate in the study were excluded. Sampling is the process of selecting a group of people that are representative of the population being studied (Burns & Grove, 2003:496). For this study the total population was used and no specific sampling method was applied.

3.4.3.1 Inclusion criteria

Registered midwives with an experience of at least 6 months working in the maternity department under study were included in the study.

3.4.3.2 Exclusion criteria

Midwives that were not willing to participate in the study and those who were on holiday or sick leave were excluded from the study. Volunteers who participated in the pilot study were also excluded from the main study.

3.5 DATA COLLECTION INSTRUMENT

A self-administered questionnaire (Annexure 1) was designed based on the objectives of the study, supported by the literature and the researcher's clinical experience. The questionnaire was developed to investigate factors that affect quality of care in midwifery practice at a hospital in the Eastern Cape Province. The questionnaire consisted of 13 close-ended questions divided into sections A and B. Section A consisted of eight questions which focused on biographical information, skills development, years of experience in midwifery practice and support from the supervisor. Section B consisted of 5 questions focusing on obstetrical profile, nursing care plans and staffing. All questions were coded for statistical analysis. The respondents were required to answer the questions with an x where applicable. The measure of quality of care in this study was derived from an assessment of potential benefits or harm of each of the practices reported by midwives in the questionnaire.

3.5.1 Reliability and validity

Brink (2006a:107) states that reliability refers to the consistency and dependability of the research instrument to measure a variable, type of reliability, stability, equivalence and internal consistency. Brink (2006b:159) states that instrument validity seeks to ascertain whether an instrument accurately measures what it is supposed to measure, given the context in which it is applied.

Although researchers always strive to maintain maximum reliability and validity in research, it is virtually impossible to achieve perfection (Neuman, 2006:37). Reliability is defined as the degree to which an instrument is able to yield consistent results if used repeatedly over time on the same person or if used by other researchers (Brink, 2006a:160).

Content validity is the first task in establishing the accuracy of the data collection instrument (Brink, 2006a:160). According to De Vos, Strydom, Fouché & Delpont

(2001:173), content validity is concerned with the representativeness or sampling adequacy of the content of an instrument. This is substantiated by Brink (2006a:160), who describes content validity as an assessment of how well the instrument represents all the components of the variables to be measured. Burns & Grove (2009:380) emphasize that construct validity includes content validity. The researcher ensured construct and content validity by consulting with experts in the field of midwifery, research methodology and statistics. The content was based on the literature and the researcher's experience which was validated by experts in the field of nursing education, research methodology and statistics. In addition, the instrument was evaluated by colleagues in midwifery. A pilot study was conducted to support the research methodology, reliability and validity of the study. The content was refined according to the results of the pilot study to ensure that there were no ambiguity and questions were accurate.

3.5.2 Pilot study

The pilot study is the smaller version of the proposed study conducted to develop and refine the methodology, such as the treatment, instruments, or data collection process to be used in the larger study (Burns & Grove, 2003:491). The purpose of the pilot study was to pre-test the questionnaire for any ambiguity and inaccuracies, and furthermore to determine the feasibility of the study. The total number of registered midwives working at this hospital complex was given to the researcher as 172. The researcher was given the opportunity to countercheck the number of registered midwives. A total number of registered midwives (n=172) worked in the maternity department of the complex. The researcher conducted a pilot study on (n=17/10%) of the respondents of the population (N=172), under similar circumstances as the actual study. These respondents were all volunteers who agreed to test the questionnaire and this could be referred to as convenient sampling. According to (Brink, 2006a:132) convenient sampling is referred to as availability sampling which involves the choice of the readily available subjects for the study. The respondents who participated in the pilot study were excluded from the main study. The pilot study included respondents of the maternity departments of both sites of the hospital complex. The researcher assessed the feedback and adjusted the questionnaire as guided by the outcomes of the pilot study and the use of experts in the fields of nursing education, midwifery, research methodology and statistics.

3.6 DATA COLLECTION

According to Brink (2006a:54), the researcher normally collects the data according to the pre-established plan. The researcher collected the actual information, that is, data, using

the instrument that was developed and tested in the pilot study. Brink (2006a:141), states that the process of data collection is of critical importance to the success of a study.

The researcher distributed 155 self-administered questionnaires personally to the respondents on both day and night shifts. Despite the appointments made with the respondents, at times the midwives were very busy and could not keep to their appointments. Subsequently, new appointments were made.

Informed consent was obtained separately from the completion of the questionnaires. Respondents were provided with an information leaflet about the study and the relevance of completing the questionnaire. Questionnaires were personally collected after a period of 30 minutes. Data collection took place over a period of six weeks from 01 October to 15 November-2012. Due to the heavy workload of midwives at times some were reluctant to complete the questionnaire but nevertheless completed it. A return rate of 81.3% was obtained.

According to Brink (2006a:170), researchers must choose methods of organizing the raw data in addition, displaying them in a fashion that will provide answers to the research questions.

3.7 Data analysis

The statistician was consulted for the data analysis. Data were entered into an excel sheet. The statistical program Software Package for Social Science (SPSS) and Statistica version 9 were used for data analysis. The excel sheet was imported into SPSS and analyses performed. Data was presented in frequencies, means, standard deviation and ranges. Quantitative data analysis techniques were applied and descriptive statistics were used to explain the data. Tables were used to illustrate and summarize the findings. However, in addition, statistical associations were done to determine whether there were statistical differences between the variables using a 95% confidence interval. A level of statistical significance was set at $p < 0.05$. The tests used to determine statistical differences included the Chi-square Pearson.

The test done in this study could be defined as:

Chi-square:

The chi-square is used as a descriptive statistic which indicates the strength of the association between two variables and as an inferential statistic which indicates the probability that any association found is likely to be due to chance factors (Neuman,

2006:372). The chi-square test uses significance testing to examine whether variables are independent (Maltby, Day & Williams, 2007:126).

Statistical significance means that the results are not likely to be due to chance factors. That is, it aims to indicate or refute that a relationship or a statistically significant association is present in the sample and probably in the population (Neuman, 2006:338).

3.8 ETHICAL CONSIDERATIONS

The Health Research Ethics Committee in the Faculty of Health Sciences of the Stellenbosch University approved the proposal for the study. Ethics committee approval number is N 10/02/029 (Annexure 3). The researcher also obtained the permission to conduct the study from the Superintendent of the hospital under study (Annexure 5) and the local research committee (Annexure 6). The questionnaires were distributed to respondents who gave informed written consent (Annexure 2).

Respondents were provided with an information leaflet with full information about the participation in the research study, conditions and their rights on participating. The respondents who were interested to participate in the study did so voluntarily. The respondents were informed that they would not be rewarded for participating in the study. When written permission was obtained from the Superintendent of the hospital, registered midwives of the respective maternity units of the hospital were informed in writing, explaining the nature and purpose of the study. Copies of the permission by the Health Research Ethics Committee of the Stellenbosch University, East London local research committee and the Superintendent of the East London hospital complex were attached.

