QUALITY ASSURANCE OF ANTENATAL CARE IN PRIMARY HEALTH CARE SETTINGS

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BY

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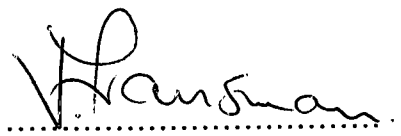
DECLARATION

I, **Violet Fransman**, declare that the script, hereby, submitted by me for the Master Societatis Scientiae (Nursing) Degree to the University of the Free State, is my own independent work and has not previously been submitted by me at another university.



V. Fransman

November 2002

This study is dedicated to my daughters, Verochelle and Xavagne-Leigh and my niece, Brenda.

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OPSOMMING

Die gesondheid van 'n nasie berus op van die gesondheid van moeder, kind en gesin: daarom is die voorgeboortelike sorg van swanger vroue van die uiterste belang. Die voorgeboortelike sorg aan swanger vroue moet daarom holisties voorsien word en van die hoogste kwaliteit wees.

Die doel van die studie was om die kwaliteit van die voorgeboortelike sorg wat aan swanger vroue in primêre gesondheidsorg instellings verleen word, te bepaal. Die ontwerp was nie-eksperimenteel van 'n beskrywende en eksplorerende aard terwyl die opname metode gebruik was om die inligting te versamel.

Die resultate van die studie toon dat swanger vroue nie tevrede is nie met die houding van personeel en die voorgeboortelike sorg wat deur gesondheidsorgpraktisyns verleen word. Die swanger vroue het ook aangetoon dat gesondheidsorgonderrig nie na wense is nie en dat te veel swanger vroue die klinieke bywoon op dieselfde tyd en dat hulle baie vroeg (03:00 in die oggend) moet opdaag om te verseker dat hulle voor die einde van die dag sorg sal verkry. Hierdie probleme word verder deur die feit dat daar ook 'n personeeltekort is, gekompliseerd. Die gesondheidsorg-praktisyns het ook aangedui dat hulle moraal laag is en dat hulle onder moeilike omstandighede werk soos personeeltekorte, onvoldoende voorraad en toerusting en dat die hoë omset van swanger vroue die lewering van holistiese en hoë kwaliteitsorg bemoeilik.

Gebaseer op bogenoemde, word aanbeveel dat kwaliteitversekerings-programme vir voorgeboortelike sorgdienste by primêre gesondheidsorg-instellings ontwikkel en geïmplementeer word.

SUMMARY

The health of a nation depends on the health of the mother, child and family, thus antenatal care for pregnant women is of utmost importance. Antenatal care for pregnant women should therefore be provided holistically and be of the highest quality.

The purpose of this study was to assess the quality of antenatal care rendered to pregnant women in primary health care settings. The design was non-experimental of an exploratory and descriptive nature, and the survey method was used to collect the data.

The results of this study showed that the pregnant women were not satisfied with aspects such as the attitude of personnel and the antenatal care rendered by health care practitioners. The pregnant women also indicated that health education was not on par and that too many pregnant women attended the clinics at the same time and that they have to come very early (03:00 in the morning) to ensure that they will be attended to before the end of the day. This problem was complicated by the fact that a staff shortage existed. The health care practitioners indicated that their morale was very low and that they had to work under difficult circumstances such as a shortage of staff, insufficient stock and equipment as well as a high turnover of pregnant women which makes it difficult to render care holistically and of a high quality.

Based on the above, recommendations are made that quality assurance programmes should be developed and implemented for antenatal care services in primary health care settings.

TABLE OF CONTENTS

CHAPTER 3: Research methodology

CHAPTER 5: Conclusion and recommendations

LISTS OF TABLES

LISTS OF FIGURES

CHAPTER 1

Introduction and problem statement

1.1 INTRODUCTION

> *"A person's health is one of the most important assets - therefore health care delivery should be of the highest quality. The health care providers – health care managers, professionals and support staff – have a legal and ethical responsibility to deliver the best possible care, or to facilitate the delivery of quality health care. Quality care is everybody's business – the health care consumer [the patient, the family and community] deserves quality care as the human life is at stake, and the funders of health care expect value for money, adding a cost-effective dimension to quality. It is thus clear that health care providers are accountable for the delivery of quality health care services"* [Muller, 1996:66].

Antenatal care for pregnant women is of the utmost importance as the health of a nation depends on the health of the mother, child and family. Women and children are also forming the majority of the population. Antenatal care for pregnant women must thus be provided holistically and of the highest quality. The role of the caregiver should evolve from authoritative to consultative and supportive, taking into account that the values of women's participation and co-operation will create a more collegial environment. In this environment total care must be rendered by health personnel, including culturally appropriate health care which meet the needs

of pregnant women (Dickason, Silverman & Schult, 1994:71-72; May & Mahlmeister, 1994:96; Mattson, 2000:37; Butchart, Tancred & Wildman, 1999:3).

1.2 PROBLEM STATEMENT

According to Burns and Grove (1997:103) the research topic identifies the area of concern with the aim to gain a better understanding of the problem. In this study the area of concern is the quality of nursing care that are rendered to pregnant women in an antenatal department, as a specialized field of the phenomena called nursing. To enlighten the area of research, the problem statement will be discussed as follows:

1.2.1 Historical overview

The previous South African government, through its apartheid policies, developed a health care system which was sustained through the years by the promulgation of legislation based on race and the creation of institutions and statutory bodies for the control of the health care professions and facilities. These institutions and facilities were built and managed with the specific aim of sustaining racial segregation and discrimination in health care (African National Congress [ANC], 1994[b]:7). Due to these policies and their consequences, it was found that health care services were severely damaged in the sense that it was grossly inefficient, fragmented, ineffective, unco-ordinated and under resourced. Because of these problems the standards of antenatal care to pregnant women were not always up to standard (ANC, 1994[b]:9; Adar, 2000:2; Health Systems Trust Update, 1996[b]:9).

"Health for all by the year 2000" was a declaration made by the World Health Organization and the United Nations Children's Fund [WHO[1] & UNICEF[2], 1978:2]. This goal could not be reached due to factors such as fragmented, inefficient health systems hampering it, therefore the African National Congress[3] [ANC] in 1994 envisaged a single national health care system for South Africa which emphasizes the provision of primary health care services and is strengthened by political commitment reflected in legislation [Muller, 1998:110]. Within this new health system, government determined a programme to be in place in order to improve maternal health through access to quality antenatal care-, delivery-, postnatal- and reproductive services for all women [ANC, 1994[a]:46]. The ANC [1994[a]:46] set a target that 95% of pregnant women should receive antenatal care and that 75% of deliveries must be supervised and carried out under hygienic conditions. The ANC also stated that by the year 1999, 90% of deliveries should be supervised by a nurse or a doctor. According to Hospital Statistics of the Free State Department of Health [Inpatients Info: Diagnoses Obstetrics, http://hin.ofs.gov.za/hin/owa/hs_u_insp.update.form., 1999:1-2] 35 440 deliveries were conducted out of 35 952 births, meaning that 99% of the set goals were reached. Even though that 99% of deliveries were supervised, it can still not be proved that quality antenatal care to pregnant women was rendered because antenatal quality assurance programmes are non-existant.

1.2.2 The rendering of quality care

Quality care according to the WHO cited in Booyens [1996:302] is "the comparison of how the level of care actually provided compares with that which is defined as the wanted level of care". According to May and

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1 WHO = World Health Organisation
2 UNICEF = United Nations Children's Fund

Mahlmeister (1994:95), the goals for women's health is the maintenance of wellness by promoting self-care through education and support. The goals for women's health must therefore be changed from treatment of problems to the maintenance of health.

According to May and Mahlmeister (1994:95) despite the fact that in the past so much emphasis was placed on reproductive health, women are still experiencing problems in the receiving of quality care during pregnancy because quality care is only accessible to those who can afford it. Women who have economic resources and education and who are viewed as more important by virtue of their class, have more access to better health care than those who do not have these tributes. Women with economic resources or those with medical aids have access to private health care practitioners where emphasis is placed on holistic- and quality care. Most of these women feel comfortable and satisfied because the care matches what they are willing to pay for. Women who have neither medical aid nor economic resources have no option but to attend antenatal care in large institutions which to date, have not yet implemented quality assurance programmes (McCoy & Khosa, 1996:157).

1.2.3 Attainment of goals for maternal health

According to the Government Gazette (April 1997:13-16) efforts must be made to provide quality health care to all South Africans, including the provision of quality health care to all women irrespective of being pregnant or not and at all levels.

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[3] ANC = African National Congress

According to Nolte [1998:77] the aim of antenatal care is to:

- reduce both maternal and fetal mortality and morbidity,
- promote and maintain physical and mental health of the mother,
- diagnose and treat complications of pregnancy,
- prevent complications of labour by identifying potential problems.

The above aims must be attained by all practitioners who render care as well as the institution delivering the care. But according to May and Mahlmeister [1994:95] problems still occur in both public and private health care services because of resources that are not always available for example medications being out of stock and shortage of staff leading to misdiagnoses and complications not being treated at an early stage.

1.2.4 Maternal and infant deaths

According to Hospital statistics of the Free State Department of Health [Inpatients Info: Diagnoses Obstetrics, http://hin.ofs.gov.za/hin/owa/hs_u_insp.update.form., 1999:1-2], 35 440 deliveries were conducted in Free State governmental- and private hospitals for the year 1999. Out of this figure 52 maternal deaths and 1 380 stillbirths were reported [the causes for deaths and stillbirths were not made known].

Despite the introduction of the maternity high care unit at Universitas Hospital 10 years ago, the report on Maternal Health Study - Free State Province, indicated that from 1 January 1997 to 31 December 1998, 188 maternal deaths were documented out of 441 cases. According to Schoon [cited in Pattinson, 1999:121] some maternal deaths were due to the fact, as found with reference to antenatal care, that these patients did not attend antenatal care services at all or attended it infrequently, as well as that of patients delayed in seeking help. The primary common cause of

these maternal deaths were pneumonia (attributed to a positive Human Immuno-deficiency Virus [HIV] in young mothers – 17% of deaths), and puerperal infection (7 deaths). The second common cause of deaths was hypertensive disease of which 17 mothers died, which could have been treated during the antenatal period. Other findings such as poor quality care received prior to death were alarming as well as unprofessional conduct which was evident from the clinical records. These reports reflected health workers' delays in referral or managing patients at the inappropriate level of care, or not following standard protocols, or making the wrong diagnosis, and not attending to problems during the monitoring of patients (Schoon, 1999:4-5; Pattinson, 1999:119-121).

1.2.5 Quality assurance programme

According to Muller (1992:28), a quality assurance programme is a planned programme that objectively monitors and evaluates the clinical performance of nursing staff, that identifies opportunities for improvement and which provides a mechanism through which action can be taken to make and maintain those improvements. Sources of evidence of structure-, process- and outcome has to be in place to assess the quality of care rendered and to be able to run a quality assurance programme. But, according to the spokes person (Ms. E. Grobler, 1999) for the Free State Department of Health, a problem exist in the sense that no standards of structure-, process- and outcome are yet in place and should be attended to.

1.3 AIM OF THE STUDY

Based on the above problems, the aim of this study is to assess the quality of the antenatal care rendered to pregnant women in primary health care settings.

1.4 OBJECTIVES OF THE STUDY

1.4.1 To develop the necessary instruments containing sources of evidence.

1.4.2 To determine the quality of care rendered in the antenatal department of a primary health care setting by using the developed instruments.

1.4.3 To formulate recommendations to improve the standard of care rendered in the antenatal care department of a primary health care setting.

1.5 CONCEPTUAL FRAMEWORK

A conceptual framework is the abstract, logical structure of meaning that guides the development of the study and enables the researcher to link the findings to nursing's body of knowledge (Burns & Grove, 1997:46).

In this study the following framework will be used. This framework is based on the work of Donabedian as in Bowling [1997:9].

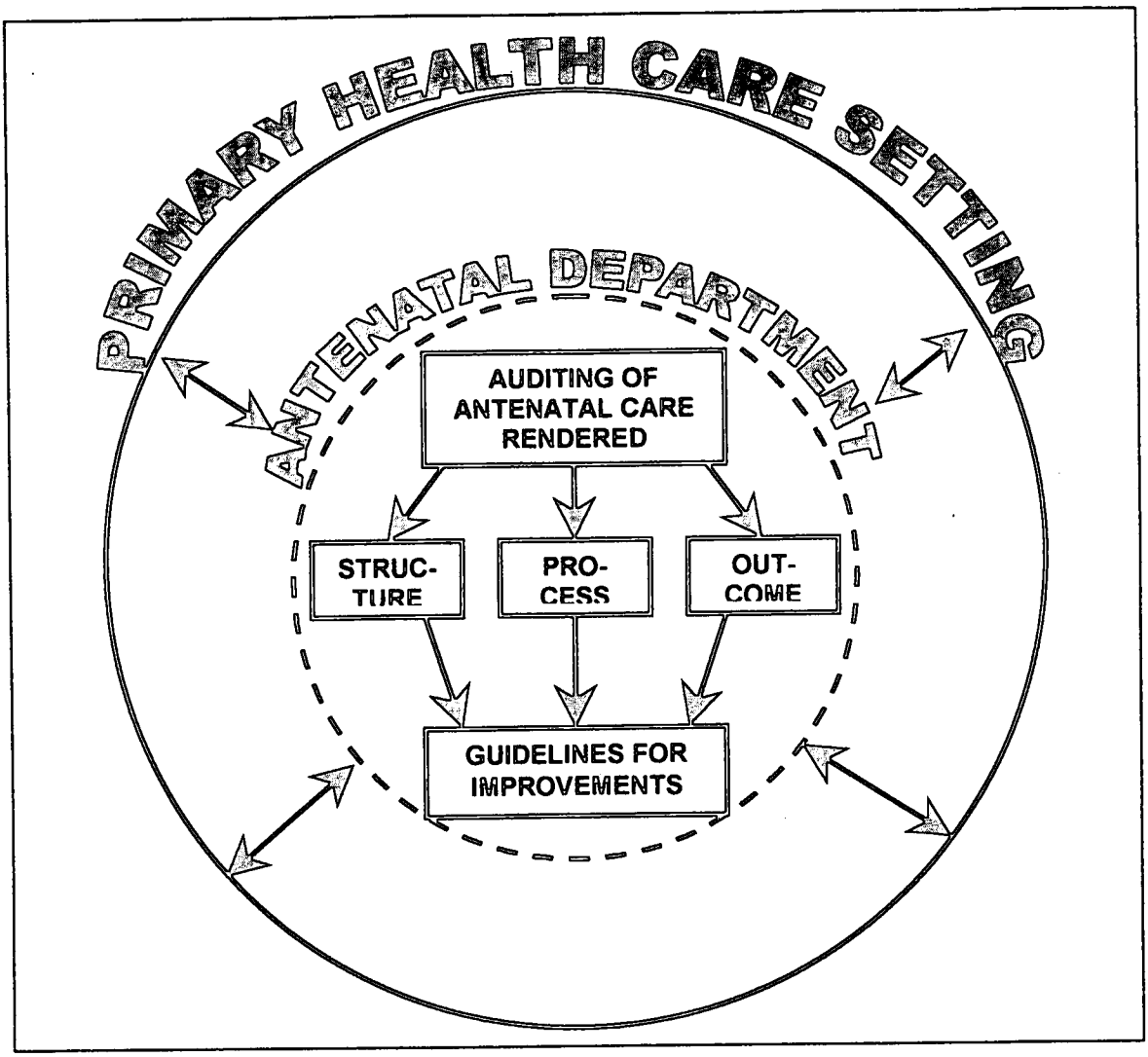

FIGURE 1.1: Conceptual framework for the auditing of antenatal care delivered

All primary health care settings must deliver antenatal care to pregnant women. To determine the quality of antenatal care rendered, evidence of standards of structure-, process- and outcome must be evaluated. Based on the results obtained, remedial steps should be taken to improve the quality of care.

1.6 DEFINITIONS

For the purpose of this study the following concepts will be used.

Antenatal Care

Antenatal care is care provided by midwives and obstetricians during pregnancy to ensure that the fetal- and maternal health are satisfactory [Tiran, 2002:14].

Perinatal

Perinatal refers to the time and process of giving birth or being born [Anderson, 1986:861].

Prenatal

Prenatal is also called antenatal and refers to both the care of the women during pregnancy and the growth and development of the fetus [Anderson, 1986:917].

Primary Health Care

According to WHO and UNICEF [1978:34], "primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-

determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process".

Primary health care centre

A primary health care centre *"provides comprehensive health care with the emphasis of primary health care within a geographic area including a variety of clinics depending on the need of the community, together with the development of a reliable reference system"* (Muller, 1998:113).

Quality

According to the WHO in Booyens (1996:302) *"quality is the comparison of how the level of care actually provided, compares with that which is defined as the wanted level of care".*

Quality assurance

"Quality assurance is an attempt to ensure that patients receive quality nursing care. In order to ensure quality and to improve it, standards of quality are set and the adherence of the nursing practice to these standards are monitored and documented" (Booyens, 1996:302).

Quality assurance programme

Quality assurance programme is *"a planned programme that objectively monitors and evaluates the clinical performance of nursing staff, that identifies opportunities for improvement and that provides a mechanism through which action is taken to make and maintain those improvements"* [Muller, 1992:28].

Standard

"A standard is a written description of the desired level of performance, containing the characteristics associated with excellence, for measuring and evaluating actual performance or service delivery" [Booyens, 1998:606].

Structure standard

"A structure standard describes what is required for the performance of an action or nursing act. It refers to physical environment or organisational set-up in the nursing unit, the equipment, instruments, stock, as well as the personnel required" [Muller, 1998:242].

Process standard

"A process standard describes step-by-step how an action or nursing act should be performed. In clinical nursing it covers the scientific principles of nursing, namely the process of assessment, planning, implementing and evaluation" [Muller, 1998:244].

For this study it means assessing the pregnant woman from the third visit, planning specific maternity actions, implement the planned actions and evaluate it against the outcome standard.

Outcome standard

"An outcome standard refers to the expected result and should be measurable. The end result can be in the form of a clinical or management output and thus refer to the goal that is to be achieved" [Muller,1998:244].

For this study the outcome standard is a live infant born to a healthy mother whose maternal care has been properly managed.

Sources of evidence

For this study the sources of evidence refer to a range or clusters of evidences or citeria indicating what is seen, read, told, experienced or present which causes to believe that something is true or has realy happened [Collins, 1989:265; Armstrong, 2001:14].

Both the questionnaire and the checklist were used to obtain evidence which was proof of the quality of care rendered as described in the structure-, process- and outcome standards by Donabedian [cited in Bowling, 1997:9].

1.7 RESEARCH METHODOLOGY

The research design of this study will be non-experimental of an explanatory and descriptive nature. The survey method will be used to collect the data. The following research techniques will be used in accordance to the design and research method:

(1) Structured interviews, based on a structured interview schedule, regarding sources of evidence for structure-, process- and outcome standards will be conducted with health personnel and pregnant women visiting the antenatal care department to determine their view of the standards of care rendered and/or received.

(2) Checklists will be used to assess the sources of evidence of standards of care (structure, process and outcome) rendered to pregnant women by health care practitioners.

The analysis of the data will be done and described on a nominal level. The validity and reliability of the research techniques will be ensured by a pilot study that will be done to validate and test the reliability of the techniques to be used.

The population will consist of pregnant women attending the Welkom Primary Health Care Centre for antenatal care but who have visited the clinic for the third time or more. All health personnel working in the antenatal department at each clinic, will be included as well as the supervisors of the clinics.

The study will be done at the Welkom Primary Health Care Centre run by the local authority. The clinics included will be Bophelong, Bronville, Khotsong, Riebeeckstad, Thabong, Tsepong and Welkom. All ethical aspects will be ensured.

1.8 VALUE OF THE STUDY

In the delivery of quality health care to pregnant women, the life of every woman and unborn baby will be improved and maintained and by reducing maternal and infant morbidity and mortality rates, both mother and baby can live a healthier life. If the quality of care is not up to standard, mechanisms should be put in place to ensure quality care. By applying quality assurance of antenatal services rendered, deficiencies can be identified by health authorities and changes can be made in order to ensure optimum quality care.

1.9 EXPOSITION OF THE STUDY

The study will consist of the following chapters:

Chapter 1: Introduction and problem statement
Chapter 2: Literature study
Chapter 3: Research methodology
Chapter 4: Data analysis
Chapter 5: Findings and recommendations
Chapter 6: Conclusion

1.10 CONCLUSION

In this chapter the introduction and problem statement have been discussed. In the next chapter a literature review of antenatal care and the standards set will be given.

CHAPTER 2

Literature study

2.1 INTRODUCTION

According to Morris (1999:1) the focus on quality health services has been developing worldwide in the last two decades. Harrison, 1958 (cited in Parsley & Corrigan, 1995:69) states that the idea of monitoring quality of care is not new. Florence Nightingale evaluated the care that was delivered to patients, and used the information to improve care in areas that were below standard (Parsley & Corrigan, 1995:69). The WHO (cited in Parsley & Corrigan, 1995:70) stated that by 1990 all member states should have built effective mechanisms for ensuring quality of patient care within the health system. The experience of the user/customer of a particular service is the final judge of quality of the service and not the objective and scientific measurements of the providers of the service.

2.2 CONCEPTS

2.2.1 Quality nursing care

2.2.1.1 Nature and importance of quality nursing care

In today's health care environment, quality nursing care is not just a goal of the nursing profession: It is also an expectation of the public. The increasingly well-informed consumer, concerned with health care costs, expects and

demands quality care from all health care providers. Because of their unique position within the health care system, nurses can be a vital force in promoting quality care and as nurses interact with all health care providers and in doing so quality nursing care standards can serve as a model for other providers [Mandeville & Troiano, 1992:7].

2.2.2 Quality and quality assurance

According to Stewart [1998:188] quality and quality assurance are terms which signpost a definitional battleground, however the purpose of Steward's study was to adopt provisional, serviceable and fairly mainstream definitions so as to be able to use these terms.

2.2.2.1 Basic ideas about the concept quality

- Quality can be defined and measured and in health it should be defined from both the patient's as well as the provider's perspective.

- Quality is dynamic – quality develops by improving it continuously.

- Quality and cost go hand in hand. It is costly to remedy mistakes when jobs are not done correctly the first time. Needs should be met economically.

- Quality has to do with doing the right things right. A significant portion of labour costs is related to be enormous amount of rework that must be done because things were not done correctly the first time.

- Quality relates to outcome. Quality is not what the health personnel put in, it is what the patient gets out.

- Quality is everybody's responsibility, not only that of management or the quality assurance nurse, but every person working in a health care service. All available methods and media will be used for its promotion and communication [Booyens, 1996:304; Oakland, 1995:21].

2.2.2.2 The concept quality

Rooney [cited in Steward, 1998:188] define quality of service as the totality of features and characteristics of a service that bear on its ability to satisfy stated or implied needs.

Nissen and Landeweerd [1997:93] see quality of care as a multidimensional construct and therefore hard to define unambiguously, whereas Donabedian [1975:7] indicates that the quality of medical care is extraordinary difficult to define because one must first indicate what dimensions or aspects of care are subject to consideration and then specify what constitutes *"goodness"* or *"badness"* with respect to these aspects or dimensions. The specification of relevant dimensions is a matter of considerable difficulty because medical care comprises a complex set of interactions. These include provider behaviour, client behaviour and client-provider interactions. Each of these forms of behaviour or interactions are further sub-divided into many elements and are related to a host of organizational and social factors that play upon it [Wright & Whittington, 1992:11].

However, different authors define the concept quality as follows:

- Payne [cited in Donabedian, 1975:8] has defined quality as *"that level of excellence produced and documented in the process of diagnosis and therapy, based on the best knowledge derived from science and the humanities, and which eventuates in the least morbidity and mortality in the population".*

- Esselslyn [cited in Donabedian, 1975:8] offers the following definition: *"Standards of quality of care should be based on the degree to which care is available, acceptable, comprehensive, continuous and documented as well as on the extent to which adequate therapy is based on accurate diagnosis and not on symptomatology".*

- Lee and Jones [cited in Donabedian, 1975:8] define it as *"good medical care is the kind of medicine practiced and taught by the recognized leaders of the medical profession at a given time or period of social, cultural and professional development in a community or population group".*

- According to Oakland [1995:4] quality is simply meeting the customer requirements which can be expressed in many ways, while Lync and Cross [1995:81] and McClean [1992:12] states that quality means meeting customer expectations [internal and external] 100% of the time through the delivery of effective products or services. Donabedian, 1980 [cited in Bowling, 1997:7] defines quality of care in relation to its effectiveness with regard to improving the patient's health status, and how well it meets professionals'- and the public's standards about how the care should be provided.

- Whittaker and Diener (1996:125) define quality in health care as the success of the health services in meeting the health related needs of the population in a manner that is consistent with local goals, national goals and resource constraints.

- Higginson, 1994 (cited in Bowling, 1997:7) stated that quality of care needs to include effectiveness, acceptability and humanity, equity, accessibility and efficiency. Higginson adds that patient empowerment might also be included, in order that they may increase their control over the services received, and each patient should be offered care that is appropriate.

- Lastly, quality is defined as a degree or level of excellence (Hawkins, 1987:510).

2.2.2.3 Patient satisfaction versus dissatisfaction

Cleary and McNeil, 1988; Lemke, 1987; McDaniel and Nash, 1990; Ware, 1994 (cited in Mahon, 1996:1242) and Westaway, Viljoen and Chabalala (1998:4) all indicated that care cannot be of high quality unless the patient is satisfied. According to Steiber and Krowinski, 1990 (cited in Mahon, 1996:1242) customer satisfaction is no longer simply the nice or right to do, it is the only good business choice in today's highly competitive environment.

Ware *et al.*, 1978 (cited in Mahon, 1996:1243) developed a taxonomy/constructs of patient satisfaction which reflects quality of care. With reference to different opinions of authors on the previous page, care cannot be of quality unless the patient is satisfied.

The taxonomy is:

- art of care/interpersonal manner/humane;
- technical quality care/competence;
- accessibility of care;
- finances or how the service is paid for;
- pleasant physical environment;
- availability of providers and resources;
- continuity of care; and
- efficacy/outcomes of care [Mahon, 1996:1242-1243].

Satisfied patients are also important because satisfied customers are loyal and may be counted on for return business and referrals, leading to an increase revenue, market share, profitability and very likely better clinical outcomes [Mahon, 1996:1242].

According to Donabedian, 1998 [cited in Mahon, 1996:1242] behaviour that indirectly suggest dissatisfaction are non-compliance with treatment regimen, premature self-termination of care, termination of membership in a health plan and seeking care outside the plan which indicate that quality of care is not being given or received.

2.2.2.4 The concept quality assurance

According to Booyens [1996:302] quality assurance is an attempt to ensure that patients receive quality nursing care. In order to ensure quality and to improve it, standards of quality are set and the adherence of the nursing practice to these standards are monitored and documented, whereas according to Booyens [1998:597], *"assurance"* implies a

guarantee of quality, in accordance with the characteristics associated with excellence, namely appropriateness, equity, accessibility, effectiveness, acceptable and efficiency.

Ellis [cited in Steward, 1998:189] stated that quality assurance in the public services has to do with establishing explicit – and transparently arrived at – standards, which reflect the defined or stated needs of service users. Given this definition it follows that quality assurance will entail:

[1] Identifying those features of a service which are of significance to users and their needs [for example that *promtness* of service is important].

[2] Assessing any problems or deficiencies which appear to exist with respect to those features [for example that there are frequent delays or long queues].

[3] Implementing improvements [for example more staff, better appointment systems, a more equal distribution of work between individual service providers, some combination of these].

[4] Monitoring the situation [continually, periodically at least, to measure delays and waiting times].

According to Oakland [1995:13] quality assurance is broadly termed the prevention of quality problems through planned and systematic activities [including documentation]. These will include the establishment of a good quality management system and the assessment of its adequacy, the audit of the operation of the system, and the review of the system itself.

Lastly, Freeman (1994:10-14) describes quality assurance as a systematic approach to identify market needs and having workable methods to meet those needs, after all, the truth is that quality assurance is a grandiose term for any well-run management system. This means that quality assurance is not esoteric, or complex or beyond the reach of non-specialists. If it were, what would be the point of it? The quality assurance system which is going to work has to be simple, fitting comfortably alongside – or even inside – everyday working practice.

2.3 ELEMENTS OF THE CONCEPT QUALITY

Quality is defined as having several dimensions and is often described within the following framework or elements of quality, viz acceptability, accessibility, appropriateness/applicability, effectiveness, efficiency and equity (Booyens, 1996:302; Muller, 1998:3; Muller, 2000:63; Ellis & Whittington, 1993:22; Dingwall & Fenn, 1992:71).

Other dimensions of quality also include safety and professional/technical competency (Muller, 2000:63-64). Steward (1998:180) further suggests that these dimensions be recognized separately, each requiring different measures and different assessment skills (Dingwall & Fenn, 1992:71).

2.3.1 Acceptability

Acceptability in health care involves:

- supplying patients with the necessary information in order to involve them in decision-making regarding their treatment programme;

- to control the distribution and release of data concerning his/her illness as well as the confidentiality of the information obtained from the patient;

- to identify and satisfy the reasonable expectation of the patient, community, provider and funder; and

- to satisfy with applicable risk management, adequate professional knowledge and competency, as well as technologically advanced services in accordance with the development and expectations of providers, funders and recipients of health care.

Acceptability should also be viewed within the legal, professional-ethical and cultural context of the various stakeholders (Booyens, 1996:302; Muller, 1998:3). Services should further be socially acceptable in terms of privacy and standards of communication with the patient and to assess the match between patient and community expectations and the care provided (Steward, 1998:180; Whittaker & Diener, 1996:126).

2.3.2 Accessibility

Services should be convenient for the patient in terms of distance/geographical outlay and time. Accessibility of health care services further involves the provision of appropriate, knowledgeable and skilled health care workers, services when required as well as the *"timeliness"* of care, that is the provision of care when it is needed by the patient, financially and socially as well as the provision and availability of services to

everyone likely to benefit [Booyens, 1996:303; Steward, 1998:180; Muller, 1998:3; Whittaker & Diener, 1996:126; Bowling, 1997:7].

2.3.3 Appropriateness

Appropriateness is the key issue and refers to the right decision and care at the right time and is relevant to outcome. It further refers to the provision of services or interventions the individuals and community really need, be it physical, psychological or social [Booyens, 1996:303; Muller, 1998:3; Whittaker & Diener, 1996:126; Bowling, 1997:11].

2.3.4 Effectiveness

Apart from technical effectiveness, the adequacy of equipment and staffing in the department should be included [Steward, 1998:180]. Effectiveness also involves measuring and monitoring whether the intended benefits which are the health care goals, are being achieved for the individual, family or community or achieving the intended benefit in the population under usual conditions of care [Booyens, 1996:303; Muller, 1998:3; Bowling, 1997:7].

2.3.5 Efficiency

Efficiency means that resources are not wasted on one service or patient to the detriment of another. It is further about the use of one's time to meet a variety of needs, the skilled use of resources and the availability of equipment and assesses the relationship between inputs and outputs, but is also seen as the greatest benefit for least cost [Booyens, 1996:303; Muller, 1998:3; Whittaker & Diener, 1996:127; Bowling, 1997:7].

2.3.6 Equity

Equity is about a fair share for all members of society, free from any form of discrimination and arranging special services to meet specific needs. It also assesses whether all these elements of quality have been equally available to all people (Booyens, 1996:304; Muller, 1998:3; Steward, 1998:180; Whittaker & Diener, 1996:126).

Other elements of quality according to Whittaker and Diener (1996:126) and Zwarenstein and Beattie (1995:141) are **coverage, adherence, continuity and respect**. Morris (1999:176) also mention **interpersonal relationships, technical competence of the provider, safety, comfort and amenities as elements of quality**.

2.4 STANDARDS OF QUALITY

In order to provide quality nursing care, standards of both practice and performance must be identified. Professional nursing standards can either be set as a result of research or by consensus of nurse experts. In nursing practice most standards have been identified by consensus, although nursing research is increasing and will provide valuable input in the future. Standards must be objective and measurable to enhance understanding and communication among practitioners as well as to provide a workable tool for monitoring and evaluating activities. Standards of practice not only identify how nursing is to be practiced but also serve as a base for staff orientation, education, and evaluation, as well as development of policies, procedures, and protocols. In addition, standards provide a basis for the

legal definition of nursing practice and professional accountability to the public [Mandeville & Troiano, 1992:15].

"A standard is a written description of the desired level of performance, containing the characteristics associated with excellence, for measuring and evaluating actual performance or service delivery" [Booyens, 1998:606]. A standard can further be seen as an approved statement of something against which measurement can be made and serves as a basis of comparison [Muller, 1996:69]. According to Donabedian [1975:2], Booyens [1998:607], Muller [1996:69] and Mandeville and Troiano [1992:15] three major approaches or standards to the evaluation of quality have been identified.

2.4.1 Type of standards

Expectations that nurses have of nursing is reflected in nursing standards. If it is accepted that the concept "quality health care" has three dimensions namely structure, process and outcome dimensions, it follows that the expectations should be formulated in terms of these dimensions [Bruwer, 1994:17].

Donabedian, 1980 [cited in Bowling, 1997:9] indicated that the evaluation of health services is usually based on the collection of data about structure, inputs, process, outputs and outcomes of the service.

According to Gillis [1994:516-517] there are three classic frameworks from which nursing care can be evaluated: structure, process and outcome. Each of these interacting elements contributes to the quality of

nursing care and an improvement in any element is likely to produce favourable change in the other two.

2.4.1.1 Structure standard

A structure standard describes what is required for the performance of an action or nursing act and involves the evaluation of the setting and instrumentalities available and used for the provision of care which includes the mission statement, objectives, physical aspects of the physical infrastructure, equipment, characteristics of the administrative organization and qualifications and experience of health professionals/ people. It also signifies the properties of the resources for example finances, equipment used to provide care and the manner in which they are organized (Donabedian, 1975:2; Gillis, 1994:517; Muller, 1998:242; Bruwer, 1994:10, 17; Muller, 2000:68-69; Whittaker & Diener, 1996:125; Starfield, 1992:12-13; Bowling, 1997:10; Greenspan, 1980:13).

Structure standards can further be identified as *"elements from physical and environmental issues to philosophical and administrative issues"* and these elements encompass all aspects of a nursing system except the process of care and its desired outcomes (Mandeville & Troiano, 1992:16).

2.4.1.2 Process standard

Process refers to how the service is organized, delivered and used and describes step-by-step how an action or nursing act should be performed and covers the scientific principles of nursing, namely the process of

assessment, planning, implementation and evaluation. According to Donabedian (1975:3) it involves physical activities of both nursing and other health professional in the management of patients (Muller, 1998:244; Bowling, 1997:10; Ellis & Whittington, 1993:21).

According to Bruwer (1994:10, 17) these standard refer to the utilization of the resources in the process of nursing and reflect the full scope of practice of nurses and are specifically applied to their patients' profiles.

Nursing care should further be appropriate, safe, legal and effective and is applied/achieved in relation to the following:

- proof of nursing care rendered;
- execution of nursing care in accordance to the scope of practice of each nurse category;
- a nursing record system that is compliant with legal principles;
- nursing care plans with appropriate and continuous evaluation of patient progress;
- patient education;
- timeous and appropriate referrals; and
- pre-discharge/transfer planning (Muller, 2000:68; Mandeville & Troiano, 1992:16; Whittaker & Diener, 1996:125).

2.4.1.3 Outcome standard

The structure of the health system and its translation into the processes of care has an impact on health status, an effect known as **outcome of care** (Starfield, 1992:15).

An outcome standard refers to the expected results and should be able to measure the change in health status or the prevention of ill health (Donabedian, 1975:3). It further indicates that it is the evaluation of end results in terms of health status and satisfaction; in many ways it provides the final evidence of whether care has been good, bad or indifferent because of the broad fundamental social and professional agreement on what results are deemed desirable. These standards also reflect the difference in patient behaviour/condition that is required/anticipated through nursing interventions (Bruwer, 1994:10, 17; Gillies, 1994:517; Mandeville & Troiano, 1992:16; Muller, 1998:244; Whittaker & Diener, 1996:125).

2.5 REASONS IN FORMALIZING QUALITY IMPROVEMENT IN HEALTH CARE

There are a number of reasons why quality is assuming increasing importance in health care.

2.5.1 Professional accountability

The WHO (cited in Booyens, 1998:599) indicates that one of the characteristics of professionalism is the pursuit of excellence and the desire to regulate one's own performance. The professional health practitioner is personally professionally-ethically accountable for his/her practice (acts and omissions). Practitioners are, therefore, eager to become formally involved in quality assurance/improvement (Muller, 1996:68).

Certainly, in South Africa, until relatively recently, health care professionals rarely had to account for their actions (or omissions) other than professional misconduct by professionals convicted of disgraceful conduct. The activities of health professionals were rarely questioned. However, the public has become increasingly informed about what constitutes good, as well as poor health care (Booyens, 1998:599; Muller, 1996:68).

2.5.2 Financial considerations

Purchasers and consumers of health services are beginning to state explicitly the kind and quality of health care delivery they expect from health professionals and health care organizations. The incidence of court cases and related claims has increased significantly over the past few years. In addition to this increased perception of what constitutes good health care, is the rapid escalation in health care costs which is placing health care out of the reach of significant numbers of people in many countries. Since the concept of quality is associated with the efficient utilization of resources, quality systems in health care are becoming essential components of the health care environment. The funders of health care want proof of the quality of care delivered (Booyens, 1998:599; Muller, 1996:68).

2.5.3 Quest for excellence

For professional-ethical reasons, health professionals themselves are realizing that they need to have a method of defining and showing that they are providing quality services. Quality improvement activities stimulate resourcefulness and staff should be afforded the opportunity to initiate and implement innovations which address the key components of quality improvement in the organization (Booyens, 1998:600; Muller, 1996:68).

2.5.4 Marketing of health services

Although a person intuitively know what quality means, quality is often difficult to define. This is because quality is not an entity but varies according to the circumstances under which it is to be judged. It is often easier to know when quality is not present, because in most circumstances in which health care is delivered, quality service provision is expected and regarded as normal. Consequently, it is possible to set standards for the delivery of quality health care, based on what is expected and feasible given the present level of medical, technical, managerial and economic resources. The proven evidence of quality health care delivery could serve as a marketing principle to be utilized in a professional manner by the health care organization [Booyens, 1998:600; Muller, 1996:68-69].

2.5.5 Internal desire to positioning

The last reason for formalized quality is man's inherent desire to position himself, to compare his performance with that of another. In this regard the health care practitioner and organizations could become competitive with one another [Booyens, 1998:600; Muller, 1996:68].

2.6 THE HEALTH CARE SYSTEM IN SOUTH AFRICA

2.6.1 Primary health care

2.6.1.1 Introduction

The quality of the health care of the nation is a direct reflection of national priorities and policies of the specific country's government. A government that places health care as a top priority will provide a system that ensures that all people receive basic health care for the achievement of optimal health [Mandeville & Troiano, 1992:13; Starfield, 1992:3; Lassey, Lassey & Jinks, 1997:8].

2.6.1.2 Historical overview of health care systems in South Africa

The previous South African government, through its apartheid policies, developed a health care system which was sustained through the years by the promulgation of racist legislation and the creation of institutions such as political and statutory bodies for the control of the health care professions and facilities. These institutions and facilities were built and managed with the specific aim of sustaining racial segregation and discrimination in health care [ANC, 1994[b]:7]. Due to these policies and their consequences, it was found that health care services were severely damaged in the sense that it was grossly inefficient, fragmented, ineffective and resources were mismanaged and poorly distributed. A fragmented health system has resulted in inequitable access to health care. The inequities in health are reflected in the health status of the most vulnerable groups of which

pregnant women are part of [ANC, 1994[b]:9; van Rensburg, Pretorius & Fourie, 1992:355].

2.6.1.3 Transforming health care in South Africa

According to Slabber [1995:2] a question they often heard is *"why must health care services in South Africa change"*, yet the arguments are that South African health services are compatible with the best in the world, the training is excellent and that graduates are welcome anywhere in the world. Despite these comments it is found that a large number of complaints against health care professionals are reported to professional councils and it is questioned whether the public gets value for the money spent on health care.

The government is responsible for ensuring that health services are available to all South Africans and the ANC is committed to using the primary health care approach as the underlying philosophy to attain this restructuring of the health system based on the National Health Plan. To provide primary health care which is affordable, comprehensive and planned according to priorities identified by the communities themselves was made clear in the National Health Service Delivery Plan [Dennil, King & Swanepoel, 2000:35, 42; Muller, 1998:210; Young, 2000:49; ANC, 1994[b]:19; Janse van Rensburg, 2000:22; Bradshaw, 1998:15].

Fundamental to the restructuring of the South African health services is the concept of a district-based health system[4] [DHS] model which can be seen as a vehicle for the provision of the comprehensive primary health care[5] [PHC]. Emphasis is placed on the district because it is at precisely this point that

[4] DHS = District Health System

top-down planning meets bottom-up reality; it is within the health district that services are or should be closest to the people and that the people can become part of the service (Owen, 1995:185; McCoy & Engelbrecht, 1999:132).