The confidentiality and anonymity was ensured to all respondents. Respondents were informed that they could withdraw from the study without any repercussions. All the relevant documentation pertaining to the research will be stored in a locked cupboard for a period of five years and be accessible to the researcher only.

3.9 SCOPE AND LIMITATIONS OF THE STUDY

The outcomes of the study were evaluated according to its scopes and limitations. The limitation identified in the study was that the research was based on what the respondents' responses indicated about the factors influencing quality care in midwifery practice. A shortcoming is that an audit of the patient documents may have verified the responses of the respondents.

3.10 CONCLUSION

This chapter described the research methodology applied in this study which included the research design, population, sampling, data instrument, data collection, reliability and validity, limitations and ethical considerations. In the next chapter the data analysis, interpretation and presentation will be addressed.

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

The research methodology applied in this study is explained and discussed in chapter 3. In chapter 4 the analysis and interpretation of the data that was collected to meet the requirements of this study are described. The data were analyzed with the support of a statistician using computerized data analysis software, namely the SPSS programme and Statistica version 9.

4.2 DESCRIPTION OF THE STATISTICAL ANALYSIS

In this chapter the results of the study are interpreted, discussed and presented in tables and frequencies. The data is predominantly presented in a quantitative form with the responses to a few open questions. Descriptive statistics describe numerical data and can be categorized by the number of variables involved (Neuman, 2006:347). According to Burns and Grove (2009:470), descriptive statistics allow the researcher to organize the data in ways that give meaning, insight and allows a phenomenon to be examined from a variety of angles.

Neuman (2006:347) states that frequency distribution is a table that shows the distribution of cases into the categories of one variable, that is, the number or percentage of cases in each category. Bivariate statistics allow a researcher to describe the relationship between the two variables (Neuman, 2006:353).

A confirmatory analysis to test quality of properties across a level of variables was carried out. The Chi-square test was used to test association of variables between demographic data and response of midwives to factors affecting quality of care.

A p-value of $p < 0.05$ represents statistical significance in hypothesis testing and 95% confidence intervals were used to describe the estimation of unknown parameters. When the p-value is greater than 0.05 by convention the chance cannot be excluded as the findings are not statistically significant at that level (Burns & Groove, 2007:325-331).

4.3 SECTION A: GENERAL INFORMATION

This section consists of the respondents' biographical information and it is formulated into eight questions and the data is presented in tables.

4.3.1 Question 1: Age of the respondents (n=126)

The results illustrated in table 4.1 indicate that the age of the majority of respondents (n=49/39.7%) ranged between 35 and 44 years, while the youngest (n=25/19.0%) are between 25 and 34 years.

Table 4.1: Age distribution of the respondents (n=126)

Age group	Frequency (n)	Percent (%)
<15 years	0	0
25-34	25	19.0
35-44	49	39.7
45-54	44	34.9
55 and above	8	6.4
TOTAL	126	100

4.3.2 Question 2: Years of experience of the respondents in maternity department (n=126)

Table 4.2 shows that the majority of respondents (n=34/27.0%) had experience of two to five years, followed by (n=32/25.4%) with experience of more than 14 years. Supported by the literature in paragraph 2.2.1.1, midwives with an experience of more than two years working in maternity tend to make subordinates feel secured and work with insight (Hallin & Danielson, 2006:1226).

Table 4.2: Years of experience of the respondents in maternity department (n=126)

Experience (Years)	Frequency (n)	Percent (%)
< One year	12	9.5
2-5	34	27.0
6-9	23	18.3
10-13	25	19.8
14 and above	32	25.4
TOTAL	126	100

4.3.3 Question 3: What are your professional qualifications? (n=126)

As shown in table 4.3 the qualifications identified were that: most nurses were trained in midwifery (n=121/96.0%), followed by nurses with only general nursing (n=112/88.9%). In addition (n=60/47.6%) had a psychiatric nursing qualification, (n=9/7.1%) an advanced midwifery qualification and only a few (n=4/3.2%) were trained as advanced neonatology

nurses. It was also identified that out of (n=126) each respondent has more than one qualification. This is of benefit to any health care service because when complications such as post partum depression occurs it becomes easier for the client to be managed as many of the midwives are also psychiatric trained (n=60/47.6%). Some respondents were qualified in nursing education (n=14/11.1 %). This qualification is also of vital importance for the services that are rendered at the hospital complex under study because it is also a training institution for the midwives. Advanced neonatology trained nurses were recorded as being the lowest figure of (n=4/3.2 %). The hospital under study is a referral institution, therefore shortage of midwives especially those that are highly skilled raises concerns as this can lead to substandard care being offered as supported by (Nsingwane & Greenfield 2008:12) (see paragraph 2.2.1.2).

Table 4.3: Professional qualifications of the respondents (n=126)

Qualifications	Frequency (n)	Percent (%)
Registration in General nursing	112	88.9
Registration in Midwifery	121	96
Registration in Advanced Midwifery	9	7.1
Registration in Nursing Education	14	11.1
Registration in Nursing Management	24	19
Registration in Community Health Nursing	42	33
Registration in Psychiatric Nursing	60	47.6
Registration in Neonatology Nursing	4	3.2

4.3.4 Question 4: In which section of the maternity department are you currently functioning? (n=126)

Table 4.4 shows that the highest number of respondents were placed in the labour ward (n=51/40.5 %), followed by those working in postnatal wards (n=25/19.8 %). The lowest number (n=1/0.8 %) were those working in prevention of mother to child transmission department. The number of the midwives who are working in labour wards is not enough for the types of patients and the services offered in the complex. The figure of midwives illustrated in table 4.4 below was the number that is utilized in these subunits of the labour ward. Labour wards at both hospitals were divided into admission suits, labour wards, the high care department and the theatre. Furthermore, the types of patients that are managed in the complex are mainly high risk patients in almost all the wards/units in the maternity department as this is a referral hospital. In some wards/units both antenatal and postnatal high risk women are managed. The fact that the lowest recorded figure was that of the registered midwives who are working in the prevention of mother to child

transmission department raises concern as HIV/AIDS has been recorded as the number one cause of maternal deaths (National Department of Health, 2006a:72). A discrepancy between the knowledge, clinical exposure and skills of health providers about HIV/AIDS was identified in a study conducted in one of the provinces of South Africa. The results of this study shows that from a sample of 215 health care providers 40% received training on counselling while only 10% of this sample received training on clinical aspects pertaining to HIV/AIDS and PMTCT (Stapleton et al., 2003:10).

Table 4.4: Section of placement in the maternity department (n=126)

Section of Department	Frequency (n)	Percent (%)
Antenatal ward/unit	24	19.1
Labour Ward	51	40.5
Post natal ward/unit	25	19.8
Neonatology ward /unit	25	19.8
Other (PMTCT)	1	0.8
Total	126	100

4.3.5 Question 5: Is a comprehensive in-service education programme offered at your institution?

Respondents (n=108/ 85.7 %) indicated that an in-service education program was offered at the hospital complex under study. Furthermore (n=18/14.3%) claimed that it is not done which is a concern as it can have an adverse effect on the quality of care (Gillespie et al., 2010:78). Midwives with updated information tend to provide good quality care because nursing is dynamic (Jewkes et al., 2003:1).

Table 4.5: In-service education program offered (n=126)

In-service education offered	Frequency (n)	Percent (%)
Yes	108	85.7
No	18	14.3
Total	126	100

4.3.6 Question 6: If the answer to question 5 is yes, please indicate the frequency of the in-service education implemented by selecting an appropriate answer?

Out of 126 respondents interviewed (n=70/ 55.6%) indicated that in-service education is implemented on a weekly basis followed by (n=30/23.8%) fortnightly. However, a

workplace environment with sufficient qualified staff and frequently trained members supporting each other contribute to a feeling of security and provision of quality care (Hallin & Danielson, 2006:1242). Furthermore, in-service education is a form of staff empowerment. Consequently, midwives need to be empowered so that they are competent to empower women (Dippenaar & Da Serra, 2012:17).

Table 4.6: In-service education implemented (n=126)

In-service education Implemented	Frequency (n)	Percent (%)
Weekly	70	55.6
Fortnightly	30	23.8
Once a month	9	7.1
Once every 3 months	3	2.4
Once every 6 months	1	0.8
Once every 9 months	0	0
Once a year	3	2.4
Never	10	7.9
Total	126	100

4.3.7 Question 7: Are the updated policies and procedure manuals available to all the staff members in your unit/ward (n=126)?

Respondents (n=120/95.2%) indicated that the policies and procedure manuals were available at the hospital, only (n=6/4.8%) indicated that the policy and procedure manuals were not available (Table 4.7). This can lead to an increase in the poor maternal care. It was identified that in some institutions policies were not available to staff members. This then led to misdiagnosis and mismanagement of maternity patients (Pattinson & Carpenter, 2005:56), as already documented in paragraph 2.2.1.1.4.

Table 4.7: Updated policies and procedure manuals (n=126)

Policy and procedure manuals	Frequency (n)	Percent (%)
Yes	120	95.2
No	6	4.8
Total	126	100

4.3.8 Question 8: Do you get support from your supervisor whenever you need it? (n=126)

Most respondents (n=70/55.6%) indicated that they received support from their respective supervisors in assisting them with their duties, however (n=56/44.4%) claimed not to be receiving support from their respective supervisors as shown in table 4.8. A statistical significant difference was identified between support from the supervisor and those who hold an advanced midwifery qualification using the Pearson Chi-Square statistical test, $df=1$ ($p=0.02$). Those who do not hold an advanced midwifery qualification were more likely to receive support from the supervisor. Lack of support of the subordinates by their supervisors is a big challenge in any institution. According to Philpot (2005:69), inadequate supervision and lack of support to the junior personnel has been identified as one of the stressful situations in the nursing profession. Lack of supervision and support can lead to the subordinate feeling frustrated and stressed as supported in paragraph 2.1.1.6.

Table 4.8: Support from the supervisor (n=126)

Support from supervisor	Frequency (n)	Percent (%)
Yes	70	55.6
No	56	44.4
Total	126	100

4.4 SECTION B: OBSTETRICAL PROFILE

4.4.1 Question 9: Please indicate which of the following assessment parameters are done on admission of the patient in your ward /unit (n=126):

4.4.2 Question 9.1: Do you take a history on admission of patients? (n=126)

Many respondents indicated that they do not take a comprehensive history (n=43/34.1%), a family history (n=61/48.4%), personal (n=57/45.2%), surgical (n=68/53.9%) and medical history (n=56/44.4%) as indicated in table 4.12. However, results further show statistical significant differences between midwives who have a neonatology qualification and medical history taking, using the Pearson Chi-Square test ($p=0.02$) between advanced neonatology nurses and taking of an obstetrical history ($p=0.03$) and between registered nurse managers and obstetrical history (Pearson $p=0.02$). The midwives with a neonatology qualification are less likely to take a medical and obstetrical history.

Registered nurse managers are less likely to take an obstetrical history. It is compulsory that the midwives take the history of their patient. Comprehensive history taking is critical in midwifery practice to identify problems encountered in a previous pregnancy, labour, puerperium and neonatal period. According to Dippenaar and Da Serra (2012:183), comprehensive or full history taking is aimed at screening the woman for any abnormality and existing complications during pregnancy and birth. Consequently, abnormalities such as the history of previous abortions, intra-uterine deaths and congenital abnormalities are associated with medical diseases that may occur during pregnancy such as diabetes mellitus and cardiac diseases which can be detected through comprehensive history taking (Dippenaar & Da Serra, 2012:247) as supported by the literature in paragraph 2.3.1.

Table 4.9: History taking (n=126)

Parameters		Frequency (n)	Percentage %
Comprehensive history	Yes	83	65.9
	No	43	34.1
TOTAL		126	100
Parameters		Frequency (n)	Percentage %
Family	Yes	65	51.6
	No	61	48.4
TOTAL		126	100
Parameters		Frequency (n)	Percentage %
Personal	Yes	69	54.8
	No	57	45.2
TOTAL		126	100
Parameters		Frequency (n)	Percentage %
Medical	Yes	59	46.8
	No	67	53.2
TOTAL		126	100
Parameters		Frequency (n)	Percentage %
Surgical	Yes	58	46.0
	No	68	54.0
TOTAL		126	100
Parameters		Frequency (n)	Percentage %
Obstetrical	Yes	84	66.7
	No	42	33.3
TOTAL		126	100

4.4.3 Question 9.2: Are you doing a urinalysis of the patients on admission (n=126)?

A minority of the respondents were not doing urinalysis of their patients (n=20/15.9 %) and (n=106/84.1%) recorded to be doing urinalysis of their patients, table 4.10.

A statistical association was identified between urinalysis and registered nurses using the Pearson Chi-square test ($p < 0.01$). Urinalysis and monitoring of vital signs are done to detect baseline information of the patient in order to detect complications and manage it at an early stage. Failure to do urinalysis as indicated by some respondents can lead to misdiagnosis and mismanagement of patients. This is supported by the literature, paragraph 2.3.1, in which a study conducted in KwaZulu-Natal province revealed that there are many challenges affecting maternity quality care. Challenges included: poor monitoring of patients during labour and puerperium, consistent poor recording of observations, poor decision-making and poor management of maternity patients (Farrell & Pattinson, 2005:67).