At a National Workshop held in Durban in December 1994, the following long-term goal was unanimously agreed upon for the implementation of a district health system (Mjekevu, 1996:189):

> *"To have a unitary national health service based on a **district health system** that allows access to everyone to improve their health. The country should be divided into geographically coherent functional health districts. There will be a single health service and health management team for each health district. The health system in each health district will be accountable to elected local government. A single local government body will be the employer of the health team. The health team will be responsible for providing comprehensive health services throughout the district up to and including community hospital level."*

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[5] PHC = Primary Health Care

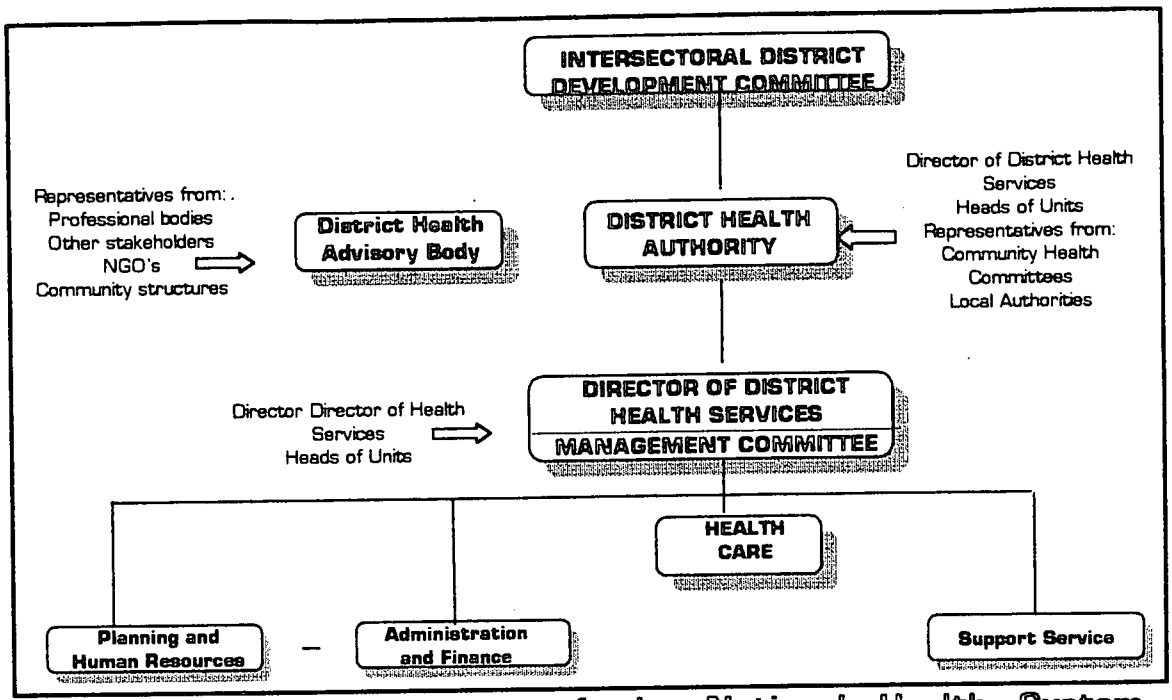

FIGURE 2.1: **Organogram of the National Health System (NHS) at the District level** (Source: A National Health Plan for South Africa – ANC[b], 1994:63)

At present both provincial- and local governments are rendering primary level services which are well integrated but a long-term policy decision has been endorsed by the top health policy-making bodies in the country that the delivery of all primary level services will fall under local government (Young, 2000:49). The developments that took place in the local government sector have had and will continue to have, a profound impact on the establishment of the DHS (Harrison-Migochi, 1998:127; Barron, 2000:1).

As the goal in all provinces is to deliver comprehensive and integrated PHC services at district level, each province has been divided into districts according to functional and geographical determinants. The size of each district is determined by the population, and varies from 200 000 to

750 000 persons, depending on the density of the population between rural and urban areas. The realignment of health services in this manner allows then for a more equitable distribution of resources [Dennil *et al.*, 2000:47, 190-191; Barron, 2000:2; Health System Trust[6] [HST] Update, 1996:11; Young, 2000:49].

2.6.2 Principles that form the basis of the health plan

In order for the health plan to be feasible, certain principles should be adhered to. These principles are:

- ***Equity.*** Health for all cannot be acquired through the supply of equitable health services alone but rather through the achievement of equitable social and economic development. The need for employment, education, adequate housing, clean water, sanitation and electricity are all vital if *"health for all"* is to be attained much as it falls outside the scope and budget of the Department of Health [ANC, 1994[b]:19; McCusker, 1997:27; Dennil *et al.*, 2000:42].

- ***Right to health.*** This principle is based on the premise that each individual has the right to attain optimal health and the State must provide the environment in which this can be achieved [ANC, 1994[b]:19; Muller, 1998:110; Dennil *et al.*, 2000:42]. Establishing health care as a human right, WHO indicated that access to health care must be ensured if this right was to be realized [Nolan, 2000:24].

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[6] HST = Health System Trust

- ***Primary health care approach.*** Comprehensive primary health care as identified by the WHO, forms the basis of this approach. It includes all aspects of community development and community involvement, which are imperative if the system is to be successful. Through this approach the inequalities in access to health services in rural and deprived communities will be a priority for improvement [ANC, 1994[b]:19; Jacobs, 1996:63; Dennil *et al.*, 2000:42].

- ***A single, comprehensive, equitable and integrated national health system must be created.*** This system will be in control of all structures dealing with health, both public and private. It will be responsible to the people and all racial, tribal, ethnic and gender discrimination will be eradicated [ANC, 1994[b]:19, 68; Dennil *et al.*, 2000:42].

- ***Co-ordination and decentralisation of services.*** Clinics, health centres and independent practitioners will be the first contacts the people will have with the health system. Authority and control over the funding will be decentralised to the lowest level possible compatible with rational planning and the maintenance of good quality care [ANC, 1994[b]:19; Jacobs, 1996:63; Dennil *et al.*, 2000:42; Rathwell, Godino & Gott, 1995:19].

- ***Priorities.*** The groups regarded as being the most vulnerable, such as mothers and children, the disabled, the underserved in rural areas and those with debilitating diseases and conditions such as AIDS, tuberculosis, gastro-enteritis, heart disease and trauma, will be given priority care [ANC, 1994[b]:20; Dennil *et al.*, 2000:42-43].

- ***Promotion of health.*** Attention must be given by health workers to the importance of health education, especially with regard to sexuality, child spacing, oral health, substance abuse, environmental health, occupational health and healthy lifestyles. Traditional healers and alternative health care practitioners must be integrated into the team of health workers [ANC, 1994[b]:20; Dennil *et al.*, 2000:43].

- ***Respect for all.*** A charter of patient's rights will be introduced to ensure the right of all people to be treated with dignity and respect [ANC, 1994[a]:43-44; ANC, 1994[b]:20; Dennil *et al.*, 2000:43].

- ***A health information system.*** There is a need for appropriate and reliable data, which is essential for good planning and management. This will improve the efficiency of the service [ANC, 1994[b]:20; Dennil *et al.*, 2000:43].

- ***Additional components of primary health care.*** To cover the specific needs of primary health care in South Africa, the new government added more components to the eight of the WHO which are emergency, occupational and mental health services. To further support the programme, priority is to be given to the development of a national health information system and a research programme is to be established that will link research with health policy and practice [ANC, 1994[a]:47-49; Dennil *et al.*, 2000:43].

2.6.2.1 Principles of a successful strategy for the implementation of primary health care

Elements of quality namely equity, accessability, effectiveness and efficiency correlates with the principles of a successful strategy implementation for PHC which implies that quality is assured in PHC. The principles are:

- ***Equity.*** All people should have equal access to basic health care and social services which are available, accessible as well as affordable, and should reflect in the provision of services now and for the future. There should be an absence of any subgroup variability and discrepancy in care (Dennil *et al.*, 2000:6; Jacobs, 1996:62; Barron, 20001:1; Hirschowitz & Orkin, 1995[b]:53).

- ***Accessibility.*** Services must be extended to be within the reach of all people in the country. Special attention must be given to disadvantaged regions of the country, especially small isolated rural areas. Services must be:
  - geographically accessible, meaning that health services should be within a reasonable distance (the WHO suggests 5-10 km) and that transport should be available as well as addressing language barriers and "office hours service"
  - financially accessible to the individual and the community
  - functionally accessible, in that the appropriate type of care be available to meet the needs of the specific community
  - the provision of qualified health care professionals (Dennil *et al.*, 2000:6; Janse van Rensburg, 2000:26; Harrison, 1997:23-24; McCusker, 1997:28; Gwala, 1995:18; Nolan, 2000:24-25; Rogge, 1998:17-18).

- ***Affordability.*** The level of health care offered should be aligned to what the community and the country can afford and too low budgets should not be allowed to derail the programme or to be used as a basis of criticism. No person should be denied health care because of an inability to pay (Dennil *et al.*, 2000:6; Jacobs, 1996:64). Adequate financial arrangements will have to be in place to ensure that there are sufficient funds for the decentralization process and disparities should be identified and corrected (Harrison, 1997:24; McCusker, 1997:28; Barron, 2000:8; Pattinson, 1999:10).

- ***Availability.*** There should be sufficient and appropriate services to meet the particular health needs of each community (Dennil *et al.*, 2000:6). The adequacy of human resources relates not only to numbers of personnel, but also to their competence, range of skills, attitudes and systems of support. The maldistribution of personnel is to be ruled out by having an advertising campaign for vacant posts and addressing of low staff morale (Harrison, 1997:24; McCuster, 1997:28; HST-update, 1996[b]:9; Pattinson, 1999:10).

- ***Effectiveness.*** Services provided must do what they are intended to do for the specific community and must also be justifiable in terms of cost (Dennil *et al.*, 2000:7; Jacobs, 1996:62; Barron, 2000:1; Janse van Rensburg, 2000:26).

- ***Efficiency.*** The results attained should be proportionate to the input, in terms of effort expended, money spent, resources used and time utilised (Dennil *et al.*, 2000:6, 7; Jacobs, 1996:63-64; Barron, 2000:1; Janse van Rensburg, 2000:26). With reference to time utilized and the different perceptions of acceptable waiting

times, clients considered a waiting time of 90 minutes to see a nurse as acceptable (Twinn, 1997:756). Another factor *"office hours of service"* should also be extended.

Other principles include: overcoming fragmentation, being accountable and allowing for stakeholders involvement and participation, partnership, the decentralization of powers and functions to be based on developmental and intersectoral approach, sustainable service and other health care providers being an integral part of DHS (Janse van Rensburg, 2000:26; Jacobs, 1996:22-28; Pattinson, 1999:10; Harrison, 1997:23-26; Barron, 2000:5, 8).

2.7 QUALITY IN MATERNAL HEALTH

2.7.1 The implementation of a comprehensive maternal health care program

The practicalities of implementing a comprehensive maternal health care program in the developing world require that it be done within the context of a national health service that emphasizes comprehensive primary health care. True comprehensive primary health care includes both the front-line service in the health center and the secondary referral hospital in an integrated program (Sachs, Beard, Papiernik & Russel, 1995:293). According to Coovadia (1995:177) a number of studies of causes of maternal mortality have consistently shown that many maternal deaths can be prevented through primary health care as women have died from common preventable diseases.

In the process of restructuring, the Department of Health has committed itself to achieving access to quality primary health care by setting objectives and targets to reach the needs of maternal-, child and women's health care. Health services should reach all mothers, the focus on maternal planning and support and that services be integrated, comprehensive, effective, efficient and cost-effective resulting in the reduction of maternal morbidity and mortality [Coovadia, 1995:181-182]. A key focus is to ensure that mechanisms are being created so that no mother dies because of lack of access to health services [ANC, 1994[b]:44].

2.7.2 Maternal health

Maternal health is being recognised as a priority within a country's National Health System. More than 150 million women worldwide become pregnant each year and half a million of these women die from pregnancy related causes for example hypertension in pregnancy. Most of which could have been prevented or are preventable [Tinker & Koblinsky, 1994:1; Pattinson, 1991:ii].

In a survey done in 1995 in South Africa, it was found that three in every 100 Africans had a family member who has died during pregnancy or childbirth and a report on enquiries into maternal deaths in South Africa for 1998 indicated that 676 maternal deaths were reported of which 94 deaths happened in the Free State [see p.5, Chapter 1] [Hirschowitz & Orkin, 1995[a]:119; Pattinson, 1999:2, 17].

2.7.3 Efforts for improving maternal health

2.7.3.1 Effort 1

In an effort to reduce the high toll of maternal morbidity and mortality, the World, Bank, WHO, United Nations Fund for Population activities [UNFPA[7]] and agencies from 405 countries launched the Safe Motherhood Initiative with the goal that maternal deaths of half a million to be halved by the year 2000. Due to socio-economic inequalities associated with poor health, WHO had to renew it's focus by identifying global priorities and targets for the year 2020 by which the maternal mortality ratio should be reduced to less than 100 per 100,000 live births. Another target by WHO is to improve access to comprehensive, essential, quality health care for all people by the year 2010 [Tinker & Koblinsky, 1994:xiii, Barron, 1998:1].

- **Meaning of *"safe motherhood"***

According to Feuerstein [1993:2] *"safe motherhood"* means creating the circumstances within which a woman is enabled to choose whether she will become pregnant and if she does, ensuring that she receives care for prevention- and treatment of pregnancy complications, has access to trained birth assistance, has access to emergency obstetric care if she needs it, and care after birth, so that she can avoid death or disability from complications of pregnancy and childbirth. The early identification of high risk pregnancies and the provision of a free antenatal service are also mechanisms that contributes to *"safe motherhood"* [ANC, 1994[b]:45].

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7 UNFPA = United Nations Fund for Population

2.7.3.2 Effort 2

Another effort that was made by the National Department of Health was the establishment of the **National Committee for the Confidential Enquiry into Maternal Deaths (NCCEMD[8])** who helped to advise on the way to improve women and child health. The **NCCEMD** effectively identified where the greatest obstacles in the health services lie and made the following **recommendations** which will go some way to immediately rectify the major problems in the provision of care for women during pregnancy, childbirth and puerperium (Pattinson, 1999:iii).

- **Recommendations**

(i) Guidelines on managing conditions which commonly result in maternal death for example hypertension in pregnancy, must be developed, distributed and implemented throughout the country by December 2002.

Motivation: It is clear that many health workers are not following standard protocols. It is not known whether this is due to ignorance or laziness. By ensuring protocols are available and promoted, ignorance should no longer be a factor.

(ii) Referral routes and criteria for referral must be established and implemented by 2001.

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8 NCCEMD = National Committee for the Confidential Equiry in Maternal Deaths

Motivation: Delay in referral or managing patients at inappropriate institutions is a common avoidable factor. Lack of clear referral criteria, sites where to refer to and resistance by the receiving hospital to accept patients are possibly responsible for these avoidable factors.

[iii] Establishing staffing and equipment norms per level of care must be performed in every health institution concerned with the care of pregnant women by 2001.

Motivation: Poor monitoring of women has been identified as a common avoidable factor. It is not known whether this is due to inadequate staffing and equipment or due to laziness on the part of the staff. Without clear norms it will not be possible to assess where the problem lies.

[iv] The distribution of the Termination of Pregnancy [TOP[9]] services [especially with respect to second trimester TOP's] must be expanded and the sites must be advertised to the public.

Motivation: The majority of deaths due to abortions occur in the second trimester and are often the result of interference by the woman herself or a non-registered person.

[v] Medical Obstetric Clinics must be established to ensure the optimal management of women with pre-existing medical conditions, especially women with heart disease and diabetes mellitus.

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[9] TOP = Termination of Pregnancy

Motivation: Cardiac disease in pregnancy is a major cause of maternal deaths. The woman with a heart lesion has often been mismanaged by the health workers managing the pregnancy. By establishing these clinics, these women should not slip through, and their management could be more expertly performed.

(vi) Family Planning services must intensively educate women 30 years and older with five or more children about the dangers of pregnancy. Contraceptive use should be actively promoted in this group of women.

Motivation: Women 30 and over and with five or more children are at significantly greater risk of dying during pregnancy, labour and the puerperium.

(vii) A National HIV[10]/AIDS[11] policy geared towards managing these women and dealing with the ethical considerations must be available by 2001 (Pattinson, 1999:xi-xii, 9-14).

Motivation: AIDS is the second most common cause of maternal deaths in South Africa. A clear policy needs to be established on managing AIDS as this has enormous implications for the allocation of scarce resources. Many women with AIDS are managed at tertiary institutions using resources that might be better used on women with a better prognosis. Medical personnel are very reluctant to take such positions and the debate needs to be opened to allow for consensus to be established.

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[10] HIV = Human Immunodeficiency Virus

2.7.3.3 Effort 3

On May 24 1994, the State President declared that all health care for children under the age of six years, and pregnant women would be free. The purpose of a free health care policy was to improve access to health care for women and children by removing the barrier of health service fees, resulting in an increased attendance at antenatal clinics, an increase in the number of women booking for antenatal care and a decline in the proportion of unbooked deliveries [McCoy, 1996:iii, Dreyer & Chapman, 1994:6].

Though the results of a survey done in 1995 about free health services indicated that such services should be extended to other groups in the community too, ways need to be found to bring health care spending under control through more efficient delivery mechanisms. With regard to the free services, the population should be educated about proper antenatal care and maternity services and that antenatal care services are to be rendered at all clinics [Dreyer & Chapman, 1994:6; McCoy, 1996:330]. An appeal was also made with regard to the changing of health personnel's attitude after the reflection that free services would encourage women to get pregnant [Hirschowitz & Orkin, 1995[b]:54].

2.8 THE ROLE OF THE MIDWIFE IN SOUTH AFRICA

It is difficult to imagine the enormous impact on a family and community that the death of a woman in childbirth brings. About 10 years ago it was a fact that at least half a million women died each year as a result of childbirth and of those who survive, many suffer permanent disability and that the majority of these tragedies occured in developing countries where

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[11] AIDS = Aquired Immunodeficiency Syndrome

resources and access to trained maternal and child health care personnel were grossly inadequate [WHO, ICM & UNICEF, 1991:8].

In South Africa, a statutory body, the South African Nursing Council [SANC] controls and regulates the training and scope of practice nurses and midwifes undergo. By doing so, the council: protects the public from unsafe practices, ensures quality of care and confer accountability, identify and give status to nurses and midwives [Bennett & Brown, 1999:124]. Through the induction of a four year programme that leads to the registration in General, Psychiatric, Community and Midwifery, the Council ensures that nurses are providers of a comprehensive health service. A post basic programme in advanced midwifery is also offered at universities and colleges [Roets, 1996:10]. A midwife before carrying out her profession, should first be registered or enrolled with the SANC after which her scope of practice is being regulated by the following regulations: R.2488, R.387 and R.2598 [see Appendixes M, N and O respectively]. As proper care during pregnancy and childbirth are important to the health of both mother and her baby, therefore antenatal care by a trained provider is important to monitor the pregnancy and reduce the risks for the mother and child during pregnancy and at delivery.

2.9 THE ROLE OF THE MIDWIFE IN THE PROVISION OF ANTENATAL CARE

The midwife has a central place in the provision of care in pregnancy and childbirth, as it is in her role in particular that the main elements of maternity care – clinical assessment and monitoring and the provision of advice and support – are combined. These elements are the focus of internationally accepted definitions of the role of the midwife. An integrated

and holistic approach to care in pregnancy and childbirth is facilitated when midwives are able to practice in accordance with this definition [Chalmers & Enkin, 1989:162].

2.9.1 Definition of the term midwife

According to Myles [cited in Nolte, 1998:3] and WHO *et al.* [1991:27] the following definition is recognized:

> *"A midwife is a person who, having been regularly admitted to a midwifery educational programme, duly recognised in the country in which it is located, has successfully completed the prescribed course of studies in midwifery, and has acquired the requisite qualifications to be registered and/or legally licensed to practise midwifery. She must be able to give the necessary supervision, care and advice to women during pregnancy, labour and the postpartum period, to conduct deliveries on her own responsibility and to care for the newborn and the infant. This care includes preventive measures, the detection of abnormal conditions in mother and child, the procurement of medical assistance and the execution of emergency measures in the absence of medical help. She has an important task in health counselling and education, not only for women but also within the family and the community. The work should involve antenatal education and preparation for parenthood, and extend to certain areas of gynaecology, family planning and child care. She may practise in hospitals, clinics, health units, domiciliary conditions or in any other service"* [Nolte, 1998:3].

2.9.2 Maternity care

WHO and UNICEF have monitored several indicators for coverage of maternity care to monitor progress towards health for all. These indicaters were the use of prenatal care, institutional deliveries and skilled attendance at delivery. At a workshop held in Japan in 1990 by WHO, International Confederation of Midwives[12] (ICM) and UNICEF: *"Statement on midwifery education – action for safe motherhood"*, the World Declaration and Plan of Action on the Survival were that by the year 2000, maternal mortality which are half a million, should be halfed. Belief was also expressed that to make an effective contribution to safe motherhood, major changes were required in the:

- content and methods of education for midwives in basic, post-basic and continuing education programmes;
- concept of a midwife and her/his role and function in society and in health services;
- deployment of midwives and the facilities and support that will be required to carry out their new role effectively; and
- midwife's capacity to collect, analyse, interpret and use information for service improvement (WHO, ICM & UNICEF, 1991:8; Abouzahr & Wardlaw, 2001:24).

[12] ICM = International Confederation of Midwives

As nursing is an essential part of the health care system, the viability and success of our health systems are directly connected to the stability, skills and knowledge of nursing professionals and that the stability of complex health care systems depends on a well-educated, professional nursing workforce with clearly defined and valued roles [Kending, 2001:22, 23].

2.9.3 Scope of practice of the midwife

The very foundation of nursing is quality care. As early as 1854, Florence Nightingale founded the nursing profession and her belief that care by **trained persons** could improve patient outcome led to the development of nursing training programs. In essence the scope of practice of the midwife indicates that she is a responsible, independent practitioner, accountable for her own acts and omissions [Mandeville & Troiano, 1992:7; Nolte, 1998:4; Berg, 1986:7]. Gropper and Boily [1999:64] further indicate that competence, pride and respect enable caregivers to put the organisation's customer service values into action.

Through her training, experience and orientation, a midwife is qualified to assess the health of the mother and the growth and development of the fetus throughout the course of the pregnancy; to recognise those signs of abnormality in the mother or fetus which may necessitate referral to medical staff for advice and treatment; and to provide health education during pregnancy, both to women individually and to groups of parents. In short, she is ideally qualified to develop a supportive and continuing relationship with a woman during her pregnancy and because the majority of women have normal pregnancies, their care falls naturally within the midwife's sphere of expertise [Enkin & Chalmers, 1982:234].

2.9.4 Antenatal care

Brown, 1935 [cited in Enkin & Chalmers, 1982] indicated that it was time to realise that antenatal work calls for experience and skill, that patients must be individualised, not only in regard to general hygiene and the maintenance of bodily health, but also in regard to diagnosis and treatment, and that in the antenatal clinic there should be no such thing as mass production.

According to Westaway and Cooper [1998:58] accessibility, availability and afordability as well as age, marital status and schooling have been shown to be barriers to the utilisation of antenatal care. In the past the physician saw the patient once during her pregnancy and at this visit the expected date of delivery was determined and that was the sum of the antenatal care that was given. The challenge facing contemporary perinatal health care is to ensure that healthy mothers give birth to healthy infants, both capable of attaining maximum developmental potential. While this goal is mastered for most mother-fetus pairs, some patients experience poor perinatal outcomes – outcomes that might have been prevented [Mandeville & Troiano, 1992:31; Nolte, 1998:77].

Since 1982, every major American public health report has emphatically stated that prenatal care is the most effective strategy for reducing low birth weight and other adverse outcomes of pregnancy [Sachs *et al.*, 1995:220]. According to Watson, 1979 [cited in Nolte, 1998:9] quality nursing is guaranteed only if scientific methods are used, because it makes provision for control and prediction, rectification and therefore, quality. The planning of antenatal care may be defined as an orderly, systematic approach whereby needs and problems are identified and a plan is formulated to address these needs. After the plan has been carried out,

the degree to which the identified problem has been solved is evaluated (Nolte, 1998:9).

2.9.4.1 Goals of antenatal care

According to Nolte (1998:77), Nolan (1997:1201-1202), Bennett and Brown (1999:210), Feuerstein (1993:35) and Royston and Armstrong (1990:157-159) the following goals are of importance for antenatal care:

- To support and encourage a family's healthy psychological adjustment to childbearing.
- To promote an awareness of the sociological aspects of childbearing and the influences that these may have on the family.
- To build up a trusting relationship between the family and their caregivers which will encourage them to participate in and make informed choices about the care they receive.
- To monitor the progress of pregnancy in order to ensure maternal health and normal fetal development.
- To recognise deviation from the normal and provide management treatment or referral as required.
- To ensure that the woman reaches the end of her pregnancy, physically and emotionally prepared for the birth of her baby.

- To help and support the mother in her choice of infant feeding; to promote breast feeding in a sensitive manner and give advice about preparation for lactation when appropriate.

- To offer the family advice on parenthood either in a planned programme or on an individual basis.

These goals can only be achieved if the service provided is acceptable to women and their families. It has become more apparent in recent years that women now have more control over their fertility.

2.9.4.2 Goals of the first visit of antenatal care

The following goals are important to reach in the initial assessment:

- to assess levels of health by taking a detailed history and to employ screening tests as appropriate;

- to ascertain baseline recordings of weight, height, blood pressure and haemoglobin level in order to assess normality. These values are used for comparison as the pregnancy progresses;

- to determine the duration of pregnancy;

- to identify risk factors by taking accurate details of past and present obstetric and medical history and for referral should it be necessary;

- to provide an opportunity for the woman and her family to express any concerns they might have regarding this pregnancy or previous obstetric experiences;

- to give advice on general health matters and those pertaining to pregnancy in order to maintain the health of the mother and the healthy development of the fetus;

- to begin building a trusting relationship in which realistic plans of care are discussed; and

- to initiate a programme of continuous antenatal care during the whole antenatal period [Nolte, 1998:77; Bennett & Brown, 1999:211].

In attaining these goals, the nursing process is the framework upon which the maternity nursing care is based and comprises of five separate but interrelated stages: assessment, diagnosis, planning, implementation and evaluation [Phillips, 1996:2].

2.9.5 Documentation

Documentation of nursing intervention is vital and is an essential part of patient care. The response of a patient's record is to both facilitate communication among health care providers and to serve as evidence of clinical treatment provided and/or planned. It also allows both the patient's evaluation and her treatment to proceed in an organized and logical fashion and protects the legal interests of both the patient and the practitioners

involved in providing care [Gleicher, 1998:16; Berg, 1986:9-10; Greenspan, 1980:14].

In order for the midwife to render care to the pregnant woman, such care should be based on the information obtained in the **H10 format** [see Appendix K] which is used in the Free State and the following should be obtained:

2.9.5.1 Personal data

Personal data is important for identification of the patient and the following data is obtained:

- **Name and identity number**
  - To identify the patient
- **Address and telephone**
  - The midwife should know where she can contact the patient, for example if she does not keep to her appointments. The address also gives an indication of the patient's social and socio-economic circumstances
- **Next of kin**
  - It is important to identify the patient's support systems

- **Hospital reference number, doctor**

  - This information is needed should previous information be needed

- **Medical aid**

  - For information only, though free treatment is given (Williams, 1996:4-5)

- **Demographic factors**

  - Education and economic status are linked with pregnancy outcomes (Gleicher, 1998:16; Williams, 1996:5).

- **Race**

  - Certain races have characteristic pelvic structures as well as culture and practices to be taken into account (Williams, 1996:5).

- **Age**

  - The age of a woman when she gives birth affects her chances of dying. The **optimal childbearing age** is considered to be between 20 and 30 years of age, with an increased risk of perinatal morbidity or congenital abnormalities as well as incidences of genetic abnormalities such as Down Syndrome after age 35. Patients younger than 16 years are also at risk (Simpson & Creehan, 1996:81; Williams, 1996:4).

- **Marital status**

  - Also plays a role as multiple studies suggest marital status is associated with the incidence of low birth weight reflected in women who were separated, divorced or widowed and for identifying of support systems [Simpson & Creehan, 1996:81; Williams, 1996:5].

- **Occupation**

  - Work is not detrimental to pregnancy, but at times a **woman's occupation** may require long commutes, heavy work or long periods of standing or sitting, all of which contribute to the risk of preterm labour, However, decreasing or eliminating work during pregnancy may place the woman at greater socio-economic risk by threatening her livelihood. Under favourable health and working conditions it is medically permissible for the women to work until a week or two before labour [Simpson & Creehan, 1996:82; Cronje, Grobler & Visser 1996:73; Williams, 1996:5].

2.9.5.2 History

Assessment of health factors that may influence pregnancy outcome includes careful evaluation of the woman's medical, gynaecologic, obstetric and pertinent family history of both woman and partner [Simpson & Creeham, 1996:79]. If the mother has for example a medical condition or is at high risk for developing a medical complication, the risk for an adverse perinatal outcome increases [Gilbert & Harmon, 1993:35].

The patient's record should include a complete history and physical examination. A detailed medical record reduces the chance of omitting important factors when formulating a treatment plan and helps to avoid performance of unnecessary tests. In addition to the performance of the history and physical examination the initial visit to obstetrics is also a good time to make a risk assessment of the patient and her pregnancy (Gleicher, 1998:16).

The patient should be assessed on the following:

- **Complaints**
  - Ask the patient if she is experiencing any problems or information to be brought under the midwife's attention.

- **Discharges**
  - Any VAGINAL discharges should be reported. Early identification and treatment of such discharges is important should the cause be pathological for example pruritus or vulvitis (Cronje *et al.*, 1996:69; Ratnam & Sen, 1997:56).

- **Last normal menses[13] (LNM)**
  - This information should be obtained in order to determine the expected delivery date[14] (EDD) (Cronje *et al.*, 1996:69).

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13 LNM = Last Normal Menstruation
14 EDD = Expected Delivery Date

- **Expected delivery date (EDD)**

  - Naegele's rule is the most frequently used method of estimating delivery and is based on a 28-day cycle in which ovulation occurs 14 ± two days after the menstrual period begins:

    * Subtract three months from the first day of the last normal menstruation (LNM) and then add one year and seven days to that date. For example, if the woman's LNM began December 20, subtracting three months provides a date of September 20, to which seven days are added to derive the estimated due date of September 27 of the following year:

Estimated delivery date (EDD) =

First day of LNM - three months + one year + seven days

(20/12/98) (20/9/98) 27/9/99)

  - A newer method, the method of nines, can also be used. Whereby + 9 days + 9 months are added from the LNM/LMP (Last Menstrual Period) (Sherwen, Scoloveno & Weingarten, 1995:329; Dickason *et al.*, 1994:200; Cronje *et al.*, 1996:69).

- **Contraception**

  - This makes the difference between a chosen parent- or motherhood and an unwanted pregnancy. Culture and religion can also play an important role in decisions about the use of contraceptives and parenthood (Nolte, 1998:72).

Contraception further influences the EDD should the mother experienced amenorrhoea due to the method used (Bennett & Brown, 1999:6).

- **Previous pregnancies**

  - Ask about prior pregnancies and any complications that developed during those pregnancies. Obstetrical history such as length of previous labours, birth weight, gestational age, preterm birth, operative birth, multiparity, elective or spontaneous abortions or stillbirths may indicate potential risks for the current pregnancy. The patient's gravidity and parity are determined and recorded (Simpson & Creeham, 1996:80; Dickason *et al.*, 1994:206; Cronje *et al.*, 1996:70; Williams, 1996:6-7).

- **Previous diseases/operations**

  - Any previous diseases that may threaten maternal-fetal well-being and may need referral should be identified for example:
    * Rheumatic fever
    * Tuberculosis
    * Diabetes mellitus
    * Thrombo-embolic episodes
    * Jaundice
    * Renal diseases
    * Congenital abnormalities
    * Poliomyelitis
    * Epilepsy
    * Hypertension

* Allergies
* Rubella [Nolte, 1998:78; Williams, 1996:5]

– Previous surgical history: As patients are often not aware of the importance of a connection between a previous operation and the present pregnancy, they must be specifically questioned because they often do not volunteer the information. The following surgical interventions are important:

* Neurosurgery, for example cerebral haemorrhage or tumours
* Musculoskeletal operations: spinal fusion, fractures of the pelvis or femur
* Cardiothoracic operations: lobectomy, valvotomy, valve prosthesis, repair of congenital cardiac lesion
* Abdominal operations, especially operations in the lower abdomen and uterus: previous ectopic pregnancy, previous hysteroplasty, hysterotomy, myomectomy, caesarean section, tuboplasty, ovarian cystectomy, appendisectomy
* Vaginal operations: repair of genital prolapse or stress incontinence, cone biopsy of the cervix, dilation and curettage. [Successful repair of a vesicovagigal fistula or stress incontinence is an indication for an elective caesarean section] [Nolte, 1998:78; Williams, 1996:6]

- **Family history**

  - Family history includes ethnic and cultural factors and family problems that may have a genetic or social impact on the woman and her pregnancy. Ask about the current status of the family's health and immunizations, especially if children are present or family members with chronic illnesses that the women might develop during her pregnancy. A positive history indicate that the patient may have a similar condition and needs referral for example:
    * Multiple pregnancies
    * Diabetes mellitus
    * Tuberculosis
    * Heart diseases
    * Asthma
    * Malignancy
    * Hypertension
    * Congenital abnormalities
    * Hereditary conditions [Nolte, 1998:78; Farrer, 1994:75; Dickason *et al.*, 1994:206; Cronje *et al.*, 1996:70].

  - Other information needed in order to guide the management of pregnancy and labour or to predict/prevent possible complications in labour are:
    * Allergy, medication regularly used, her immunizations and childhood diseases because infection and medication may be detrimental to the fetus [Dickason *et al.*, 1994:206; Nolte, 1998:79].

- **Alcohol**

  - Alcohol as well as general sustance abuse during pregnancy represents a problem of enormous scope. Screen the patient for alcohol use/abuse as it has been associated with fetal alcohol syndrome, minor and major malformation, stillbirths, prematurity, low birth weight and low placenta weight [Gleicher, 1998:263-267, 1430].

  - Fetal alcohol syndrome was recognized in the 1970's as a constellation of birth defects encompassing intrauterine growth retardation and is considered to be the leading cause of mental retardation. Alcohol usage further results in placenta abruptio and spontaneous abortion.

  - A dose-response relationship has yet to be clearly defined. There appears to be a demonstratably higher risk for heavy drinkers, who drink five or more drinks per day at least twice a month, or an average of three drinks a day during pregnancy [Sachs *et al.*, 1995:308-309; Folb & Dukes, 1990:31-32].

- **Smoking**

  - Cigarette smoking is associated with a range of adverse pregnancy outcomes and appears to have a negative impact on reproductive health. Carbon monoxide is absorbed through the placenta and results in oxygen depletion for which the fetus cannot compensate. Nicotine ultimately leads to raising fetal blood pressure. Other problems associated with smoking

are placenta previa, placenta abruptio, premature rupture of membranes, low birth weight, retarded intra-uterine growth and abortion [Sachs *et al.*, 1995:309-310; Gleicher, 1998:1426; Folb & Dukes, 1990:37].

- **Social**

  - Social history includes habits such as customary quantities of drinking, smoking and the use of drugs. Also find out about patients level of education and intelligence and marriage stability. Her financial situation and any support system for after-care for mother and baby, the availability of water, transport, telephone and shopping facilities should be enquired. Other factors like poor hygiene, inadequate nutritional status and limited income are interrelated causative attributes of adverse perinatal outcomes [Gilbert & Harmon, 1993:26; Sellers, 1993:170; Cronje *et al.*, 1996:70; Dicason *et al.*, 1994:206].

- **Medication**

  - Any medication used, should be identified as medication that is safe for the mother, may have severe effects on the fetus [Williams, 1996:7; Nolte, 1998:79]. Medication should be limited to that prescribed by a doctor or midwife [Williams, 1996:30].

2.9.6 Examination

The physical examination includes the following:

- **Length**

  - Length of the patient has to be measured to form an idea of the size of the pelvis. It serves as a guide only and does not mean that if the patient is small/short, she will be a candidate for caesarean section. A contracted pelvis is more common in a patient shorter than 150 cm, but nor does a normal height exclude the possiblity of a contracted pelvis (Nolte, 1998:81; Williams, 1996:8; Bennett & Brown, 1999:216).

- **Weight**

  - The woman's weight must be recorded at every visit and she should be weighed on the same scale while not wearing shoes. Both excessive and decreased gain are significant and require meticulous fetal monitoring (Nolte, 1998:71, 80, 99; Cronje *et al.*, 1996:71; Bennett & Brown, 1999:216). According to the Institute of Medicine and Wolfe and Gross (cited in Tulman & Fawcett, 1998:630) the recommended weight gain during pregnancy for women is as follows:
    * Women whose weight was normal before pregnancy: 11,36-15,91 kg,
    * Underweight women: 12,75-18,18 kg,
    * Whereas for overweight women: 6,82-11,36 kg.

- **General**

  - General appearance has to be noted in order to determine factors like socio-economic status, intellectual level, signs of neglect or abnormalities such as scoliosis, kyphosis and lordosis. Other factors that can be obtained are:
    * Does the woman look happy, sad or depressed?
    * Is she overweight or underweight?
    * Does she seem tired, harassed or upset [Dickason *et al.*, 1994:207; Nolte, 1998:81; Bennett & Brown, 1999:218].

- **Thyroid**

  - A thyroid which is visibly enlarged or has a single palpable nodule should be refered to the doctor [Nolte, 1998:81]. It normally enlarges somewhat during pregnancy as a result of increased vascularity and hyperplasia of glandular tissue as well as a response to the need for increased metabolism [Gilbert & Harmon, 1993:5; Sherwen *et al.*, 1995:300; Cronje *et al.*, 1996:254; Williams, 1996:9].

- **Mammae**

  - Examine the breast for asymmetry, dimpling, possible masses and retracted nipples. Inform the mother that the size of her breasts, or the returning to work, are not contra-indications for breastfeeding [Nolte, 1998:81; Phillips, 1996:116; Dickason *et al.*, 1994:207].

- WHO, the American Academy of Pediatrics [AAP], and the American College of Obstetricians and Gynecologists [ACOG] have endorsed breast-feeding as the preferred method of infant feeding in the first year of life. The prenatal period is the time to discuss the pros and cons of breastfeeding and to assist the family in making a decision [Phillips, 1996:116; Williams, 1996:9].

- **Heart**

  - Pregnancy results in increased cardiac output, heartrate and bloodvolume by 35 to 40% the normal heart is able to adapt to these changes without undue difficulty. About 1 to 2% of pregnant women are at risk because of pre-existing heart disease. Any abnormality should be diagnosed early for referral and treatment and may permit diagnosis of a boarderline cardiac condition [Nolte, 1998:322; Ladewig, London & Olds, 1994:273; Dickason *et al.*, 1994:207].

- **Pulse**

  - Normal pulse rate is from 60 to 90 beats per minute[15] [BPM] and may increase with 10 BPM as the pregnancy progresses. It should be monitored with every visit as it can be a sign of increased stress on the heart for example if tachycardia or infection is present it should be investigated [Nolte, 1998:324; Corrie, McKinny & Murray, 1994:139].

[15] BPM = Beats Per Minute

- **Blood pressure**

  - Blood pressure should remain relatively stable throughout pregnancy and a baseline should be determined (Corrie *et al.*, 1994:139). The same-arm and position should be used when monitoring the woman's blood pressure as maternal position affects blood pressure readings. As there is a physiological decrease in blood pressure during pregnancy, any increase, in blood pressure is therefore a danger sign (Nolte, 1998:69; 80). Hypertention is the commonest medical complication of pregnancy in South Africa and is a major cause of maternal and perinatal morbidity and mortality worldwide (Cronje *et al.*, 1996:176).

- **Abdomen**

  - An abdominal examination consits of three components: inspection, palpation and auscultation.

    - ***Inspection***

      ⇒ The following should receive attention during inspection:

      - ⊕ Shape of the uterus for example longitudinal, transverse
      - ⊕ Size of uterus; does it correlate with the duration of pregnancy
      - ⊕ Position of fetus
      - ⊕ Possible fetal movements
      - ⊕ Previous surgical scars
      - ⊕ Full bladder

⊕ Skin lessons

⊕ Skin changes; linea nigra or striae gravidarum [Sellers, 1993:198; Nolte, 1998:82; Cronje *et al.*, 1996:81].

◊ ***Palpation***

⇒ The oldest clinical method of estimating fetal size – abdominal palpation – is so inaccurate as to be little better than a blind guess [Enkin, 1995:61]. A more quantitative approach is to measure the increase in size of maternal abdomen, which must, to some extent, reflect uterine growth. There have been several studies of fundal height as an indicator of fetal size, but little investigation of the potential of this measurement for assessing growth. The ability to predict low birthweight is not the same as the ability to detect growth retardation [Enkin, 1995:61-62].

⇒ Palpation of the abdomen can further determine masses, tenderness, presenting parts and the lie of the fetus. The amount of amnion fluid can also be determined by identifying any polyhydramnios or oligohydramnios [Sellers, 1993:197, 198; Nolte, 1998:134; 313; Dickason *et al.*, 1994:207; Cronje *et al.*, 1996:81].

◊ ***Auscultation***

⇒ Fetal heart can be heard between 22 and 24 weeks if a fetal stethoscope is used. Fetal heart rate should be between 120 and 160 BPM and is seldom confused with maternal pulse. Women also talk a great deal about the importance of hearing the heartbeat as a way to provide assurance that all is well to bond with the developing fetus (Handler & Grachello, 1996:33; Nolte, 1998:93; Cronje *et al.*, 1996:85).

o **Symphysis-Fundus (SF) Measurement**

– This measurement is taken from the upper brim of the symphysis to the highest palpable point of the fundus (see Figure 2.2) and is measured in centimetres, approximately from the 14th to the 16th week of gestation and to be recorded on a growth chart (see Figure 2.3). This method of determining the duration of pregnancy is more accurate than the classical fundal-height method (Nolte, 1998:98; Cronje *et al.*, 1996:82, 91, 323).