Table 4.10: Urinalysis (n=126)

Parameters		Frequency (n)	Percentage %
Urinalysis	Yes	106	84.1
	No	20	15.9
TOTAL		126	100.0

4.4.4 Question 9.3: Are you checking vital signs of the patients on admission in the ward?

The majority of respondents have recorded that they do check their patients' vital signs (n=108/85.7%). However, (n=18/14.3 %) recorded that they do not check vital signs of their patients as illustrated in table 4.11. A statistical association was identified between registered nurses and vital signs using the Pearson Chi-square test ($p < 0.01$). The frequent improper recording of observation is a problem encountered in South Africa which leads to poor quality care in maternity (National Department of Health, 2002:47).

Table 4.11: Observations / vital signs (n=126)

Parameters		Frequency (n)	Percentage %
Observations / vital signs	Yes	108	85.7
	No	18	14.3
TOTAL		126	100.0

4.4.5 Question 10: Are you doing a physical, abdominal and vaginal assessment of the client in the ward (n=126)?

As indicated in table 4.12 the majority of the respondents (n=102/81.0%) were identified to be doing physical assessment of patients, (n=97/76.9.0%) respondents were doing abdominal assessments of clients. It is a concern that (n=24/19.0%) recorded that they were not doing a physical assessment, (n=29/23.0%) not doing abdominal assessments and (n=42/33.3%) not doing vaginal assessments. However, the physical assessment of a patient during pregnancy, labour and neonatal period is crucial because abnormalities can be detected and treated early. Complications include intra-uterine growth restriction during pregnancy, abnormal uterine action during labour, sub-involution during puerperium and abdominal distension during the neonatal period (Fraser et al., 2009:247). However, vaginal examinations cannot be left out in midwifery practice as it is of crucial importance, to exclude any abnormality that may arise. An abnormality can include poor dilatation of the cervix, cord prolapse or presentation (Fraser et al., 2009:341).

Table 4.12: Assessment parameters performed on patients (n=126)

Parameters		Frequency (n)	Percentage %
Physical assessment	Yes	102	81.0
	No	24	19.0
Total		126	100.0

Parameters		Frequency (n)	Percentage %
Abdominal assessment	Yes	97	77.0
	No	29	23.0
Total		126	100.0

Parameters		Frequency (n)	Percentage %
Vaginal assessment	Yes	84	66.7
	No	42	33.3
Total		126	100.0

4.4.6 Question 11: Is the nursing diagnosis developed according to the stipulated national guidelines for maternity care and policies (n=126)?

Only (n=89/70.6%) of the respondents indicated that they were formulating nursing diagnosis according to the guidelines and stipulated policies, see table 4.13. A statistical association was identified between age and formulating nursing care diagnosis using Pearson Chi- squared test $df=3$ ($p=0.02$). Respondents between the ages 45 to 54 were more likely to agree to be formulating a nursing diagnosis in their units. This indicated that nurses registered in midwifery were more likely to formulate nursing diagnosis according to the stipulated policies, as indicated in table 4.23 (n=89/70.6). However, (n=37/29.4%)

respondents indicated that they were not formulating the nursing diagnosis according to the national maternity care guidelines and policies as indicated in table 4.13. It is a responsibility of the registered midwife to take a proper history from the clients, do physical assessments, interpret the findings and formulate the nursing diagnosis and care plan according to provincial or national protocols and guidelines. This must be done to ensure proper management of all clients all the times for proper management of all maternity clients (National Department of Health, 2002:7).

Table 4.13: Nursing diagnosis developed according to the stipulated national guidelines for maternity care and policies (n=126).

Parameters		Frequency (n)	Percentage%
Nursing Diagnosis	Yes	89	70.6
	No	37	29.4
Total		126	100.0

4.4.7 Question 12: Are the nursing care plans developed according to the stipulated national guidelines for maternity care and policies (n=126)?

Respondents (n=111/88.1%) recorded that they were developing the nursing care plans and (n=15/11.9%) was not developing the nursing care plan for their patient, see table 4.14. A further statistical association was identified between policy and nursing diagnosis using Pearson Chi- square ($p=0.05$) $df=2$. Failure to develop nursing care plans can lead to patient mismanagement (Fraser et al., 2009:347).

Table 4.14: Nursing care plans developed according to the stipulated national guidelines for maternity care and policies (n=126).

Parameters		Frequency (n)	Percentage %
Nursing care plans	Yes	111	88.1
	No	15	11.9
TOTAL		126	100.0

4.4.8 Question 13: Is there adequate staffing to provide patient care in your ward/ unit (n=126)?

The majority of the respondents (n=118/93.7%) indicated that there was an inadequate number of staff to provide quality care in maternity, see table 4.15. According to the National Department of Health (2002:137) the manager has a responsibility to ensure availability of adequate staff and equipment in the health sector.

Table 4.15: Adequate staffing to provide patient care (n=126).

Adequate staffing	Frequency (n)	Percent (%)
Yes	8	6.3
No	118	93.7
Total	126	100.0

4.5 CONCLUSION

In this chapter data that was collected during this study was analyzed, interpreted and discussed. Tables were used to make data understandable. The researcher succeeded in exploring the research question and successfully addressed the research question, i.e. 'what are the factors that influence the quality of care in a midwifery practice at a hospital complex in the Eastern Cape Province, South Africa. The objectives of the study focused on the structure and process standards

4.5.1 Structure Standards: To determine whether

- policies and procedure manuals are available and updated
- support from the supervisor is available
- there was adequate staff
- the required qualifications were available
- the required experience of registered midwives were available
- in-service training was being given

4.5.2 Process standards: To determine whether

- patients were assessed according to the national guidelines for maternity for maternity care
- patients were diagnosed according to the national guidelines for maternity care
- patients' care plans were formulated according to the national guidelines for maternity care

These objectives as decided upon for this study were successfully reached scientifically. In the final chapter the conclusion and recommendations are made based on the study outcomes generated during this research.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

In this chapter, conclusions based on the scientific evidence obtained during this study are drawn with reference to the outcomes from similar studies. The purpose, research question, objectives, as well as the limitations of this study are briefly discussed. Finally, the recommendations as derived from the study are presented.

5.2 CONCLUSIONS BASED ON THE RESEARCH OBJECTIVES

The objectives of the study focused on the structure and the process standards

Structure Standards: To determine whether

- policies and procedure manuals are available and updated
- support from the supervisor is available
- there was adequate staff
- the required qualifications were available
- the required experience of registered midwives were available
- in-service training was being given

Process standards: To determine whether

- patients were assessed according to the national guidelines for maternity care.
- patients were diagnosed according to the national guidelines
- patients' care plans were formulated according to the national guidelines for maternity care.

These objectives were met through an in-depth research study that was aimed at identifying the factors that may affect quality of care in a midwifery practice in a hospital complex in Eastern Cape Province.

5.2.1 To determine whether the policies and procedure manuals were available

The majority of respondents (95.2%) indicated that the policy and procedure manuals were available at the hospital, only (4.8 %) recorded that the policy and procedure manuals were not available (Table 4.7). Despite the positive response of respondents who indicated that the policies were available at the time of the study, the minority who indicated that policies and procedure manuals were not available may affect the quality of care.

5.2.2 To determine if the support from the supervisor is available

It was identified that (44.4%) of the staff were not receiving support from their respective supervisors (Table 4.8). Lack of support can adversely affect quality of care. According to Freeney and Tierman (2009:1557) burnout is sometimes caused by a feeling of a lack of support which may result in exhaustion, anger and ineffectiveness.

5.2.3 To determine if there was adequate staff

The majority of the respondents (93.7 %) unanimously recorded that there is inadequate staffing to provide quality care in maternity, see table 4.15. The hospital complex under study is a referral institution for maternity complications. An inadequate number of staff may account for poor quality of care (Fraser et al., 2006:969).

5.2.4 To determine if the required qualifications for staff allocated in maternity were available

The hospital under study is a referral hospital which serves a population of 9 111 576 inhabitants. . All complicated obstetrical and neonatology high risk conditions are referred to this hospital complex for management. Despite being a referral hospital, this study has shown that the hospital not only has an inadequate number of staff but is further aggravated by an inadequate number of qualified advanced midwives (7.1%) and advanced neonatology nurses (3.2%), (Table 4.3). This may seriously hamper the management of high risk patients. A study conducted in one of the provinces of South Africa revealed that managerial functions are sometimes compromised when managers are compelled to deliver patients because of the lack of advanced midwives (Penn-Kekana et al., 2005:42).

5.2.5 To determine if the required experience of registered midwives was available

Table 4.2. shows that the majority of participants (27.0%) have experience of 2 to 5 years, followed by those with more than 14 years of experience (25.4%). Experienced staff may contribute positively or negatively to the clinical environment. Working with a midwife with more than six (6) years of experience and who is highly skilled makes the subordinates feel secure and they tend to work with insight, especially when proper guidance is offered (Hallin & Danielson, 2006:1226). However, results of audited partograms (78%) conducted in different provinces indicated poor recording during labour and this included experienced midwives in midwifery practice (Farrell & Pattinson, 2005:12).

5.2.6 To determine if in-service training was being given

It was identified that the majority of the respondents (85.7%) were receiving in-service education, but (14.3%) of the respondents indicated that in-service education was not offered in their maternity department (Table 4.5). A deficit in in-service education may adversely affect the quality of care in a maternity department. According to a study by Sakala and Kazaka (2011:2), a decrease in in-service education of midwives led to a decrease in patient education which directly decreased the follow-up post-natal visits.

5.2.7 To determine if the patients were assessed according to the national guidelines for maternity care .

The national guidelines for maternity care indicate that all midwifery patients should be assessed comprehensively (National Department of Health, 2007a:26). However, this study has shown that patients were not assessed according to the guidelines. The study shows that (34.1%) of the respondents were not taking a comprehensive history, shown in table 4.9, (19.0%), were not doing a physical assessment, including an abdominal assessment (23.0%) and vaginal examination (33.3%), shown in table 4.12. Failing to assess patients may lead to patient mismanagement. Comprehensive history taking is the most effective strategy in midwifery practice, as it becomes easier to identify problems encountered in a previous pregnancy, labour and puerperium (Fraser et al., 2006:240). Vaginal examinations cannot be excluded in midwifery practice as it is of critical importance to assess progress of labour and exclude any abnormalities such as umbilical cord prolapse after the rupture of the membranes (Fraser et al., 2006:341). According to Buchmann (2007:56) neonatal deaths or stillbirths resulting from intrapartum hypoxia should be a rare event as these are sometimes caused by avoidable factors such as, failure of the midwives to respond to poor progress of labour.

5.2.8 To determine if the patients were diagnosed according to the national guidelines for maternity care

Diagnosing the patients after an assessment is critical in ensuring that the correct management is implemented. It is a concern to note that (29.4%) of the respondents (table 4.13) were not formulating any nursing diagnosis according to the guidelines and stipulated policies (National Department of Health, 2007b:28). A study on the knowledge of midwives about hypertensive disorders during pregnancy, revealed (20 to 40%) lacked knowledge on assessment and diagnosis of women with hypertensive disorders during pregnancy (Ngwekazi, 2010:72). Consequently, it leads to poor management of patients with hypertensive disorders.

5.2.9 To determine if the patients' care plans were formulated according to the national guidelines for maternity care

It was identified that (11.9%) (see table 4.14) of the respondents were not formulating nursing care plans. However, the respondents that are not formulating nursing care plans are likely to deliver poor quality of care which can lead to development of complications at any stage in midwifery care (Fraser et al., 2006:348).

5.3 RECOMMENDATIONS

The following recommendations are made based on the scientific evidence obtained from this study.

5.3.1 Availability of the policies and procedure manuals

It is the responsibility of the unit manager to ensure that the policies and procedure manuals are available to all staff members in the ward. The unit manager should ensure that the midwives understand the needs of the patient so that patient-focused service is implemented to improve good quality service delivery. The implementation of this service should be in line with current policies (Proctor, 2002:2).

A study conducted in Durban in 1999 to 2001, revealed that 507 maternal deaths were associated with the minimum use of policies and protocols in maternity care which were further aggravated by avoidable medical conditions (Moodley, 2004:247).

According to Dippenaar and Da Serra (2012:174) midwifery practice, professional skills, protocols and guidelines should be based on scientific evidence. These must be updated regularly to avoid outdated policies and protocols. Achievement of goals and meeting objectives in any unit or department in a health organization is done through proper adherence to guidelines and policies (Gillespie et al., 2011:80).

5.3.2 Quality improvement programme implementation

Quality improvement programmes should be implemented which include quality assurance teams. The quality improvement team should formulate the policies and standards which will guide the implementation of the various procedures. The effectiveness of the quality improvement team was identified in a study conducted in Nepal in 1997 to 2000, which revealed that quality improvement teams identified challenges which could hinder provision of quality of care (Clapham et al., 2004:5).

Quality improvement may be effective when the principles of quality improvement are implemented. The principles include:

- informed group commitment
- group co-operation
- empowerment of personnel
- management support and
- quality improvement culture (Clapham et al., 2004:4).

Jewkes et al. (2003:1) indicate that these principles should be used with quality improvement models which are:

- setting of standards
- evaluation
- monitoring and
- a remedial phase.

Quality circles should be considered in both hospitals as these are meetings where opportunities are given to staff members to solve problems and improve work processes and outcomes. The findings on a study conducted in America revealed that midwives were able to discuss the challenges in midwifery practice. The need to form quality improvement teams was identified in the quality circle meeting (Hughes, Deery & Lovatt, 2002:48-49).