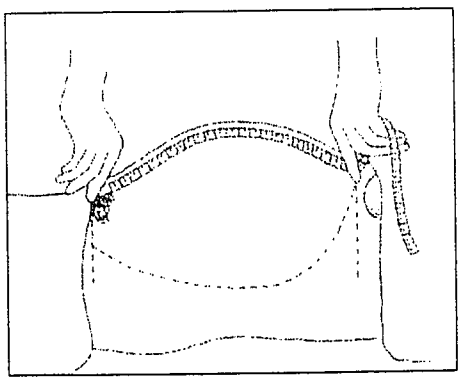

FIGURE 2.2: Determination of the fundal height in centimetres with a tape measure (Williams, 1996:12)

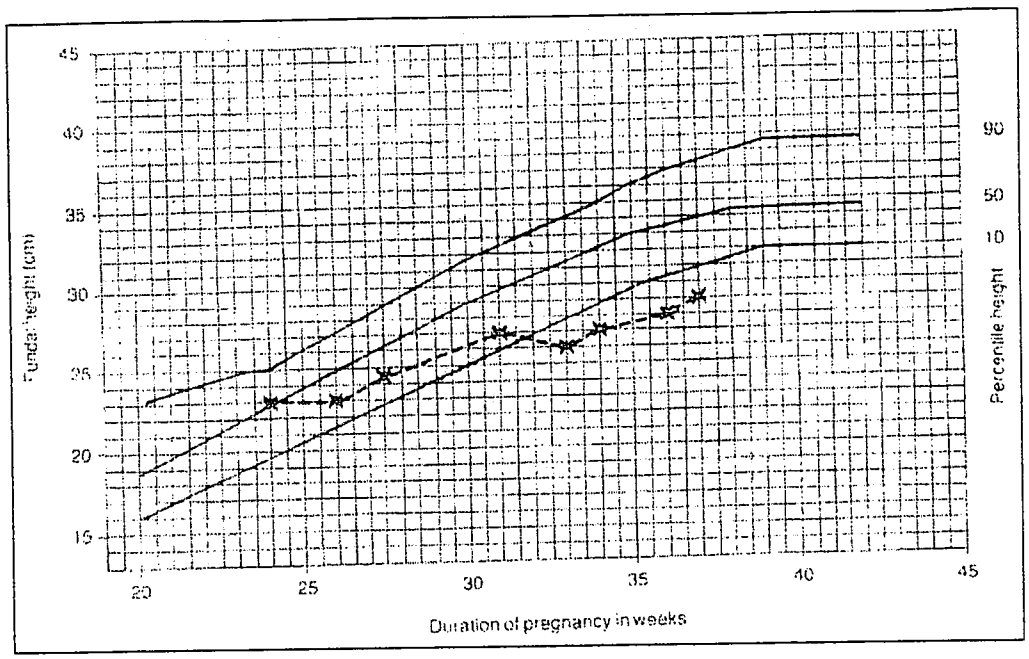

FIGURE 2.3: **Percentile chart on which height of fundus in centimetres is indicated** (Williams, 1996:12)

- **Vaginal examination (PV)**

  – An internal examination is normally conducted during the first visit and is to confirm pregnancy by feeling the cervix and assessing the size of the uterus. A papsmear can also be obtained to screen for cervical cancer cells and the external genitalia are examined for lesions, scars or infection (Dickason *et al.*, 1994:207; Otte, 1997:32; Cronje *et al.*, 1996:85).

- **Urine tests**

  - A urine sample for testing is obtained at every visit, the following are checked:

    * ***Glucose:*** may occasionally appear in small amounts and is a reflection of the increased glomerular filtration rate and decreased tubular reabsotion during pregnancy. If large amounts of glucose are noted, screening should be done for gestational diabetes (Nichols & Zwelling, 1997:437; Dickason, *et al.*, 1994:208; Ratnam & Sen, 1997:6).

    * ***Protein:*** Traces or one plus of protein may be found in the urine as a result of vaginal secretions or blood. Large amounts of protein, 300 mg in 24 hours can be indicative of pre-eclampsia or infection. If infection is confirmed, patient is to be treated with antibiotics (Enkin, 1995:54; Nichols & Zwelling, 1997:437; Cronje *et al.*, 1996:177; Ratnam & Sen, 1997:6).

    * ***Nitrates:*** Nitrates in the urine can indicate a urinary tract infection which should be treated immediately with antibiotics. Urinary tract infections are associated with increased risk for the mother and fetus, especially for premature labour and low birth weight (Nichols & Zwelling, 1997:439).

    * ***Blood:*** Blood in the urine can indicate a urinary tract infection or a sign of vaginal bleeding or an abortion can be expected (Ratnam & Sen, 1997:8-9).

- **Ultrasound/sonar**

  - Ultrasound may be used to assess the pregnant client, the developing fetus, or both. It also visualizes internal maternal and fetal structures to guide other diagnostic procedures for example amnioncentesis. When maternal or fetal complications are expected or identified, ultrasonography serves as a valuable tool to confirm the diagnosis and follow-up on fetal status (Simpson & Creehan, 1996:91; Cronje, *et al.*, 1996:542; Gleicher, 1998:46; Sherwen *et al.*, 1995:325).

  - Of interest, ultrasound is also highly valued by women and can be seen as an expected part of prenatal care (Handler & Grachello, 1996:33). It has the potential to be a fascinating and happy experience for prospective parents, but real or mistaken diagnoses of fetal abnormality can lead to psychological devastation (Enkin, 1995:43).

- **Tetanus toxoid**

  - Tetanus toxoid is given during pregnancy in order to prevent neonatal tetanus which is a frequent cause of infant deaths when sterile procedures are not observed in cutting the umbilical cord (Department of Health, 2000:2).

- **Oedema**

  - Physiological oedema confined to the lower limbs is present in 50 to 80% of pregnant women during the last few weeks of

pregnancy and disappears after bedrest. This oedema develops gradually and is associated with a smooth rate of weight gain. Pathological oedema is characterised by the presence of oedema on waking in the mornings and can be caused by pre-eclampsia, cardiac lesion or chronic renal failure. As oedema in pregnancy is common and does not define a group at risk, it should not be used as a defining sign of hypertensive disorders in pregnancy (Enkin, 1995:55; Nolte, 1998:81; 289).

2.9.7 Special investigations

Special investigations are not done routinely, but the following screening tests are strongly recommended:

- ***Blood group***
  - **Rhesus[16] (Rh) factor and blood type** determinations are done to detect possible maternal-fetal blood incompatibilities. If the mother is Rh positive, the Rh antigen is in her blood whereas a Rh negative mother lacks the Rh antigen. A problem can exist if the mother is Rh negative and the father is Rh positive and the infant may inherit from the father. Specific antibodies may be produced in the mother's serum if the fetal erythrocytes enter her system, and these antibodies can cross the placenta to destroy fetal erythrocytes (Phillips, 1996:107; Dickason *et al.*, 1994:203).

[16] Rh = Rhesus

- If the mother is Rh negative, regular tests should be done to exclude the development of antibodies (Nolte, 1998:80; Williams, 1996:8; Ratnam & Sen, 1997:5).

- **Haemoglobin[17] (Hb)**

  - Hb should be assessed as increased plasma-levels at 24 to 32 weeks gestation further dilute Hb levels, resulting in possible anaemia and decreased oxygen-carrying capacity. The lowest limit of normal for the Hb in pregnancy is 12,6 g/dl (Doenges & Moorhouse, 1994:69; Williams, 1996:8; Bennett & Brown, 1999:175).

- **Human immunodeficiency virus (HIV)**

  - Though voluntary HIV counselling and testing (VCT) should be made available in antenatal clinics, routine screening to detect HIV infection is still controversial. There are many views as to the ethical issues involved in screening, however informed consent and appropriate counselling before the screening should be carried out (Bennett & Brown, 1999:217-218; WHO, 2000:10-14; Flake, 2000:14).

  - Infection with HIV continues to be a major health care issue. In 1994, HIV infection was the third leading cause of death for women between the ages of 25 and 44, the childbearing years (Katz, 2001:184).

17. Hb = Haemoglobin

- Knowledge of the HIV status of a pregnant woman will allow the pregnancy to be managed in a way that will decrease the risks for the woman and also allow for prevention of vertical transfer of the virus to the fetus/neonate (Pattinson, 1999:13).

- Note the maternal HIV status as HIV antibodies can be transmitted across the placenta between 15 to 20% that are present in all infants of HIV seropositive mothers. However only 20 to 40% of these infants will themselves eventually test positive for HIV (Doenges & Moorhouse, 1994:591-592; Gleicher, 1998:479; Cronje *et al.*, 1996:99, 288-289; Bennett & Brown, 1999:343).

- Because it is impossible to know the HIV status of all individuals or indeed to exclude the presence of other blood-borne infections which might constitute a transmissioin risk, the principal of *"universal precautions"* has been advocated as a basis for infection control policy (Bennett & Brown, 1999:343).

- **Rapid Plasmin Reagin[18] (RPR)/Venereal Disease Research Laboratory[19] (VDRL)**

  - Perinatal transmission of nearly all sexually transmitted diseases[20] (STDs) can influence pregnancy outcome for both the mother and the neonate (Sachs *et al.*, 1995:68).

  - A RPR/VDRL test is to screen for syphilis which can cause congenital abnormalities if it is transmitted to the fetus

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18 RPR = Rapid Plasmin Reagin
19 VDRL = Venereal Disease Research Laboratory
20 STDs = Sexually Transmitted Diseases

(Kenner & MacLaren, 1993:95; Bennett & Brown, 1999:217).

- **Treponema Pallidum Haemagglutinin Assay[21] (TPHA)**

  - In cases where the mother is tested positive for VDRL or RPR, a TPHA test should be done. A positive result is an indication for immediate treatment with penicillin and fetal growth and abnormalities to be watched for (Nolte, 1998:80; Ratnam & Sen, 1997:6).

  - It is sometimes recommended that testing be repeated before labour begins (Phillips, 1996:107).

- **Cervix (CX) Screen**

  - It is important to take a cervical smear at the first antenatal visit if one has not been done in the previous year. As pregnancy may increase cervical cancerous growth because of hormonal influences. This should be ruled out as pregnancy might need to be terminated for the treatment of the mother. Other vaginal infectious may also be detected, though the woman may be asymptomatic (Kenner & MacLaren, 1993:95; Gilbert & Harmon, 1993:13; Cronje *et al.*, 1996:85).

[21] TPHA = Treponema Pallidum Haemagglutinin Assay

2.9.8 Risk summary

All women should receive adequate supervision during pregnancy and particular attention should be paid to *"risk"* mothers. These include the following:

(a) Women under the age of 16 years or over the age of 35.

(b) Those who are pregnant for the first time and those who have had three or more pregnancies.

(c) Those suffering from hypertension, renal disease, cardiac conditions, diabetes mellitus or other systemic diseases.

(d) Unmarried mothers.

(e) Women whose previous obstetric history gives cause for concern, for example those who have had a previous caesarian section, still birth or postpartum haemorrhage, retained placenta or fistula.

(f) Women from the lower socio-economic classes (Doenges & Moorhouse, 1994:70; De Haan, 1997:185; Cronje *et al.*, 1996:69, 75, 91; Tinker & Koblinsky, 1994:13; Frigoletto & Little, 1988:55).

Depending on what the mother present with, she should be classified as low-, medium- or high risk.

2.9.9 Planning

Planning refers to deciding in advance as to what type of delivery the patient is expected to have and where. It further serves to discuss any views about the conduct of labour and formulate a birth plan if required. Further planning involves the type of feeding especially breastfeeding to be

encouraged as well as future contraception that will suit the woman's need (Bennett & Brown, 1999:231).

2.9.10 Referral for opinion

Every midwife who provides antenatal care should have a policy of when and how to refer patients to other team members (Nolte, 1998:113). Keep record of any referral as well as the reason as to why the patient has been referred by the midwife. The main purpose of screening for risk factors is to detect those women who are more likely than others to have an adverse outcome of pregnancy and to refer them to a more skilled and better equipped level of care (Royston & Armstrong, 1990:158; Maine, 1993:37). Patient's records, referral letters or telephones can be used to communicate in between team members and departments.

2.9.11 Health education in pregnancy

Pregnant woman has the right to participate in decisions involving her well-being and that of her unborn child, thus perinatal education must be presented purposefully and the end result must focus on a healthy baby and a healthy and empowered mother, family and community (Richter, 2002:9; Steward & Steward, 1978:2).

If women are to make effective use of the medical resources available, they need to know when to seek help. Opportunities for effective health education are greatly increased during pregnancy as most women are eager to do what is best for their babies. Education given should cover:

(a) Nutrition, and the mother should be encouraged to eat a balanced diet, as pregnancy makes extra demands on her.

(b) The importance of sufficient exercise, rest and sleep.

(c) The pregnant woman should be advised on/to:

- avoid contact with those suffering from infections,
- refrain from taking medications which have not been prescribed,
- the dangers associated with smoking,
- the use of alcohol and other drugs should be brought to her attention,
- clothing,
- sexual intercourse,
- her work,
- dental care,
- travel.

(d) Inform the woman about the danger signs for example swelling of the feet, face and hands, vaginal bleeding and early rupture of membranes.

(e) Preparation for breast-feeding commences during the prenatal period and all possible steps are to be taken to encourage it.

(f) Various aspects of child care, particularly infant feeding and hygiene, and psychologically sound childrearing practices should be encouraged.

[g] Preparation for delivery: the mother should be told what to expect and what is expected of her during the various stages of labour [De Haan, 1997:186; Royston & Armstrong, 1989:158; Pattinson, 1999:14; Williams, 1996:21-30; Kitzinger, 1995:71-86].

2.9.11.1 Goals of antenatal education

- To build confidence and self-esteem so as to enable parents to take control over their labour and the birth of their children.

- To enable parents to ask questions and seek information so that they can make informed choices and communicate more effectively with health professionals.

- To create awareness amongst women of their own bodies/feelings/ needs so that they can achieve positive physical and mental health.

- To educate women about the course of pregnancy, labour and the puerperium so that they can expect a normal pregnancy, labour and puerperium.

- To challenge the notion that health issues should be left to medical experts and to encourage parents to take responsibility for their own health and the health of their children [Nolan, 1997:1201].

2.9.12 Follow-up visits to the clinic

After the first visit the patient with a normal pregnancy is advised to visit the clinic or a doctor every four weeks until the 28th week of pregnancy,

then every two weeks until the 36th week, and then weekly until the end of her pregnancy. However, she should be advised that, should any complication arise, she must contact the prenatal clinic or her doctor immediately for an appointment (Williams, 1996:19; Bennett & Brown, 1999:231; Lewis & Chamberlain, 1990:40).

2.9.12.1 Procedure for follow-up visits

Action	Explanation
❑ The special investigations performed during the first visit (and/or thereafter), should be reviewed.	❑ If any deviations or abnormalities are diagnosed, it must be treated immediately.
❑ Ask the patient specifically if there are any complaints. These complaints should be thoroughly evaluated. Give the necessary treatment, advice and reassurance.	❑ Minor complaints are common during pregnancy and the midwife should manage them in such a way as to prevent any further complications. This will strengthen the positive relationship between patient and midwife.
❑ Weigh the patient.	❑ Determine adequate weight gain.
❑ Take the patient's blood pressure while she is lying on her side (after she has rested on the examination couch for 5 minutes).	❑ Moderate decrease in blood pressure during pregnancy is physiological. A rise in blood pressure is a danger sign.
❑ Test the urine for protein, glucose and ketones.	❑ The presence of any of these three may indicate maternal and fetal complications.
❑ The abdominal examination and auscultation are done.	❑ To confirm fetal growth.
❑ The symphysis-fundus measurement (in cm) is determined.	❑ To correlate and confirm fetal growth.
❑ Take note of oedema and varicose veins.	❑ Oedema may indicate that the patient needs more careful observation. Varicose veins are evaluated and the necessary treatment given, for example, elastic support hose.

Action	Explanation
❑ Encourage breastfeeding and give advice about the care of the breasts and nipples.	❑ Midwives should be enthusiastic and motivated about breastfeeding, since it is the best feeding for babies.
❑ Keep the correct times for external examination, the vaginal examination and clinical pelvimetry, in mind.	❑ In this way many complications of labour may be excluded.
❑ A repetition of the test for the patient's haemoglobin, especially in border-line cases, is not superfluous.	❑ Haemoglobin decreases physiologically during pregnancy and this may become pathological.
❑ The date and time of the next visit should be clearly arranged with the patient, preferably in writing, before she leaves the clinic.	
❑ During the follow-up visit the midwife should ensure the co-operation and respect of the patient by her skill and professional behaviour.	

(Williams, 1996:19-20; Lewis & Chamberlain, 1990:42)

2.10 CONCLUSION

In this chapter, an extensive literature review covers the concepts of quality and quality assurance, primary health care as well as the role of the midwife and antenatal care. In the next chapter, the research methodology of this study will be viewed.

CHAPTER 3

Research methodology

3.1 INTRODUCTION

A description of the research methodology, research process, validity and reliability as well as ethical consideration are necessary because they set guidelines as to how the research study should be conducted. This chapter will consist of an outline of the research methodology (design and method) used as well as the course of the research process followed. The validity and the reliability of the study as well as the ethical consideration taken into account during the study will also be discussed and lastly, an outline of the value of the study will be given. The research methodology and process will be discussed as separate entities, while validity and reliability, the ethical considerations as well as the value of the study will be discussed for the study as a coherent whole.

3.2 METHODOLOGY

3.2.1 Research design

The research design is described by Talbot (1995:198), as the backbone structure of a study by determining how the study will be organized, when data will be collected and when interventions, if any, are to be implemented. According to Woods and Catanzaro (1988:117) research designs indicate what activities the investigator and participants should be performing and

the order in which they should occur. Without a research design, the investigator's activities may not suit the purpose of the study. Based on the purpose of the study and in order to achieve its objectives, a non-experimental research design of a descriptive and exploratory nature was used. According to Burns and Grove [1997:27] as well as Uys and Basson [1991:45-46], a non-experimental design of a descriptive nature must be used when obtaining information about real life situations such as the human experiences, meanings and perceptions of the quality of antenatal care rendered to pregnant women. This design was therefore used because an experimental research design could not be used as the assessment of quality assurance of antenatal care rendered to pregnant women is a human experience which can be expressed in different degrees by respondents. The study is descriptive in nature because the area of research is one to which little attention has been given, as most of the existing research studies are concentrated on the nursing process and procedures in midwifery. The exploratory nature of this study is due to the relative newness of the phenomenon of quality assurance in nursing service delivery and management in general [Uys & Basson, 1991:38]. As a research topic, it is only in the last decade that quality assurance has been recognised as a phenomenon on its own and not as part of nursing processes. As no-variables have been manipulated a qualitative design of a descriptive and exploratory nature had to be used.

3.2.2 Research method

The survey is a method of data collection by using questionnaires, personal interviews and checklists. Therefore, this method was used to collect data as the data was both explanatory and descriptive in nature. Questions were asked to determine the opinion of people about care rendered as well

as the reasons for their opinions (Uys & Basson, 1991:47-49). The checklists were used to obtain objective descriptive data of the care that was rendered.

3.2.3 Research techniques

According to Wilson (1989:336) the choice of a data-collection method is one of the most important steps in the research process. Different instruments can be used on their own or in combination, with one another. The following techniques were used:

- Structured interviews based on structured interview schedules (see Appendixes E, F and G) were used to determine the views of health personnel working in the antenatal department as well as pregnant women who visited the antenatal department, regarding the sources of evidence for standards (structure-, process- and outcome-) of care been rendered and or received.

- Checklists (see Appendix J) based on observation, were used to assess the care rendered regarding the sources of evidence for structure- process and outcome standards.

The structured interview schedule with the clients was completed by fieldworkers. The structured interview schedules with health care personnel were completed by the researcher. Training of the two fieldworkers (see Appendixes H and I) lasted one day. They were part of the pilot study done in Odendaalsrus to become conversant with the interview schedule. One fieldworker withdrew after the pilot study was conducted.

3.2.3.1 Validity and reliability of the research instruments

The validity and reliability of the research instruments were assured as follows:

3.2.3.1.1 Structured interview schedule

Validity and reliability of the structured interview schedule were ensured by:

- Evaluation of the structured interview schedule by domain experts at the University of the Free State and Managers of health care institutions in the Free State was done regarding content validity, the logical and sequential flow of questions and wording.

- The structured interview schedule was tested in the antenatal department of the primary health care clinic of the local authority of Odendaalsrus to determine the validity and reliability. Seventeen clients (pregnant women), one supervisor, four professional nurses and one enrolled auxiliary nurse took part in the pilot study. The fieldworkers were part of the pilot study in order to give them a clearer understanding of the study objectives and to prepare them for the data collection process. After completion of the data analysis of the pilot study the necessary alterations in the schedule were made. Retesting of the altered schedule was done which then indicated the validity and reliability.

- The respondents participating in the pilot study were not included in the sample of the study.

3.2.3.1.2 Checklist

The validity and reliability of the checklists were ensured as follows:

- A literature study was done to determine the sources of evidence to be set for the structure-, process- and outcome standards

- Evaluation of the checklists were done by domain experts at the University of the Free State and Managers of health care institutions in the Free State regarding the content- and face validity and the logical order to be followed.

- The checklists were pre-tested in only one of the antenatal clinics of the primary health care department of the local authority of Odendaalsrus to ensure validity and reliability. Regarding the sources of evidence for the process- and outcome standards, eight physical examinations and records were evaluated in the pilot study. The checklist for sources of evidence for structure standards was also tested in the same clinic. After completion of the data analysis of the pilot study, the necessary alterations in the checklists were done in such a way as to include an evaluation of the external environment and the disposal of waste. Retesting of the altered schedule was done which then indicated the validity and reliability.

3.2.4 Population

The study was conducted at Welkom Primary Health Care Centre which is run by the local authority. The Primary Health Care Centre consists of the following clinics: Bophelong, Bronville, Khotsong, Riebeeckstad, Thabong, Tsepong and Welkom.

All health care personnel (professional nurses) working in the antenatal department at each clinic as well as the supervisors of the clinics were included in the study (see Table 3.1). As the number of personnel was very small (eight supervisors and 22 professional nurses) all were included in the sample. No enrolled nurses-, enrolled auxiliary nurses or lay care givers who form part of the population were included, because they do not provide specialized midwifery care

TABLE 3.1: Health personnel working in the different clinics

CLINIC	Supervisor	Professional nurse
A	1	2
B	1	4
C	2	8
D	1	2
E	1	3
F	1	1
G	1	2
Total	**8**	**22**

The client population was all pregnant women attending the clinics for antenatal care and who had visited the clinic for the third time or more. First and second time visitors were excluded and the reason for this was, that services could be evaluated more objectively after the clients had been exposed to it several times.

TABLE 3.2: Clients attended antenatal care clinics per week

CLINIC	Clinics days of antenatal care	Number of clients	Times visited by researcher and fieldworker
A	π	11	1
B	'	12	2
C	π	24	2
D	'	15	2
E	⊗	25	2
F	π	17	1
G	'	4	4
Total 7		**108**	**14**

' = All week days
π = Tuesdays
⊗ = Fridays

3.2.5 Sample of the study

The respondents in the sample of the study consisted of health care personnel and pregnant women.

3.2.5.1 Health personnel

Only nursing personnel who worked in the antenatal care department as well as all supervisors of the clinics who gave written consent were included in the sample. Personnel who were either on annual- or sick leave were excluded from the sample. All supervisors of the seven clinics were included in the sample with the exception of one clinic where two supervisors were included.

The reason for this was that the allocated supervisor was on leave when the study begun and returned before the study ended. The mentioned supervisor requested to be included in the study – therefore both acting and allocating supervisors were included the sample.

3.2.5.2 Clients

The clinics render antenatal care to pregnant women on different days [see Table 3.2]. Therefore, only the pregnant women who visited the antenatal department on the days mentioned in table 3.2 were included in this study. The inclusion criteria were pregnant women who:

- visited the clinic for the third time and more
- those who gave written consent.

3.3 IMPLEMENTATION OF THE RESEARCH PROTOCOL

3.3.1 Entrance to the field

According to Talbot [1995:110] risks are usually an inherent part of any study. Therefore careful examination must be made to determine if the subjects' rights have been protected. To abide by this ethical code, permission was obtained from:

- the ethical committee of the Faculty of Health Sciences, University of the Free State [see Appendix A], and

- the local authority to carry out the study in the clinics in Welkom and to do the pilot study in Odendaalsrus [see Appendixes B and C].

The seven clinics in Welkom are the only primary health care clinics where antenatal care is rendered to pregnant women. The researcher explained the nature and the purpose of the study to the Nursing Service Managers (after which permission was granted). The respondents' voluntary permission was also received, after explanation of the aim and objectives of the study was given. The fieldworker was also introduced to the Nursing Service Managers.

3.3.2 Collection of data

Data was collected as follows:

The data collection commenced the first week in April 2001 and ended the first week in June 2001. The duration of the data collection was influenced by the many public holidays that fell within April and May and resulted in clinics being closed.

Before commencing the study all antenatal clients as well as health personnel were informed about the aims and objectives of the study. The researcher and fieldworker also explained to the clients the inclusion criteria for pregnant women and the reasons thereof. The necessary voluntary consent was obtained from the personnel and clients (see Appendix D).

3.3.2.1 Conducting structured interviews

Structured interviews were conducted with clients and health care personnel.

3.3.2.1.1 Clients - pregnant women

The structured interviews with the pregnant women (see Appendix G) were conducted by only one fieldworker and was based on the structured interview schedule. Interviews were conducted in privacy in either a consulting room, staff room or the kitchen (as the kitchen was the only vacant space in some clinics).

Before interviewing the client, the fieldworker explained in the client's language what the structured interview schedule entailed and informed the respondent about the presence of the researcher in the examination room while being examined. Individual consent was given in privacy as clients were called in one by one. Both the fieldworker and client were sitting at a desk facing one another. After completion of the structured interview the client was than referred to the midwife for the physical examination. The fieldworker continued with the interviews until she attended to all clients. As the researcher attended to the physical examination as executed by the midwife, the fieldworker conducted the interviews alone.

3.3.2.1.2 Health personnel - Supervisors and professional nurses

The structured interview schedules for the structured interview with the health personnel (see Appendixes G and H) were used. Informed consent (see Appendix D) was only obtained from health personnel after the service for the antenatal clients ended. The interviews were also conducted after the service ended. Interviews were conducted privately (one-by-one) with professional nurses without the presence of the supervisors in the consulting rooms. One professional nurse did not want to partake as she

was busy with other clients and indicated that she did not have the time to partake. The researcher asked the professional nurse if it was not possible to interview her between seeing clients, but the professional nurse indicated that she was not interested in the study.

Regarding the supervisors, the necessary informed consent was obtained [see Appendix D] before conducting the interviews. The interview was conducted in the supervisor's office. Privacy was maintained at all times.

3.3.2.2 Completion of the checklist

The checklist [Appendix J] was completed to evaluate the sources of evidence for structure-, process- and outcome standards.

3.3.2.2.1 Evaluation of the sources of evidence set for structure standards

The sources of evidence set for evaluation of the structure standards included

- Physical environment and layout of the centre
- Mission statement, philosophy, goals and objectives of the Antenatal Department,
- Policies and procedures,
- Human resource management – personnel provision, utilization and development,
- Quality improvement programmes,
- Management of material resources - equipment, instruments, and stock [medical and general]

The completion of the checklist was done after all the clients had left and the structured interviews were completed. The supervisor, or if not available, any other professional nurse accompanied the researcher during the completion of the checklist. Confidentiality and anonymity were maintained at all the different clinics involved by keeping all information separately to ensure that nobody could access the information. Alphabetical letters [A to G] were used to identify the different clinics.

3.3.2.2.2 Evaluation of the sources of evidence set for process standards

The evaluation of the sources of evidence set for process standards was done whilst conducting the physical examination. The researcher, standing next to the examination couch, observed the nursing actions of the examining midwife with regard to the antenatal care given as well as the charting of such activities and findings. Records were also evaluated for completeness and correctness. Both the client as well as the examining midwife gave voluntary and informed consent that the researcher may be present and observe the antenatal care that was rendered.

3.3.2.2.3 Evaluation of the sources of evidence set for outcome standards

The evaluation of the sources of evidence set for outcome standards was done after the examination of the client in the examination room. The researcher evaluated the client's record for completeness and correctness of the physical examination being done as well as previous charting of outcome activities. As the procedure at clinics is that the clients take their record home, the client was requested to wait until after the record was

checked. The record was then given back to client as they keep it with them should it be necessary for any after hour care needed or for the confinement.

3.3.3 Exit from the field

After the data has been collected, exit from the field took place. No revisits by the researcher or the fieldworker took place as all the necessary data had been obtained. The Nursing Service Managers, supervisors, professional nurses as well as the clients were thanked for their participation.

3.4 VALIDITY AND RELIABILITY OF THE STUDY

The validity and reliability of the whole study was ensured as follow:

- **Data triangulation**

According to Burns and Grove (1997:241) data triangulation refers to the collection of data form multiple sources, with similar foci to obtain diverse views from participants about the topic under study. In this study data was obtained form health care personnel, pregnant women and records.

- **Theoretical triangulation**

Through literature review of books, articles, discussions with domain experts as well as by consultation with practicing practitioners (not included in the study) regarding clarity of the structured interview schedule and the

sources of evidence set in the checklist, theoretical triangulation was ensured.

❑ Methodological triangulation

According to Burns and Grove (1997:242) methodological triangulation is the use of two or more research methods in a single study. In this study, a literature study was done and based on it, the structured interview schedule and checklist were constructed to use as techniques to collect the necessary data. In this way methodological triangulation was ensured and maximized.

- Validity and reliability of the study were further assured through monitoring of the data process by the researcher, establishing equivalence by defining the sampling criteria, training fieldworkers, using only pregnant woman, (homogeneity) and heterogeneity (subjects were included from different clinics, age, gender and qualifications).

3.5 DATA ANALYSIS

The analysis of all data obtained was done on a nominal descriptive level. The Department of Biostatistics of the University of the Free State conducted the analysis. The data obtained through the structured interviews was analysed as follows:

- Close ended questions were analysed and described on a descriptive ordinal level (frequencies and percentages).

- Open ended questions were analysed using the method described by Tesch (in Creswell, 1994:144-155).

The data obtained through the checklist was analysed on a descriptive ordinal level only.

3.6 ETHICAL ISSUES

Conducting nursing research requires not only expertise and diligence but also honesty and integrity (Burns & Grove, 1997:195). When human subjects are used in the research study, respondents have to know the activities they will be involved in, that their rights will be protected, that their person will be safeguarded and that the mechanisms necessary to ensure their protection are adequate (Wilson, 1993:244-246). According to Burns and Grove (1997:200) researchers and reviewers of research have an ethical responsibility to recognize and protect the rights of human respondents. The human rights that require protection include the right to:

(a) self-determination,

(b) privacy,

(c) anonymity and confidentiality,

(d) fair treatment and

(e) protection from discomfort and harm.

In view of the above, the following ethical actions were adhered to in this study:

(1) Permission granted

Permission to do this research was granted by:

- Ethical Committee of the Faculty of Health Sciences, University of the Free State (Appendix A);
- Transitional Local Authority of the Department of Health, Welkom, for using their clinics in order to get data from health personnel and clients visiting the antenatal departments of the health care centre (Appendix B); and
- Transitional Local Authority of Department of Health, Odendaalsrus for the pilot study that was done (Appendix C).

(2) Protection of human rights

The human rights of the respondents were protected as follows:

- Informed consent (see Appendix D) was obtained from all respondents included in the study.
- All respondents knew they had the right to partake, not to partake or to withdraw at any time from the activities they were involved in.
- The right to privacy, anonymity and confidentiality was protected by keeping all data confidential and no respondent or clinic could be identified by assigning a letter of the alphabet (from A to G) to each clinic.

- Results will be made known to the health care authorities and to the respondents on request after completion of the study.

(3) Obtaining informed consent

Written permission to participate in the study was obtained from participants, both pregnant women and health care practitioners. An explanation regarding the purpose of the study, the methods of obtaining information and how the information would be used were given to the respondents. The structured interview schedule was provided with instructions ensuring anonymity and voluntary participation.

3.7 PROBLEMS ENCOUNTERED

- One fieldworker withdrew due to work commitments. As someone else could not be found to replace the withdrawn fieldworker, the study was conducted with only one fieldworker.

- Certain clinics had to be visited more than once. The reason for this was that on the day of visiting the clinic, there was only one or no pregnant women who visited this particular clinic for that day. At one clinic, only four pregnant women could be interviewed.

- It was also noticed that the results of special investigations were attached to client's records without keeping a copy of this information in the clinic itself. In some clinics a hard cover book was kept where the following information of the client is entered into namely: date, name, address, blood pressure, weight, urine, RPR, Rhesus factor, tetanus, gravida, para, gestation, fetal lie, -presentation, -position, -heart, movements, -head and amnion fluid.

In other clinics only the client's name and the return date for follow-up were recorded, while no information of the client was kept in some clinics. Should the client loose her antenatal card, no data can be retracted.

- Some pregnant women were not prepared to be interviewed, but gave permission that they may be observed during the physical examination as well as for their records to be evaluated for completeness and correctness [sources of evidence for process and outcome standards]. Therefore the total observations of the physical examination were more than the number of pregnant women who were interviewed.

- Some pregnant women were not prepared to wait for their records to be evaluated and insisted to leave after the physical examination. Therefore the total number of records evaluated [sources of evidence for outcome standards] were less than the number of pregnant women who were observed during the physical examination.

3.8 VALUE OF THE STUDY

The results will serve as a basis for policy makers and programme managers to design quality assurance programmes and services that are responsive to the needs of pregnant women. This study will not only help antenatal care services in the primary health care settings in Welkom but all primary health care settings in South Africa. It will also benefit all antenatal services rendered by hospitals in South Africa.

3.9 CONCLUSION

The research methodology was discussed in depth in this chapter. A qualitative design of a descriptive and explanatory nature was used. A structured interview based on an interview schedule and a checklist were used as research techniques to collect the necessary data. Validity and reliability of the data collection tools as well as of the study as a whole were ensured. The protection of the human rights of the respondents was strictly adhered to. The findings of the data analysis will be discussed in the next chapter.

CHAPTER 4

Results of study

4.1 INTRODUCTION

"Data analysis entails categorizing, arranging and summarizing the data and describing them into meaningful terms" (Brink, 1996: 178). Data analysis involves three activities namely, data reduction, categorizing and interpretation of the data. The data obtained from the research was analysed according to the theoretical basis and the results were described on the descriptive nominal level.

4.2 REDUCTION AND CATEGORISATION OF DATA

Data reduction is a process of selecting, focusing, simplifying and transforming the data in a transcription (Lundgren, 2000:19). Therefore because of the volumes of data acquired in a non-experimental design of a descriptive nature, initial effort at analysis focused on reducing the data to facilitate examination. During the data reduction phase of the qualitative data obtained form the interview, the following steps were adhered to as described by Tesch (in Creswell, 1994: 145-155).

- To form an idea of the completeness of the data, the principle and co-encoder first worked through all the data from the questionnaires.

- The principal encoder and the co-encoder worked separately, while categorising the data by placing the inferences to the words, the statements and phrases which were used in the content under categories.

- The coding system was accepted and the preliminary categorization of responses were done,

- The categorization of the responses were done as follows:
  - main categories were established first
  - sub categories were identified under each main category
  - the data were then organised into main- and sub-categories.

- The final categories were accepted by both the principle and co-encoder and all further data analysis were done according to the accepted coding system and categories.

4.3 INTERPRETATION OF THE DATA

The data obtained from the closed-ended- and open-ended questions of the structured interviews as well as the data obtained from the checklists will be discussed under the following headings:

4.3.1 Structured interviews

4.3.1.1 Pregnant women (clients),

4.3.1.2 Health care personnel, and

4.3.1.3 Supervisors

4.3.2 Checklists

4.3.2.1 Sources of evidence for structured standards,

4.3.2.2 Sources of evidence for process standards, and

4.3.2.3 Sources of evidence for outcome standards.

4.3.3 Comparison on topics related to structured interviews and checklists

4.3.3.1 Health education,

4.3.3.2 Privacy, and

4.3.3.3 Personnel attitude.

4.3.1 Structured interviews

The data obtained from the close- and open ended questions of the questionnaires used in the structured interviews schedule will now be discussed.

4.3.1.1 Pregnant women (client)

One hundred clients were interviewed at seven clinics though 108 respondents gave permission to partake in the study.

4.3.1.1.1 Biographic data

- **Age of client**

The ages of the respondents varied between 15 and 39 years with a median of 27 years.

- **Number of pregnancies**

The number of pregnancies of the respondents varied between one- and six pregnancies with a median of two pregnancies.

- **Babies born alive**

Babies born alive of the respondents varied between no children to four babies born alive. The median was one child.

The discussion of the data that follows, will include the questions that have been put to the pregnant women/client:

4.3.1.1.2 Attendance

- **Question: Do you always attend this clinic?**

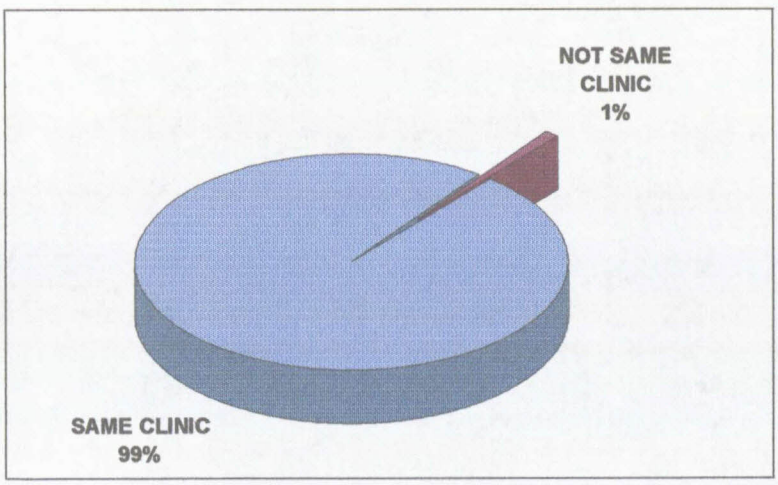


FIGURE 4.1: Attendance to same clinic (N = 100)

According to Figure 4.1, 99% of the respondents indicated that they do attend the same clinic every time.

Reason for options of respondents

- Geographically and conveniently near – 77
- The only clinic though far - 19
- Good reputation of the clinic, though far – 2

- Service being satisfactory – 1
- Geographically too far – 1

4.3.1.1.3 Always seen by same midwife

- **Question: Are you always seen by the same midwife?**

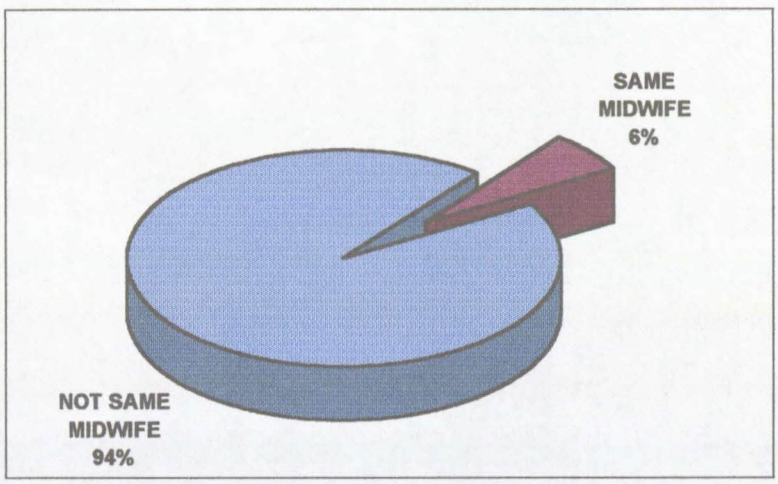


FIGURE 4.2: Same midwife (N = 100)

With reference to Figure 4.2, only 6% of the respondents were seen by the same midwife.

Reason for options of respondents

Ninety-four percent of the respondents indicated that they were seen by the available midwife had been allocated to the antenatal service department on that specific day. This midwife is not always the same midwife as on the previous visits.

4.3.1.1.4 Seen by doctor in clinic

- **Question: Has the doctor ever attended to you in this clinic?**

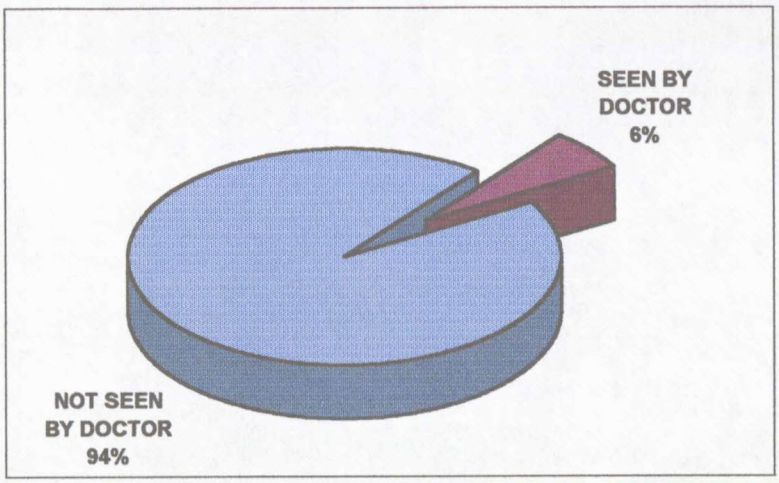


FIGURE 4.3: Seen by doctor in clinic (N = 100)

According to Figure 4.3, 6% of the respondents have been seen by a doctor, whereas 94% of the respondents indicated that they have not been seen by a doctor.

Reason for options of respondents

- Would like to see a doctor – 16
- No doctor available – 78

4.3.1.1.5 Functioning of the clinic

- **Question: Give your opinion about the functioning of this antenatal clinic**

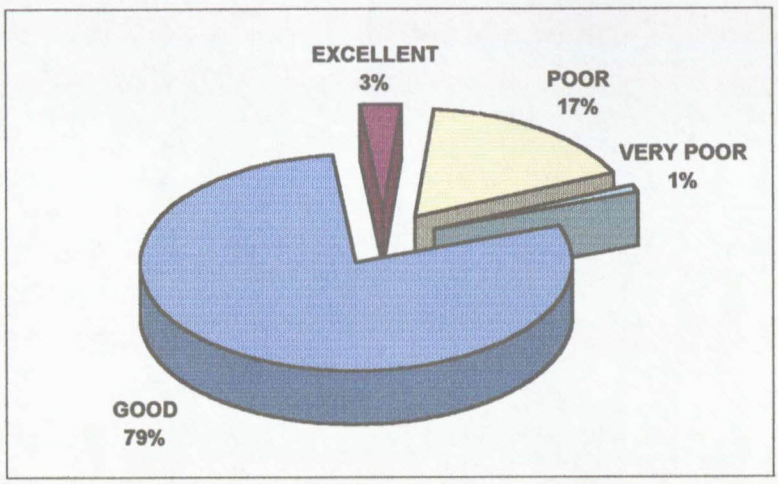


FIGURE 4.4: Functioning of clinic (N = 100)

The functioning of the clinic was evaluated in terms of **excellent, good, poor and very poor.** Figure 4.4 depicts that 82% of the respondents indicated that the functioning of the clinic was **excellent to good**, while 18% of the respondents indicated that the functioning of the clinic was **poor to very poor**.