Donabedian's tripartite model of quality (1990:1116) supported by Muller (2007:203), should also be implemented. This model must be implemented in line with a quality assurance programme. This framework is based on a triad of structure, process and outcome entities and it has been used by many hospital managers to assess the effectiveness of the health care delivery system (Jewkes et al., 2003:1).

5.3.3 Availability of support from the supervisor

5.3.3.1 Implementation of a support system

Lack of support can adversely affect the performance of the midwives. Stapleton et al., (2003:16) found that effective leadership and support may lead to a well functioning service delivery system. Work satisfaction and productivity will improve because of good support and management (Pillay, 2007:97). Therefore, the implementation of a proper support system for the midwives will be beneficial to the work environment. Formulation of support groups to support midwives may alleviate the pressure with the challenges they are faced with.

An implementation of the employee assistance programme may be effective in this regard. This programme was found to be effective in a study that was conducted in Limpopo. The results on this study revealed that employees' work-based problems were identified and resolved (Bila & Roestenburg, 2011:35). Supervisors should support this programme by referring employees and encourage self referral to the employee assistance programme department where possible (Pillay, 2007:107).

5.3.3.2 Creating a positive work environment

A positive work environment is recommended which may enhance productivity and decrease frustration. The rest rooms for staff members should be designed in such a way that it is conducive to rest during lunch hours. The availability of appropriate material and human resources are recommended. Regular staff meetings should be conducted as required. These should be conducted to give staff opportunities to express their concerns. A qualitative study conducted in England on the facilitation of cultural shift in midwifery revealed that staff meetings created a lot of opportunities for the midwives to address problematic issues. The opportunities included an ability to discuss the problems encountered in the practice. The problems identified were: a lack of staff, work overload and a lack of information. At these meetings solutions to resolve the problems were also identified (Hughes et al., 2002:48-49).

5.3.3.3 Team building

Winning teams should be created to develop healthy relationships amongst staff members. This can be a measure which can be contributory to team building which consequently leads to the provision of good quality of care. The results obtained from a study conducted at Kwa-Zulu Natal by Lesia (2011:183), revealed that 92% of advanced midwives received cooperation from other health care workers rather than from their colleagues. Respondents (46%) reported that their colleagues were identified to be judgmental rather than being supportive. This may result in difficulties encountered to build teams.

5.3.3.4 Staff motivation and introduction of incentives

The introduction of incentives provides motivation for employees and should be considered to reward staff for outstanding work performance. By giving recognition to the staff work performance is more likely to improve (Muller, 2009:351). Financial incentives may be effective in areas where employees are underpaid but it should not be the only strategy that is applied to motivate staff (Henderson & Tulloch, 2008:5). Every manager as a leader should take the responsibility to improve and sustain staff motivation in the

maternity department. Periodic assessment of staff motivation and performance are required. Conversations are recommended between staff and management in order to identify needs, motives, perceptions and values.

5.3.4 Adequate staffing

Adequate staffing is essential for the delivery of safe quality patient care. Policies should be applied to ensure the retention and recruitment of staff. The introduction of staffing norms will add value to the provision of adequate staffing. The leadership or manager must be constantly aware of staffing issues such as the filling of vacant posts.

The physical environment must be attended to so that it is conducive to the midwives in delivering effective quality care to patients. This environment includes equipment, stock, policies, and personnel and these are enabling conditions for quality of care. In so doing staff is retained (National Department of Health, 2002:23). The International Labour Office (IOL, 2006:5) states that the employer should take responsibility for improving the conditions of employment. This can be achieved by addressing the shortage of personnel, especially the highly skilled category.

5.3.4.1 Distribution of staff according to the need

Acuity of patients of the various wards and units within midwifery should be determined to ensure an efficient and effective distribution of staff, for example that there is an equal distribution in expertise such persons qualified in neonatology and advanced midwifery.

5.3.5 In-service training and continuous professional development

Continuous education and training is a method of upgrading and updating the knowledge and skills of the nurses (IOL, 2006:6). A personnel development programme should be developed and implemented for all categories of nurses. The Midwifery Department should have its own in-service education department and mentor in order to guide midwives, update and develop midwifery skills. A manager and the departmental in-service mentor must identify the needs and changes that might give rise to in-service training (Muller, 2009:351).

Midwives should be given opportunities to attend workshops, seminars and congresses in midwifery. Each ward/unit must have a policy which stipulates that the midwife should be given an opportunity to attend the in-service education that is to be offered.

Furthermore, in-service education is a form of staff empowerment. Consequently, midwives should be empowered so that they are competent to empower the patients (Dippenaar & Da Serra, 2012:17).

According to section 39 of the Nursing Act No 33 of 2005 (Republic of South Africa, 2005), continuous professional development is compulsory. Managers are therefore compelled by legislation to implement continuous development as it compels continuous development of staff. It is therefore recommended that nursing managers adhere to this regulation.

5.3.6 Implementation of the national guidelines for maternity care

The national guidelines for maternity care should be implemented and enforced in the delivery of patient care. Patients should be assessed comprehensively, diagnosed and managed according to these guidelines to ensure quality patient care. In so doing the maternal and infant mortality and morbidity rates are kept to the minimum. By intensively implementing these guidelines complications may also be avoided. The regular auditing of patient documentation internally and externally should be a priority and compulsory in the clinical midwifery field.

There should be periodic auditing of patient and ward/unit records by the quality assurance team in each ward/unit. This should be inclusive of assessing how far the complex is in achieving the millennium development goals.

5.4 FURTHER RESEARCH

Further research based on patient satisfaction and an audit on patient's records is recommended.

5.5 LIMITATIONS

The limitation identified in the study was that the research was based on what the respondents' responses indicated about the factors influencing quality care in midwifery practice. A shortcoming is that an audit of the patient documents may have verified the responses of the respondents. Further research could be conducted in this regard.

5.6 CONCLUSION

The aim of this study was to investigate factors that may affect the quality of care in midwifery practices at East London hospital complex. The results indicated that quality of care is still compromised as the midwives are faced with challenges that affect quality of

care in the hospital under study. These challenges include the shortage of staff, expertise and burden of disease. However, the results have highlighted many changes required in midwifery practice. The results have shown that the challenges that were identified in this study were both managerial and clinical in nature.

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ANNEXURES**ANNEXURE 1: QUESTIONNAIRE****Factors affecting quality of care in midwifery practice****Instructions**

- Please answer all questions
- If a question require a written response and you do not know, please write *I have no knowledge* or *don't know*
- Select only one box for the questions that need an X in the box or delete and write *error* over the incorrect choice and mark in the appropriate box.