Reason for options of respondents

The respondents who were not satisfied, gave the following reasons for their options (please note that some reasons given were also indicated by respondents who chose the excellent to good option):

- There is no health education – 1
- Too many people seen on same day – 2
- Environment is not attractive – 1
- The first visit is a hazard, we come too early – 2

- We have to stand in the cold and wait long – 6
- Only 10 people are seen per day – 1
- Clinic too small and always overcrowded – 7
- Not informed and does not involve me – 1
- No medications available – 2
- Some staff are rude and unfriendly – 3
- Get no help from nurses – 1
- Have to wait outside while cleaners clean the waiting area – 1
- Are waiting with other clients with different diseases – 1
- Lack of medical doctor – 1
- Staff shortage prevents progress – 1
- Waiting long outside before clinic open – 3

4.3.1.1.6 Service acceptability

- **Question:** **Is the service acceptable in terms of:**
  - Time of antenatal clinic?
  - Days of antenatal clinic?
  - Waiting time before attended to?
  - Accessibility?

TABLE 4.1: Service acceptability (N = 100)

SERVICE ACCEPTABLE	Yes		No		Yes and No		Not applicable	
	F[22]	%	F	%	F	%	F	%
Time	72	72	28	28	-	-	-	-
Days	98	98	2	2	-	-	-	-
Waiting time	40	40	60	60	-	-	-	-
Accessibility	64	64	34	34	1	1	1	1

[22] F = Frequency

According to Table 4.1, respondents who responded positively were; 72% towards time, 98% towards days and 64% towards accessibility of the antenatal clinic. The waiting time in the clinic was **not acceptable** for 60% of the respondents. One percent of the respondents answered yes as well as no to accessibility and 1 % of the respondents did not respond at all.

Reason for options of respondents

Wait too long

- Waiting time unacceptable and killing us - 55
- Wait whole day and have to go home without been attended to - 4
- Too many patients and few staff - 1

Accessibility

- Clinic is geographically far but is the nearest clinic - 35
- Two clinics needed in the same area - 1
- Far, but coming to this clinic because of the good reputation - 1

Time of the clinic is not acceptable

- Staff tell them to come at a certain time to the clinic, but then the gates were still locked - 16
- Wait outside while it is freezing cold - 6
- Time is suitable for the clinic and staff, but not for them - 4
- Too many clients are seen in one day - 2

4.3.1.1.7 Referrals

- **Question: Do you receive a note when referred to other health services?**

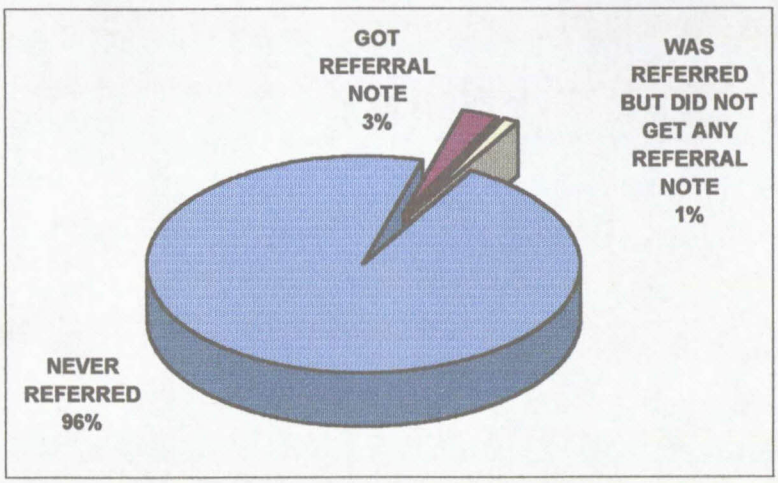


FIGURE 4.5: Referral note given (N = 100)

Figure 4.5 depicts that 3% of the respondents did get a referral note, 1% the respondents who were referred, did not get any referral note and 96% of the respondents were never referred, as it was not necessary.

Reason for options of the respondents

- Accompanied by a nurse – 2
- Accompanied by a cleaner – 1
- Did not get a referral note, but was merely told to deliver her baby elsewhere – 1

- **Question: Do you know where to go to when referred?**

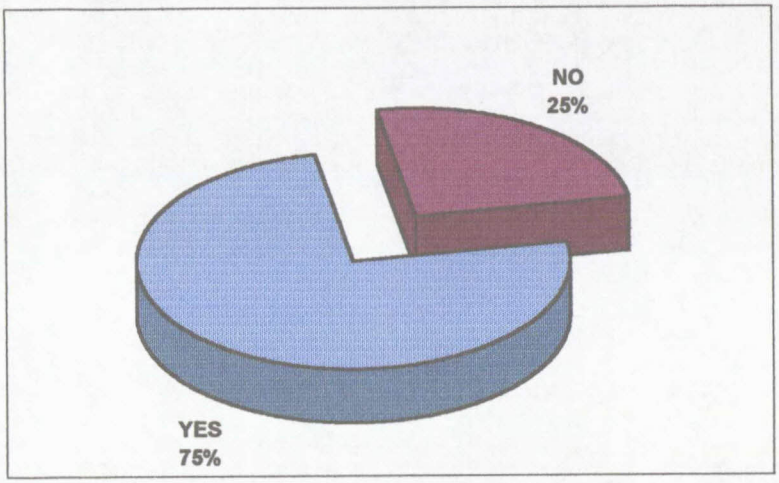


FIGURE 4.6: Do know where to go to (N = 4)

According to Figure 4.6 from the four referrals reflected in 4.3.1.1.7 3 (75%) of the respondents knew where to go to while only 1 (25%) of the respondent did not know where to go to.

Reasons for options of respondents

- Chaperoned – 2
- Given direction – 1
- Did not know and had to find her own way – 1

4.3.1.1.8 Meeting of needs/problems

- **Question**
  - Does this service meet your needs?
  - Are you involved in making decisions?
  - Are you informed about your health status?
  - Is confidentiality being maintained about you as a client?
  - Do you receive the care you expected from the personnel?

TABLE 4.2: Meeting of needs/problems (N = 100)

SUBJECT	Yes		No	
	F	%	F	%
Meeting your needs	85	85	15	15
Involvement in decisions	52	52	48	48
Informed about health status	42	42	58	58
Confidentiality maintained	100	100	-	-
Receiving of expected care	82	82	18	18

Table 4.2 depicts that the respondents indicated that their needs/problems are being met pertaining to meeting of needs (85%), confidentiality (100%) and expected care (82%). No information given about their health status (58%) and not involved in decision-making (48%) were experienced negatively by respondents.

Reasons for options of respondents who chose "NO" as an answer

Service meeting the needs of clients

- Not always/partially meet my needs – 5
- Pay for a doctor to see me/private doctor – 2
- No education/advice – 3
- Sometimes no medication – 1
- "I only come here, but don't value it" – 1
- No moral support for personal problems – 1
- No personal gain for coming hear – 1
- No purpose at all here – 1

Involvement in decision-making

- I'm not always told/just told – 24
- Not involved/never involved/not really involved – 24

Informed about health status

- Not even after palpation – 13
- Not/never informed – 43
- Nobody ever explains anything – 1
- No communication in this aspect – 1

Receiving expected care

- I'm not told about my unborn baby – 5
- Staff is rude and I am afraid to talk – 2
- Exposed to cold weather – 1
- No medication – 2
- No treatment for pregnancy – 1
- Was not addressed accordingly – 1
- Not satisfied at all -1

- The staff is not communicating/sulky – 1
- They told me not to complain – 1
- Not getting what I expect – 1
- No health education – 2

4.3.1.1.9 Health Education

- **Question:** **Was the following health education given to you?**
  - Diet, exercise, rest, relaxation, medication, personal hygiene, clothing, sexual activity, minor ailments, danger signs in pregnancy, changes in pregnancy, fetal development, breast preparation, signs of labour and postnatal care

TABLE 4.3: Health education given (N = 100)

SUBJECT	Yes		No	
	F	%	F	%
Diet	31	31	69	69
Exercise	21	21	79	79
Rest	27	27	73	73
Relaxation	28	28	72	72
Medication	37	37	63	63
Personal hygiene	29	29	71	71
Clothing	31	31	69	69
Sexual activity	16	16	84	84
Minor ailments	28	28	72	72
Danger signs in pregnancy	30	30	70	70
Changes in pregnancy	28	28	72	72
Fetal development	17	17	83	83
Breast preparation	37	37	63	63
Signs of labour	33	33	67	67
Postnatal care	15	15	85	85

According to Table 4.3, 63% to 85% of the respondents indicated that no health education was given to them on the above topics.

Reason for options of respondents

Respondents who chose the **no** option indicated that health education was simply not given whereby respondents who chose the **yes** option, indicated that health education was told, discussed, explained to or only mentioned.

4.3.1.1.10 Personnel

- **Question:** **(a) Are health personnel friendly and communicative?**
  (b) Are health personnel unco-operative?

TABLE 4.4(a): Health personnel (N = 100)

SUBJECT	Yes		No		Not answered	
	F	%	F	%	F	%
Friendly	86	86	13	13	1	1
Communicative	79	79	20	20	1	1

TABLE 4.4(b): Health personnel (N = 100)

SUBJECT	Yes		No		Not answered	
	F	%	F	%	F	%
Unco-operative	13	13	86	86	1	1

Table 4.4(a) and (b) depicts that the respondents indicated that the health personnel are friendly (86%), communicative (79%) and co-operative (86%).

Reasons for options of respondents who chose "NO" as an answer

Not friendly

- Rude – 4
- Not all of them are always friendly – 8
- Staff has a negative attitude – 1

Not communicative

- Has no time for client – 1
- Talks little to client – 9
- Does not answer all questions – 1
- Not communicative – 6
- Some members never talk and are sulky – 1
- Some are rude – 1
- Language problem 1

Unco-operative

- They are rude – 1
- Some of them are un-cooperative – 10
- They do not give direction – 1
- We have to wait long hours to be served and if we ask to come later to the clinic, they refuse – 1

- **Question:** **(a) Are the administrative personnel friendly and communicative?**

  (b) Are the administrative personnel unco-operative?

TABLE 4.5(a): Administrative personnel (N = 100)

SUBJECT	Yes		No	
	F	%	F	%
Friendly	87	87	13	13
Communicate	84	84	16	16

TABLE 4.5(b): Administrative personnel (N = 100)

SUBJECT	Yes		No	
	F	%	F	%
Unco-operative	11	11	89	89

Table 4.5(a) and (b) depicts that the respondents indicated that the administrative personnel are friendly (87%), communicative (84%) and co-operative (89%).

Reasons for options of respondents who chose "NO" as an answer

Not friendly

- Very unfriendly – 6
- Some are rude – 3
- Very wrong attitude – 1
- Very harsh – 1
- Most of them are nasty – 1
- Has foul language – 1

Not communicative

- Do not communicate – 11
- Talks very little to us – 1
- Do not talk politely – 3
- Personnel are cheeky – 1

Unco-operative

- Simply unco-operative – 10
- Personnel talks badly to those who comes late – 1

- **Question:** **(a) Are the cleaners friendly and communicative?**
  (b) Are the cleaners unco-operative?

TABLE 4.6(a): Cleaners (N = 100)

SUBJECT	Yes		No	
	F	%	F	%
Friendly	84	84	16	16
Communicate	83	83	17	17

TABLE 4.6(b): Cleaners (N = 100)

SUBJECT	Yes		No	
	F	%	F	%
Unco-operative	17	17	83	83

Table 4.6 depicts that the respondents indicated that the cleaners are friendly (84%), communicative (83%) and co-operative (83%).

Reasons for options of respondents who chose "NO" as an answer

Not friendly

- Very unfriendly – 3
- Have to sit in cold while cleaning clinic – 5
- Do not co-operate – 1
- Cleaners are rude – 3
- Talks down upon clients – 1
- Not everybody is friendly – 1
- Scold clients as they come into the clinic – 1
- Sulky – 1

Not communicative

- Has an unkind silence – 1
- Rude and ruthless – 3
- Does not communicate – 9
- Talks very little – 5

Unco-operative

- Let clients sit outside in cold while cleaning the clinic – 5
- No sympathy – 1
- Do not talk nicely – 1
- Very unco-operative – 9

- **Question:** **(a) Are the security personnel friendly and communicative?**
  (b) Are the security personnel unco-operative?

None of the clinics have security personnel. All respondents indicated not applicable.

4.3.1.1.11 General

- **Question:** **Is attention given to problems not related to pregnancy?**

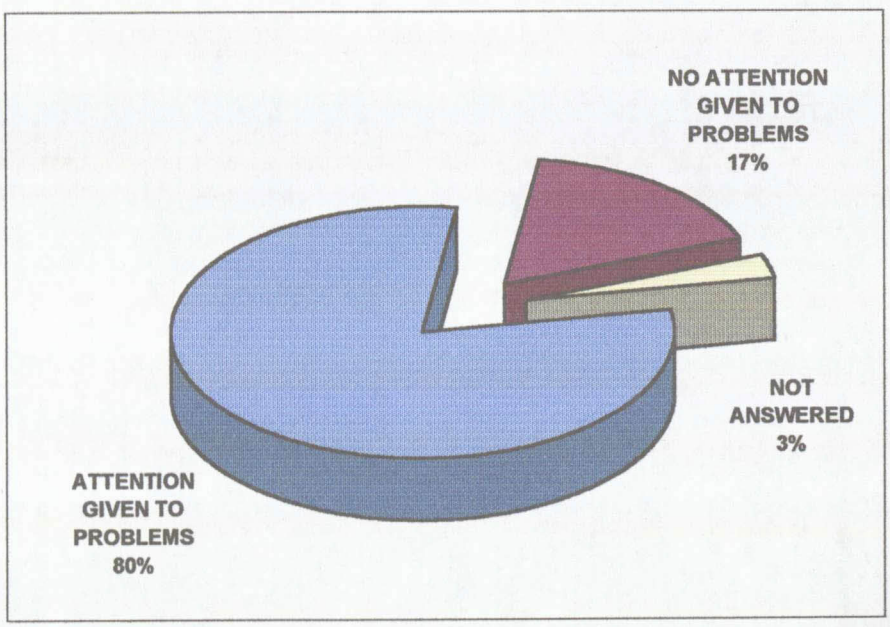


FIGURE 4.7: **Attention given to problems not related to pregnancy (N = 100)**

According to Figure 4.7, 80% of the respondents indicated that attention is given to problems not related to pregnancy, while 17% of the respondents indicated that no attention has been given. Three percent of the respondents did not answer this question.

Reason for options of the respondents

No attention is given to problems not related to pregnancy

- The staff has a negative attitude – 1
- Been told to go and see a private doctor – 2
- Ignores my other problems – 3
- Not always attended to – 4
- "I had a sore and other problems, they refuse to treat it" – 3
- Attends to pregnancy problems only – 1
- "I am afraid to talk about it" – 1
- "I don't discuss other problems with staff" – 2

- **Question: Is privacy maintained during examination?**

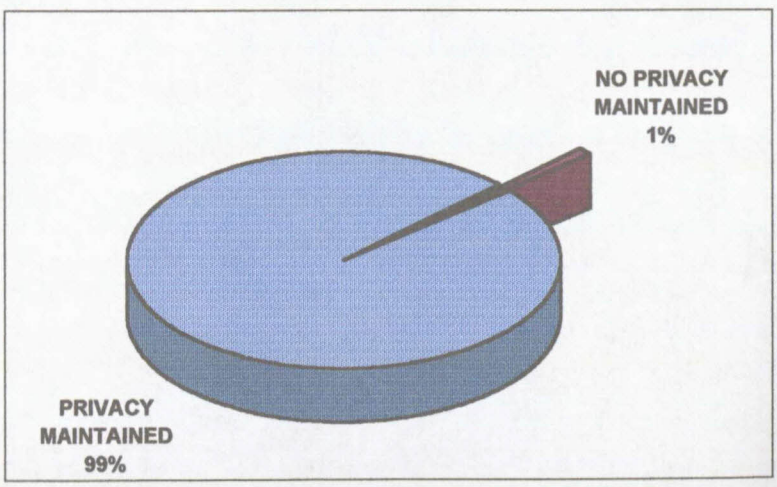


FIGURE 4.8: Privacy during pregnancy (N = 100)

Figure 4.8 reflected that 99% of the respondents indicated that privacy was maintained during examination.

Reason for options of respondents

- No privacy as people come in and out the room during examination – 1

4.3.1.1.12 Structure of the clinic

- **Question:** **How would you rate the condition of the:**
  - painting, walls, lights, ventilation, floors, ceiling, room temperature?

TABLE 4.7: Structure rating of clinic (N = 100)

SUBJECT	Excellent		Good		Poor		Very poor		Not applicable	
	F	%	F	%	F	%	F	%	F	%
Painting	22	22	54	54	22	22	2	2	-	-
Walls	22	22	57	57	19	19	2	2	-	-
Lights	21	21	71	71	6	6	1	1	1	1
Ventilation	21	21	46	46	31	31	2	2	-	-
Floors	21	21	41	41	33	33	5	5	-	-
Ceiling	21	21	70	70	6	6	3	3	-	-
Room temperature	21	21	40	40	34	34	5	5	-	-

Table 4.7 depicts that the respondents indicated that the structure of clinic was **excellent to good** with reference to: painting (76%), walls (79%), lights (92%), ventilation (67%), floors (62%), ceiling (91%) and room temperature (61%).

Reason for options of respondents

The structure of the clinic was rated **poor to very poor** by the respondents for the following reasons:

Painting

- Dull – 7
- Need repainting – 15
- Pealing off – 2

Walls

- Needs attention – 13
- Paint peals off and cracked – 2
- Dull and dirty – 3
- Not attractive – 3

Lights

- Inadequate – 7

Ventilation

- Overcrowded with patients – 30
- Kitchen is next to toilet which is smelling – 1
- Too hot/cold – 2

Floors

- Not bright and shiny – 15
- Not clean – 19
- Not attractive/pealing off – 4

Ceiling

- Dull, needs painting – 6
- Not clean – 1
- Sagging down – 2

Room temperature

- Cold in winter or hot in summer – 33
- Uncontrollable – 6

4.3.1.1.13 External environment

- **Question:** **How would you rate the condition of the:**
  - walls, roofing, gutters, fence, yard, parking (personnel/visitors), neatness, water supply?

TABLE 4.8: External environment (N = 100)

SUBJECT	Excellent		Good		Poor		Very poor		Not applicable	
	F	%	F	%	F	%	F	%	F	%
Walls	27	27	53	53	19	19	1	1	-	-
Roofing	27	27	54	54	18	18	1	1	-	-
Gutters	25	25	53	53	21	21	1	1	-	-
Fence	23	23	57	57	17	17	3	3	-	-
Yard	34	34	27	27	16	16	23	23	-	-
Parking:										
∘ Personnel	35	35	49	49	16	16	-	-	-	-
∘ Visitors	22	22	51	51	26	26	-	-	1	1
Neatness	25	25	46	46	24	24	4	4	1	1
Water supply	22	22	74	74	1	1	-	-	3	3

Table 4.8 depicts that the respondents rated the outside environment as **excellent to good** with reference to: walls (80%), roofing (81%), gutters (78%), fence (80%), yard (61%), personnel's parking (84%), visitor's parking (73%), neatness (71%) and water supply (96%). One percent of the respondent did not answer the question on visitor's parking as well as neatness while 3% did not answer regarding the water supply.

Reason for options of respondents

The outside environment was rated **poor to very poor** by the respondents for the following reasons:

Walls

- Needs painting – 10
- Unattractive – 7
- Dirty – 1
- Dilapidated and needs reconstruction – 2

Roofing

- Needs painting – 12
- Needs attention - 6
- Full of debris – 1

Gutters

- Full of debris – 1
- Needs painting – 8
- Needs attention –13

Fence

- Rusty – 15
- Falling down – 3
- Precon needs painting – 2

Yard

- Needs attention – 10
- Full of weeds, long grass and stagnant water – 24
- Untidy – 1
- Dirty and unattractive – 4

Personnel's parking

- Not enough, for 2 cars only – 15
- Park all over the yard – 1

Visitor's parking

- Have to park in street, unsafe – 20
- Not available – 5
- Untidy – 1

Neatness

- Clumsy – 15
- Untidy – 9
- Unattractive – 3
- Very dirty – 1

Water supply

- Some taps are locked – 1

4.3.1.1.14 Further comments

An option "further comments" was available on the questionnaire and the following comments were given by the respondents:

Structure of clinic

- Need more examination rooms – 3
- Additional toilets needed – 3
- Enlargement of clinic – 27
- Delivery room needed – 7
- Different toilets for different gender needed – 8
- To reconstruct the clinic – 8
- Build more clinics nearer to clients – 16
- Clinic should be neat, attractive and presentable to be proud of – 17

Waiting room

- Not big enough – 11
- Not enough chairs – 11
- Separate waiting rooms for different diseases needed – 1
- Pregnancy women should not to be mixed with other clients – 13
- Clean the clinic in the afternoon to avoid us to wait outside in unpleasant weather – 9
- Good ventilator/ventilation needed – 1
- Heating system needed – 17

Waiting time outside gates

- Need protected shelter outside gate while waiting for [clinic to start] gates to open – 4
- Unsafe to wait outside gate – 5

- Gates to be opened in good time – 12
- Have to wait outside locked gates as early as 03:00 as been told by staff while clinic opens only at 08:00 untill 12:00.

Staff

- Increase staff – 18
- Staff should change their attitude – 13
- Staff should manage their time better – 2
- Staff should not all go on the same lunch and tea breaks – 2

Service given by staff

- "Please involve us in our health as well as our babies' health" – 2
- Treatment for other problems also needed – 7
- Patient has to wait long hours to be seen – 16
- "Please inform us about our self and baby after examination" – 5
- First time visitors should not been turned back because of limited number taken per day and have to attend again – 1
- Have to wait whole day and not been attended to – 2
- Patient need to be seen by nurse of own culture because of language problems – 1
- Need privacy during examination – 1
- Patients have to wait for long hours and as early as 02:00 when start booking for antenatal care - 1

Health education

- No health education during first visit of pregnancy – 9
- Give health education while waiting to be seen – 3

Other services needed to be available

- Security – 5
- Sonar – 28
- 24 hour clinic service seven days a week – 6
- Medical doctor – 68
- Serving refreshments – 1
- Transport – 3
- Ambulance for confinement – 11
- More clinic days per week for antenatal patient – 1

General

- Medication should be available at all times – 13
- Overcrowding – 10

4.3.1.2 Health care personnel

Twenty-two respondents, all professional nurses from seven clinics, took part in this study.

4.3.1.2.1 Biographic data

- **Age of employees**

The ages of the respondents varied between 26- and 56 years with a median of 34 years.

- **Gender composition**

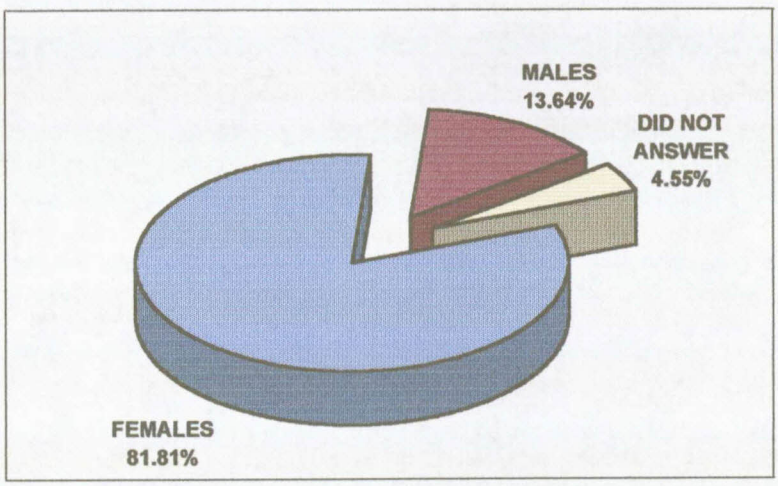


FIGURE 4.9: Gender composition of employees (N = 22)

With reference to Figure 4.9, 3 (13.64%) of the respondents were male and 18 (81.81%) were female. One (4.55%) respondent did not answer this question.

- **Years of experience as a professional nurse**

Years of experience as a professional nurse varied from less than one- to 30 years with a median of 6.5 years.

- **Years working at clinic**

TABLE 4.9: Years working at the clinic (N = 22)

YEARS	F	%
4 to 9 months	7	31.82
1	2	9.09
2	4	18.18
3	2	9.09
4	1	4.55
5	2	9.09
6	3	13.64
12	1	4.55

According to Table 4.9, 7 (31.82%) of the respondents worked from four to nine months in the clinic. Eight (36.36%) of the respondents have worked there from one to three years while 6 (27.28%) of the respondents worked in the clinic from four- to six years and 1 (4.55%) of the respondent worked for as long as 12 years at the clinic.

- **Professional qualifications**

All 22 (100%) of the respondents indicated that they were professional nurses with a midwifery qualification.

The discussion of data that follows, will include the questions that have been put to the health personnel:

4.3.1.2.2 Proud of working at particular clinic

- **Question: Are you proud of working at this particular clinic?**

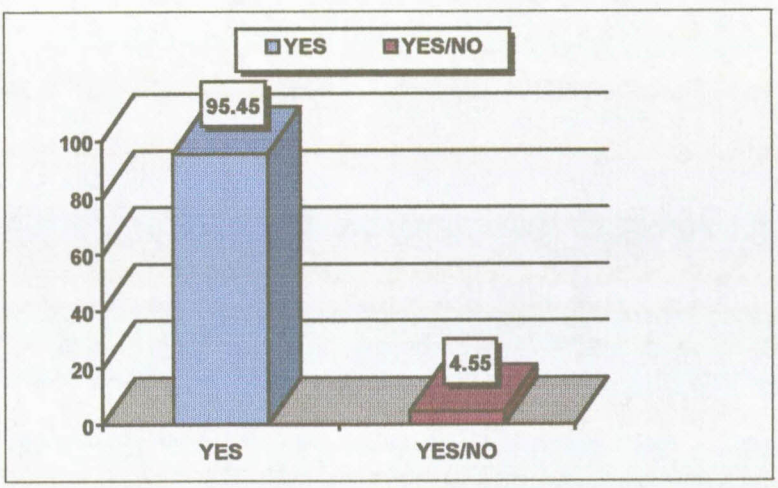


FIGURE 4.10: Proud of working at particular clinic (N = 22)

According to Figure 4.10, 21 (95.45%) of the respondents indicated that they were proud of working at the particular clinic. Only 1 (4.55%) of the respondents were not sure, as the respondent indicated yes as well as no as an answer simultaneously.

Reason for options of the respondents

One of the respondents indicated "**YES AND NO**" with the following responses:

- Proud of working at clinic, though there is a shortage of staff and therefore a lot of work
- Serving the community
- The clinic is small
- No privacy for patient/clients
- Two sisters working in one cubicle
- No area to do surgical procedures
- No area to drink tea at teatime
- Kitchen is mixed with the toilet and laundry

4.3.1.2.3 Opinion about orientation programme, in-service training and personnel participation in the clinic

- **Question:** **Give your opinion about the following in this clinic:**
  - Orientation programmes
  - In-service training with regard to quality assurance
  - Personnel participation in formulation of quality assurance standards
  - Personnel participation in clinic policy making
  - Personnel participation in decision-making

TABLE 4.10: Opinion about issues in the clinic (N = 22)

SUBJECT	Excellent		Good		Poor		Very poor		Not applicable		Not answered	
	F	%	F	%	F	%	F	%	F	%	F	%
Orientation programmes	2	9.09	14	63.64	4	18.18	2	9.09	-	-	-	-
In-service training with regard to quality assurance	3	13.64	10	45.45	7	31.82	1	4.55	1	4.55	-	-
Personnel participation in formulation of quality assurance standards	-	-	4	18.18	9	40.91	5	22.73	2	9.09	2	9.09
Personnel participation in clinic policy making	-	-	3	13.64	10	45.45	4	18.18	5	22.73	-	-
Personnel participation in decision-making	-	-	5	22.73	9	40.91	4	18.18	4	18.18	-	-

According to Table 4.10, the number of respondents who chose **excellent to good** as an option were: In-service training 13 (59.09%) and orientation programmes 16 (72.73%), whereas the respondents who only chose **good** as an option were for personnel participation in formulating of standards 4 (18.18%), policy-making 3 (13.64%) and decision-making 5 (22.73%).

Reason for options of respondents

The respondents who chose the **poor to very poor option** gave the following reasons:

Orientation programmes

- No personnel orientation – 2
- Personnel have to find out for themselves – 1
- Not enough time – 1
- Orientation done in bits and pieces – 1
- Not orientated about student curriculum – 1

In-service training

- No in-service training about quality assurance – 5
- Not enough in-service training and time – 2
- Repetition of known topics – 1
- Only the managers and supervisors attend the quality assurance in-service training as it is not applicable to the professional nurses – 1

Personnel participation in quality assurance

- Don't understand it – 3
- No participation – 8
- Lack of time – 1
- Management do this on their own – 2
- Not applicable because of standards already been formulated and they were not involved – 2

Personnel participation in policy-making

- No involvement – 7
- Decisions are made for us from above – 7
- Not applicable as all decisions are taken for us – 5

Personnel participation in decision-making

- They are told and no involvement, management decides – 12
- Staff don't want to participate – 1
- Not applicable because of reasons such as no participation allowed – 4

4.3.1.2.4 Communication/liaison

- **Question:** **Give your opinion about communication/ liaison with:**
  - management, other health departments, clients, multi-professional team

TABLE 4.11: Communication/liaison (N = 22)

SUBJECT	Excellent		Good		Poor		Very poor		Not applicable		Not answered	
	F	%	F	%	F	%	F	%	F	%		
Management	1	4.55	7	31.81	5	22.73	8	36.36	-	-	1	4.55
Other health departments	1	4.55	14	63.63	4	18.18	2	9.09	-	-	1	4.55
Clients	2	9.09	12	54.55	4	18.18	1	4.55	2	9.09	1	4.55
Multi-professional team	3	13.64	12	54.55	5	22.73	2	9.09	-	-	-	-

Table 4.11 depicts that the respondents indicated excellent to good for communication/liaison with: ***other health departments*** 15 (68.18%), ***clients*** (63.64%), ***multi-professional teams*** 15 (68.19%) and ***management*** 8 (36.36%).

Reason for options of respondents

The communication was rated **poor to very poor** by the respondents for the following reasons:

Communication/liaison with management

- Don't have time to listen to or address problems – 2
- Management take decisions for us – 2
- No meetings to discuss problems and no two way communication – 1

- Management is sarcastic and has no empathy for staff – 1
- Get no feedback – 1
- Problems with top-down structure – 1
- Staff are unhappy and there is no communication – 4
- "Management only criticize" – 1

Communication/liaison with other departments

- Don't get feedback/results – 5
- Don't use correct channels to refer clients – 1

Communication/liaison with clients

- Not enough time per client to build up relationship – 3
- Clients rude to staff – 2

Communication/liaison with multi-professional team

- No professional communication – 5
- One way communication – 1
- Some general practitioners are negative towards staff – 1

4.3.1.2.5 General

- **Question:** **Give your opinion about:**
  - Personnel-patient ratio
  - Stock available
  - Equipment available
  - Service rendered in terms of time per client
  - Implementation of standing orders
  - Availability of doctor

TABLE 4.12: General opinion about personnel-patient ratio, stock, equipment, service, standing orders and doctor (N = 22)

SUBJECT	Excellent		Good		Poor		Very poor		Not applicable	
	F	%	F	%	F	%	F	%	F	%
Personnel-patient ratio	-	-	1	4.55	13	59.09	8	36.36	-	-
Stock available	1	4.55	11	50	8	36.36	2	9.09	-	-
Equipment available	-	-	9	40.91	9	40.91	4	18.18	-	-
Service rendered in terms of time per client	3	13.64	3	13.64	10	45.45	6	27.27	-	-
Implementation of standing orders	2	9.09	10	45.45	5	22.73	3	13.64	2	9.09
Availability of doctor	3	13.64	9	40.91	8	36.36	1	4.55	1	4.55

Table 4.12 depicts that the respondents indicated that services rendered in terms of ***personnel-patient ratio*** 21 (95.45%), ***equipment available*** 13 (59.09%) ***and time spent per client*** 16 (72.72%) were **poor to very poor**, while 12 (54.55%) of the respondents indicated

services in terms of ***stock available, implementation of standing orders and availability of doctor*** as **excellent to good.**

Reason for options of respondents

The general opinion of respondents was rated as **poor to very poor** for the following reasons:

Personnel-patient ratio

- Clinic always overcrowded – 5
- Staff shortage – 7
- Professional nurses to see 35 to 80 clients a day – 7
- Personnel are overworked – 2

Stock available

- Every thing out of stock – 6
- Limitations in budget – 1
- Chronic stock not always available – 2
- Stock ordered not always received – 1

Equipment available

- Equipment not on standard, old or not available – 3
- Not enough – 2
- Out of order and not repaired – 2
- No dobler, glucometer, urine glasses – 3
- Order but don't receive it – 1
- No replacement for broken stock – 2

Services rendered in terms of time/client

- Too many clients per professional nurse with the result that there is not enough time for detecting or listening to problems or to give information and education – 16

Implementation of standing orders

- Staff don't implement it – 3
- Staff don't know the Essential Drug List – 1
- Staff had no input in making the standing orders – 1
- There is no standing orders – 2
- Standing orders are not written down – 1

Service rendered in terms of availability of doctor

- Doctor is only available for two to three hours per week – 5
- Come only once or twice a week – 3
- Doctor only available in morning – 1

4.3.1.2.6 Further comments

An option for further comments was available on the questionnaire and the following comments were given by the respondents:

Structure of the clinic

- Too small – 4
- Start with a mobile clinic – 1
- Poor security – 1
- No emergency exits – 1
- No toilets for clients – 1
- No observation area – 1

- Far away from main road – 1
- No tea room – 1
- Kitchen and laundry / laundry and toilet are one area – 1

Staffing

- No recognition for years of service – 2
- Underpaid – 3
- No male personnel – 1
- No promotions available – 3
- No uniform allowance – 2
- Staff of government have to work in municipality clinic and don't know who is supposed to be their employer – 3
- Staff are demotivated because of overload – 1
- Staff are resistant to change – 1
- Some staff are unprofessional – 1

Clients

- No transport available – 1
- "Patients abuse medication" and suggest they have to pay – 1

Procedures

- No standard procedures – 1

4.3.1.3 Supervisors

Eight supervisors at seven clinics participated in this study. At one clinic two supervisors participated, as one supervisor was on leave and had been relieved by a professional nurse at the time the clinic was visited for the first time.

4.3.1.3.1 Biographic data

- **Age of employees**

The ages of the respondents varied between 41- and 58 years with a median of 48 years.

- **Gender composition**

All 8 [100%] of the respondents were females.

- **Years of experience as a professional nurse**

TABLE 4.13: Years of experience as a professional nurse (N = 8)

YEARS	F	%
10	1	12.5
18	1	12.5
20	1	12.5
22	2	25
23	1	12.5
30	1	12.5
36	1	12.5

According to Table 4.13 the years of experience as a professional nurse varied from 10- to 36 years with a median of 22 years.

- **Years of experience as a supervisor**

TABLE 4.14: Years of experience as supervisor (N = 8)

YEARS	F	%
0	1	12.5
2	1	12.5
5	1	12.5
6	1	12.5
7	3	37.5
10	1	12.5

According to Table 4.14, 2 (25%) of the respondents had gained experience of six months to two years. Five (62.5%) of the respondents had between five- to seven years of experience, while 1 (12.5%) of the respondents had 10 years of experience.

- **Working at this clinic**

TABLE 4.15: Working at this clinic (N = 8)

YEARS	F	%
7 months	1	12.5
4	1	12.5
5	3	37.5
11	1	12.5
12	1	12.5
19	1	12.5

According to Table 4.15, 1 (12.5%) of the respondents had been working for seven months, 4 (50%) of the respondents had been working between four- and five years whereas 2 (25%) of the respondents had been working

between 11- and 12 years. Only 1 (12.5%) of the respondents was working at this clinic for 19 years.

- **Professional qualifications**

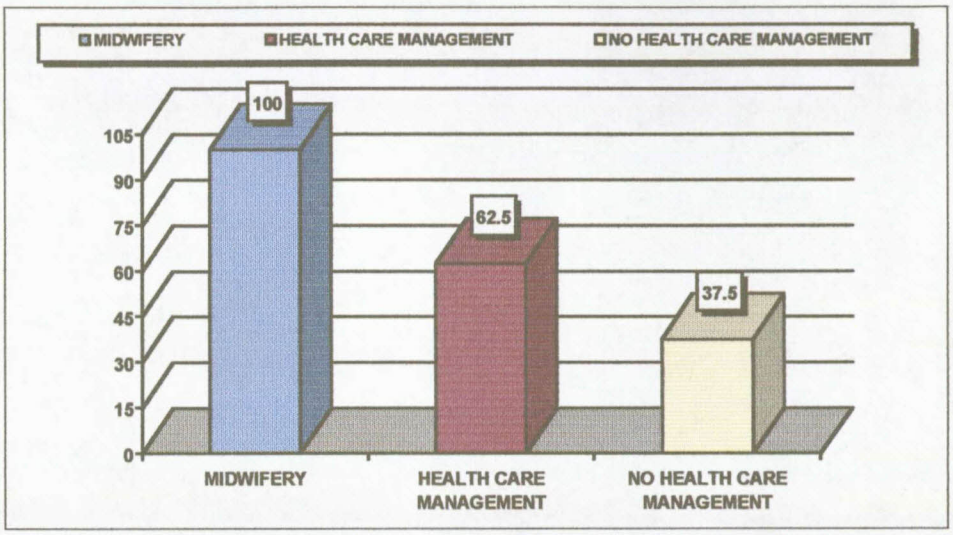


FIGURE 4.11: Professional qualifications (N = 8)

According to Figure 4.11 all 8 (100%) of the respondents were professional nurses with an extra qualification in **midwifery** whereas 5 (62.5%) of the respondents had a **health care management** qualification and 3 (37.5%) of the respondents did not have such a qualification.

The discussion of data that follows, will include the questions that have been put to the supervisors:

4.3.1.3.2 Policies, procedures, programmes

- **Question:** **Do you have the following in place:**
  - Updated written policies?
  - Updated written procedures?
  - Orientation programme?
  - In-service training?
  - Performance appraisal system?
  - Disciplinary code and procedure?
  - Grievance procedure?

TABLE 4.16: Policies, procedures and programmes in place (N = 8)

SUBJECT	Yes		No		Not sure		Not applicable	
	F	%	F	%	F	%	F	%
Updated written policies	8	100	-	-	-	-	-	-
Updated written procedures	7	87.5	1	12.5	-	-	-	-
Orientation programme	4	50	4	50	-	-	-	-
In-service training	7	87.5	-	-	1	12.5	-	-
Performance appraisal system	-	-	8	100	-	-	-	-
Disciplinary code and procedure	8	100	-	-	-	-	-	-
Grievance procedure	7	87.5	1	12.5	-	-	-	-

According to Table 4.16, 8 (100%) of the respondents indicated that the clinics did have **updated written policies** as well as a **disciplinary code and procedure**. Seven (87.5%) of the respondents indicated that the clinics had **updated written procedures, in-service training and a grievance procedure**. Four (50%) of the respondents indicated that the clinic had an **orientation programme**, whereas 8 (100%) of the respondents indicated that the clinics **did not** have a **performance appraisal system**.

Reason for options of respondents

Respondents, who chose **"NO"** as an answer, gave the following reasons:

Written procedures

- The written procedures are not in place – 1

Orientation programme

- Do orientation programme verbally only – 1
- Peers have to orientate one another – 1
- Training is done by the health care centre's training component – 2

In-service training

- Not sure as it happens on and off – 1

Performance appraisal system

- None in place – 6
- The document is in the developing phase – 2
- "Has not seen one being in place" – 1

4.3.1.3.3 Personnel attendance

- **Question:** **Do personnel attend:**
  - In-service training?
  - Orientation programmes?
  - Personnel meeting?

TABLE 4.17: Personnel attendance of in-service training, orientation programmes and personnel meeting (N = 8)

SUBJECT	Yes		No	
	F	%	F	%
In-service training	8	100	-	-
Orientation programmes	7	87.5	1	12.5
Personnel meeting	5	62.5	3	37.5

According to Table 4.17, the respondents who indicated that personnel do attend **personnel meetings**, were 5 (62.5%), **orientation programmes** were 7 (87.5%) and **in-service training** were 8 (100%) while those who do not attend **orientation programmes** was 1 (12.5%) and **personnel meetings** were 3 (37.5%).

Reason for options of respondents

The respondents who chose "NO" as an option gave the following reasons:

Orientation programmes

- None exists – 1

Personnel meetings

- No regular meetings – last meeting was in 1998 – 1
- Staff reluctance – 1
- Share information daily but not formal meeting – 1

4.3.1.3.4 Personnel involvement by supervisor

- **Question:** **Do you involve your personnel in:**
  - Formulation of quality assurance standards/ programmes?
  - Policy making?
  - Decision-making?

TABLE 4.18: Personnel involvement by supervisor (N = 8)

SUBJECT	Yes		No	
	F	%	F	%
Formulation of quality assurance standards/ programmes	8	100	-	-
Policy making	4	50	4	50
Decision-making	8	100	-	-

According to Table 4.18, 8 (100%) of the respondents indicated that they do involve their personnel in the **formulation of quality assurance standards/programmes and decision making** while 4 (50%) of the respondents involve their personnel in **policy making**.

Reasons for option

Respondents who chose **"NO"** as an option gave the following reasons:

Policy making

- Comes from head office and therefore does not involve staff - 4.

4.3.1.3.5 Implementation of procedures

- **Question:** **Are the following being implemented:**
  - Performance appraisal systems?
  - Disciplinary code and procedure?
  - Grievance procedure?

TABLE 4.19: Implementation of performance appraisal systems, disciplinary code and procedures and grievance procedure (N = 8)

SUBJECT	Yes		No	
	F	%	F	%
Performance appraisal systems	-	-	8	100
Disciplinary code and procedures	6	75	2	25
Grievance procedure	5	62.5	3	37.5

According to Table 4.19, 8 (100%) of the respondents indicated that there were **no performance appraisal systems in place**, (also seen in Table 4.16 p. 145) hence it not being implemented. Six (75%) of the respondents indicated that they **implement the disciplinary code and procedure** whereas 5 (62.5%) of the respondents **do implement the grievance procedure**.