Section A: GENERAL INFORMATION**1. Age of the respondents**

No	Age group	Response
01	<15yrs	
02	15-24yrs	
03	25-34 yrs.	
04	35-44 yrs.	
05	45-54yrs	
06	>54yrs	

2. Years of experience of respondents in maternity department.

No	Years of experience in midwifery practices	Response
07	< 1 year	
08	2 – 5 years	
09	6 – 9 years	
10	10 – 13 years	
11	14 and >	

3. What are your professional qualifications?

No	Professional qualifications	Response
12	Registration in General nursing	
13	Registration in Midwifery	
14	Registration in Advanced Midwifery	
15	Registration in Psychiatric Nursing	
16	Registration in Nursing Management	
17	Registration in Nursing Education	
18	Registration in Community Nursing	
19	Registration in Neonatology Nursing	
	Other	

4. In which section of the maternity department are you currently functioning?

No	Section	Response
20	Antenatal care / unit / clinic	
21	Labor ward	
22	Postnatal ward / unit	
23	Neonatology ward / unit	
24	If other please specify below	

5. Is a comprehensive in-service education program offered at your institution?

No	In-service education program offered	Yes	No
25			

6: If the answer to question 5 is yes, please indicate the frequency of the in-service education implemented by selecting an appropriate answer?

No	In-service education program implementation	Response
26	Weekly	
27	Fortnightly	
28	Once a month	
29	Once every 3 months	
30	Once every 6 months	
31	Once every 9 months	
32	Once a year	
33	Never	

7. Are the updated policies and procedure manuals available to all the staff members in your unit/ward (n=126)?

No	Policy and procedure manual	Yes	No
34			

8. Do you get enough support from your supervisor whenever you need it?

No	Support from your supervisor	Yes	No
35			

Section B: OBSTETRICAL PROFILE

9. Please indicate which of the following assessment parameters are done on admission of the patient in your ward /unit?

9.1. Do you take history on admission of patients?

No	History Taking	Yes	No
36	Comprehensive history		
37	Family		
38	Personal		
39	Medical		
40	Surgical		
41	Obstetrical (previous and current pregnancies)		

9.2. Are doing a urinalysis of the patients in the ward on admission?

No	Urinalysis	Yes	No
42	If other please specify		

9.3: Are you checking vital signs of the patients on admission in the ward?

No	Vital Signs	Yes	No
43	If other please specify		

10. Are you doing a physical, abdominal and vaginal assessment of the patients in the ward?

No	Physical assessment	Yes	No
44			
45	Abdominal assessment		
46	Vaginal assessment		
	If other please specify		

11. Is the nursing diagnosis developed according to the stipulated national guidelines for maternity care and policies?

No	Nursing diagnosis	Yes	No
47			

12. Are the nursing care plans developed according the stipulated national guidelines for maternity care and policies?

No	Nursing Care Plans	Yes	No
48			

13. Is there adequate staff to provide quality patient care in your ward/unit?

No	Adequate staff	Yes	No
49			

THANK YOU FOR YOUR TIME TO COMPLETE THIS QUESTIONNAIRE.

ANNEXURE 2: PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF THE RESEARCH PROJECT:

REFERENCE NUMBER: (STUDENT: 15263096).

FACTORS AFFECTING QUALITY OF CARE IN A MIDWIFERY PRACTICE

PRINCIPAL INVESTIGATOR: MS L .P GCAWU

ADDRESS: 35 SILLI CRESCENT GOMPO TOWN, 5209

CONTACT NUMBER: 0437333870 (WORK) 0836938900 (CELL)

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Health Research Ethics Committee (HREC) at Stellenbosch University and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

What is this research study all about?

The aim of the study is to investigate factors influencing the quality of care in midwifery practice.

Objectives of the study are to:

- Determine factors which could negatively impact on the work load of registered midwives.
- Determine if the qualifications and experience of registered midwives influence the quality of their work.

Why have you been invited to participate?

You are invited to participate in this study to share your knowledge and experiences on midwifery practices.

What will your responsibilities be?

You are required to give true and honest answers to all questions. You will not be judged for answers given.

Will you benefit from taking part in this research?

There will be no direct personal benefit linked to the participation in this research study however; information obtained might be used to improve the quality of midwifery practice in the abovementioned hospital complex as indicated before.

Are there in risks involved in your taking part in this research?

There are no risks involved in participating in this study.

If you do not agree to take part, what alternatives do you have?

Your participation in this study is completely voluntary.

Who will have access to your medical records?

The information will be collected by the researcher herself. All completed documents will be kept locked in a filing document. Only the researcher will have access to this cabinet. The collected data will be treated as confidential and protected. If it is used in a publication or theses, the identity of the participant will remain anonymous.

What will happen in the unlikely event of some form of injury occurring as a direct result of your taking part in this research study?

Since this is a descriptive study and not an intervention study, no adverse events are anticipated; therefore issues of insurance cover are not addressed.

Will you be paid to take part in this study and are there any costs involved?

No you will not be paid to take part in the study but your transport and meal costs will be covered for each study visit. There will be no costs involved for you, if you do take part.

Is there anything else that you should know or do?

- You should inform your family practitioner or usual doctor that you are taking part in a research study. (Include if applicable)
- You should also inform your medical insurance company that you are participating in a research study. (Include if applicable)
- You can contact Ms Babrah Hanran at telephone no.021 9389760 if you have any further queries or encounter any problems.
- You can contact the **Health Research Ethics Committee** at 021-938 9207 if you have any concerns or complaints that have not been adequately addressed by your study doctor.
- You will receive a copy of this information and consent form for your own records.

Declaration by participant

By signing below, I agree to take part in a research study entitled Factors affecting quality of care in a midwifery practice.

I declare that:

- I have read or had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.

- I may be asked to leave the study before it has finished, if the study doctor or researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) on (*date*) 2010.

.....
Signature of participant

.....
Signature of witness

Declaration by investigator

I (name) declare that:

- I explained the information in this document to
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter. (*If an interpreter is used then the interpreter must sign the declaration below.*)

Signed at (*place*) on (*date*)
2010.

.....
Signature of investigator

.....
Signature of witness

Declaration by interpreter

I (*name*) declare that:

- I assisted the investigator (*name*) to explain the information in this document to (*name of participant*) using the language medium of Afrikaans/Xhosa.
- We encouraged him/her to ask questions and took adequate time to answer them.
- I conveyed a factually correct version of what was related to me.
- I am satisfied that the participant fully understands the content of this informed consent document and has had all his/her question satisfactorily answered.

Signed at (*place*) on (*date*)2010.

.....
Signature of interpreter

.....
Signature of witness

ANNEXURE 3: LETTER OF PERMISSION FROM THE UNIVERSITY ETHICAL COMMITTEE

MAILED



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvennoot • your knowledge partner

02 September 2010

Department of Nursing
2nd Floor, Teaching building
Stellenbosch University
Tygerberg campus
7505

Dear Ms Gcawu

“Factors Affecting Quality of care in A Midwifery Practice.”