Reason for options of respondents

Respondents who chose **"NO"** as an option gave the following reasons:

Disciplinary code and procedure

- Not needed up to date – 2

Grievance procedure

➢ No personnel has come forth with any grievance – 3

4.3.1.3.6 Written and verbal communication

- **Question:** **Give your opinion on:**
  - Performance appraisal
    - Written
    - Verbal
  - Disciplinary procedure
    - Written
    - Verbal
  - Grievance procedure
    - Written
    - Verbal

TABLE 4.20: Written and verbal communication on performance appraisal, disciplinary and grievance procedure (N = 8)

SUBJECT	Excellent		Good		Poor		Very poor		Not applicable	
	F	%	F	%	F	%	F	%	F	%
Performance appraisal	-	-	-		-	-	1	12.5	7	87.5
∘ Written	-	-	5	62.5	-	-	-	-	3	37.5
∘ Verbal										
Disciplinary procedure										
∘ Written	-		5	62.5	1	12.5	-	-	2	25
∘ Verbal	1	12.5	5	62.5	1	12.5	-	-	1	12.5
Grievance procedure										
∘ Written	-	-	5	62.5	-	-	1	12.5	2	25
∘ Verbal	-	-	7	87.5	-	-	-	-	1	12.5

According to Table 4.20, 1 [12.5%] of the respondents indicated that the **written performance appraisal** was **very poor** as it was not in place and 7 [87.5%] of the respondents said it was not applicable as it was not in place.

Five [62.5%] of the respondents indicated that the **verbal communication with regard to performance appraisal** was good.

Five [62.5%] of the respondents indicated that the **written as well as verbal disciplinary procedure** were **good** while 1 [12.5%] respondent indicated it was **poor**. Two [25%] of the respondents indicated that it was not applicable as it was not necessary for implementation.

Respondents indicated the **grievance procedure [written** 5 [62.5%] and **verbal** 7 [87.5%]] were **good,** whereas 1 [12.5%] of the respondents indicated it to be **very poor** as it was never put in writing. Two [25%] of the respondents indicated that there was no written grievance procedure in place.

4.3.1.3.7 Personnel turnover

- **Question: Do you have a high personnel turnover?**

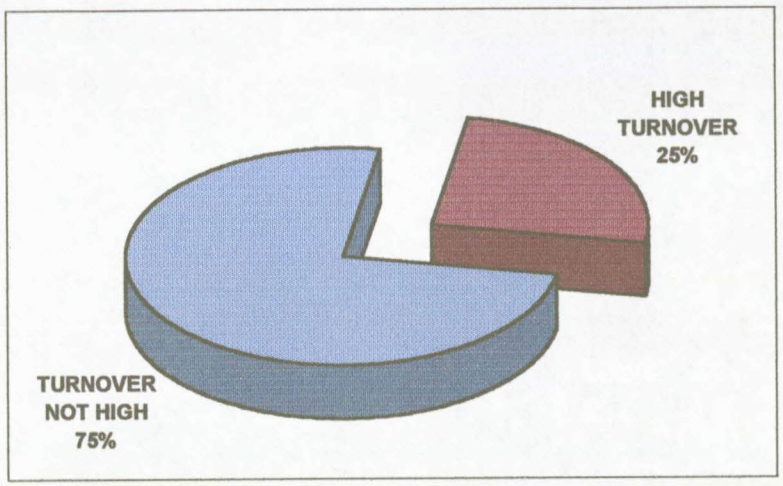


FIGURE 4.12: Personnel turnover (N = 8)

According to Figure 4.12, 2 (25%) of the respondents indicated that there was according to them a high personnel turnover, though 6 (75%) of the respondents indicated that according to them no high turnover was experienced.

Reason for options of respondents

Respondents who chose **"YES"** as an option gave the following reasons:

High turnover

- personnel were transferred to other clinics and the fact that clinic personnel got less salary than personnel working for public services - 2

4.3.1.3.8 Vacant posts

- **Question: Do you experience problems in filling vacant posts?**

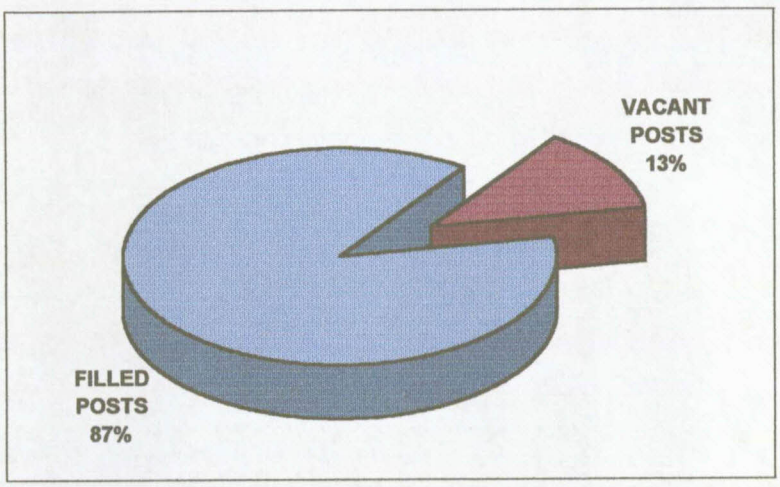


FIGURE 4.13: Vacant posts (N = 8)

According to In Figure 4.13, 1 (12.5%) of the respondents indicated that vacant posts resulted from it not being filled, though vacant for a long time. Seven (87.5%) of the respondents indicated that all posts were filled.

Reason for options of respondents

- "Has no say in filling of vacant posts" – 1

4.3.1.3.9 Absenteeism

- **Question: Do you experience problems with absenteeism?**

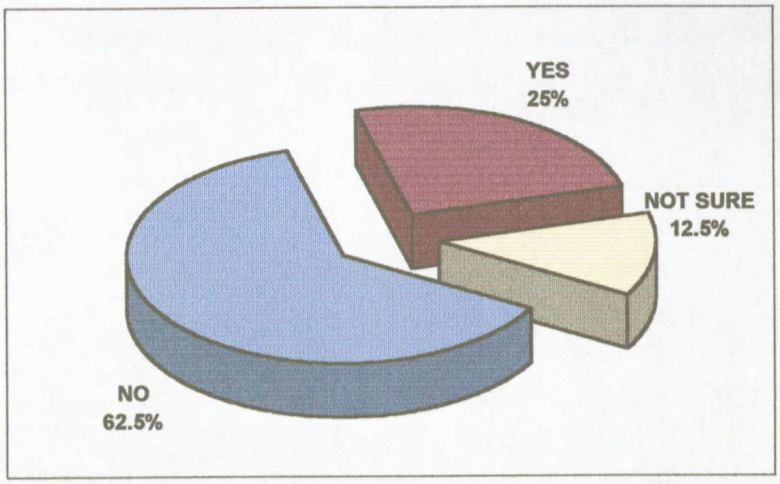


FIGURE 4.14: Absenteeism (N = 8)

According to Figure 4.14, 2 (25%) of the respondents indicated that according to them absenteeism was experienced, while 5 (62.5%) of the respondents indicated that according to them, they did not experience problems with absenteeism.

Reason for options of respondents

Respondents, who indicated **"YES"** as an answer, gave the following reasons:

- Personnel are sick every month due to workload – 1
- Due to stress disorders – 1

Respondents, who indicated **"NO"** as an answer, gave reasons such as:

- Personnel do report even if there is a problem – 2
- One of two personnel giving a problem – 1
- No problems – 2

4.3.1.3.10 Budget

- **Question:** **Do you draw-up the clinic budget?**
  - Is the clinic budget decentralised?
  - Do you involve your personnel?
  - Do you and your personnel work within the limits of the budget?

TABLE 4.21: Clinic budget (N = 8)

SUBJECT	Yes		No		Not sure		Not applicable	
	F	%	F	%	F	%	F	%
Do you draw –up the clinic budget?	6	75	2	25	-	-	-	-
Is the clinic budget decentralised?	4	50	4	50	-	-	-	-
Do you involve your personnel?	3	37.5	3	37.5	1	12.5	1	12.5
Do you and your personnel work with-in the limits of the budget?	3	37.5	3	37.5	1	12.5	1	12.5

According to Table 4.21, 6 (75%) of the respondents **draw-up the clinic budget**, whereas four (50%) of the respondents indicated that the clinic's **budget is centralised**

Three (37.5%) of the respondents indicated that they do not **involve their personnel** and nor do they **work within the limits of the budget**.

Reason for options of respondents

- Do not draw- up budget as it is done by head office – 4
- "I am new in the position and therefore not sure" – 1

4.3.1.3.11 Measures in place

- **Question:** **Are any measures in place to:**
  - Limit expenses?
  - Replace unbudgeted items?
  - Waste disposal?

TABLE 4.22: Measure in place to limit expense, replace unbudgeted items/stock/equipment and waste disposal (N = 8)

SUBJECT	Yes		No		Not sure		Not applicable	
	F	%	F	%	F	%	F	%
Limit expenses	8	100	-	-	-	-	-	-
Replace unbudgeted items/stock/ equipment	2	25	5	62.5	1	12.5	-	-
Dispose waste								
∘ Medical	8	100	-	-	-	-	-	-
∘ General	8	100	-	-	-	-	-	-

According to Table 4.22, 8 (100%) of the respondents indicated that measures were in place to **limit expenses**, as well as the **correct disposal of medical- and general waste.** Five (62.5%) of the respondents indicated that measures were not in place to **replace unbudgeted items, stock or equipment** and the reason for this was "if not been placed on the budget, you don't get it", and no money was available. Only 1 (12.5%) of the respondents indicated that she was not sure, as she was new in this position.

4.3.1.3.12 Stock/equipment

- **Questions:**
  - Do the personnel use stock and equipment correctly?
  - Is training given for the use of new equipment?
  - Is broken equipment being repaired promptly?
  - Are condemned items being replaced by new ones?

TABLE 4.23: Stock/equipment (N = 8)

SUBJECT	Yes		No		Not sure		Not applicable	
	F	%	F	%	F	%	F	%
Do the personnel use stock and equipment correctly?	8	100	-	-	-	-	-	-
Is training given for the use of new equipment?	7	87.5	1	12.5	-	-	-	-
Is broken equipment being repaired promptly?	1	12.5	5	62.5	1	12.5	1	12.5
Are condemned items being replaced by new ones?	-	-	6	75	1	12.5	1	12.5

According to Table 4.23, 7 (87.5%) of the respondents indicated that training was given for the use of **new equipment** and all personnel 8 (100%) do know how to use stock and equipment correctly. Five (62.5%) of the respondents indicated that broken equipment was not been repaired promptly nor replaced by new ones by 6 (75%) respondents.

Reason for options of respondents

Respondents, who gave "NO" as an answer, gave the following reasons:

Training

- No new equipment received and therefore no training needed – 1.

Broken equipment repaired and received back in short time

- It depends on what is broken and needs to be repaired – 1
- It takes a long time because of no funds and it depends on the department who does the repairing as the repairer wants to know who is going to pay – 5

Condemned items been replaced

- Not replaced because of no funds, should have budgeted for it and depends on the need - 6

4.3.1.3.13 Medical supply

- **Questions:**
  - Is medical supply as stipulated on the essential drug list?
  - Is the supply issued timeously?

TABLE 4.24: Availability and issuing of medical supply (N = 8)

SUBJECT	Yes		No	
	F	%	F	%
Is medical supply as stipulated on the essential drug list?	7	87.5	1	12.5
Is the supply issued timeously?	8	100	-	-

According to Table 4.24, 8 (100%) of the respondents indicated that the medical supply was issued timeously whereas 7 (87.5%) of the respondents indicated that the medical supply was available as stipulated on the essential drug list.

Reason for options of respondents

- Medical supplies are not available as indicated on the essential drug list because supplies having been ordered, are not received – 1

4.3.1.3.14 Multi-professional team

- **Question: How is the communication within the team?**

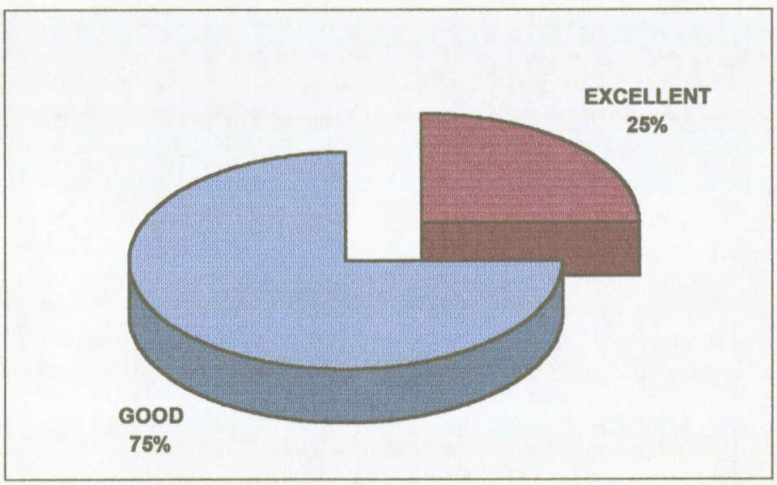


FIGURE 4.15: Multi-professional team communication (N = 8)

According to Figure 4.15, 6 (75%) of the respondents indicated that the communication was **good** within the multi-professional team, whereas 2 (25%) of the respondents indicated it to be **excellent**.

Reason for opinions of respondents

- We meet daily and discuss problems – 1
- Open and transparent lines of communication – 2
- Every problem can be referred and solved – 4
- Get feedback – 1

4.3.1.3.15 Further comments

An option "Further comments" was available on the questionnaire and the following comments were given by the respondents:

Structure of clinic

- No separate toilets – 1
- Small consulting rooms – 1
- No security – 2
- Alarm system out of order – 1
- Roads to clinic not accessible on rainy days – 1
- Clinic is too small and patients have to wait outside– 2
- Decision-making always top down – 1

Clients

- No home visits done anymore – 1

Transport

- No transport for clients – 3
- Clinic not on main road – 1

General

- A lot of burglary – 1

Services

- No mobile clinic anymore – 1
- Referral system – no feedback – 1

Staffing

- Shortage of staff – 4
- No promotion but have to act as supervisor – 1
- Newly appointed staff receive the same salary as experienced staff – 1
- No study leave – 1
- Demotivated – 3

4.3.2 Checklists

Data obtained from the checklists will now be discussed.

4.3.2.1 Sources of evidence for structure standards

Seven clinics were visited and sources of evidence for structure standards were evaluated at each clinic.

The discussion of data that follows, will include the questions that have been observed in the checklists:

4.3.2.1.1 Physical layout

- **Question:** **Are the following present as depicted in Table 4.25?**

TABLE 4.25: Physical layout (N = 7) (to be continued)

SUBJECT	Yes		No		Not applicable	
Physical layout	**F**	**%**	**F**	**%**	**F**	**%**
Reception area	7	100	-	-	-	-
Waiting area	7	100	-	-	-	-
Dispensary/medicine room	7	100	-	-	-	-
Dressing room	4	57.14	3	42.86	-	-
Consultation rooms	7	100	-	-	-	-

TABLE 4.25: Physical layout (N = 7)

SUBJECT	Yes		No		Not applicable	
Physical layout	**F**	**%**	**F**	**%**	**F**	**%**
Linen room	-	-	7	100	-	-
Staff rest room	4	57.14	3	42.86	-	-
Storerooms:						
◦ General stock	5	71.43	2	28.57	-	-
◦ Sterile stock	-	-	7	100	-	-
Cleaners room	3	42.86	4	57.14	-	-
Sluice room	3	42.86	4	57.14	-	-
Office for supervisor	7	100	-	-	-	-
Passage/s	7	100	-	-	-	-
Ramp for disabled	4	57.14	3	42.86	-	-
Rails for disabled	-	-	7	100	-	-
Kitchen	6	85.71	1	14.29	-	-
Toilets:						
◦ Personnel	7	100	-	-	-	-
◦ Patients	7	100	-	-	-	-

Table 4.25 depicts the following: Seven (100%) of the clinics had no **linen- and sterile stock rooms as well as rails for the disabled** whereas 3 (42.86%) of the clinics had no **dressing- and staff restrooms and a ramp for the disabled.** Four (57.14%) of the clinics had no **cleaners- and sluice rooms.** Only 1 (14,29%) of the clinics had **no kitchen**, while 2 (28.57%) of the clinics had **no general storerooms**.

4.3.2.1.2 Reception area

- **Question:** **Are the following present within the reception area as depicited in Table 4.26?**

TABLE 4.26: Reception are (N = 7)

SUBJECT	Yes		No		Not applicable	
Reception area	**F**	**%**	**F**	**%**	**F**	**%**
Telephone	5	71.43	2	28.57	-	-
◦ In working condition	7	100	-	-	-	-
Filing cabinets for antenatal files	-	-	7	100	-	-
Lock-up cabinets for files	1	14.29	6	85.71	-	-
Desk	5	71.43	2	28.57	-	-
Chair/s	7	100	-	-	-	-
Reception counter	6	85.71	1	14.29	-	-
Baskets:						
◦ Incoming post	4	57.14	3	42.86	-	-
◦ Outgoing post	4	57.14	3	42.86	-	-
Stationery:						
◦ Applicable	7	100	-	-	-	-
◦ Available	4	57.14	3	42.86	-	-
Bin:						
◦ Available	6	85.71	1	14.29	-	-
◦ Covered [N = 6]	4	66.67	2	33.33	-	-
Key cupboard	6	85.71	1	14.29	-	-

With reference to Table 4.26, **all** 7 [100%] of the clinics had working **telephones, applicable stationery** [though not always available] **and enough chairs**, whereas seven [100%] of the clinics **had no cabinets for antenatal files**, as antenatal clients keep their files with them. At 5 [71.43%] of the clinics telephones were at the reception area and at 2 [28.57%] clinics telephones were in a consultation room. One [14.29%] of the clinics **had lock-up cabinets** though not use, while the other

6 [85.71%] clinics cabinet locks are out or broken. Two [28.57%] of the clinics **did not have desks in the reception area,** while 1[14.29%] of the clinics did not have a **counter** and made use of a table.

Four [57.14%] of the clinics had **baskets for incoming- and outgoing post** though not necessarily used for post, but for patient's files. Six [85.71%] of the clinics had **bins** in the reception area 4 of which [66.67%] were covered, Only 1 [14.29%] of the clinics did not have a **key cupboard**.

4.3.2.1.3 Waiting area

- **Question:** **Are the following present within the waiting area as depicted in Table 4.27?**

TABLE 4.27: Waiting area (N = 7)

SUBJECT	Yes		No		Not applicable	
Waiting area	**F**	**%**	**F**	**%**	**F**	**%**
Benches/chairs	7	100	-	-	-	-
Benches/chairs sufficient	4	57.14	3	42.86	-	-
Bin/s:						
◦ Available	4	57.14	3	42.86	-	-
◦ Covered [N = 4]	3	75	1	25	-	-
Big enough to accommodate all patients	1	14.29	6	85.71	-	-

According to Table 4.27, 7 [100%] of the clinics did have **chairs or benches** in the waiting area though at 3 [42.86%] of the clinics it was not enough. **Bins** were only available at 4 [66.67%] of the clinics of which 1 [25%] **was not covered**. Only 1 [14.29%] of the clinics' waiting area was big enough to accommodate all clients. This resulted that clients of the

other 6 (58.71%) clinics, had to wait outside and had to sit on the grass until been called.

4.3.2.1.4 Dispensary/medicine room

- **Question:** **Are the following present within the dispensary/medicine room as depicted in Table 4.28?**

TABLE 4.28: Dispensary/medicine room (N=7) (to be continued)

SUBJECT	Yes		No		Not applicable	
Dispensary/medicine room	**F**	**%**	**F**	**%**	**F**	**%**
Shelves	7	100	-	-	-	-
Shelves marked	6	85.71	1	14.29	-	-
Lock-up cupboards	7	100	-	-	-	-
Supply:						
◦ Applicable	7	100	-	-	-	-
◦ Available	5	71.43	2	28.57	-	-
◦ Record-keeping	7	100	-	-	-	-
Stock:						
◦ Applicable	7	100	-	-	-	-
◦ Available	7	100	-	-	-	-
◦ Record-keeping	7	100	-	-	-	-
Fridge:						
◦ Thermometer in fridge	7	100	-	-	-	-
◦ Thermometer in working condition	7	100	-	-	-	-
◦ Contents:						
– Medication	7	100	-	-	-	-
– Food	-	-	7	100	-	-
Desk	1	14.29	6	85.71	-	-
Wash basin	3	42.86	4	57.14	-	-
Soap (N=3)	3	100	-	-	-	-
Running water (N=3)	3	100	-	-	-	-
◦ Hand towels (N=3)	2	66.67	1	33.33	-	-

TABLE 4.28: Dispensary/medicine room (N = 7)

SUBJECT	Yes		No		Not applicable	
Dispensary/medicine room	**F**	**%**	**F**	**%**	**F**	**%**
Bin/s:						
• Available	3	42.86	4	57.14	-	-
◦ Covered (N = 3)	2	66.67	1	33.33	-	-
Locked security gate	1	14.29	6	85.71	-	-
Key control	7	100	-	-	-	-

According to table 4.28, only 1 (14.29%) of the clinics' **shelves were not marked**. At 2 (28.57%) of the clinics, **some medical supply was not available**. Only 1 (14.29%) of the clinics had a **desk in the dispensary**.

Only 3 (42.86%) of the dispensaries/medicine rooms **had wash basins** of which 2 (66.67%) had hand towels. Four (57.14%) of the dispensaries/medicine rooms did not have **bins**. From the 3 (42.86%) dispensaries/medicine rooms which had bins, only 2 (66.67%) **were covered.** Only 1 (14.29%) dispensary/medicine room had a security gate.

4.3.2.1.5 Dressing room

Only 4 (57,14%) of the seven clinics had a separate dressing room. At the 3 (42.86%) clinics which had no separate dressing rooms, dressings were done in the consultation rooms.

- **Question:** **Are the following present within the dressing room as depicted in Table 4.29?**

TABLE 4.29: Dressing room (N = 4) (to be continued)

SUBJECT	Yes		No		Not applicable	
Dressing room	**F**	**%**	**F**	**%**	**F**	**%**
Couch	4	100	-	-	-	-
Footstool	4	100	-	-	-	-
Linen	3	75	1	25	-	-
Pillow	1	25	3	75	-	-
Pillowcase	1	25	3	75	-	-
Blanket	-	-	4	100	-	-
Sheet	3	75	1	25	-	-
Linen saver	3	75	1	25	-	-
Changing of linen:						
◦ Daily	-	-	4	100	-	-
◦ In-between patients	-	-	4	100	-	-
◦ When dirty only	-	-	4	100	-	-
◦ When necessary	4	100	-	-	-	-
Chair	4	100	-	-	-	-
Dressing trolley						
◦ Trolley mobile	1	25	3	75	-	-
Lock-up cupboards	1	25	3	75	-	-
Wash basin/s	4	100	-	-	-	-
Running water	4	100	-	-	-	-
Soap	4	100	-	-	-	-
◦ Hand towels	2	50	2	50	-	-
Disinfectant	2	50	2	50	-	-
Equipment:						
◦ Applicable	4	100	-	-	-	-
◦ Available	4	100	-	-	-	-
◦ Record-keeping	4	100	-	-	-	-
Supply:						
◦ Applicable	4	100	-	-	-	-
◦ Available	4	100	-	-	-	-
◦ Record-keeping	4	100	-	-	-	-

TABLE 4.29: Dressing room (N = 4)

SUBJECT	Yes		No		Not applicable	
Bin/s:						
◦ Available	4	100	-	-	-	-
◦ Covered	4	100	-	-	-	-
Correct disposal	2	50	2	50	-	-

According to Table 4.29, only 3 (75%) of the couches had **linen** which included a sheet and linen saver and 1 (25%) of the couches had a **pillow with a pillowcase**. None of the couches (100%) had a **blanket**. According to the staff, **linen is only changed** when necessary. Thus it would be changed when dirty or when the dressing rooms are been cleaned.

One (25%) of the dressing rooms had a **mobile dressing trolley**, though the other 3 (75%) dressing rooms had **trays** from which dressings were done. Only 1 (25%) of the dressing rooms' cupboards was locked. While 2 (50%) of the dressing rooms had **hand towels, disinfectant and disposed dirty dressings** correctly.

4.3.2.1.6 Consulting room

Consulting rooms of which a minimum of two were found at all 7 (100%) clinics.

- **Question:** **Are the following present within the consulting room as depicted in Table 4.30?**

TABLE 4.30: Consulting room (N = 7) (to be continued)

SUBJECT	Yes		No		Not applicable	
Consulting room	**F**	**%**	**F**	**%**	**F**	**%**
Couch	7	100	-	-	-	-
Footstool	6	85.71	1	14.29	-	-
Linen						
∘ Pillow	5	71.43	2	28.57	-	-
∘ Pillowcase	5	100	-	-	-	-
∘ Blanket	-	-	7	100	-	-
∘ Sheet	7	100	-	-	-	-
∘ Linen saver	5	71.43	2	28.57	-	-
Changing of linen:						
∘ Daily	-	-	7	100	-	-
∘ In-between patients	-	-	7	100	-	-
∘ When dirty only	7	100	-	-	-	-
∘ When necessary	7	100	-	-	-	-
Desk	7	100	-	-	-	-
Chair/s	7	100	-	-	-	-
Scale:						
∘ For weight	7	100	-	-	-	-
– In working condition	7	100	-	-	-	-
∘ For height	5	71.43	2	28.57	-	-
– In working condition	5	71.43	-	-	2	28.57
Emergency trolley:						
∘ Complete	-	-	7	100	-	-
∘ Daily checking of emergency trolley	-	-	7	100	-	-

TABLE 4.30: Consulting room (N = 7) (to be continued)

SUBJECT	Yes		No		Not applicable	
Consulting room	**F**	**%**	**F**	**%**	**F**	**%**
Suction apparatus:						
◦ In working condition	-	-	7	100	-	-
Sterile suction catheters	-	-	7	100	-	
Sterile suction tubing	-	-	7	100	-	
Oxygen:						
◦ Wall	-	-	7	100	-	-
◦ In working condition	-	-	-	-	7	100
◦ Cylinder	7	100	-	-	-	-
– In working condition	4	57.14	3	43.86	-	-
Masks available	6	85.71	1	14.29	-	-
Baumanometer in working condition	7	100	-	-	-	-
Stethoscope:						
◦ Fetal	7	100	-	-	-	-
◦ General in working condition	7	100	-	-	-	-
Measuring tape	7	100	-	-	-	-
Urine testing equipment:						
◦ Non-expire	7	100	-	-	-	-
Syringes:						
◦ 2 ml	7	100	-	-	-	-
◦ 5 ml	7	100	-	-	-	-
◦ 10 ml	7	100	-	-	-	-
◦ 20 ml	7	100	-	-	-	-
Needles:						
◦ Sizes 19	6	85.71	1	14.29	-	-
◦ Sizes 21	7	100	-	-	-	-
◦ Sizes 23	6	85.71	1	14.29	-	-
Swabs	7	100	-	-	-	-
Closed sharpholder	7	100	-	-	-	-
Blood tubes:						
◦ Green	3	42.86	4	57.14	-	-
◦ Grey	6	85.71	1	14.29	-	-
◦ Purple	6	85.71	1	14.29	-	-
◦ Red	7	100	-	-	-	-
◦ White	4	57.14	3	42.86	-	-

TABLE 4.30: Consulting room (N = 7)

SUBJECT	Yes		No		Not applicable	
Consulting room	**F**	**%**	**F**	**%**	**F**	**%**
Papsmear:						
◦ Slides	7	100	-	-	-	-
◦ Spatulae	7	100	-	-	-	-
◦ Cytofix	7	100	-	-	-	-
◦ Sterile speculae:						
– Small	7	100	-	-	-	-
– Medium	7	100	-	-	-	-
– Large	7	100	-	-	-	-
– X-large	7	100	-	-	-	-
Gloves:						
◦ Sterile	2	28.57	5	71.43	-	-
Unsterile - Small	-	-	7	100-	-	-
Unsterile - Medium	7	100	-	-	-	-
Unsterile - Large	-	-	7	100-	-	-
K.Y. jelly	6	85.71	1	14.29	-	-
Haemoglobin meter:						
◦ In working condition	7	100	-	-	-	-
◦ Sticks available	6	85.71	1	14.29	-	-
◦ Preptic swabs available	7	100	-	-	-	-
Glucometer:						
◦ In working condition	4	57.14	3	42.86	-	-
◦ Non-expired strips	4	100	-	-	-	-
Specimen bottles	6	85.71	1	14.29	-	-
Stationery:						
◦ Applicable	7	100	-	-	-	-
◦ Available	7	100	-	-	-	-
Bin:						
◦ Available	7	100	-	-	-	-
◦ Covered	6	85.71	1	14.29	-	-

According to table 4.30 only 1 (14.29%) of the clinics' consulting rooms had no **footstool**. At 2 (28.57%) clinics the consulting rooms had no **pillows, pillowcases and linen savers**, whereas at 7 (100%) clinics the consulting rooms had no **blankets**. **Linen was only changed** when dirty or when the staff felt it was necessary in all 7 (100%) clinics.

Scales for height were only found in 5 (71.43%) of the clinics and were all in working condition. At all 7 (100%) of the clinics the **emergency trolleys** were incomplete nor **checked daily** and had no **suction apparatus, -catheters or -tubing**. Only 4 (57.14%) of the 7 (100%) **oxygen cylinders** found in the clinics were in working condition and at 1 (14.29%) of the clinics, **oxygen masks** were not available. A working glucometer was not found in 3 (42.86%) of the clinics.

As the above items were allocated per clinic and not per consulting room, evaluation was done as such.

Needles sizes 19 and 23 as well as **grey and purple blood tubes** were not found in 1 (14.29%) of the clinics only. White blood tubes were not found in 3 (42.86%) clinics and green blood tubes not found in 4 (57.14%) clinics.

Sterile gloves were found at 2 (28.57%) of the clinics only. Only medium size **unsterile gloves** were found at all 7 (100%) of the clinics. At 1 (14.29%) clinic, **K.Y. jelly, haemoglobin sticks, specimen bottles and covered bin** were not found.

4.3.2.1.7 Linen room

Though all 7 (100%) of the clinics did not have a separate linen room, linen was packed in either a cupboard or general storeroom.

- **Question:** **Are the following present within the linen room as depicted in Table 4.31?**

TABLE 4.31: Linen room (N = 7)

SUBJECT	Yes		No		Not applicable	
Linen room	**F**	**%**	**F**	**%**	**F**	**%**
Shelves	-	-	7	100	-	-
Pile system	-	-	7	100	-	-
Same items packed together	-	-	7	100	-	-

Table 4.31 reflects that all 7 (100%) of the clinics did not have a pile system in place and did not pack same items together. Linen was packed in cupboards together with toilet paper, sugar, stationery and medicine, or in a general storeroom as well as a room where the washing machine and soiled linen were kept.

4.3.2.1.8 Staff rest room

Staff rest rooms were found in only at 4 (57.14%) of the clinics. In the 3 (42.86%) of the clinics where no staff rest rooms were found, staff had their tea and lunch in either the consultation rooms, kitchen, supervisors office or outside the clinic.

- **Question:** **Are the following present with in the staff rest room as depicted in Table 4.32?**

TABLE 4.32: Staff rest room (N = 4)

SUBJECT	Yes		No		Not applicable	
Staff rest room	**F**	**%**	**F**	**%**	**F**	**%**
Tables	4	100	-	-	-	-
Sufficient chairs	3	75	1	25	-	-
Bin:						
◦ Available	3	75	1	25	-	-
◦ Covered	3	100	-	-	-	-

Table 4.32 reflects that only 1 (25%) of the staff rest rooms did not have enough chairs or a bin.

4.3.2.1.9 Storeroom

General storerooms were found at five (71.43%) of the clinics only. At two (28.57%) of the clinics a general storeroom was not found and stock was placed in any available space.

- **Question:** **Are the following present within the storerooms as depicted in Table 4.33?**

TABLE 4.33: Storerooms (N = 5)

SUBJECT	Yes		No		Not applicable	
Storerooms	**F**	**%**	**F**	**%**	**F**	**%**
Shelves	5	100	-	-	-	-
Equipment:						
∘ Applicable	5	100	-	-	-	-
∘ Available	4	80	1	20	-	-
∘ Pile system	2	40	3	60	-	-
∘ Maintenance	3	60	2	40	-	-
Supplies:						
∘ Applicable	5	100	-	-	-	-
∘ Available	4	80	1	20	-	-
∘ Pile system	4	80	1	20	-	-
Locked up	5	100	-	-	-	-
∘ Safe key keeping	5	100	-	-	-	-

According to table 4.33 only one (20%) of the storerooms neither had **the available equipment and medical supplies nor a pile system for the medical supplies.** A **pile system for equipment** was also not used in 3 (60%) of the storerooms and at two (40%) of the storerooms, the **maintenance of the equipment** was also not kept.

4.3.2.1.10 Cleaners' room

Only 3 (42.86%) of the clinics had separate cleaners' rooms. At 4 (57.14%) of the clinics where no cleaners' rooms were found, cleaning materials were placed in kitchens, storerooms or any available cupboard.

Though all clinics did not comprise of a cleaners room, all 7 [100%] clinics were evaluated for the availability of cleaning supply, -equipment, -policy and storage.

- **Question:** **Are the following present within the clinic as depicted in Table 4.34?**

TABLE 4.34: Cleaning supply/ -equipment/ -policy and storage [N = 7]

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Cleaning supply:						
◦ Applicable	7	100	-	-	-	-
◦ Available	6	85.71	1	14.29	-	-
Cleaning equipment:						
◦ Applicable	7	100	-	-	-	-
◦ Available	7	100	-	-	-	-
Handled according to policy:						
◦ Supplies	3	42.86	4	57.14	-	-
◦ Equipment	3	42.86	4	57.14	-	-
Lock up cupboards for:						
◦ Supplies	3	42.86	4	57.14	-	-
◦ Equipment	3	42.86	4	57.14	-	-

Table 4.34 depicts that only 1 [14.29%] of the clinics did not have the available cleaning supply. Four [57.14%] of the clinics did not have **lock-up cupboards or a policy on the handling of supplies and equipment**.

4.3.2.1.11 Sluice room

Only 3 [42.86%] of the clinics had a sluice room. At 4 [57.14%] of the clinics where no sluice rooms were found, toilets were used to flush away "sluiced" items,

Though all clinics did not comprise of a sluice room, all 7100%] clinics were evaluated for the cleaning policy, bins and storage.

- **Question: Are the following present within the clinic as depicted in Table 4.35?**

TABLE 4.35: Bins and the policy regarding cleaning, disinfection and storage of dirty linen (N = 7)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Cleaning and disinfection according to policy:						
◦ Bedpans	-	-	7	100	-	-
◦ Urine glasses	3	42.86	4	57.14	-	-
Bin/s:						
◦ Available	2	28.57	5	71.43	-	-
◦ Covered	1	50	1	50	-	-
Storage of dirty linen according to policy	1	14.29	6	85.71	-	-

Table 4.35 depicts that 7 [100%] of the clinics did not have a **policy on cleaning and disinfection of bedpans** whereas 4 [57.14%] of the clinics did not have a **policy on cleaning and disinfection of urine glasses**.

Seven [100%] of the clinics did not have bedpans available, while 4 [57.14%] of the clinics did not have urine glasses. Three [42.86%] of the clinics washed the urine glasses just with soap and water. The three clinics which had sluice rooms, only 2 [28.57%] had **bins** of which 1 [50%] **bin was covered**. **Dirty linen** was stored according to **policy** at 1 [14.29%] of the clinics only, while at 6 [85.71%] of the clinics, at times, **clean and soiled linen** were stored in one room.

4.3.2.1.12 Kitchen

Only 1 (14.29%) of the clinics had no kitchen.

- **Question:** **Are the following present within the kitchen as depicted in Table 4.36?**

TABLE 4.36: Kitchen (N = 6)

SUBJECT	Yes		No		Not applicable	
Kitchen	**F**	**%**	**F**	**%**	**F**	**%**
Fridge:						
○ Working thermometer	6	100	-	-	-	-
○ Freezer facility	6	100	-	-	-	-
○ Medication kept within	6	100	-	-	-	-
○ Medication kept apart from any foodstuff	6	100	-	-	-	-
Lock-up cupboards	-	-	6	100	-	-
Wash basin	6	100	-	-	-	-
Running water	6	100	-	-	-	-
Soap	5	83.33	1	16.67	-	-
Clean dish cloth	6	100	-	-	-	-
Bin:						
○ Available	4	66.67	2	33.33	-	-
○ Covered	4	100	-	-	-	-

Table 4.36 depicts that all 6 (100%) of the kitchens had no **lock-up cupboards.** One (16.67%) of the kitchens had **no soap**, while 2 (33.33%) of the kitchens had no **bins**. One clinic converted the sluice room into a "kitchen" as a sink, water and cupboards were in there, but did not use it for sluice purposes.

4.3.2.1.13 Offices, passages, ramp and rails

- **Question: Are the following in place in the clinics as depicted in Table 4.37?**

TABLE 4.37: Offices, passages, ramps and rails (N = 7)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Office for supervisor	7	100	-	-	-	-
Passages	7	100	-	-	-	-
Ramp for disabled	4	57.14	3	42.86	-	-
Rails for disabled	-	-	7	100	-	-

Table 4.37 reflects that 3 (42.86%) of the clinics had no ramps and 7 (100%) had no rails for the disabled.

4.3.2.1.14 Patient toilets

- **Question: Are toilets sufficient and are the following present within the toilets as depicted in Table 4.38?**

TABLE 4.38: Patient toilets (N = 7)

SUBJECT	Yes		No		Not applicable	
Toilets	F	%	F	%	F	%
Patients:						
○ Sufficient per patient	1	14.29	6	85.71	-	-
○ In working condition	5	71.43	2	28.57	-	-
○ Bells in patient's toilets	-	-	7	100	-	-
○ Big enough for wheelchair	3	42.86	4	57.14	-	-
○ Toilet paper	1	14.29	6	85.71	-	-
○ Running water	6	85.71	1	14.29	-	-
○ Hand towel	-	-	7	100	-	-
○ Soap	-	-	7	100	-	-

Table 4.38 depicts that at 6 (85.71 %) of the clinics there were no **toilet paper** nor sufficient **toilets**, as there was for example only one toilet for each of the male- and female patients. At another clinic an outside toilet was used by both male and female patients. An average of 150 patients were seen at each clinic per day. At 2 (28.57%) of the clinics it was reported that toilets were continuously broken. Only three (42.86%) of the clinics' toilets were **big enough to accommodate a wheelchair.**

In all 7 (100%) of the clinics' toilets no **bells, hand towels or soap** were found. One (14.29%) of the clinics did not have **running water** at the basin in the toilet and patients had to wash their hands at an outside tap.

4.3.2.1.15 Staff toilets

- **Question:** **Are toilets sufficient and are the following present within the toilets as depicted in Table 4.39?**

TABLE 4.39: Staff toilets (N = 7)

SUBJECT	Yes		No		Not applicable	
Toilets	**F**	**%**	**F**	**%**	**F**	**%**
Staff:						
◦ Sufficient	4	57.14	3	42.86	-	-
◦ In working condition	6	85.71	1	14.29	-	-
◦ Toilet paper	6	85.71	1	14.29	-	-
◦ Washbasin	5	71.43	2	28.57	-	-
◦ Running water	5	71.43	2	28.57	-	-
◦ Soap	2	28.57	5	71.43	-	-
◦ Towel	1	14.29	6	85.71	-	-

Table 4.39 reflects the following with regard to **staffs' toilets**: Though all 7 [100%] of the clinics had personnel toilets, 3 [42.86%] of the clinics did not have **toilets** specifically build for the staff and therefore allocated one of the patients' toilets.

At 1 [14.29%] of in the clinics, the toilet was not in a **working condition** nor did they have any toilet paper. Five [71.43%] of the clinics had **washbasins with running water but no soap** in the toilets though at one, the **basin** was not accessible because of equipment packed in front of it. Six [85.71 %] of the toilets had no **hand towel**.

4.3.2.1.16 Staffing

- **Question: Determine correlation of nurse-patient ratio and personnel attending to antenatal patients as depicted in Table 4.40**

TABLE 4.40: Staffing (N = 7)

SUBJECT	Yes		No		Not applicable	
Staffing	**F**	**%**	**F**	**%**	**F**	**%**
Nurse-patient ratio [1:30]	3	42.86	4	57.14	-	-
Health personnel attending to antenatal patient:						
◦ Professional nurses with midwifery	7	100	-	-	-	-
◦ Professional nurses without midwifery	-	-	7	100	-	-
◦ Enrolled nurses	-	-	7	100	-	-
◦ Enrolled nursing assistant	1	14.29	6	85.71	-	-

Table 4.40 reflects that at only 3 [42.86%] of the clinics the respondents felt that the **nurse-patients ratio 1:30** [according to the supervisors] was reasonable as well as manageable. At 4 [57.14%] of the clinics the personnel felt that the **nurse-patient ratio** was unreasonable as a nurse

had to attend to 50 to 80 patients per day. In all seven [100%] of the clinics antenatal patients were only seen by a professional nurse with midwifery. In 1 [14.29%] of the clinics, an enrolled nursing assistants was testing the urine and weighing the patients.

4.3.2.1.17 Management

- **Question:** **Are the following present in management as depicted in Table 4.41?**

TABLE 4.41: Management (N = 7)

SUBJECT	Yes		No		Not applicable	
Management	**F**	**%**	**F**	**%**	**F**	**%**
Mission statement	3	42.86	4	57.14	-	-
Philosophy	2	28.57	5	71.43	-	-
Goals	3	42.86	4	57.14	-	-
Objectives	3	42.86	4	57.14	-	-
Organogram	3	42.86	4	57.14	-	-
Up-dated nursing act and regulations file	5	71.43	2	28.57	-	-
Up-dated procedure manuals regarding nursing	5	71.43	2	28.57	-	-
Personnel provision policy	1	14.29	6	85.71	-	-
Personnel utilization policy	1	14.29	6	85.71	-	-
Personnel development policy	1	14.29	6	85.71	-	-
Quality improvement programme	-	-	7	100	-	-
Disciplinary procedure	6	85.71	1	14.29	-	-
Grievance procedure	6	85.71	1	14.29	-	-
Conflict handling procedure	4	57.14	3	42.86	-	-
Personal files	1	14.29	6	85.71	-	-
Job descriptions	2	28.57	5	71.43	-	-
Performance appraisal	-	-	7	100	-	-
Educational books/literature on antenatal care	6	85.71	1	14.29	-	-

Table 4.41 reflects that only 3 (42.86%) of the clinics had a **mission statement, goals, objectives** as well as an **organogram,** while 2 (28.57%) of the clinics had a **philosophy**. At 5 (71.43%) of the clinics **updated acts, regulations and procedure manuals** were found

Policies on personnel provision, -utilization, -development and personal files were only found in 1 (14.29%) of the clinics. In 6 (85.71%) of the clinics, **disciplinary- and grievance procedures as well as antenatal literature** were found while conflict handling procedures were found in 4 (57.14%) of the clinics. No **performance appraisal system and quality improvement programme** were found at all 7 (100%) of the clinics.

4.3.2.1.18 Maintenance of clinic

- **Question:** **Is neatness/ventilation being maintained as depicted in Table 4.42?**

TABLE 4.42: Neatness/ventilation (N = 7)

SUBJECT	Yes		No		Not applicable	
General	**F**	**%**	**F**	**%**	**F**	**%**
Neatness	7	100	-	-	-	-
Cross ventilation	7	100	-	-	-	-

Table 4.42 reflects that neatness and cross ventilation were maintained in all 7 (100%) of the clinics.

4.3.2.2 Sources of evidence for process standards

With reference to the checklist sources of evidence for process standards on 108 clients' records and physical examination have been evaluated. The analysis of such findings will now be discussed.

4.3.2.2.1 Nurse-patient relationship

TABLE 4.43: Nurse-patient relationship (N = 108)

SUBJECT	Yes		No		Not applicable	
Nurse-patient relationship	F	%	F	%	F	%
Nurse introduces herself to the patient	3	2.78	105	97.22	-	-
Nurse listens to patient	30	27.78	1	0.93	77	71.29
Nurse answers patient's concerns or questions	30	27.78	1	0.93	77	71.29

Table 4.43 depicts that the **nurses did introduce themselves** to only 3 (2.78%) of the patients, while nurses **listened** and **answered concerns or questions of 30** (27.78%) patients.

4.3.2.2.2 Nursing care procedures

TABLE 4.44: Nursing care and procedures in general (N = 108)

SUBJECT	Yes		No		Not applicable	
Nursing care procedures	F	%	F	%	F	%
Carried out according to scope of practice	108	100	-	-	-	-
Client is informed before activities are carried out	25	23.15	83	76.85	-	-
Preservation of privacy	96	88.89	12	11.11	-	-
Demonstrate caring attitude as observed by researcher	107	99.07	1	0.93	-	-
Client's personal data filled in completely	10	9.26	98	90.74	-	-
Client's personal data filled in correctly	99	91.67	9	8.33	-	-

Table 4.44 depicts that the nurses **preserved privacy** of 96 (88.89%) clients. Ninety-nine (91.67%) of the clients' data was filled **in correctly. Procedures** carried out **according to the scope of practice** was done on 108 (100%) clients and a **caring attitude** was demonstrated on 107 clients. Eighty-three (76.85%) of the clients were not **informed before activities were carried out** by the nurse, whereas 98 (90.74%) of **the clients' data was not filled in completely**.

4.3.2.2.3 Completion of INITIAL ASSESSMENT according to H10 (antenatal record)

The H10 (antenatal record) were evaluated for completeness and the following information reflected:

TABLE 4.45: H10 record (N = 108) (to be continued)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Length:						
◦ Recorded	83	76.85	20	18.52	5	4.63
Weight:						
◦ Recorded	107	99.07	1	0.93	-	-
◦ Problem identified	2	1.85	-	-	106	98.15
◦ Referred (N = 2)	-	-	-	-	2	100
General appearance:						
◦ Recorded	103	95.37	5	4.63	-	-
◦ Problem identified (N = 103)	1	0.97	-	-	102	99.03
◦ Referred (N = 1)	-	-	-	-	1	100
Thyroid:						
◦ Recorded	98	90.74	10	9.26	-	-
◦ Problem identified (N = 98)	-	-	-	-	98	100
◦ Referred	-	-	-	-	98	100

Table 4.45 depicts that in 20 (18.52%) cases **length** was not **recorded** while in 5 (4.63%) cases it was not applicable because of the use of an antenatal card other than the H 10 document.

Weight recording reflected on 107 (99.07%) of the respondents' records, and only with 1 (0.93%) of the respondents it was not recorded. Two (1.85%) of the respondents **presented with a weight problem** of whom the referral status did not reflect.

Five (4.63%) of the respondents' **general appearance** was not recorded, and one (9.07%) of the respondent's records reflected **having a problem**, though the handling thereof was not known. With 10 (9.26%) of the respondents, no **thyroid recordings** were done.

TABLE 4.45: H10 record (N = 108) (to be continued)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Heart:						
◦ Recorded	85	78.70	23	21.3	-	-
◦ Problem identified (N = 85)	-	-	-	-	85	100
◦ Referred (N = 85)	-	-	-	-	85	100
Pulse:						
◦ Recorded	62	57.41	46	42.59	-	-
◦ Problem identified (N = 62)	-	-	-	-	62	100
◦ Referred (N = 62)	-	-	-	-	62	100
Blood pressure:						
◦ Recorded	105	97.22	3	2.78	-	-
◦ Problem identified (N = 105)	3	2.86	-	-	102	97.14
◦ Referred (N = 3)	2	66.67	-	-	1	33.33

Table 4.45 depicts further that with the respondents, no recordings on the **heart** 23 (21.3%) and **pulse recordings** 46 (42.59%) were done.

Blood pressure was not recorded with 3 (2.78%) of the respondents. Three (2.86%) of the respondents presented with **problems** of whom 2 (66.67%) **were referred**.

TABLE 4.45: H10 record (N = 108) (to be continued)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Abdomen:						
◦ Recorded	95	87.96	13	12.04	-	-
◦ Problem identified (N = 95)	1	1.05	-	-	94	98.95
◦ Referred (N = 1)	1	100	-	-	-	-
Mammae:						
◦ Recorded	97	89.81	11	10.19	-	-
◦ Problem identified (N = 97)	-	-	-	-	97	100
◦ Referred (N = 97)	-	-	-	-	97	100
Symphysis fundus measurement (SF):						
◦ Recorded	99	91.67	9	8.33	-	-
◦ Problem identified (N = 99)	2	2.02	-	-	97	97.98
◦ Referred (N = 2)	-	-	-	-	2	100
Vagina (PV):						
◦ Recorded	53	49.07	55	50.93	-	
◦ Examination done	25	23.15	28	25.92	55	50.93
◦ Problem identified (N = 25)	8	23.53	-	-	17	76.47
◦ Referred (N = 8)	6	75	-	-	2	25
Urine:						
◦ Recorded	87	80.56	21	19.44	-	-
◦ Problem identified (N = 87)	6	6.90	-	-	81	93.10
◦ Referred (N = 6)	-	-	-	-	6	100
Referred for ultrasound:	-	-	108	100		
Tetanus toxoid:						
◦ Date recorded	107	99.07	1	0.93	-	-
◦ Dosage recorded	90	83.33	18	16.67	-	-
◦ Nurse's signature	101	93.52	7	6.48	-	-

Table 4.45 further depicts that 13 (12.04%) of the respondents assessment of the **abdomen** was not recorded. One (1.05%) of the respondents presented with a **problem**, whom was **referred.**

Eleven (10.19%) of the respondents' records did not reflect recordings of the **mammae**. No identified problems were picked up.

Symphysis fundus measurement (SF) was not recorded on 9 (8.33%) of the records of the respondents. Two (2.02%) of the respondents had **problems** of which the referral status was not reflected.

For 53 (49.07%) of the respondents' "PV done" or "PV not done" **has been recorded** while 55 (50.93%) records reflected no recording. On 25 (23.15%) of the respondent's records, an **actual PV was done. Problems** were identified with 8 (23.53%) of the respondents of which recordings indicated that 6 (75%) of the respondents were **referred.**

Urine was not recorded in 21 (19.44%) of the respondents' records. Six (6.59%) of the respondents had **problems,** but referral status did not reflect this. None of the 108 (100%) respondents were referred for an **ultrasound**.

Only one (0.93%) of the respondents' records did not reflect the **date** when **tetanus toxoid** was given, whereas 18 (16.67%) of the respondents' records did not reflect the **dosage** given. In 7 (6.48%) of the respondents' records, no **nurses' signature** was reflected.

TABLE 4.45: H10 record (N = 108) (to be continued)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Special examinations:						
◦ **Blood grouping:**						
– Recorded	-	-	108	100	-	-
– Problem identified	-	-	-	-	108	100
– Referred	-	-	-	-	108	100
◦ **Haemoglobin (HB):**						
– Recorded (N = 108)	104	96.30	4	3.70	-	-
– Problem identified (N = 108)	3	2.78	-	-	105	97.22
– Referred (N = 3)	-	-	-	-	3	100
◦ **Human Immunodeficiency Virus (HIV):**						
– Recorded	-	-	108	100	-	-
– Counseling	-	-	-	-	108	100
– Problem identified	-	-	-	-	108	100
– Referred	-	-	-	-	108	100
◦ **Veneral Disease Research Virus (VDRL):**						
– Recorded (N = 108)	102	94.44	6	5.56	-	-
– Problem identified (N = 108)	13	12.04	-	-	95	87.96
– Referred (N = 13)	12	92.31	-	-	1	7.69
◦ **Treponema Pallidum, Haemagglutinin Assay (TPHA):**						
– Recorded	-	-	108	100	-	-
– Problem identified	-	-	-	-	108	100
– Referred	-	-	-	-	108	100
◦ **Cervix screen (papsmear):**						
– Recorded (N = 108)	2	1.85	106	98.15	-	-
– Problem identified (N = 2)	-	-	-	-	2	100
– Referred	-	-	-	-	2	100

Table 4.45 depicts further that in all 108 (100%) of the respondents, no blood was taken to determine the **blood group, HIV status or TPHA** of the patient. **Haemoglobin** was not recorded on 4 (3.70%) of the respondents' records. Three (2.78%) of the respondents had **problems** but the referral status was not reflected.

VDRL results were not reflected in 6 (5.56%) of the respondents' records. Thirteen (12.04%) of the respondents had **problems** of whom 12 (92.31%) of the respondents were **referred.**

Papsmear recordings reflected that it been done on only 2 (1.85%) of the respondents' records of which same do not reflect whether problems were identified or not.

TABLE 4.45: H10 record (N = 108)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Final Expected Date of Delivery (EDD):						
– Recorded	34	31.48	74	68.52	-	-
Risk factors:						
◦ Recorded	81	75	27	25	-	-
◦ Problem identified	31	38.27	-	-	50	61.73
◦ Referred (N = 31)	5	16.13	-	-	26	83.87
Planning:						
◦ Type of delivery	96	88.89	12	11.11	-	-
◦ Feeding	106	98.15	2	1.85	-	-
◦ Contraception	106	98.15	2	1.85	-	-
◦ Place of delivery	105	97.22	3	2.78	-	-

Table 4.45 depicts that the **final expected date** was not **recorded** on 74 (68.52%) of the respondents' records. **Risk factors** were not **recorded** on 27 (25%) of the respondents' records, whereas 31 (38.27%) of the respondents **had problems** of whom 5 (16.13%) of the **respondents were referred**.

The **type of delivery** planned for was not **recorded** on 12 (11.11%) of the respondents' records, while the **plan for feeding and contraception** were not recorded on 2 (1.85%) of the respondents' records. According

to 3 (2.78%) of the respondents' records, the **place of delivery** was not recorded.

4.3.2.2.4 Follow-up physical examination

TABLE 4.46: Follow-up physical examination (N = 108) (to be continued)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Weight:						
◦ Taken (N = 108)	108	100	-	-	-	-
◦ Recorded (N = 108)	108	100	-	-	-	-
◦ Problem identified (N = 108)	6	5.56	-	-	102	94.44
◦ Referred (N = 6)	1	16.67	5	83.33	-	-
Blood pressure:						
◦ Taken (N = 108)	108	100	-	-	-	-
◦ Recorded (N = 108)	108	100	-	-	-	-
◦ Problem identified (N = 108)	13	12.04	-	-	95	87.96
◦ Referred (N = 13)	9	69.23	4	30.77	-	-
Urine:						
◦ Taken (N = 108)	108	100	-	-	-	-
◦ Recorded (N = 108)	108	100	-	-	-	-
◦ Problem identified (N = 108)	9	8.33	-	-	99	91.67
◦ Referred (N = 9)	7	77.78	2	22.22	-	-

Table 4.46 depicts that **weight, blood pressure and urine** were taken and recorded of all 108 (100%) of the respondents. **Problems** were identified with six (5.56%) of the respondents whose **weight** were taken, of whom only 1 (16.67%) **was referred**, and 5 (83.33%) of the respondents were not **referred.**

Thirteen (12.04%) of the respondents presented with **blood pressure** problems, of whom 9 (69.23%) **were referred**, and 4 (30.77%) were not referred.

Nine (8.33%) of the respondents had problems which were identified on their **urine sample**. Seven (77.78%) of the respondents with the problems were **referred** and 2 (22.22%) were not referred.

TABLE 4.46: Follow-up physical examination (N = 108) (to be continued)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Symphysis fundus measurement (SF):						
◦ Taken	108	100	-	-	-	-
◦ Recorded	106	98.15	2	1.85	-	-
◦ Problem identified	3	2.78	-	-	105	97.22
◦ Referred (N = 3)	2	66.67	1	33.33	-	-
Recordings of:						
◦ Fetal heart (N = 108)	104	96.30	1	0.93	3	2.77
◦ Fetal movements (N = 108)	103	95.37	2	1.85	3	2.78
◦ Fetal lie (N = 108)	82	75.93	10	9.26	16	14.81
◦ Fetal position (N = 108)	82	75.93	10	9.26	16	14.81
◦ Fetal head fixed (N = 108)	82	75.93	10	9.26	16	14.81
◦ Problem identified (N = 108)	7	6.48	-	-	101	93.52
◦ Referred (N = 7)	3	42.86	4	57.14	-	-
Amniotic fluid:						
◦ Recorded (N = 108)	82	75.93	22	20.37	4	3.70
◦ Problem identified (N = 82)	3	3.66	-	-	79	96.34
◦ Referred (N = 3)	2	66.66	1	33.33	-	-
Edema:						
◦ Recorded (N = 108)	105	97.22	3	2.78	-	-
◦ Problem identified (N = 105)	11	10.48	-	-	94	89.52
◦ Referred (N = 11)	7	63.64	4	36.36	-	-
Other problem/s not related to pregnancy:						
◦ Identified/detected (N = 108)	38	35.19	-	-	70	64.81
◦ Recorded (N = 38)	20	52.63	18	47.37	-	-
◦ Referred (N = 20)	16	80	4	20	-	-

Table 4.46 depicts further that **Symphysis fundus measurement (SF)** was not recorded on 2 (1.85%) of the records of the respondents. Three (2.78%) of the respondents had **problems** of whom only two (66.67%) respondents were referred.

Recording of the fetal heart was not done in 1 (0.93%) case whereas it was not necessary with 3 (2.77%) of the respondents because the respondents were less than 21 weeks pregnant. **Recording of the fetal movement** was not done in 2 (1.85%) cases whereas it was not necessary with 3 (2.78%) of the respondents because respondents were less than 21 weeks pregnant. **Recording of the fetal-lie, -position and -head** were not done in 10 (9.26%) cases whereas it was not necessary in 16 (14.81%) cases because the respondents were less than 33 weeks pregnant. **Problems with reference to the fetal heart, -movements, -lie, -position or -head** were identified in 7 (6.48%) cases of whom only 3 (42.86%) of the respondents were referred.

Eighty-two (75.93%) of the respondents' **amniotic fluid** were **recorded** of whom, only 3 (3.66%) **presented with problems**. With the other 79 (96.34%) of the respondents none of them presented with problems. With the three of the respondents who **had problems,** 2 (66.66%) were **referred** and 1 (33.33%) of the respondent **was not referred**.

Only 3 (2.78%) of the respondents' records did not reflect recordings on **edema**. Eleven (10.48%) of the respondents **presented with problems** of whom 7 (63.64%) were **referred** and 4 (36.36%) of the respondents were not referred.

Other problems not related to pregnancy such as respiratory or dermatology conditions were identified or detected with 38 (35.19%) of the respondents and not with the other 70 (64.81%) respondents. Only 20 (52.63%) of the respondents' problems were **recorded** of whom 16 (80%) were **referred** and 4 (20%) respondents were not referred.

TABLE 4.46: Follow-up physical examination (health education topics (N = 108) (to be continued)

SUBJECT	Yes		Not applicable	
	F	%	F	%
Health education:				
◦ Personal hygiene	5	4.63	103	95.37
◦ Clothing	2	1.85	106	98.15
◦ Diet	16	14.81	92	85.19
◦ Physical changes in pregnancy	9	8.33	99	91.67
◦ Exercise	-	-	108	100
◦ Breast and breast feeding	7	6.48	101	93.52
◦ Labour signs	4	3.7	104	96.3
◦ Medication	4	3.7	104	96.3
◦ Rest	4	3.7	104	96.3
◦ Sexual activity	2	1.85	106	98.15
◦ Minor ailments	25	23.15	83	76.85
◦ Danger signs in pregnancy	1	0.93	107	99.07
◦ Fetal development	5	4.63	103	95.37
◦ Postpartum contraception	1	0.93	107	99.07

Table 4.46 reflects further that **health education** was given to between 1 and 25 (0.93% to 23.15%) of the respondents, whom only presented with the said need while no health education was given to respondents who did not have any need.

TABLE 4.46: Follow-up physical examination (N = 108)

SUBJECT	Yes		No		Not applicable	
	F	%	F	%	F	%
Next appointment date	108	100	-	-	-	-
Referral:						
◦ Support services available	2	1.85	3	2.78	103	95.37
◦ General doctor	9	8.33	2	1.85	97	89.82
◦ Other	-	-	3	2.78	105	97.22

Table 4.46 finally depicts that all 108 (100%) of the respondents were given a **date for their next visit.**

Two (1.85%) of the respondents were **referred to available support services**, especially the social worker and 3 (2.78%) of the respondents were not referred. All 3 (2.78%) of the respondents were not referred to, for example the **dietician or chemist**. Nine (8.33%) of the respondents were **referred to the doctor** and 2 (1.85%) of the respondents were not referred.

4.3.2.3 Sources of evidence for outcome standards

Though 108 respondents gave permission to partake in the study, records of only 105 respondents were evaluated retrospectively for criteria of outcome standards. In this section seven aspects were evaluated and are reflected in Tables 4.47 and 4.48.

4.3.2.3.1 Outcome standards criteria according to clients' problems and health education

TABLE 4.47: Outcome standards criteria according to clients' problems and health education (N = 105)

SUBJECT	Yes		No		NOT APPLICABLE	
General	**F**	**%**	**F**	**%**	**F**	**%**
Problem recorded in client's records	56	53.33	8	7.62	41	39.05
Problem attended to – proof is in progress report	52	49.52	12	11.43	41	39.05
Problems evaluated – proof in progress report	7	6.67	57	54.28	41	39.05
Outcome of problem recorded in client's records	4	3.81	60	57.14	41	39.05
Health education given – proof is in records	22	20.95	83	79.05	-	-

According to Table 4.47, 56 (53.33%) records of the respondents reflected that **problems were recorded**, whereas 8 (7.62%) were not recorded and was picked, for example where medication was given to the client without recording the reason for it. Forty-one (39.05%) were not applicable as the respondents had no reflections of any problems. Fifty-two (49.52%) of the records reflected that **problems were attended to and there was proof of it**, while 12 (11.43%) of the records had no proof that problems were attended to. Forty-one (39.05%) of the respondents **had no problems,** therefore it was not applicable. Seven (6.67%) of the

records indicated that **problems were evaluated** with the next visit and proof was in the **progress report** of the respondent, while 57 (54.28%) of the **respondents' records** had no proof that problems were evaluated. Forty-one (39.05%) of the respondents had no problems and therefore it was not applicable. Only 4 (3.81%) of the records indicated that the **outcome of the problems** was recorded, whereas in 60 (57.14%) of the records no **outcome of the problems** was recorded and 41 (39.05%) were not applicable.

Only 22 (20.95%) of the records reflected **written proof** of **health education given.** In 83 (79.05%) of the records, no proof of **health education** given was found.

4.3.2.3.2 Statistics on antenatal care

TABLE 4.48: Statistics on antenatal care (N = 105)

SUBJECT	Yes		No		Not applicable	
General	**F**	**%**	**F**	**%**	**F**	**%**
Statistics recorded in records	105	100	-	-	-	-
Statistics sent to appropriate authority	105	100	-	-	-	-

Table 4.48 depicts that statistics were recorded and sent to the appropriate authority in all 105 (100%) of the cases.

4.3.3 Comparison on topics related to questionnaires and check-lists

Comparisons will be discussed in terms of related topics found between the different questionnaires (structured interview schedules) and checklists.

4.3.3.1 Health education

TABLE 4.49: Comparison on health education

SUBJECT	Client's questionnaire (N = 100)				Process standard (checklist) (N = 108)			
	Yes		No		Yes		No/Not applicable	
	F	%	F	%	F	%	F	%
Diet	31	31	69	69	16	14.81	92	85.19
Exercise	21	21	79	79	-	-	108	100
Rest	27	27	73	73	4	3.7	104	96.3
Medication	37	37	63	63	4	3.7	104	96.3
Personal hygiene	29	29	71	71	5	4.63	103	95.37
Clothing	31	31	69	69	2	1.85	106	98.15
Sexual activity	16	16	84	84	2	1.85	106	98.15
Minor ailments	28	28	72	72	25	23.15	83	76.85
Danger signs in pregnancy	30	30	70	70	1	0.93	107	99.07
Changes in pregnancy	28	28	72	72	9	8.33	99	91.67
Fetal development	17	17	83	83	5	4.63	103	95.37
Breast preparation	37	37	63	63	-	-	-	-
Breast and breastfeeding	-	-	-	-	7	6.48	101	93.52
Postpartum contraception	-	-	-	-	1	0.93	107	99.07
Signs of labour	33	33	67	67	4	3.7	104	96.3
Postnatal care	15	15	85	85	-	-	-	-

According to table 4.49, the clients questionnaire reflected that an average of 27.14% of the respondents indicated that they had received health education while in the checklist sources of evidence for process standards reflected that an average of only 6.07% of the respondents received health education during the physical examination.

4.3.3.2 Privacy

TABLE 4.50: Comparison on privacy

SUBJECT	Process standard (checklist) (N = 105)				Client's questionnaire (N = 100)			
	Yes		No		Yes		No	
	F	%	F	%	F	%	F	%
Preservation of privacy	96	88.89	12	11.11	99	99	1	1

Table 4.50 depicts how privacy was maintained as it reflects between 88.89% in the checklist for process standard to 99% in the clients questionnaire (structured interview schedule)[23].

[23] **Privacy**
* Maintain privacy by:
  - Knocking on patient's door before entering.
  - Closing curtains and doors.
  - Providing second gown while ambulating and sheet or blanket when transporting.
  - Holding patient discussions/confidential information sharing in private.
* Always ask patients if they need anything before leaving the room (Perucca, 2001:23).

4.3.3.3 Personnel attitude

TABLE 4.51: Comparison on personnel attitude (N = 100)

SUBJECT HEALTH	Health personnel				Administrative personnel				Cleaners			
	Yes		No		Yes		No		Yes		No	
	F	%	F	%	F	%	F	%	F	%	F	%
Friendly	86	86	13	13	87	87	13	13	84	84	16	16
Unco-operative	13	13	86	86	11	11	89	89	17	17	83	83
Communicative	79	79	20	20	84	84	16	16	83	83	17	17

Table 4.51 depicts that the administrative personnel were most friendly (87%) and communicative (84%) whereas cleaners were found to be most unco-operate (17%).

4.4 CONCLUSION

Data analysis and interpretation of results were discussed in this chapter. In the next chapter findings, conclusions and recommendations will be discussed.

CHAPTER 5

Conclusion and recommendations

5.1 INTRODUCTION

This chapter addresses the findings of the study, the discussion of the conclusions reached and the recommendations made. The process of quality assurance always has shortcomings that must be identified, followed by the determining of aims for remedial actions that should be implemented. The conceptual framework forms the basis of the discussion.

5.2 THE FINDINGS OF THE STUDY

After the analysis of the questionnaires and checklists, the following findings will be discussed.

5.2.1 Questionnaires (structured interview schedules)

The questionnaires used consisted of structured interviews schedules which were held with pregnant women, health personnel and supervisors.

5.2.1.1 Pregnant woman (client)

Pregnant women felt that the services rendered did not comply with their expectations because of reasons like:

- there is a lack of health education given to clients,

- they are not send for sonars,
- .they are not informed about their health status,
- they are not involved in decision-making regarding their own health care,
- they have to wait long periods before being seen because of too many patients attending the clinic,
- shortage of staff,
- medication are not always available, and
- generally the doctor was not available to see them.

5.2.1.2 Health personnel

Nursing care of the staff was influenced by:

- Management aspects:
  - Personnel are not involved in quality assurance programmes, decision- or policy-making, orientation programme as well as experiencing poor communication with management.
  - Personnel experienced low moral because of no promotions.
- Rendering care:
  - Personnel did not have enough time to spend with clients as the clinics are always overcrowded and staff-shortage is being experienced.
  - Stock and equipment are not always available.

5.2.1.3 Supervisors

The rendering of services could have been influenced negatively because of the following reasons:

- Management aspects:
  - Not all personnel are involved in policy-making or drawing-up of the clinic budget.
  - The fact that there are no performance appraisals for personnel, and staff shortage lead to staff being demotivated.
- Rendering care:
  - Problems were being experienced in the replacement and repair of items for example baumanometers or glucometers.

5.2.2 Checklists

The checklists used consisted of sources of evidence for structure – process and outcome standards.

5.2.2.1 Layout

Layout problems were experienced whereby not all clinics had a dressing room, storerooms for general- and sterile stock, cleaners' rooms, sluice rooms, ramp and rails for disabled persons, or a staff rest area as well as a waiting area big enough to accommodate clients visiting the clinics.

5.2.2.2 Stock and equipment

None of the clinics had suction apparatus as well as a complete emergency trolley. Problems were been experienced in the replacement of equipment, and in addition the replacement and repairment of equipment was also not done timeously.

5.2.2.3 Management

Mission statements, philosophies, goals, objectives organograms as well as the necessary policies for personnel-, provision-, utilization and development were not found in any of the clinics. No quality assurance programme or a performance appraisal system existed in the clinics.

5.2.2.4 Nursing care

- Health education was not given most of the time.
- The interpretation and charting of findings on the H10 document was found to be a problem.
- No feedback and continuity of care as clients were referred to a private practitioner with problems not related to pregnancy.
- Not all clinics kept duplicates of clients' records as clients kept the antenatal record with them.
- No guidelines for handling of clients' problems were encountered, or identified by nurses.

5.2.2.5 Security personnel

None of the clinics had security personnel.

5.3 DISCUSSIONS WITH REFERENCE TO THE FINDINGS

5.3.1 Personnel

As it was found that staff was not sufficient and there were no security personnel. According to the Primary Health Care Package for South Africa (2000:2-4), the staff establishment of all categories should be known and vacancies should be discussed with the supervisor. According to Cockey (2001:16), patients do have better health care outcomes in health institutions with higher staffing levels. Every clinic should also provide comprehensive security services to protect property and ensure the safety of all people at all times at the clinics.

5.3.2 Health education

As it was found that a lack of health education was given (see Table 4.49, p.199), according to Pattinson (1999:14), health education plays a major role in preventing maternal deaths and that antenatal education should be part of every health education programme that deals with reproductive health issues.

Staff should further be able to address the health problems, identify needs, and give appropriate education to improve health awareness.

5.3.3 Blood testing/investigations

Voluntary HIV testings are not being done, but, according to Flake (2000:14) it is recommended that all pregnant women, regardless of risk, should receive routine HIV counselling and be offered voluntary testing.

5.3.4 Recordkeeping

As the interpretation and charting of patients' findings were a problem, Berg (1986:9) indicated that documentation of nursing intervention is vital as it provides the basis for planning patient care and provides evidence of the course of a patient's condition. Furthermore, documentation attests communication among members of the health team and protects the legal interests of both the patient and the practitioners involved in providing health care. As timely and meaningful documentation allow assessment of the quality and quantity of care, it can be seen as one measure to ensure accountability among practitioners (Berg, 1986:10).

5.3.5 Management

According to Cardello (2001:36) and the Department of Health: Primary Health Care Package for South Africa (2000:3), patient satisfaction is an operational priority and an integral part of the facility's mission, vision and values; thus the importance that clinics should have such managerial functions and posted in the clinic as it was found that not all clinics were having a mission statement and philosophy.

5.3.6 Medical supply and equipment

As medical supply and equipment were not always fully available, the Primary Health Care Package for South Africa [2000:4] indicated that stock should be secure with time and checked against the order when received. The drugs ordered should followed EDL principles. Medical supply and equipment should always be in stock or with a mechanism for obtaining emergency supplies when needed.

5.4 RECOMMENDATIONS

The following recommendations were made:

5.4.1 Facilities

- Architectural study for the enlargement, improvement or erection where necessary of the following:
  - Kitchen and sluice rooms
  - Waiting areas with enough chairs and staff rest areas
  - Additional consulting rooms
  - Rails and ramps for disabled persons
  - Toilets with facilities for patients and personnel.

- Improvement/attention must also be given to walls, floors, painting and premises where necessary

5.4.2 Functioning and services of clinics

- Provide mobile clinics, to reduce waiting time when clients have to wait from 03:00 till clinics open.

- The appointment of security personnel to all clinics to ensure safety of both personnel and patients.

- The development and execution of policies with regard to referring patients for special investigations for example voluntary HIV testing.

- Proper budget for equipment needed for examples urine glasses.

- In-service training of personnel for the proper execution of recordkeeping.

- In-service training of personnel for the proper execution of nursing processes and nursing care activities.

- Developing of a quality assurance programme for the care of antenatal clients by developing standards together with the implementation and evaluation thereof.

5.4.3 Personnel

- Undertake a professional work study of the staff establishment with the aim of increasing staff.

- Develop a training plan and carry out a performance appraisal for each member of staff each year.

- Do staff development on a topic "healthy nurse-patient relationship".

5.4.4 General

Further research is recommended in the light that standards for quality assurance need to be developed.

5.5 CONCLUSION

In this chapter the findings of the study and recommendations were discussed. The conclusion of the study will be discussed in the next chapter.

CHAPTER 6

Conclusion of the study

The health of a nation depends on the health of the mother, child and family, thus antenatal care for pregnant women is of utmost importance. Antenatal care for pregnant women should therefore be provided holistically and be of the highest quality. The role of the caregiver should evolve from authoritative to consultative and supportive, taking into account that women's participation and co-operation in their own health management will create a more collegial environment. In this environment quality health care should be rendered by all health care practitioners, taking into consideration culturally appropriate health care which meets the needs of pregnant women.

The purpose of this study was to assess the quality of antenatal care rendered to pregnant women in primary health care settings. A non-experimental design of a descriptive and explanatory nature was used. The survey method was used to gather the data. The respondents in the sample consisted of 108 pregnant women and 30 health care professionals [of whom 8 were supervisors]. Structured interviews, based on a structured interview schedule were used to collect data from the respondents [both pregnant women and health care practitioners]. A checklist was used to assess sources of evidence for structure- process- and outcome standards. Ethical principles relevant to the conduct of research involving human subjects, were adhered to such as obtaining the necessary permission and complying with the human rights of the respondents. Data were analysed on a nominal descriptive level.

The results of this study showed that the pregnant women were not satisfied with aspects such as the attitude of personnel and the antenatal care rendered by health care practitioners. The pregnant women also indicated that health education was not on par and that too many pregnant women attended the clinics at the same time and that they have to come very early (03:00 in the morning) to ensure that they will be attended to before the end of the day. This problem was complicated by the fact that there was also a staff shortage. The health care practitioners indicated that their morale was very low and that they have to work under difficult circumstances such as a shortage of staff, insufficient stock and equipment, a high turnover of pregnant women which makes it difficult to render care holistically and of a high quality. Based on the above, recommendations were made that quality assurance programmes should be developed for antenatal care services in primary health care settings and be implemented as soon as possible. Health care practitioners should also be trained in aspects such as communication skills, record keeping and providing health education. To overcome the problem of the shortage of staff, more staff members should be employed while the low morale of the staff needs urgent attention.

APPENDIX A

Letter to Ethics Committee

University of the Free State

12 Lorandrew Court
Petunia Street
Heidedal
BLOEMFONTEIN
9306

13 November 2000

The Chairperson
Ethics Committee
Faculty of Health Sciences
University of the Free State
BLOEMFONTEIN
9300

Dear Sir/Madam

PERMISSION TO DO RESEARCH

I am a Masters student [1997555519] in the School of Nursing at the University of the Free State requesting permission to conduct a research study.

The title of the study is: Quality assurance of antenatal care in primary health care settings.

Thank you.

Yours faithfully

.....

V. Fransman
RESEARCHER

Telephone: [051] 4304142 [work]
082 893 2169

THE UNIVERSITY OF THE ORANGE FREE STATE

Office of the Director : Administration
Faculty of Health Sciences

339 BLOEMFONTEIN 9300
(051) 405-3013 / 401-2847

REPUBLIC OF SOUTH AFRICA
TELEFAX (051) 444 3103 SA

Enquiries: Mrs Niemand Tel 4053004

28th November 2000

MS V FRANSMAN
12 LORANDREW COURT
PETUNIA STREET
HEIDEDAL
BLOEMFONTEIN
9306

Dear Ms Fransman

ETOVS NR 236/00
RESEARCHER: MS V FRANSMAN
PROJECT TITLE: QUALITY ASSURANCE OF ANTENATAL CARE IN PRIMARY HEALTH CARE SETTINGS.

The abovementioned study was approved by the Ethics Committee during their meeting held on the 28th November 2000.

Your attention is kindly drawn to the following:
a) A progress report be presented not later than one year after approval of the project
b) That all extentions, amendments, serious adverse events, termination of a study etc have to be reported to the Ethics Committee

Will you please quote the Etovs number as indicated above in subsequent correspondence, reports and enquiries.

Yours faithfully

For DIRECTOR: MEDICINE ADMINISTRATION

APPENDIX B

Letter to Health Authority Welkom

12 Lorandrew Court
Petunia Street
Heidedal
BLOEMFONTEIN
9306

13 November 2000

The Head
Department of Health
Welkom Local Government
WELKOM
9460

Dear Sir/Madam

PERMISSION FOR USING THE LOCAL HEALTH CARE CLINICS - RESEARCH STUDY

I am a Masters student (1997555519) at UFS requesting permission for the use of the local municipal clinics to conduct a research study. The aim of the study is to do quality assurance of antenatal care to pregnant women in primary health care settings.

The duration of the study will be approximately two months, using Tuesdays only. Data will be collected from antenatal clients who revisit the clinics for antenatal care for the third time or more as well as supervisors and health personnel working at the antenatal department.

Data will be collected in the form of structured interviews and checklists. Two fieldworkers will conduct interviews with the clients and health personnel working in the antenatal departments to complete their questionnaires. The checklists will be completed by the researcher through observing for standards of quality care as well as completion of the structured interview with the supervisors.

The structured interviews schedules and checklists are designed to evaluate in general the service and nursing care presently rendered. After analysis of the data, results will be made known to you. Recommendations will then be made to develop a quality assurance programme.

Enclosed find proof of registration as student.

Thank you.

Yours faithfully

.....

V. Fransman
RESEARCHER

Researcher - V Fransman

Professional Qualifications: General Nursing
Midwifery
Community Health Nursing
Nursing Administration
Nursing Education

Academic Qualifications: BA (Cur) - UNISA

Presently registered for M. Soc Science - UFS

Telephone - (051) 4304142 (work)
082 893 2169

Field workers: Me T Rakhajane
Professional Nurse, Midwife and Community Health Nurse

Me S Moloi
Professional Nurse and Midwife

MATJHABENG

MUNICIPALITY
UMASIPALA
MMASEPALA

MUNISIPALITEIT

WELKOM

TRANSITIONAL MANAGER COMMUNITY SERVICES
HEALTH DEPARTMENT GESONDHEID
1st Floor Ste Verdieping
Health Department Gesondheidsdepartement
Annet Road Annetweg
WELKOM 9459
Bus 780, WELKOM 9460
Tel (057) 391 3150 / 3159
Fax (057) 352 4525
E.Mail : Welgro@Matjhabeng.com

Enq/Navrae: Me IG Choeu

Ref/Verw: 5/6/2/3

Date/Datum: 2001/11/28

Me V Fransman
12 Lorandrew Court
Petunia Street
Heidedal
BLOEMFONTEIN
9306

Madam,

PERMISSION FOR RESEARCH STUDY AT THE CLINICS

Your letter dated 13 November 2000, refers.

Arrangements have been done with personnel to expect you to conduct your study.

Hope you will find this in order.

Yours faithfully

.....
ACT TRANSITIONAL HEAD HEALTH SERVICES

This letter is also available in the language of your choice.
Hierdie brief is ook beskikbaar in die taal van u keuse

APPENDIX C

Letter to Health Authority

Odendaalsrus

12 Lorandrew Court
Petunia Street
Heidedal
BLOEMFONTEIN
9306

13 November 2000

The Head
Department of Health
Odendaalsrus Local Government
ODENDAALSRUS
9460

Dear Sir/Madam

PERMISSION FOR USING THE ONE LOCAL HEALTH CARE CLINIC - RESEARCH STUDY

I am a Masters student (1997555519) at UFS requesting permission for the use of one of your local health care clinic to conduct a pilot study.

After the pilot study, a full scale research study will then be conducted under the local health care clinics in Welkom. The aim of the study is to do quality assurance of antenatal care to pregnant women in primary health care settings.

The pilot study will be conducted under the supervisor, personnel working at the antenatal department and women who attend the clinic for services of antenatal care for the third time or more.

Data will be collected in the form of structured interviews and checklists. Two field workers will conduct interviews with the clients and health personnel working in the antenatal department to complete their questionnaires. The checklists will be completed by the researcher through observing for standards of quality care as well as the completion of the structured interview with the supervisor.

Enclosed find proof of registration as student.

Thank you.

Yours faithfully

.....

V. Fransman
RESEARCHER

Researcher - V Fransman

Professional Qualifications: General Nursing
Midwifery
Community Health Nursing
Nursing Administration
Nursing Education

Academic Qualifications: BA (Cur) - UNISA

Presently registered for M. Soc Science - UFS

Telephone - (051) 4304142 (work)
082 893 2169

Field workers: Me T Rakhajane
Professional Nurse, Midwife and Community Health Nurse

Me S Moloi
Professional Nurse and Midwife

MATJHABENG

Munisipaliteit

TELEFOON
TELEPHONE (057) 391-8300

FAX (057) 396-2072

Korrespondensie moet gerig word aan Die Munisipale Bestuurder

Correspondence to be addressed to The Municipal Manager

Odendaalsrus

In antwoord verwys asb. na
In your reply please quote

MP Nyamane

Municipality

POSBUS
P O BOX 708

WELKOM
9460

Departement : Publieke Dienste
Department : Public Services

Afdeling : Gesondheidsdienste
Section : Health Services

10/10/2002

Me V Fransman
12 Lorandrew Court
Petunia street
Heidedal
BLOEMFONTEIN
9306

Madam

PERMISSION FOR PILOT STUDY AT THE CLINICS

Your letter dated 13 November 2000, refers.

Arrangements have been done with personnel to expect you to conduct your study.

Hope you will find this in order.

Yours faithfully

E SCHEURKOGEL
SENIOR PROP NURSE

APPENDIX D

Letter of approval for permission to respondent

12 Lorandrew Court
Petunia Street
Heidedal
BLOEMFONTEIN
9306

13 November 2000

Dear Colleague/Client

I am a professional nurse who is presently conducting a research study at the University of the Free State. The aim of the study is to do quality assurance of antenatal care to pregnant women in primary health care settings.

As we are continuously striving to improve standards of nursing care and service, your views and constructive opinion will be of great value in this respect.

All information will remain anonymous and will be dealt with confidentially. You may also withdraw at any time if you do not wish to continue partaking in the study.

In order to achieve the above, I would appreciate your open views to assist us in evaluating the nursing care and service in general.

Results will also be made known to you on request.

Thank you for your time and attention.

Yours faithfully

V Fransman

.....

V. Fransman
RESEARCHER

Permission to partake in the study.

I ..... (full name and surname) hereby give permission to partake in the study after explanation of the study has been given to me by the fieldworkers/researcher.

Signature ..... Date .....

Witness 1. ....

2. ....

APPENDIX E

Letter to fieldworkers

12 Lorandrew Court
Petunia Street
Heidedal
BLOEMFONTEIN
9306

13 November 2000

Dear Colleague

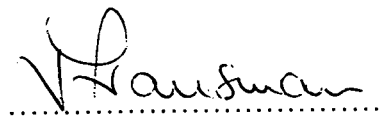
I am presently conducting a research study. The aim of the study is to do quality assurance of antenatal care of pregnant women in primary health care settings.

I am in need of your assistance in the data collection process.

Full training will be given to you by the researcher enabling you to be conversant with what is expected of you, when and how to conduct the data collection process and to understand the structured interviews.

Thank you for your participation.

Yours faithfully



V. Fransman
RESEARCHER

Telephone: (051) 4304142 (work)
082 893 2169

APPENDIX F

Instructions to fieldworkers

INSTRUCTIONS TO FIELDWORKERS

There are seven municipality clinics in the Welkom region namely Boipelong, Bronville, Khotsong, Riebeeckstad, Thabong, Tsepong and Welkom where the study will be conducted. A pilot study will be conducted at the Odendaalsrus municipality clinic.

One clinic will be visited by you on Tuesdays until all clinics have been visited. Every clinic will be visited once.

On these days data will be collected by means of a structured interview with pregnant women revisiting the clinic for antenatal care for the third time or more. The reason for this is because services can be evaluated more objectively after being exposed for more then once or twice to the service at the clinic.

A structured interview will also be conducted with the supervisors and health personnel working at these antenatal departments.

Both employee and client structured interview must be completed in privacy.