ETHICS REFERENCE NO: N10/02/029

RE: APPROVAL

A panel of the Health Research Ethics Committee reviewed this project on 8 February 2010; the above project was approved on condition that further information is submitted.

This information was supplied and the project was finally approved on 1 September 2010 for a period of one year from this date. This project is therefore now registered and you can proceed with the work.

Please quote the above-mentioned project number in ALL future correspondence.

Please note that a progress report (obtainable on the website of our Division: www.sun.ac.za/rds) should be submitted to the Committee before the year has expired. The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly and subjected to an external audit.

Translations of the consent document in the languages applicable to the study participants should be submitted.

Federal Wide Assurance Number: 00001372

Institutional Review Board (IRB) Number: IRB0005239

The Health Research Ethics Committee complies with the SA National Health Act No.61 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 Part 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

Please note that for research at a primary or secondary healthcare facility permission must still be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Contact persons are Ms Claudette Abrahams at Western Cape Department of Health (healthres@pgwc.gov.za Tel: +27 21 483 9907) and Dr Hélène Visser at City Health (Helene.Visser@capetown.gov.za Tel: +27 21 400 3981). Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

01 November 2012 14:19 Page 1 of 2

Fakulteit Geneeskunde en Gesondheidswetenskappe · Faculty of Medicine and Health Sciences

Verbind tot Optimale Gesondheid · Committed to Optimal Health

Afdeling Navorsingsontwikkeling en -steun · Division of Research Development and Support

Posbus/PO Box 19063 · Tygerberg 7505 · Suid-Afrika/South Africa

Tel.: +27 21 938 9075 · Faks/Fax: +27 21 931 3352



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jou kennisvenoot • your knowledge partner

Approval Date: 1 September 2010

Expiry Date: 1 September 2011

Yours faithfully

MS CARLI SAGER

RESEARCH DEVELOPMENT AND SUPPORT

Tel: +27 21 938 9140 / E-mail: carlis@sun.ac.za

Fax: +27 21 931 3352

01November 2012 14:19

Page 2 of 2

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ANNEXURE 4 : LETTER FROM THE RESEARCHER TO THE SUPERINTENDANT

35 Silly Crescent

Gompo Town

East London

Tei:043-7092411

043-7333870

5209

0836938900

15-07-2010

The Medical Superintendent

East London Hospital Complex

East London

Dear Sir/ Madame

Research: East London Hospital Complex Maternity Department

I humbly request permission to conduct a research at East London Hospital Complex Maternity Department in August – September 2010. This is a requirement of Masters Degree in the division of nursing Stellenbosch University. The purpose of this survey is to investigate the factors that affect quality of midwifery care at East London Hospital Complex. A quantitative study will be conducted where a self-administered questionnaire will be used to collect data. The questionnaires will be given to 174 registered midwives and 15 Operational Managers working at Maternity ELHC.

Confidentiality and anonymity will be maintained at all times, as the questionnaires will not be linked with consent signed by participants. The data that will be collected will be analysed and published without mentioning the names of participants.

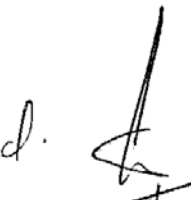
Maternity is the department that is mostly close to my heart. I am currently working as a Midwifery Lecturer at Lilitha College of Nursing East London Campus since 2005 July. I started practising as a professional nurse in 1993 worked in General Wards at Cecilia Makiwane Hospital; in 1999, I worked in Maternity Department until June 2005.

Thank You

Yours Sincerely

MS L P Gcawu

M CUR STUDENT: UNIVERSITY OF STELLENBOSCH

Approved: 
10/9/2010

ANNEXURE 5: LETTER FROM THE SUPERINTENDANT



Province of the
EASTERN CAPE
HEALTH

Office of the Hospital Manager • Room 4.75 • 4th Floor • Frere Hospital • Amalinda Main Road •
East London • Eastern Cape
Private Bag X 9047 • East London • 5200 • REPUBLIC OF SOUTH AFRICA
Tel.: +27 (0)43 709 2006 • Fax: +27 (0)43 709 2052 • Email:
carmen.delange@impilo.ecprov.gov.za • Website: www.ecdoh.gov.za

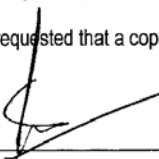
10 September 2010

Ms L.P. Gcawu
35 Silly Crescent
Gompo Town
East London
5209

**RE: REQUEST TO CONDUCT RESEARCH PROJECT – FACTORS EFFECTING QUALITY OF CARE IN
MIDWIFERY PRACTICES**

Your correspondence dated the 15.07.2010 refers. Your request to conduct a Research Project (Factors Effecting Quality of Care in Midwifery Practices) has been approved.

It is requested that a copy of the completed analysis be submitted to this office for record purposes.



Dr. J. Thomas
Acting Hospital Manager
Frere Hospital
East London Hospital Complex
JT/cdl

- cc. Dr L. Galo – Acting Hospital Manager Cecilia Makiwane Hospital
- cc. Mrs D. Sixishe – Deputy Director Nursing Cecilia Makiwane Hospital
- dd. Mrs T. Mguli – Deputy Director Nursing Frere Hospital

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Website: www.ecdoh.gov.za



Ramva eliqaqambileyo!

ANNEXURE 6: LETTER OF PERMISSION FROM THE LOCAL RESEARCH COMMITTEE

083 6938 900

Ethics Committee: E. L HOSPITAL COMPLEX

Postal Address :

C/o East London Health Resource Centre
PO Box 12882
Amalinda
5252

Telephone : 043 -709 2032

Physical Address :

Cheltenham Road
East London
5201 South Africa

Fax no.: 043 - 7092386

28 September 2010

Ms LP Gcawu
35 Silly Crescent
Gompo Town
5200

Dear Ms Gcawu


RE: Research in ELHC Maternity Department with regards to factors that affect the quality of midwifery care at East London Hospital Complex

We acknowledge receipt of the above mentioned proposal.

Having gone through your proposal, the committee has no ethical problems noted.

Please be advised that the committee has granted you the consent to do the research.

Yours sincerely



**Dr P Alexander – Chairman Region C Ethics Committee
Ophthalmologist EL Hospital Complex**

Annexure 7: Certificate from the language editor



SERVICES

English/Afrikaans
* Translations
* Editing
* Proof-Reading
* Academic Manuscript Preparation
* Archival Research
* Transcriptions from Archived Documents



Member: South African Translators' Institute (SATI)

3 Beroma Crescent
Beroma
Bellville 7530

13 November 2012

TO WHOM IT MAY CONCERN

This letter serves to confirm that the undersigned

ILLONA ALTHAEA MEYER

has proof-read and edited the document contained herein for language correctness.

(Ms IA Meyer)

SIGNED

Thesis of **Luleka Patricia Gcawu:**

Factors affecting quality of care in midwifery practice

The thesis has been re-edited on 13 November 2012.