Data must be collected from the clients whilst they are waiting to be seen, because if data are collected after they have been seen, they may be in a hurry to leave and that may influence the objectivity of the data.

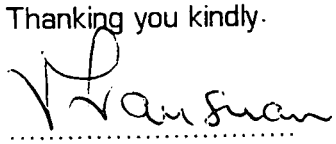
Written permission should be obtained from respondents after explaining the reason for the study and before conducting the interview.

Completed structured interviews will be collected by the researcher at the end of the day.

Training will be given to you two weeks before the study and you will also be provided with the structured interviews to make sure you understand each question by interpreting it the same and explaining it to the respondent correctly should they not understand the question. Please note that no interpretations or assumptions should be made. Use clients' own words.

Make sure that each question is answered correctly by writing, ticking or making one cross (X) in the blocks provided indicating the choice of the respondent's view and motivate against the correct question number.

Thanking you kindly.



V. Fransman
RESEARCHER

APPENDIX G

Structured questionnaire for structured interview schedule

- Professional nurses

QUALITY ASSURANCE PROGRAMME

EMPLOYEE QUESTIONNAIRE

Please write in/tick the appropriate answer.

1	Age					3-4
2	Male/Female					5
3	Years of experience					6-7
4	How long are you working at this clinic?					8-9
5	Professional qualifications	Enrolled nursing assistant	Enrolled nurse	Professional nurse without midwifery	Professional nursing with midwifery	10

Please fill in the questionnaire by making a cross (x) in the appropriate block, representing your view and elaborate/motivate your decision.

Are you proud of:				**Reason for answer**	
6	Working for this particular clinic?	Yes	No		11-12

Give your opinion about the following in this clinic:							Reason for answer			
7	Orientation programmes	Excel-lent	Good	Poor	Very poor	Not applic able				13-14
8	Inservice training with regard to quality assurance	Excel-lent	Good	Poor	Very poor	Not applic able				15-16
9	Personnel participation in formulation of quality assurance standards	Excel-lent	Good	Poor	Very poor	Not applic able				17-18
10	Personnel participation in clinic policy making	Excel-lent	Good	Poor	Very poor	Not applic able				19-20
11	Personnel participation in decision-making	Excel-lent	Good	Poor	Very poor	Not applic able				21-22
12	**Give your opinion about communication/liaison with:**						**Reason for answer**			
12.1	Management	Excel-lent	Good	Poor	Very poor					23-24

Communication/liason with:						Reason for answer			
12.2	Other health departments	Excel-lent	Good	Poor	Very poor				25-26
12.3	Clients	Excel-lent	Good	Poor	Very poor				27-28
12.4	Multi-professional team	Excel-lent	Good	Poor	Very poor				29-30
13	**General – give your opinion about:**								
13.1	Personnel-patient ratio	Excel-lent	Good	Poor	Very poor				31-32
13.2	Stock available	Excel-lent	Good	Poor	Very poor				33-34
13.3	Equipment available	Excel-lent	Good	Poor	Very poor				35-36
13.4	Service rendered in terms of time per client	Excel-lent	Good	Poor	Very poor				37-38

						Reason for answer			
13.5	Implementation of standing orders	Excel-lent	Good	Poor	Very poor				39-40
13.6	Availability of doctor	Excel-lent	Good	Poor	Very poor				41-42

PLEASE COMMENT ON ANY FURTHER:

APPENDIX H

Structured questionnaire for structure interview schedule

- Supervisor

QUALITY ASSURANCE PROGRAMME

						1-2

SUPERVISOR QUESTIONNAIRE

Please write in/tick the appropriate answer.

1	Age						3-4
2	Male/Female						5
3	Years of experience as a professional nurse						6-7
4	Years of experience as a supervisor						8-9
5	How long are you working at this clinic?						10-11
6	Professional qualifications	Professional nurse without midwifery	Professional nurse with midwifery	Professional nurse without health care management	Professional nurse with health care management		12-13

Please fill in the questionnaire by making a cross (x) in the appropriate block, representing your view and elaborate/motivate your decision.

7	Do you have the following:			Reason for answer			
7.1	Updated written policies?	Yes	No				14-15
7.2	Updated written procedures?	Yes	No				16-17
7.3	Orientation programme?	Yes	No				18-19
7.4	In-service training?	Yes	No				20-21
7.5	Performance appraisal system?	Yes	No				22-23
7.5	Disciplinary code and procedure?	Yes	No				24-25
7.6	Grievance procedure?	Yes	No				26-27

8	Personnel			Reason for answer		
8.1	**Do personnel attend:**					
8.1.1	In-service training?	Yes	No			28-29
8.1.2	Orientation programmes?	Yes	No			30-31
8.1.3	Personal meeting	Yes	No			32-33
8.2	**Do you involve personnel in:**					
8.2.1	Formulation of quality assurance standards/programmes?	Yes	No			34-35
8.2.2	Policy making?	Yes	No			36-37
8.2.3	Decision-making?	Yes	No			38-39

8.3	**Are the following being implemented:**						**Reason for answer**			
8.3.1	Performance appraisal systems?		Yes	No						40-41
	Are the following being implemented:									
8.3.2	Disciplinary code and procedures?		Yes	No						42-43
8.3.3	Grievance procedure?		Yes	No						44-45
8.4	**Give your opinion about the method of communication with regard to:**									
8.4.1	**Performance appraisal**						**Reason for answer**			
8.4.1.1	Written	Excel-lent	Good	Poor	Very poor	Not appli-cable				46-47
8.4.1.2	Verbal	Excel-lent	Good	Poor	Very poor	Not appli-cable				48-49
8.4.2	**Disciplinary procedure:**									
8.4.2.1	Written	Excel-lent	Good	Poor	Very poor	Not appli-cable				50-51

	Disciplinary procedure:						**Reason for answer**		
8.4.2.2	Verbal	Excel-lent	Good	Poor	Very poor	Not appli-cable			52-53
8.4.3	**Grievance procedure:**								
8.4.3.1	Written	Excel-lent	Good	Poor	Very poor	Not appli-cable			54-55
8.4.3.2	Verbal	Excel-lent	Good	Poor	Very poor	Not appli-cable			56-57

	General			**Reason for answer**		
8.5	Do you have a high turn over of personnel?	Yes	No			58-59
8.6	Do you experience problems in the filling of vacant posts?	Yes	No			60-61
8.7	Do you experience problems in absenteeism?	Yes	No			62-63

9	Budget			Reason for answer			
9.1	Do you draw-up the clinic budget?	Yes	No				64-65
9.2	Is the clinic budget decentralized	Yes	No				66-67
9.3	Do you involve your personnel?	Yes	No				68-69
9.4	Do you and your personnel work within the limits of the budget?	Yes	No				70-71
10	**Are any measures in place to:**						
10.1	Limit expenses?	Yes	No				72-73
10.2	Replace unbudgetted items/stock/ equipment?	Yes	No				74-75

10	Are any measures in place to:			Reason for answer			
10.3	Dispose waste:						
10.3.1	Medical	Yes	No				76-77
10.3.2	General	Yes	No				78-79
11	**Stock/equipment**						
11.1	Do the personnel use it correctly?	Yes	No				1-2
11.2	Is training given for the use of new equipment?	Yes	No				3-4
11.3	Is broken equipment been repaired in short-time?	Yes	No				5-6
11.4	Are condemned items been replaced by new ones?	Yes	No				7-8

12	**Medical supply**					**Reason for answer**			
12.1	Is medical supply as stipulated on the essential drug list?			Yes	No				9-10
12.2	Is the supply issued timeously?			Yes	No				11-12
13	**Multiprofessional team**								
13.1	How is the communication within the team?	Excel-lent	Good	Poor	Very poor				13-14

PLEASE COMMENT ON ANY FURTHER

APPENDIX I

Structured questionnaire for structure interview schedule

- Antenatal client

QUALITY ASSURANCE PROGRAMME

		1-2

CLIENT INTERVIEW FORM

Please write in the appropriate answer.

1	Age		3-4
2	Total number of pregnancies?		5-6
3	How many babies born alive?		7-8

Please fill in the questionnaire by making a cross (x) in the appropriate block, representing you view and elaborate/ motivate your decision.

				Reason for opinion	
4	Do you always attend this clinic?	Yes	No		9-10
5	Are you always seen by the same midwife	Yes	No		11-12

				Reason for opinion					
6	Has the doctor ever attended to you in this clinic?	Yes	No						13-14
Give your opinion about the:						**Reason for opinion**			
7	Functioning of this antenatal clinic	Excel-lent	Good	Poor	Very poor				15-16
Is the service acceptable in terms of:				**Reason for answer**					
8	time of antenatal clinic?	Yes	No						17-18
9	days of antenatal clinic?	Yes	No						19-20
10	waiting time before attended to?	Yes	No						21-22
11	accessibility?	Yes	No						23-24

12	Referrals			Reason for answer			
12.1	Do you receive a note when referred to another health care service?	Yes	No				25-26
12.2	Do you know where to go to?	Yes	No				27-28
13	**Meeting of your needs/problems**						
13.1	Does this service meet your needs?	Yes	No				29-30
13.2	Are you involved in making decisions about your treatment?	Yes	No				31-32
13.3.	Are you informed about your health status?	Yes	No				33-34
13.4	Is confidentiality been maintained about you as a client?	Yes	No				35-36
13.5	Do you receive the care you expected from the personnel?	Yes	No				37-38

14	Was the following health education given to you?			Reason for answer			
14.1	Diet	Yes	No				39-40
14.2	Exercise	Yes	No				41-42
14.3	Rest	Yes	No				43-44
14.4	Relaxation	Yes	No				45-46
14.5	Medication	Yes	No				47-48
14.6	Personal hygiene	Yes	No				49-50
14.7	Clothing	Yes	No				51-52

				Reason for answer			
14.8	Sexual activity	Yes	No				53-54
14.9	Minor ailments	Yes	No				55-56
14.10	Danger signs in pregnancy	Yes	No				57-58
14.11	Changes in pregnancy	Yes	No				59-60
14.12	Fetal development	Yes	No				61-62
14.13	Breast preparation	Yes	No				63-64
14.14	Signs of labour	Yes	No				65-66

				Reason for answer			
14.15	Postnatal care	Yes	No				67-68
15	**Health personnel:** Are they:						
15.1	Friendly?	Yes	No				69-70
15.2	Unco-operative?	Yes	No				71-72
15.3	Communicative?	Yes	No				73-74
16	**Administration personnel:** Are they:						
16.1	Friendly?	Yes	No				75-76
16.2	Unco-operative?	Yes	No				77-78

				Reason for answer			
16.3	Communicative?	Yes	No				79-80
17	**Cleaners:** Are they						
17.1	Friendly?	Yes	No				1-2
17.2	Unco-operative?	Yes	No				3-4
17.3	Communicative?	Yes	No				5-6
18	**Security personnel:** Are they			**Reason for answer**			
18.1	Friendly?	Yes	No				7-8
18.2	Unco-operative?	Yes	No				9-10

						Reason for answer			
18.3	Communicative?	Yes	No						11-12
19	**General**								
19.1	Is attention given to your other problems not related to pregnancy?	Yes	No						13-14
19.2	Is privacy maintained during an examination?	Yes	No						15-16
20	**Structure of the clinic**					**Reason for opinion**			
	How would you rate the condition of the:								
19.1	Painting?	Excel-lent	Good	Poor	Very poor				17-18
19.2	Walls?	Excel-lent	Good	Poor	Very poor				19-20
19.3	Lights?	Excel-lent	Good	Poor	Very poor				21-22

						Reason for opinion			
19.4	Ventilation?	Excel-lent	Good	Poor	Very poor				23-24
19.5	Floors?	Excel-lent	Good	Poor	Very poor				25-26
19.6	Ceiling?	Excel-lent	Good	Poor	Very poor				27-28
19.7	Temperature of the room?	Excel-lent	Good	Poor	Very poor				29-30
21	**External environment**								
	How would you rate the condition of the:								
21.1	Walls	Excel-lent	Good	Poor	Very poor				31-32
21.2	Roofing	Excel-lent	Good	Poor	Very poor				33-34

						Reason for opinion			
21.3	Gutters	Excel-lent	Good	Poor	Very poor				35-36
21.4	Fence	Excel-lent	Good	Poor	Very poor				37-38
21.5	Yard	Excel-lent	Good	Poor	Very poor				39-40
21.6	Parking:								
21.6.1	Personnel	Excel-lent	Good	Poor	Very poor				41-42
21.6.2	Visitors	Excel-lent	Good	Poor	Very poor				43-44
21.7	Neatness	Excel-lent	Good	Poor	Very poor				45-46
21.8	Water supply	Excel-lent	Good	Poor	Very poor				47-48

PLEASE COMMENT ON ANY FURTHER

APPENDIX J

Checklists

- To observe sources of evidence of structure standards
- To observe sources of evidence of process standards
- To observe sources of evidence of outcome standards

CHECKLIST TO OBSERVE SOURCES OF EVIDENCE OF STRUCTURE STANDARDS

Y = Yes; N = No; N/A = Not applicable			1-2

Are the following present?

	1. Physical layout	Y	N	N/A		
1.1	Reception area					3
1.2	Waiting area					4
1.3	Dispensary/medicine room					5
1.4	Dressing room					6
1.5	Consultation rooms					7
1.6	Linen room					8
1.7	Staff rest room					9
1.8	Store rooms:					
1.8.1	General stock					10
1.8.2	Sterile stock					11
1.9	Cleaners room					12
1.10	Sluice room					13
1.11	Office for supervisor					14
1.12	Passage/s					15
1.13	Ramp for disabled					16
1.14	Rails for disabled					17
1.15	Kitchen					18
1.16	Toilets:					
1.16.1	Personnel					19
1.16.2	Patients					20

Are the following present within?

	2. Reception area					
2.1	Telephone					21
2.1.1	In working condition					22
2.2	Filing cabinets for antenatal files					23
2.3	Lock-up cabinets for files					24

		Y	N	N/A		
2.4	Desk					25
2.5	Chair/s					26
2.6	Reception counter					27
2.7	Baskets:					
2.7.1	Incoming post					28
2.7.2	Outgoing post					29
2.8	Stationery:					
2.8.1	Applicable					30
2.8.2	Available					31
2.9	Bin:					
2.9.1	Available					32
2.9.2	Covered					33
2.10	Key cupboard					34
3.	**Waiting area**					
3.1	Benches/chairs					35
3.2	Benches/chairs sufficient					36
3.3	Bin/s:					
3.3.1	Available					37
3.3.2	Covered					38
3.4	Big enough to accommodate all patients					39
4.	**Dispensary/medicine room**					
4.1	Shelves					40
4.2	Shelves marked					41
4.3	Lock-up cupboards					42
4.4	Supply:					
4.4.1	Applicable					43
4.4.2	Available					44
4.4.3	Record-keeping					45
4.5	Stock:					
4.5.1	Applicable					46
4.5.2	Available					47
4.5.3	Record-keeping					48
4.6	Fridge:					

		Y	N	N/A		
4.6.1	Thermometer in fridge					49
4.6.2	Thermometer in working condition					50
4.6.3	Content:					
4.6.3.1	Medication					51
4.6.3.2	Food					52
4.7	Desk					53
4.8	Wash basin					54
4.9	Soap					55
4.10	Running water					56
4.10.1	Hand towels					57
4.11	Bin/s:					
4.11.1	Available					58
4.11.2	Covered					59
4.12	Locked security gate					60
4.13	Key control					61
5.	**Dressing room**					
5.1	Couch					62
5.2	Footstool					63
5.3	Linen					64
5.4	Pillow					65
5.5	Pillowcase					66
5.6	Blanket					67
5.7	Sheet					68
5.8	Linen saver					69
5.9	Changing of linen:					
5.9.1	Daily					70
5.9.2	In-between patients					71
5.9.3	When dirty only					72
5.9.4	When necessary					73
5.10	Chair					74
5.11	Dressing trolley					75
5.11.1	Trolley mobile					76
5.12	Lock-up cupboards					77

		Y	N	N/A		
5.13	Wash basin/s					78
5.14	Running water					79
5.15	Soap					80
5.15.1	Hand towels					1
5.16	Disinfectant					2
5.17	Equipment:					
5.17.1	Applicable					3
5.17.2	Available					4
5.17.3	Record-keeping					5
5.18	Supply:					
5.18.1	Applicable					6
5.18.2	Available					7
5.18.3	Record-keeping					8
5.19	Bin/s					
5.19.1	Available					9
5.19.2	Covered					10
5.20	Correct disposal					11
6.	**Consulting room**					
6.1	Couch					12
6.2	Footstool					13
6.3	Linen					14
6.3.1	Pillow					15
6.3.2	Pillowcase					16
6.3.3	Blanket					17
6.3.4	Sheet					18
6.3.5	Linen saver					19
6.4	Changing of linen:					
6.4.1	Daily					20
6.4.2	In-between patients					21
6.4.3	When dirty only					22
6.4.4	When necessary					23
6.5	Desk					24
6.6	Chair/s					25

		Y	N	N/A	
6.7	Scale:				
6.7.1	For weight				26
6.7.1.1	In working condition				27
5.7.2	For height				28
6.7.2.1	In working condition				29
6.8	Emergency trolley:				
6.8.1	Complete				30
6.8.2	Daily checking of emergency trolley				31
6.9	Suction apparatus:				
6.9.1	In working condition				32
6.10	Sterile suction catheters				33
6.11	Sterile suction tubing				34
6.12	Oxygen:				
6.12.1	Wall				35
6.12.2	In working condition				36
6.12.3	Cylinder				37
6.12.3.1	In working condition				38
6.13	Masks available				39
6.14	Baumanometer in working condition				40
6.15	Stethoscope:				
6.15.1	Fetal				41
6.15.2	General in working condition				42
6.16	Measuring tape				43
6.17	Urine testing equipment:				
6.17.1	Non-expire				44
6.18	Syringes:				
6.18.1	2 ml				45
6.18.2	5 ml				46
6.18.3	10 ml				47
6.18.4	20 ml				48

		Y	N	N/A	
6.19	Needles:				
6.19.1	Sizes 19				49
6.19.2	Sizes 21				50
6.19.3	Sizes 23				51
6.20	Swabs				52
6.21	Closed sharpholder				53
6.22	Blood tubes:				
6.22.1	Green				54
6.22.2	Grey				55
6.22.3	Purple				56
6.22.4	Red				57
6.22.5	White				58
6.23	Papsmear:				
6.23.1	Slides				59
6.23.2	Spatulae				60
6.23.3	Cytofix				61
6.23.4	Sterile speculae:				
6.23.4.1	Small				62
6.23.4.2	Medium				63
6.23.4.3	Large				64
6.23.4.4	X-large				65
6.24	Gloves:				
6.24.1	Sterile				66
6.24.1.1	Small				67
6.24.1.2	Medium				68
6.24.1.3	Large				69
6.25	K.Y. jelly				70
6.26	Haemoglobin meter:				
6.26.1	In working condition				71
6.26.2	Sticks available				72
6.26.3	Preptic swabs available				73
6.27	Glucometer:				
6.27.1	In working condition				74
6.27.2	Non-expired strips				75

		Y	N	N/A	
6.28	Specimen bottles				76
6.29	Stationery:				
6.29.1	Applicable				77
6.29.2	Available				78
6.30	Bin:				
6.30.1	Available				79
6.30.2	Covered				80
7.	**Linen room:**				
7.1	Shelves				1
7.2	Pile system				2
7.3	Same items pack together				3
8.	**Staff rest room**				
8.1	Tables				4
8.2	Sufficient chairs				5
8.3	Bins:				
8.3.1	Available				6
8.3.2	Covered				7
9.	**Store rooms**				
9.1	Shelves				8
9.2	Equipment:				
9.2.1	Applicable				9
9.2.2	Available				10
9.2.3	Pile system				11
9.2.4	Maintenance				12
9.3	Supplies:				
9.3.1	Applicable				13
9.3.2	Available				14
9.3.3	Pile system				15
9.4	Locked up				16
9.4.1	Safe key keeping				17
10.	**Cleaners' room**				
10.1	Cleaning supply:				
10.1.1	Applicable				18
10.1.2	Available				19

		Y	N	N/A		
10.2	Cleaning equipment:					
10.2.1	Applicable					20
10.2.2	Available					21
10.3	Handled according to policy:					
10.3.1	Supplies					22
10.3.2	Equipment					23
10.4	Lock up cupboards for:					
10.4.1	Supplies					24
10.4.2	Equipment					25
11.	**Sluice room**					
11.1	Cleaning and disinfection according to policy:					
11.1.1	Bedpans					26
11.1.2	Urine glasses					27
11.2	Bin/s:					
11.2.1	Available					28
11.2.2	Covered					29
11.3	Storage of dirty linen according to policy					30
12.	**Kitchen**					
12.1	Fridge:					
12.1.1	Working thermometer					31
12.1.2	Freezer facility					32
12.1.3	Medication kept within					33
12.1.4	Medication kept apart from any foodstuff					34
12.2	Locked up cupboards					35
12.3	Washbasin					36
12.4	Running water					37
12.5	Soap					38
12.6	Clean dish cloth					39
12.7	Bin:					
12.7.1	Available					40
12.7.2	Covered					41

		Y	N	N/A		
13.	**Toilets**					
13.1	Patients:					
13.1.1	Sufficient per patient					42
13.1.2	In working condition					43
13.1.3	Bells in patient's toilets					44
13.1.4	Big enough for wheelchair					45
13.1.5	Toilet paper					46
13.1.6	Running water					47
13.1.7	Hand towel					48
13.1.8	Soap					49
13.2	Staff:					
13.2.1	Sufficient					50
13.2.2	In working condition					51
13.2.3	Toilet paper					52
13.2.4	Washbasin					53
13.2.5	Running water					54
13.2.6	Soap					55
13.2.7	Towel					56
14.	**Staffing**					
14.1	Nurse-patient ratio (1:30)					57
14.2	Health personnel attending to antenatal patient:					
14.2.1	Professional nurses with midwifery					58
14.2.2	Professional nurses without midwifery					59
14.2.3	Enrolled nurses					60
14.2.4	Enrolled nursing assistant					61
15.	**Management**					
15.1	Mission statement					62
15.2	Philosophy					63
15.3	Goals					64
15.4	Objectives					65
15.5	Organogram					66

		Y	N	N/A		
15.6	Up-dated nursing act and regulations file					67
15.7	Up-dated procedure manuals regarding nursing					68
15.8	Policies:					
15.8.1	Personnel provision policy					69
15.8.2	Personnel utilization policy					70
15.8.3	Personnel development policy					71
15.8.4	Quality improvement programme					72
15.8.5	Disciplinary procedure					73
15.8.6	Grievance procedure					74
15.8.7	Conflict handling procedure					75
15.8.9	Job descriptions					77
15.8.8	Personal files					76
15.8.10	Performance appraisal					78
15.9	Educational books/literature on antenatal care					79
16.	**General**					
16.1	Neatness					80
16.2	Cross ventilation					1

CHECKLIST TO OBSERVE SOURCES OF EVIDENCE OF PROCESS STANDARDS

Y = Yes; N = No; N/A = Not applicable					
					1-2

		Y	N	N/A	
1.	**Nurse-patient relationship**				
1.1	Nurse introduces herself to the patient				3
1.2	Nurse listens to patient				4
1.3	Nurse answers patient's concerns or questions				5
2.	**Nursing care procedures**				
2.1	Carried out according to scope of practice				6
2.2	Patient be informed before activities are carried out				7
2.3	Preservation of privacy				8
2.4	Demonstrate caring attitude				9
2.5	Client's personal data filled in completely				10
2.6	Client's personal data filled in correctly				11
2.7	Complete initial assess-ment according to antenatal record (H10):				
2.7.1	Length:				
2.7.1.1	Taken				12
2.7.1.2	Recorded				13
2.7.2	Weight:				
2.7.2.1	Taken				14
2.7.2.2	Recorded				15

		Y	N	N/A		
2.7.2.3	Problem identified					16
2.7.2.4	Referred					17
2.7.3	General appearance:					
2.7.3.1	Recorded					18
2.7.3.2	Problem identified					19
2.7.3.3	Referred					20
2.7.4	Thyroid:					
2.7.4.1	Recorded					21
2.7.4.2	Problem identified					22
2.7.4.3	Referred					23
2.7.5	Heart:					
2.7.5.1	Recorded					24
2.7.5.2	Problem identified					25
2.7.5.3	Referred					26
2.7.6	Pulse					
2.7.6.1	Recorded					27
2.7.6.2	Problem identified					28
2.7.6.3	Referred					29
2.7.7	Blood pressure:					
2.7.7.1	Recorded					30
2.7.7.2	Problem identified					31
2.7.7.3	Referred					32
2.7.8	Abdomen:					
2.7.8.1	Recorded					33
2.7.8.2	Problem identified					34
2.7.8.3	Referred					35
2.7.9	Mammae:					
2.7.9.1	Recorded					36
2.7.9.2	Problem identified					37
2.7.9.3	Referred					38
2.7.10	Symphysis fundus measurement (S.F.):					
2.7.10.1	Recorded					39
2.7.10.2	Problem identified					40

		Y	N	N/A		
2.7.10.3	Referred					41
2.7.11	Vagina (PV):					
2.7.11.1	Examination done					42
2.7.11.2	Recorded					43
2.7.11.3	Problem identified					44
2.7.11.4	Referred					45
2.7.12	Urine:					
2.7.12.1	Recorded					46
2.7.12.2	Problem identified					47
2.7.12.3	Referred					48
2.7.13	Referred for ultrasound					49
2.7.15	Tetanus toxoid:					
2.7.15.1	Date recorded					50
2.7.15.2	Dosage recorded					51
2.7.15.3	Nurse's signature					52
2.7.15	Special examinations:					
2.7.15.1	Blood grouping:					
2.7.15.1.1	Recorded					53
2.7.15.1.2	Problem identified					54
2.7.15.1.3	Referred					55
2.7.15.2	Haemoglobin (HB):					
2.7.15.2.1	Recorded					56
2.7.15.2.2	Problem identified					57
2.7.15.2.3	Referred					58
2.7.15.3	Human Immunodeficiency Virus (HIV):					
2.7.15.3.1	Recorded					59
2.7.15.3.2	Counselling					60
2.7.15.3.3	Problem identified					61
2.7.15.3.4	Referred					62
2.7.15.4	Veneral Disease Research Virus (VDRL):					
2.7.15.4.1	Recorded					63
2.7.15.4.2	Problem identified					64

		Y	N	N/A	
2.7.15.4.3	Referred				65
2.7.15.5	Treponema Pallidum Haemagglutinin Assay (TPHA):				
2.7.15.5.1	Recorded				66
2.7.15.5.2	Problem identified				67
2.7.15.5.3	Referred				68
2.7.15.6	Cervix screen (papsmear):				
2.7.15.6.1	Recorded				69
2.7.15.6.2	Problem identified				70
2.7.15.6.3	Referred				71
2.7.16	Final Expected Date of Delivery (EDD):				
2.7.16.1	Recorded				72
2.7.17	Risk factors:				
2.7.17.1	Recorded				73
2.7.17.2	Problem identified				74
2.7.17.3	Referred				75
2.7.18	Planning:				
2.7.18.1	Type of delivery				76
2.7.18.2	Feeding				77
2.7.18.3	Contraception				78
2.7.18.4	Place of delivery				79
3.	**Follow-up physical examination**				
3.1	Weight:				
3.1.1	Taken				80
3.1.2	Recorded				1
3.1.3	Problem identified				2
3.1.4	Referred				3
3.2	Blood pressure:				
3.2.1	Taken				4
3.2.2	Recorded				5
3.2.3	Problem identified				6
3.2.4	Referred				7

		Y	N	N/A		
3.3	Urine:					
3.3.1	Taken					8
3.3.2	Recorded					9
3.3.3	Problem identified					10
3.3.4	Referred					11
3.4	SF measurement:					
3.4.1	Taken					12
3.4.2	Recorded					13
3.4.3	Problem identified					15
3.4.4	Referred					16
3.5	Monitoring and recorded of:					
3.5.1	Fetal heart					17
3.5.2	Fetal movements					18
3.5.3	Fetal lie					19
3.5.4	Fetal position					20
3.5.5	Fetal head fixed					21
3.5.6	Problem identified					22
3.5.7	Referred					23
3.6	Amniotic fluid:					
3.6.1	Recorded					24
3.6.2	Problem identified					25
3.6.3	Referred					26
3.7	Edema:					
3.7.1	Recorded					27
3.7.2	Problem identified					28
3.7.3	Referred					29
3.8	Other problem/s:					
3.8.1	Identified/detected					30
3.8.2	Recorded					31
3.8.3	Referred					32
3.9	Health education:					
3.9.1	Personal hygiene					33
3.9.2	Clothing					34

		Y	N	N/A		
3.9.3	Diet					35
3.9.4	Physical changes in pregnancy					36
3.9.5	Exercise					37
3.9.6	Breast and breast feeding					38
3.9.7	Labour signs					39
3.9.8	Medication					40
3.9.9	Rest					41
3.9.10	Sexual activity					42
3.9.11	Minor ailments					43
3.9.12	Danger signs in pregnancy					44
3.9.13	Fetal development					45
3.9.14	Postpartum contraception					46
3.10	Next appointment date					47
3.11	Referral:					
3.11.1	Supportive services available					48
3.11.2	General doctor					49
3.11.3	Other					50

CHECKLIST TO OBSERVE SOURCES OF EVIDENCE OF OUTCOME STANDARDS

Y = Yes; N = No; N/A = Not applicable			1-2

		YES	NO	N/A		
1.	**Client**					
1.1	Identified problems of client:					
1.1.1	Recorded in client's records					3
1.1.2	Attended to – proof is in progress report					4
1.1.3	Evaluated – proof is in progress report					5
1.1.4	Outcomes been recorded in client's records					6
1.2	Health education – proof is in records					7
2.	**Statistics**					
2.1	Statistics on antenatal care:					
2.1.1	Proof of recordings					8
2.1.2	Proof that it was sent to appropriate authority					9

APPENDIX K

H10 Document

(X-216293 - 3/98 - 150000 Cards) A.P.C.T.

Obstetriese Rekord/Obstetrical Record
Vrystaat/Free State

Kliniek/Clinic	Pt Regnr.

Naam/Name .....

I.D. No. .....

Adres/Address .....

..... Tel. .....

Ouderdom/Age ..... Getroud/Married .....

Beroep/Occupation .....

Naasbestaande/Next of kin .....

Hospitaal/Hospital	Hosp. No	Dokter/Doctor
1.		
2.		
3.		

Mediese fonds/Medical Aid .....

Geskiedenis/History

Klagtes/Complaints .....

..... Afskeiding/Discharge .....

LNM ..... Sure ..... DVV/EDD .....

Kontrasepsie/Contraception .....

Vorige swangerskappe/Previous pregnancies

Jr/Yr	Swangerskap Pregnancy	Verlos Delivery	Gewig Weight	Uitkoms Outcome

Vorige siekte/operasie / Previous disease/operation:

.....

.....

Familie geskiedenis/Family history .....

.....

Allergie/Allergy ..... Rook/Smoke .....

Alcohol ..... Social .....

Huidige medikasie/Present medication .....

.....

.....

Ondersoek/Examination

Lengte/Length ..... Gewig/Weight .....

Algemeen/General .....

.....

Tiroied/Thyroid ..... Mammae .....

Hart/Heart .....

BD/BP ...../..... Pols/Pulse .....

Buik/Abdomen .....

SF meting/measurement ..... cm

PV .....

Urine: Bloed/Blood ..... Proteien/Protein .....

Glukose/Glucose ..... Nitriete/Nitrates .....

Datum/Date...../...../.....

Ondersoeker/Examiner .....

Sonar/Ultrasound

Tetanus Toksoied/Toxoid (Dat. Dos. Handtekening/Signature)

1. .....

2. .....

3. .....

Spesiale Ondersoeke/Special Investigations

Datum/Date	Toets/Test	Result
	Bloedgroep Bloodgroup	
	HB	
	HIV	
	RPR/VDRL	
	TPHA	
	Cx sifting/screen	

Bicillin 1. .....

2. .....

3. .....

HIV Berading/Counselling .....

Datum/Date...../...../..... Deur/By .....

Risiko opsomming/Risk summary

Finale DVV/Final EDD			

Gravida ..... Para ..... Abort ..... Ekt./Ect. .....

Risiko faktore/Risk factors

1. .....

2. .....

3. .....

4. .....

☐ Lae risiko/Low risk ☐ Medium risiko/risk

☐ Hoë risiko/High risk

Beplanning/Planning

Verlossing/Delivery .....

Voeding/Feeding .....

Kontrasepsie/Contraception .....

Plek van verlossing/Place of delivery .....

Kommentaar/Comments

.....

.....

.....

.....

.....

.....

.....

.....

.....

Verwysing vir opinie/Referral for opinion

Datum/Date	Hospitaal/Hospital	Indikasie/Indication

RISIKO FAKTORE/RISK FACTORS

OPVOLG BESOEKE/FOLLOW UP VISITS

Naam van ondersoeker
Name of examiner

DATUM huidige en volgende
DATE present and next

DUURTE/DURATION	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44

LENGTE
LENGTH
m

FETALE HART/FETAL HEART

FET. BEWEGINGS/MOVEMENTS

kg

IN 1 kg EENHEDE/UNITS

40 35 30 25 20 15 10 5 0

cm

kg

LIGGING/LIE
PRESENT
POSISIE/POSITION
VAS?/FIXED?
AMN. VOG/FLUID

DUURTE/DURATION	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
GEWIG kg WEIGHT kg																																	
BD/BP mmHg (sist/diast)																																	
URINE Prot.																																	
URINE Bloed/Blood																																	
URINE Gluk/Gluc																																	
URINE Nitriete/Nitrite																																	
EDEEM/EDEMA																																	

Datum Date	Kommentaar Comments

APPENDIX L

Guideline for referring antenatal clients

Hb (7-10) g/dl
- FeSO4 1X3 Day
- Folic 1 Dly
- Vit C 2mg 3x1 Day

B/ville

ALL THIS PATIENT MUST BE SENT TO GRH BEFORE 34 WEEKS OF GESTATION FOR EVALUATION

1. Previous Caesarean section.
2. Persistent breech.
3. Multiple pregnancy.
4. RH - Negative.
5. Chronic Hypertension.

ALL THIS PATIENT MUST BE REFER TO GRH ON SUSPECION AT SPECIALIST CLINIC ON MONDAY → DR.

1. CARDIAC in pregnancy.
2. Renal disease in pregnancy.
3. Diabetics in pregnancy.
4. Recurrent pregnancy loss.
5. TB with pregnancy.
6. Multiple pregnancy.

Thursday
& Self
Wards

COMPILED BY: DR E. MOLOI
GRH DEPT. OF GYNOCOLOGY
PHONE: (057) 3966300
CELL: 083 272 8995

DATE: APRIL 2001-04-23

8/Vdle

HYPERTENSION IN PREGNANCY

PREGNANCY INDUCED HYPERTENTENSION

DIAGNOSIS: 1. BP plus minus 160/90
2. Proteinuria plus minus 2
3. Pathological Oedema

PERIPHERAL HOSPITAL REFER TO GOLDFIELDS REGIONAL HOSPITAL.

INITIAL MANAGEMENT

1. Put IV line (Ringer lactato 100ml/hourly)
2. Start Aldomet 250 – 500 mg – 6hourly
3. Give Apresoline 25mg of Bp plus minus 110mmhg
4. Give 6g MgSO4 stat IV over 20-30min (200ml NS)
5. Transfer to GRH.

MANAGEMENT

1. CVP line
2. Control BP
3. Blood – FBC, SMAC, Urine for MCS, 24-Hour Protein.
4. Fetal gestation by dates/ ultrasound.

ECLAMPSIA

1. °2 40% continuously
2. MgSo4 6g ivi stat, then 200mg in 200ml of NS of 20 ml 1 hourly
3. Apresoline 50mg po 8hourly
4. Monitor: 1. Urinary output
   2. Respiration rate
   3. Reflexes knee
5. Deliver.

COMPILED BY: DR. E. MOLOI
GRH DEPT. OF GYNOGOLOGY
PHONE: (057) 3966300
CELL: 083 2728995
FOR ANY ENQUIRIES USE THE ABOVE NUMBERS

DATE: APRIL 2001-04-23

APPENDIX M

Regulation R.2488

GOVERNMENT NOTICE

No. R. 2488 26 October 1990

THE SOUTH AFRICAN NURSING COUNCIL

REGULATIONS RELATING TO THE CONDITIONS UNDER WHICH REGISTERED MIDWIVES AND ENROLLED MIDWIVES MAY CARRY ON THEIR PROFESSION

The Minister of National Health and Population Development has, on the recommendation of the South African Nursing Council, in terms of section 45 (1) (q) of the Nursing Act, 1978 (Act No. 50 of 1978), made the regulations set out in the Schedule hereto.

SCHEDULE

CHAPTER I

DEFINITIONS

1. In these regulations "**the Act**" shall mean the Nursing Act, 1978 (Act No. 50 of 1978), and any expression to which a meaning has been assigned in the Act shall bear such meaning, and, unless the context otherwise indicates-

"**child**" shall also mean an unborn child;

"**confinement**" shall mean pregnancy, labour and the puerperium;

"**registered person**" shall mean a person who is registered as a nurse or as a midwife in terms of the Act, or as a medical practitioner or dentist in terms of the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act No. 56 of 1974);

"**specified officer**" shall mean the medical officer of health of a local authority or, where such an office does not exist or is vacant, the registered nurse in charge of the nursing services of such local authority.

CHAPTER 2

CONDITIONS UNDER WHICH A REGISTERED MIDWIFE MAY CARRY ON HIS PROFESSION

2. A registered midwife shall carry on his profession under the conditions set out in this Chapter.

Equipment and materials

3. In the course of his practice a registered midwife shall at all times have available the equipment and materials that are required for the practice of midwifery, including-

(a) an intravenous infusion set and at least 2 x 1 000 mℓ of 52 dextrose in a normal saline solution;

(b) the equipment and material necessary to perform an episiotomy and to suture an episiotomy or a first or second degree tear of the perineum.

Records

4. (1) A registered midwife shall keep clear and accurate records of the progress of pregnancy, labour and the puerperium and of all acts, including emergency acts, which he performs in connection with a mother and child.

(2) Such records shall be in accordance with the details set out in Annexure A of this Chapter.

(3) A registered midwife shall retain the records referred to in subregulation (1) for at least three years and shall produce the records to the council when required to do so.

Breast-feeding

5. A registered midwife shall promote breast-feeding unless it is contra-indicated.

The ante-natal period

6. (1) On being engaged to attend a confinement, a registered midwife shall-

(a) advise the patient to be examined by a medical practitioner and undergo a blood test at least once during her pregnancy;

(b) ascertain whether any abnormality which could have an adverse affect on the present confinement has occurred during a previous pregnancy, labour

or puerperium and, if so, advise the patient to seek medical advice;

(c) in the case of a primigravida, make all the assessments required to ascertain whether the pelvis is adequate for a normal delivery and where any doubt exists immediately refer the case to a medical practitioner;

(d) instruct the patient in antenatal exercises, including preparation for labour and preparation for breast-feeding.

(2) Where possible, the registered midwife shall visit the patient at least once in her own home and shall examine the patient at least once a month until the 28th week, thereafter at least once a fortnight until the 36th week, and then at least once a week until the commencement of labour.

(3) If it is not possible to comply with the provisions of subregulation (2), the registered midwife shall endorse the record of the case accordingly, giving reasons.

Labour

7. (1) A registered midwife in attendance upon a patient in labour shall not leave the patient without giving an address at which he can be reached without delay.

(2) When the second stage of labour is imminent the registered midwife shall stay with the patient till after the birth of the child and for as long thereafter as the condition of the patient or the child may demand: Provided that he shall stay with the patient for at least one hour after the expulsion of the placenta and membranes.

(3) A registered midwife shall, in a case of postpartum haemorrhage when a medical practitioner is not available or pending the arrival of a medical practitioner, administer not more than 10 units of oxytocin at a time by intramuscular injection, but the administration may be repeated at intervals if and when necessary.

(4) An internal examination shall not be carried out by a registered midwife in the case of vaginal haemorrhage.

(5) An episiotomy may be performed by a registered midwife to prevent a severe tear of the perineum or complications relating to the child, provided the head is on the perineum.

Puerperium

8. During the puerperium the registered midwife shall-

(a) attend the mother and child at least once a day and shall not discharge them from his care until such time as the condition of both is satisfactory;

(b) if possible, continue such attendance daily for at least the five days

following the birth of the child;

(c) if it is not possible to attend the mother and child at least once a day for at least the five days following the birth of the child, endorse the record of the case accordingly, giving reasons;

(d) instruct the mother in-

(i) post-natal exercises and breast-feeding unless contra-indicated;

(ii) caring for herself and her child during the puerperium;

(iii) recognising abnormalities that may occur, and when and where to obtain assistance;

(iv) oral rehydration therapy for the child.

Pre-mixed gas and air analgesia

9. A registered midwife may administer pre-mixed gas and air analgesia to a patient only on the prescription of a medical practitioner.

Medical assistance

10. (1) In the event of any of the following illnesses, abnormalities or complications occurring during pregnancy, labour or the puerperium or in the child, the registered midwife shall, subject to the provisions of subregulation (4), with the consent of the mother, call in a medical practitioner or refer the patient to a medical practitioner:

(a) *During pregnancy*:

Excessive nausea and vomiting;

abortion, actual or threatened;

vaginal bleeding;

apparent intra-uterine growth retardation;

hypertension;

albumin or sugar in the urine;

oedema of the hands, face or feet;

convulsions;

abnormal vaginal discharge;

sores on the genitals;

any condition suggesting a disproportion between head and pelvis;

abnormal presentation after the 32nd week;

multiple pregnancy;

tenderness or abnormal distension of the abdomen.

(b) *During labour*:

Convulsions;

abnormal vaginal discharge;

sores on the genitals;

excessive vaginal bleeding;

premature labour before the 37th week;

presentation other than an uncomplicated head presentation;

when no presentation can be determined;

multiple pregnancy;

non-engagement of the head in the case of a primigravida;

undue prolongation of any stage of labour;

disordered or abnormal uterine action;

presentation or prolapse of the cord;

foetal distress;

placenta not completely expelled one hour after the birth of the child;

third degree perineal tear.

(c) *During the puerperium*:

Convulsions;

abdominal distension and tenderness;

malodorous lochia;

rigor;

rise in body temperature to 37,7°C for 24 hours, or its recurrence within that period, or a rise in body temperature to 37,4°C on two successive days;

continuously rapid or steadily rising pulse rate;

unusual swelling of the breasts with local tenderness of pain;

excessive or prolonged bleeding;

pain in the lower limbs, especially pain in the calves.

(c) *The child*:

Injuries received during birth;

malformation or deformity (whether endangering life or not);

undue feebleness, whether the child is premature or not;

inflammation of or any discharge from the eyes;

serious skin eruptions, especially those marked by the formation of watery blisters;

inflammation of or haemorrhage from the umbilicus;

jaundice;

convulsions;

neonatal haemorrhage.

(2) Where any illness, abnormality or complication, other than the illnesses, abnormalities or complications referred to in subregulation (1), occurs during pregnancy, labour or the puerperium or in the child, a registered midwife may if he deems it necessary, subject to the provisions of subregulation (4) and with the consent of the mother, call in a medical

practitioner or refer the patient to a medical practitioner.

(3) Where a medical practitioner is called in or consulted as contemplated in subregulations (1) and (2), a registered midwife shall-

(a) remain with the patient and deal with the emergency to the best of his ability until the medical practioner arrives; or

(b) accompany the patient if she is to be sent to medical assistance.

(4) When calling in medical assistance as contemplated in subregulations (1) and (2) the registered midwife shall call in the medical practitioner desired by the mother.

(5) Where, in the course of pregnancy, labour or the puerperium a registered midwife-

(a) advises the patient to consult a medical practitioner;

(b) refers the patient to a registered person other than a medical practitioner;

(c) consults the patient with a view to calling in medical assistance,

the relevant particulars, as well as any refusal by the patient to consent to any of the above, shall be recorded as set out in Annexure A of this Chapter.

ANNEXURE A

RECORDS OF MATERNITY CASES ATTENDED

Date of booking _____

Name and address of patient _____

Age _____ Gravida. Para.

Estimated date of delivery _____

Obstetric and other history

History of previous general health _____

History of previous pregnancies _____

History of previous children _____

Mass at birth of previous children _____

History of previous labours _____

History of previous puerperia _____

Any other illnesses, complications or abnormalities _____

_____

Any medication taken in the course of this pregnancy _____

Antenatal visits

Dates of visits _____

Dates of visits in patient's own home _____

Weeks of gestation _____

Abnormal findings, if any _____

Referral to medical practitioner _____

If referred, name of medical practitioner _____

Medication or treatment prescribed _____

If not referred in case of illnesses, complications or abnormalities, reasons why not referred

_____

_____

Emergencies and action taken _____

Labour

Date and time registered midwife called in _____

Date and time of arrival _____

Date and time of commencement of labour _____

Record on arrival:

(a) Maternal pulse rate, temperature and blood pressure _____

(b) Foetal heart rate _____

(c) Date and time of beginning of established labour, including contractions _____
_____

Findings on abdominal palpations _____

Dates and times of findings of all internal examinations _____

Date and time of rupture of membranes _____

Date and time of beginning of second stage _____

Date and time of birth of child _____

Date and time of completion of third stage _____

Blood pressure, pulse rate and temperature on completion of third stage _____
_____

Method of expulsion of the placenta _____

Condition of the placenta and membranes _____

Amount of blood loss _____

Any complications _____

Episiotomy, suturing _____

Perineal tears, suturing _____

Local anaesthetic administered _____

Name of medical practitioner, if called in, with the date, time and reason for calling him in
_____
_____

Details of and reasons for medication and treatment given to the mother and child, including any emergency action taken _____
_____

The child

Sex _____

Whether full-term, premature or miscarriage (if premature or miscarriage, give approximate

number of weeks) _____

Alive or stillborn (if stillborn, state whether macerated or not) _____

Mass at birth _____

Apgar rating at one minute after birth _____

Apgar rating at five minutes after birth _____

Medication: eyes or other for the child _____

Any physical abnormalities and any deviation from the normal at birth or during the puerperium _____

Name of medical practitioner, if called in, with the date, time and reason for calling him in

_____

_____

Discharge or last visit:

Date _____

Mass and condition _____

Method of feeding _____

Emergencies and action taken _____

The mother

Signature of patient/witness, if advice not accepted (regulation 6 (1)) _____

If it is not possible to comply with the provisions of regulation 6 (2), state the reasons_

_____

Name of medical practitioner, if called in, with the date, time and reason for calling him in

_____

_____

If a medical practitioner is not available, or if the patient refuses to call in a medical practitioner, state reason for requiring aid, the date and time and whether the medical practitioner was not available or was refused by the patient _____

Signature of patient/witness _____

If a medical practitioner is called in without the patients being consulted, state why it was not possible to consult the patient (regulation 10 (1)) _____

Date _____

Record of daily pulse rate and body temperature, showing also daily progress of involution of the uterus and state of lochia _____

If it is not possible to comply with any of the provisions of regulation 8, state the reasons _____

Signature of patient/witness, if any treatment or referral is refused (regulation 10 (5)) _____

Condition of mother on discharge or last visit _____

_____
Signature of registered midwife

CHAPTER 3

CONDITIONS UNDER WHICH AN ENROLLED MIDWIFE MAY CARRY ON HIS PROFESSION

11. An enrolled midwife shall carry on his profession under the conditions set out in this Chapter.

Private practices

12. (1) An enrolled midwife who conducts a private practice shall be entitled to practise as such only if he has been entered on a list of enrolled midwives by a specified officer in terms of Government Notice No. R. 2489 of 26 October 1990.

(2) An enrolled midwife referred to in subregulation (1) shall make written application to the specified officer in whose area of jurisdiction he conducts a private practice, and then present himself for a personal interview with the said specified officer at a place and time to be determined by the specified officer for that purpose.

(3) An enrolled midwife referred to in subregulation (1) shall produce proof of enrolment with the council and such other information as the specified officer concerned may require.

(4) If a specified officer, after consideration of an application in terms of subregulation (2), is satisfied that the applicant concerned is enrolled with the council as a midwife and complies with the requirements of regulation 13 he shall enter the name of the applicant

concerned on a list referred to in subregulation (1).

(5) An enrolled midwife referred to in subregulation (1) shall notify the specified officer concerned of any change of address by registered mail within seven days.

(6) In the case of an enrolled midwife who immediately prior to the commencement of these regulations was conducting a private practice, the provisions of subregulation (1) shall come into operation-

(a) on expiry of a period of six months after the date of such commencement, if application has not been made in terms of subregulation (2) within that period;

(b) on the date of entry on a list as contemplated in subregulation (1), if such application has been made within that period.

Equipment and materials

13. In the course of his practice on enrolled midwife shall at all times have at least the following equipment and materials at his disposal:

(a) Foetal stethoscope;

(b) a clinical thermometer;

(c) an antiseptic, soap and nailbrush;

(d) a pair of scissors;

(e) ligatures to tie off an umbilical cord;

(f) swabs and dressings;

(g) surgical gloves;

(h) cotton wool;

(i) gauze;

(j) two arterial clamps;

(k) a watch with a second hand;

(l) a scale;

(m) equipment for the testing of urine;

(n) a container for the removal of equipment used at the labour.

Records

14. (1) An enrolled midwife shall keep a record of each case treated by him, in the form prescribed in Annexure A of this Chapter.

(2) An enrolled midwife shall retain the record referred to in sub-regulation (1) for at least three years and shall produce such record to the council when required to do so.

Prevention of infection

15. An enrolled midwife shall adhere strictly to the rules of asepsis and prevention of cross infection when assisting a patient.

Duties of an enrolled midwife during the antenatal period

16. (1) On being engaged to attend a confinement, the enrolled midwife shall-

(a) advise the patient to be medically examined at least once during her pregnancy and to undergo the necessary blood test;

(b) ascertain whether any abnormality occurred during any previous pregnancy, labour or puerperium and, if so, advise the patient to seek medical advice.

(2) If the patient for any reason does not accept the advise referred to in subregulation (1), the enrolled midwife shall endorse the record of the case accordingly and shall, subject to the provisions of subregulation (3), obtain the signature of the patient or another witness.

(3) If the signature referred to in subregulation (2) cannot be obtained, the enrolled midwife shall endorse the record of the case accordingly.

(4) Where possible, an enrolled midwife shall visit the patient at least once in her own home and shall examine the patient at least once a month until the 28th week, thereafter at least once a fortnight until the 36th week, and then at least once a week until the commencement of labour.

(5) If it is not possible to comply with the provisions of subregulation (4), the enrolled midwife shall endorse the record of the case accordingly, giving reasons.

Duties during labour

17. An enrolled midwife shall make only the vaginal and rectal examinations that are necessary: Provided that in the case of vaginal bleeding no internal examination may be made.

Attendance upon a patient during labour

18. (1) An enrolled midwife in attendance upon a patient in labour shall not leave the patient without giving an address at which he can be reached without delay.

(2) When the second stage of labour is imminent the enrolled midwife shall stay with the patient till after the birth of the child and for as long thereafter as the condition of the patient or the child may demand: Provided that he shall stay with the patient for at least one hour after the expulsion of the placenta and membranes.

Duties during the puerperium

19. (1) During the puerperium the enrolled midwife shall attend the mother and child at least once a day until such time as the condition of both is satisfactory: Provided that such attendance shall, if possible, be carried out daily for at least five days following the birth of the child.

(2) If it is not possible to attend the mother and child at least once a day for at least five days following the birth of the child, the enrolled midwife shall endorse the record of the case accordingly, giving reasons.

(3) An enrolled midwife shall advise the patient to be examined by a medical practitioner or at a post-natal clinic at least once during the three months following the confinement.

(4) An enrolled midwife shall promote breastfeeding unless it is contra-indicated.

(5) An enrolled midwife shall instruct the mother in-

(a) caring for herself and her child during the puerperium;

(b) recognising abnormalities that may occur, and when and where to obtain assistance;

(c) oral rehydration therapy for the child;

(d) the procedure for the registration of the birth of the child;

(e) the procedure for taking the child to a clinic for immunisation.

Medical assistance

20. (1) An enrolled midwife shall observe carefully the normal course of pregnancy, labour and the puerperium.

(2) In all cases where any illness, abnormality or complication occurs in the mother or the child during pregnancy, labour or the puerperium, the enrolled midwife shall forthwith, in

consultation with the mother or, where necessary, the family, call in a medical practitioner of the mother's or family's choice, or refer the patient to a medical practitioner and where possible state the reason for calling him in.

(3) If the medical practitioner concerned is not available, another medical practitioner or a registered midwife shall be called in, if available.

(4) If a medical practitioner or a registered midwife is not available, or if the mother or the family refuse to consent to the calling in of a medical practitioner or a registered midwife, the enrolled midwife shall assist the patient to the best of his ability and endorse the record of the case accordingly and shall, subject to the provisions of subregulation (5), obtain the signature of the mother or of another witness.

(5) If such signature cannot be obtained, the enrolled midwife shall endorse the record of the case accordingly.

(6) If it is not possible to consult the mother or the family, the enrolled midwife shall act on his own judgement and enter the facts in the record of the case.

(7) In the application of subregulation (2), illness, abnormality or complication means any of the following:

(a) *During pregnancy*:

Excessive nausea and vomiting;

excessive gain in mass;

sugar or albumin in the urine;

rise in blood pressure;

headaches and visual disturbances;

tuberculosis;

abortion, actual or threatened;

vaginal bleeding;

apparent lack of foetal growth;

puffiness of the hands, face or feet;

convulsions;

malodorous discharge;

sores on the genitals;

deformity or short stature of the mother;

abnormal presentation after the 32nd week;

multiple pregnancy;

any abnormality which is detected.

(b) *During labour*:

Convulsions;

abnormal vaginal discharge;

sores on the genitals;

excessive vaginal bleeding;

premature labour before the 37th week;

any presentation other than an uncomplicated head presentation;

when no presentation can be determined;

undue prolongation of any stage of labour;

excessive or abnormal uterine action;

presentation or prolapse of the uterine cord;

foetal distress;

placenta not completely expelled 30 minutes after the birth of the child;

any perineal tear;

multiple pregnancy.

(c) *During the puerperium*:

Convulsions;

distension and tenderness of the abdomen malodorous lochia;

rigor;

rise in body temperature;

continuously rapid or steadily rising pulse rate;

unusual swelling of the breasts with local tenderness or pain;

excessive or prolonged bleeding;

pain in the lower limbs, especially pain in the calves.

(d) *In the child*:

Injuries received during birth;

malformation (whether endangering life or not);

undue feebleness, whether the child is premature or not;

failure to gain mass;

dehydration;

inflammation of or any discharge from the eyes, however slight;

serious skin eruptions, especially those marked by the formation of watery blisters;

inflammation of or haemorrhage from the umbilicus;

jaundice;

convulsions;

bleeding of any nature.

(8) Where a medical practitioner or registered midwife is called in as contemplated in subregulations (2) and (3), an enrolled midwife shall-

(a) await the arrival of the medical practitioner or registered midwife and carry out his instructions;

(b) accompany the patient if the patient is sent to medical assistance.

ANNEXURE A

RECORDS OF MATERNITY CASES ATTENDED

Case number _____

Name of patient _____

Address _____

Population group _____ Age _____

Date of booking _____

Antenatal period

Estimated date of delivery _____

Number of previous (full term _____

Confinements premature _____

Miscarriage _____

Abnormalities during any previous pregnancy, labour and puerperium _____

_____

Present general condition of health of patient _____

Any abnormalities during current pregnancy _____

Advice given and findings _____

Signature of patient of other witness if advice is not accepted _____

Dates of medical examinations, if any _____

Dates of examinations by enrolled midwife and findings:

- height of fundus _____

- persentation _____

- foetal heart _____
- oedema _____
- urine _____
- pulse rate _____

Name of medical practitioner or registered midwife, if called in, with date, time and reason for calling him in _____
_____

Labour

Date and time of arrival of the enrolled midwife _____

Body temperature and pulse rate of patient on arrival of the enrolled midwife _____
_____

Date and time of birth of child _____

Presentation _____

Duration of labour _____

Condition of the placenta and membranes _____

Amount of blood loss _____

Complications, if any (including perineal tears) _____

Name of medical practitioner or registered midwife if called in for the mother, with the date, time and reason for calling him in _____
_____

The child

Full term, premature or miscarriage _____ Sex _____

Alive or stillborn (if stillborn, state whether macerated or not) _____

Mass at birth _____ Length at birth _____

Any abnormalities _____

Date of severing of umbilical cord _____

Puerperium

The pulse rate, body temperature and condition of the lochia of the mother shall be recorded daily on the chart which shall be available for this purpose.

Name of medical practitioner or registered midwife, if called in for the mother or the child, with date, time and reason for calling him in _____

_____

Additional information

Entries and signatures required in regulations 16 (2), 16 (3), 16 (5), 19 (2), 20 (2), 20 (4), 20 (5) and 20 (6).

Discharge or last visit

Date _____

Condition of mother _____

Condition and mass of child _____

Method of feeding _____

Referred to baby care clinic (if available) _____

Signature _____

Date _____

APPENDIX N

Regulation R.387

GOVERNMENT NOTICE

No. R. 387 15 February 1985

as amended by

Government Notice Nos. R. 866 of 24 April 1987, R. 2490 of 26 October 1990.

THE SOUTH AFRICAN NURSING COUNCIL

RULES SETTING OUT THE ACTS OR OMISSIONS IN RESPECT OF WHICH THE COUNCIL MAY TAKE DISCIPLINARY STEPS

The Minister of Health and Welfare has, on the recommendation of the South African Nursing Council, determined that the acts or omissions meant in section 35 of the Nursing Act, 1978 (Act 50 of 1978), are the acts or omissions specified in the Rules set out in the Schedule hereto.

SCHEDULE

CHAPTER 1

Definitions

1. In these rules "**the Act**" shall mean the Nursing Act, 1978 (Act 50 of 1978), and any expression to which a meaning has been assigned in the Act shall bear such meaning, and, unless the context otherwise indicates-

"**advertisement**" shall mean any written, illustrated, visual or other descriptive material or verbal statement or reference-

(a) which appears in a newspaper, magazine, pamphlet or other publication;

(b) which is distributed amongst members of the public;

(c) which has been fixed to, or appears on walls, windows or boards; or

(d) which is brought to the attention of members of the public in any other manner whatsoever,

and which is meant to-

(i) promote a specific practice or a specific practitioner's technique or treatment;

(ii) make known a practitioner's professional proficiency or knowledge;

(iii) make known a product or business or institution or organisation of any nature whatsoever, for whatever purpose and in any way whatsoever.

and "**advertising**" shall have a corresponding meaning;

"***bona fide* patient**" shall mean a patient who has at any time previously been treated by the practitioner concerned;

"**section**" shall mean a section in the Act.

CHAPTER 2

REGISTERED NURSES

2. Subject to the proviso in section 35, it is hereby determined that the acts or omissions set out in this Chapter, are deemed to be acts or omissions in respect of which the council can take disciplinary steps against a registered nurse in terms of Chapter 4 of the Act.

Practice

3. Wilful or negligent omission to carry out such acts in respect of the diagnosing, treatment, care, prescribing, collaborating, referral, co-ordinating and patient advocacy as the scope of his profession permits.

4. Wilful or negligent omission to maintain the health status of a patient under his care or charge, and to protect the name, person and possessions of such a patient, through-

(a) correct patient identification;

(b) determining the health status of the patient and the physiological responses of the body to disease conditions, trauma and stress;

(c) the correct administration of treatment, medication and care;

(d) the prevention of accidents, injury or other trauma;

(e) the prevention of the spread of infection;

(f) the checking of all forms of diagnostic and therapeutic interventions for the individual;

(g) specific care and treatment of the very ill, the disturbed, the confused, the aged, infants and children, the unconscious patient, the patient with communication problems and the vulnerable and high-risk patient; and

(h) the monitoring of all the vital signs of the patient concerned.

5. Wilful or negligent omission to keep clear and accurate records of all actions which he performs in connection with a patient.

6. Purporting to perform the acts of a person registered in terms of the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act 56 of 1974), and the Pharmacy Act, 1974 (Act 53 of 1974), unless the nurse is also registered in such a capacity.

Advertising

7. (1) Subject to the provisions of subrule (2) a nurse may not-

(a) advertise;

(b) permit his name to be used in a professional capacity in connection with advertising.

(2) The following actions of a nurse are not deemed to constitute advertising:

(a) A communication to a *bona fide* patient concerning change of address, hours of consultation and telephone numbers or the establishment or dissolution of a partnership, provided such communication is addressed to the patient concerned and is enclosed in an envelope;

(b) A communication to another nurse, midwife, medical practitioner, dentist, member of a supplementary health service profession, social worker, hospital, person or institution approved by the council, that he has commenced a practice, provided such communication is addressed to the persons concerned and is enclosed in an envelope;

(c) The entry, in ordinary print, of his name, profession, field of practice, residential and consulting rooms addresses and telephone numbers and the name, profession and field of practice of a partner, in an official telephone

directory;

(d) The publication of articles of a health science nature in professional journals and books in connection with health, with mention of his name and professional qualifications;

(e) The divulgence of his views on topics of a health science nature in the lay press or on the radio or television or the holding of a lecture or address for a lay audience, with mention of his name, where such a nurse-

(i) serves in a full-time or part-time capacity in health services or post-secondary educational institutions and is not in private practice; or

(ii) acts as an officer or member of the South African Nursing Association or of the council and on instruction of such association or the Council;

(f) the use of a name plate as stipulated in rule 8 or rule 9;

(g) the use of stationery as stipulated in rule 10;

(h) the acts referred to in rule 12 (2) or rule 18 (3);

(i) the promotion of the interest of an organisation registered in terms of the National Welfare Act, 1978 (Act 100 of 1978), a professional nursing association or society, a health service at any level of government, an educational service approved by the council and any other organisation, body or institution approved by the council.

Name plates

8. (1) The permanent consulting rooms of a nurse in private practice shall, and the permanent residence of such a nurse may, be indicated only by a name plate as stipulated in this rule, which shall not exceed 360 mm x 210 mm in size and which shall bear only the nurse's-

(a) title, initials and surname;

(b) registered profession and field of practice;

(c) professional qualification or qualitications the use of which, in the case of such a nurse, is authorised by the council;

(d) telephone number(s); and

(e) hours of consultation:

Provided that where a nurse prefers not to have particulars concerning telephone numbers and hours of consultation indicated on such name plate, a separate plate, not exceeding 360 mm x 210 mm in size, with the nurse's telephone number(s) and hours of consultation, day be affixed directly below such name plate.

(2) (a) In the case of an itinerant practice the nurse's consulting rooms shall be indicated only by a name plate as stipulated in subrule (1), with the addition of the days and hours of consultation when the said nurse is available at the said consulting rooms.

(b) The further information stipulated in paragraph (a), may be indicated on a separate plate or surface, not exceeding 360 mm x 210 mm in size.

(3) Not more than one name plate may be displayed at each entrance to a building in which a nurse's consulting rooms are situated and one on or next to the door of such consulting rooms: Provided that a name plate may be affixed to an outer wall or pillar of such building with the prior approval of the council, where such a building does not have suitable facilities for a name plate to be affixed thereto: Provided further that the particulars stipulated in subrule (1) may, with the prior approval of the council, be affixed in a framed area of 360 mm x 210 mm on a glass window as close as possible to the entrance of the building in which the consulting rooms are situated, where such a building has no facilities for a name plate to be affixed thereto.

(4) Where facilities exist in the entrance hall or on the ground floor of a building in which a nurse's consulting rooms are situated, to indicate the names of tenants, the nurse's title, initials, surname and profession may be indicated in such places.

(5) A plate with the initials and surname of a nurse and a direction indicator thereon, may be displayed in the corridor of the floor where the nurse's consulting rooms are situated.

9. (1) If a nurse takes over the practice of another nurse or if a partner in the practice dies or retires, the name plate of the predecessor concerned, the deceased or the retired partner may be displayed for no longer than 12 months after the date of such take over, death or retirement, during which period the name of the person who has taken over the practice shall appear on such name plate.

(2) If a nurse moves to consulting rooms at a new address, a notice to this effect, mentioning the new address of his consulting rooms, may be displayed at his previous address for no longer than 12 months from the date of such move.

Stationery (including visiting cards)

10. Only the following information may appear on professional stationery:

(a) The name of the nurse and partner, if any;

(b) the registered profession, field of practice and abbreviations in respect of

qualifications registered by the council;

(c) addresses and telephone numbers;

(d) hours of consultation.

Canvassing

11. A nurse may not, either personally or through the mediation of an agent or in any other manner, canvass or tout for a patient for himself or for any other person.

Itinerant practice

12. (1) An itinerant practice may be carried on where a nurse renders a complete and satisfactory service to his patients in such a practice on a regular basis.

(2) Such service shall be rendered at least once a month and shall be similar to the service which he renders at the place where he carried on his main practice.

(3) Subject to the provisions of rule 8 (2) (a) and (b) a nurse may make his intention to visit a place known to the persons mentioned in rule 7 (2) (a) and (b).

Financial interest

13. A nurse may not-

(a) (i) accept or insist on any commission or remuneration, financial or otherwise, from manufacturers of, or dealers in medicines, remedies or any equipment, apparatus, instrument, appliance or material which is used in the course of his practise or prescribed to patients;

(ii) pay or give anybody commission or remuneration, financial or otherwise, or offer anybody anything for the recommendation of patients;

(iii) accept any commission or remuneration, financial or otherwise, from somebody for the recommendation of patients;

(b) share any fees collected for a service, with anybody other than a partner, unless such sharing is commensurate with the extent of such other person's participation in the rendering of such service.

(c) charge higher fees for professional services rendered than any fees prescribed in terms of section 45 (1) (r) of the Act.

Certificates

14. (1) A certificate required from a nurse in his professional capacity, may, only be issued by such a nurse if, as a nurse, he is convinced, from his personal observation or from what the patient has communicated to him, that the facts stated in such a certificate are correct.

(2) Where such a certificate is issued only on the grounds of the communication of a patient or another person, such fact shall be specifically mentioned in the said certificate.

Professional secrecy

15. (1) Subject to the provisions of subrule (2), a nurse may not divulge any information concerning a patient which has become known to him in his professional capacity.

(2) This rule is not applicable if such information is made known-

(a) with the explicit consent-

(i) of a patient who is of age;

(ii) of the parent or guardian of a patient who is a minor; or

(iii) of the surviving spouse or child who is of age, of a patient who is deceased;

(b) where instructed thereto by a court of law or where a nurse is otherwise lawfully bound thereto;

(c) in the exclusive interest of a patient who is not able to, or is not capable of, granting permission; or

(d) in a professional consultation with anybody involved in the treatment of the patient or, in the exclusive interest of the patient, with somebody else.

Medicines, apparatus and processes

16. No use may be made in a practice of-

(a) any form of treatment, apparatus or process which is secret or claimed to be secret;

(b) any apparatus which upon inspection by the council does not prove to be capable of fulfilling the claims made in respect thereof;

(c) diagnostic and treatment methods which do not comply with the accepted standards as determined by the council from time to time.

Impediment

17. A nurse may not impede a patient or a person properly acting on behalf of a patient, who desires to obtain the advice of or treatment by another person who is authorised by law to advise or treat persons concerning their health, to consult such a person.

Acts and exhibition of certificates

18. (1) Except in case of emergency a nurse may not perform an act-

(a) which does not pertain to his registered profession;

(b) for which he has inadequate training or experience.

(2) A nurse may not-

(a) use consulting rooms connected to or with a corridor to a premises or portion thereof where another business, trade, work or profession than that profession in which he is registered in terms of the Act, is practised or carried on: Provided that the entrance and corridors of a public building in which his consulting rooms are situated, or a connection which may not be used by patients, are not deemed to be an unauthorised connection or thoroughfare;

(b) practise or carry on from his consulting rooms any business, trade, work or profession except the profession in which he is registered in terms of the Act, except with the prior written consent of the council and subject to such conditions as the council may determine; or

(c) share consulting rooms with someone other than a person referred to in rule; 19 (1) (a), without the prior written consent of the council.

(3) A practitioner may display only the following certificates in his consulting rooms:

(a) Certificates, diplomas and degrees which have a bearing on the profession in which he is registered; and

(b) membership certificates of professional associations with which he is affiliated.

(4) A nurse shall display clearly in his consulting rooms the registration certificate issued to him in terms of the Act.

Co-operation, partnership and service contracts

19. (1) Subject to the provisions of subrule (2), a nurse may not, in the practise of his registered profession-

(a) enter into a partnership or where such partnership already exists at the coming into effect of these rules, other than with the council's approval and subject to conditions which the council determines, maintain it or co-operate with a person who is not-

(i) registered or enrolled in terms of the Act;

(ii) registered in terms of any other act in respect of a profession which is approved by the council in the public interest and with consideration of professional ethics, as an acceptable profession for the purpose of partnership or professional co-operation;

(b) unilaterally and without the approval of the other party, break a contract of service into which he has entered;

(c) refuse or in a deliberate or negligent manner fail to execute any lawful duties for which he has been employed;

(d) support or assist any person in any way in illegal practice or action;

(e) employ somebody to perform nursing acts, who is not registered or enrolled in terms of the Act.

(2) Subrule (1) shall not apply in an emergency.

Tendering

20. A nurse may not tender for a full-time, part-time or any other kind of nursing appointment.

Supersession

21. A nurse may not-

(a) take the place of another nurse or midwife who is in charge of a case in respect of which he acted together with or on behalf of such a nurse or midwife, except with the consent of such nurse or midwife who was in charge of the case originally, unless the consent is refused unreasonably, or unless no other nursing; midwifery or medical assistance, is available;

(b) take over a case of another nurse or midwife unless he is convinced that the patient or person in charge of the case has notified such nurse or midwife that he no longer requires his services.

Delay in obtaining medical assistance

22. In accordance with the exingencies of the circumstances and the seriousness of the patient's condition, a nurse may not neglect-

(a) to refer the patient for medical care where such care is beyond the scope of practice of the nurse and may not delay such referral;

(b) to do what he can to save a life, to arrest deterioration in the health status of the patient, to prevent deformity or to reduce pain and suffering;

(c) in circumstances where a patient is in the care of such a nurse but the control over the medical treatment of a patient rests with someone other than the nurse, to execute without reasonable grounds any verbal or written prescriptions or any request made to the nurse by that person with regard to the medical treatment of such a patient, or where such prescription or request is not executed, to inform such a person of the non-execution thereof as soon as practicably possible.

Professional reputation of other persons

23. A nurse may not unjustly cast reflection, explicitly or by implication, upon the probity or professional reputation, skill, knowledge, service or qualifications of any person registered or enrolled under the Act or under any other act.

Relations with the council, its members and officials

24. A nurse may not perform any wilful act which is calculated to-

(a) prevent the council, a committee of the council or the registrar from performing a duty which may be lawfully performed by the council, such committee or the registrar;

(b) bring the council or any member or official into contempt or discredit.

Exploitation

25. A nurse may not permit himself to be exploited in a manner detrimental to the public or to professional interest.

Repeal

26. The regulations published under Government Notice R.1650 of 14 September 1973, as amended by Government Notice R. 481 of 10 March 1978, are hereby repealed.

CHAPTER 3

REGISTERED MIDWIVES

27. Subject to the proviso to section 35, it is hereby determined that the acts or omissions set out in this Chapter, shall be deemed to be acts or omissions in respect of which the council may take disciplinary steps against a registered midwife in terms of Chapter 4 of the Act.

28. Rules 7 to 25 shall *mutatus mutandis* apply to a registered midwife.

29. Wilful or negligent omission to carry out such acts in respect of the monitoring, diagnosing, treatment, care, prescribing, collaboration, referral, co-ordination and patient advocacy as the scope of his profession permits.

30. Wilful or negligent omission to protect the name, person and possessions of a mother and child under his care or charge in the course of pregnancy, labour and the puerperium through-

(a) the correct identification of the mother and child;

(b) the prevention of accidents, injury or other trauma;

(c) the prevention of infection and of the spread of infection;

(d) the checking and monitoring at reasonable intervals of all forms of diagnostic and therapeutic interventions;

(e) the specific care and treatment of the vulnerable, high-risk mother and child, the seriously ill, the disturbed, the confused, the unconscious patient and the mother with communication problems.

31. Wilful or negligent omission to keep clear and accurate records of the progress of pregnancy, labour and the puerperium and all acts which he performs in connection with a mother and child.

32. Failure to comply with the conditions under which he may carry on his profession, as promulgated by Government Notice No. R. 2488 of 26 October 1990.

33. Purporting to perform the acts of a person registered in terms of the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act No. 56 of 1974), or the Pharmacy Act, 1974 (Act No. 53 of 1974), unless the registered midwife is also registered in such capacity.

CHAPTER 4

ENROLLED MIDWIVES

34. Subject to the proviso to section 35, it is hereby determined that the acts or omissions set out in this Chapter shall be deemed to be acts or omissions in respect of which the council may take disciplinary steps against an enrolled midwife in terms of Chapter 4 of the Act.

35. Rules 7 to 25 shall *mutatis mutandis* apply to an enrolled midwife.

36. Wilful or negligent omission to identify health needs and to promote the health of mother and child through such acts and procedures as the scope of his practice permits.

37. Wilful or negligent omission to protect the name, person and possessions of a mother and child under his care or charge through-

(a) the correct identification of the mother and child;

(b) the prevention of accidents, injury or other trauma;

(c) the prevention of infection and of the spread of infection;

(d) the carrying out at reasonable intervals of all observations and interventions while the mother and child are in his care, and the recording thereof.

38. Failure to comply with the conditions under which he may carry on his profession, as promulgated by Government Notice No. R. 2488 of 26 October 1990.

39. Purportion to perform the acts of a person registered in terms of the Act, the Medical, Dental and Supplementary Health Service Professions Act No. 56 of 1974, or the Pharmacy Act, No. 53 of 1974.

NURSING ACT

GOVERNMENT NOTICE

No. R. 425

22 February 1985

as amended by

Government Notice Nos. R. 1312 of 19 June 1987, R. 2078 of 25 September 1987, R. 753 of 22 April 1988.

THE SOUTH AFRICAN NURSING COUNCIL

REGULATIONS RELATING TO THE APPROVAL OF AND THE MINIMUM REQUIREMENTS FOR THE EDUCATION AND TRAINING OF A NURSE (GENERAL, PSYCHIATRIC AND COMMUNITY) AND MIDWIFE LEADING TO REGISTRATION

The Minister of Health and Welfare has, on the recommendation of the South African Nursing Council, in terms of section 45 (1) of the Nursing Act, 1978 (Act 50 of 1978), made the regulations as set out in the Schedule hereto.

SCHEDULE

Definitions

1. In these regulations "**the Act**" shall mean the Nursing Act, 1978 (Act 50 of 1978), and any expression to which a meaning has been assigned in the Act shall bear such meaning, and, unless the context otherwise indicates-

(i) "**academic year**" means a period of at least 44 weeks in any calendar year;

(ii) "**course of study**" means a programme of education and training approved in terms of section 15 (3), leading to the obtaining of a qualification which confers on the holder thereof the right to registration as a nurse (general, psychiatric and community) and a midwife;

(iii) "**nursing college**" means a post-secondary educational institution which offers professional nursing education at basic and post-basic level where such nursing education has been approved in terms of section 15 (2);

(iv) "**section**" means a section of the Act.

Conditions for registration

2. A nurse (general, psychiatric and community) and midwife shall be registered in terms of section 16 if-

(a) he received education and training at an approved nursing school;

(b) he was registered as a student in terms of the regulations relating to registers for students published under Government Notice R. 3735 of 14 November 1969, as amended by Government Notices R. 171 of 12 February 1971, R. 1204 of 7 July 1972, R. 1647 of 20 September 1974 and R. 2207 of 31 October 1980;

(c) he successfully completed the course of study, has complied with the programme objectives referred to in regulation 6 (2), and the other requirements for the award of the qualification concerned.

Conditions for the approval of a nursing school

3. A nursing school shall be approved for the offering of a course of study if-

(a) it is a university with a department or sub-department of nursing or a nursing college which has entered into a co-operation agreement with a university which has a department or sub-department of nursing;

(b) the course of study has been approved in terms of section 15 (3);

(c) the head of the department or sub-department of nursing of the university or the head of the nursing college where the education and training is offered, is a registered nurse who holds at least a baccalaureus degree and against whose name an additional qualification in nursing education and an additional qualification in nursing administration are registered.

Admission to the course of study

4. In order to be admitted to a course of study, a person must be the holder of at least a senior certificate or an equivalent certificate which gives admission to formal post secondary education.

Duration of the course of study

5. The duration of the study course is four academic years.

Curriculum

Submission of curriculum to council

6. (1) The curriculum shall be submitted by the university or nursing college concerned to the council for approval in terms of section 15 (2).

Programme objectives

(2) Such curriculum shall provide for personal and professional development of the student so that, on completion of the course of study, he-

(a) shows respect for the dignity and uniqueness of man in his social-cultural and religious context and approaches and understands him as a psychological, physical and social being within this context;

(b) is skilled in the diagnosing of individual, family, group and community health problems and in the planning and implementing of therapeutic action and nursing care for the health service consumers at any point along the health/illness continuum in all stages of the life cycle (including care of the dying), and evaluation thereof;

(c) is able to direct and control the interaction with health service consumers in such a way that sympathetic and empathic interaction takes place;

(d) is able to maintain the ethical and moral codes of the profession and practise within the prescriptions of the releyant laws;

(e) endorses the principle that a comprehensive health service is essential to raise the standard of health of the total population and in practice contributes to the promotion of such a service, bearing in mind factors from within and outside the borders of the country which are a threat to health;

(f) is able to collaborate harmoniously within the nursing and multidisciplinary team in terms of the principle of interdependence and co-operation in attaining a common goal;

(g) is able to delineate personal practice according to personal knowledge and skill, practise it independently and accept responsibility therefor;

(h) is able to evaluate personal practice continuously and accept responsibility for continuing professional and personal development;

(i) evinces an enquiring and scientific approach to the problems of practice and is prepared to initiate and/or to accept change;

(j) is able to manage a health service unit effectively;

(k) is able to provide effective clinical training within the health service unit;

(l) is acquainted with the extent and importance of the environmental health services and knows the professional role and responsibilities in respect of the services and in respect of personal professional actions where the services are not available;

(m) is able to promote community involvement at any point along the health/illness continuum in all stages of the life cycle;

(n) has the cognitive, psychomotor and affective skills to serve as a basis for effective practice and for continuing education;

Subjects

(3) The curriculum shall consist of at least the following subjects and the approach shall be the integration of the various fields of study, particularly in their clinical application:

(a) Fundamental Nursing Science, ethos and professional practice - at least one (1) academic year.

(b) General Nursing Science - at least three (3) academic years.

(c) Psychiatric Nursing Science - at least two (2) academic years.

(d) Midwifery - at least two (2) academic years.

(e) Community Nursing Science - at least two (2) academic years.

(f) Biological and natural sciences - at least two and a half (2½) academic years.

(g) Pharmacology - at least half (½) an academic year.

(h) Social Sciences - at least two (2) academic years.

(4) (a) .....
[Deleted by G.N. R. 1312 of 19 June 1987.]

(b) .....
[Deleted by G.N. R. 1312 of 19 June 1987.]

(5) .....
[Deleted by G.N. R. 1312 of 19 June 1987.]

Examinations

(6) (a) Subject to the provisions of paragraph (b), examinations shall be conducted in all subjects prescribed in subregulation (3) and an examination mark of at least 50% shall be obtained in each subject.

(b) In the case of nursing science subjects with practical components, the theory and the practica shall be examined and passed separately in terms of the requirements of the nursing school concerned.

Application of these regulations

7. (1) Subject to the provisions of subregulation (2), examinations in terms of the provisions of the regulations published under Government Notices R. 879 of 2 May 1975, R. 880 of 2 May 1975, R. 881 of 2 May 1975 and R. 882 of 2 May 1975, as amended from time to time, shall be conducted by the council only until 31 December 1990: Provided that the following provisions of the aforementioned regulations shall remain in force and effect until a date to be determined by the Minister in the *Government Gazette*:

(a) Government Notice R. 879 of 2 May 1975, as amended - regulation 7.

(b) Government Notice R. 880 of 2 May 1975, as amended - regulation 7.

(c) Government Notice R. 881 of 2 May 1975, as amended - Annexure A.

(d) Government Notice R. 882 of 2 May 1975, as amended - Annexure A.

(2) Notwithstanding the provisions of the regulations referred to in subregulation (1) and the regulations relating to registers, published under Government Notice R. 3589 of 24 October 1969, as amended, no person may, after 1 January 1986, be registered as a student for the first time for a course of study leading to registration as a nurse or midwife, unless he registers for the course of study referred to in these regulations, or the course provided for in the regulations published under Government Notice R. 254 of 14 February 1975, as amended by Government Notices R. 479 of 10 March 1978 and R. 2212 of 31 October 1980.

8. The regulations published under Government Notice R. 2118 of 30 September 1983 are hereby repealed.

APPENDIX O

Regulation R.2598

GOVERNMENT NOTICE

No. R. 2598 30 November 1984

as amended by
Government Notice Nos. R. 1469 of 10 July 1987, R. 2676 of 16 November 1990, R. 260 of 15 February 1991.

THE SOUTH AFRICAN NURSING COUNCIL

REGULATIONS RELATING TO THE SCOPE OF PRACTICE OF PERSONS WHO ARE REGISTERED OR ENROLLED UNDER THE NURSING ACT, 1978

The Minister of Health and Welfare has, on the recommendation of the South African Nursing Council, in terms of Section 45 (1) (q) of the Nursing Act, 1978 (Act 50 of 1978), made the regulations as set out in the Schedule hereto.

SCHEDULE

CHAPTER 1.- DEFINITIONS

1. In these regulations "**the Act**" shall mean the Nursing Act, 1978 (Act 50 of 1978), and any expression to which a meaning has been assigned in the Act, shall bear such meaning and, unless the context otherwise indicates-

"**child**" shall include the unborn child.

"**co-ordination**" shall mean the bringing together of the acts of members of the health team to meet the spectrum of identified health needs of an individual or a group;

"**diagnosing**" shall mean the identification of, and discriminating between physical, psychological and social signs and symptoms in man;

"**health needs**" shall mean those signs, symptoms and processes which denote the individual's interaction with any actual or potential health problem and which require nursing intervention;

"**midwifery regimen**" shall mean the regulation and implementation of those matters which through midwifery intervention, have an influence on the course and management of pregnancy, all stages of labour and the puerperium and includes the

provision of care plans, their implementation and evaluation and the recording of the course of pregnancy, labour and puerperium and of any health problem and the care received by the mother and child whilst in the charge of the midwife;

"**nursing regimen**" shall mean the regulation of those matters which, through nursing intervention have an influence on the preventive, promotive, curative or rehabilitative aspects of health care and includes the provision of nursing care plans, their implementation and evaluation thereof and recording of the course of the health problem, the health care received by a patient and its outcome whilst a patient is in the charge of the nurse;

"**prescribing**" shall mean giving the written directions regarding those treating, nursing care, co-ordinating, collaborating and patient advocacy functions essential to the effective execution and management of the nursing regimen;

"**registered person**" shall mean a person who is registered as a nurse or as a midwife in terms of the Act or as a medical practitioner or dentist in terms of the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act 56 of 1974);

"**treatment**" shall mean selection and performance of those therapeutic measures essential to the effective execution and management of the nursing regimen.

CHAPTER 2. THE SCOPE OF PRACTICE OF REGISTERED NURSES

2. The scope of practice of a registered nurse shall entail the following acts or procedures, which may be performed by scientifically based physical, chemical, psychological, social, educational and technological means applicable to health care practice:

(a) The diagnosing of a health need and the prescribing, provision and execution of a nursing regimen to meet the need of a patient or group of patients or, where necessary, by referral to a registered person;

(b) the execution of a program of treatment or medication prescribed by a registered person for a patient;

(c) the treatment and care of and the administration of medicine to a patient, including the monitoring of the patient's vital signs and of his reaction to disease conditions, trauma, stress, anxiety, medication and treatment;

(d) the prevention of disease and promotion of health and family planning by teaching to and counselling with individuals and groups of persons;

(e) the prescribing, promotion or maintenance of hygiene, physical comfort and re-assurance of the patient;

(f) the promotion of exercise, rest and sleep with a view to healing and rehabilitation of a patient;

(g) the facilitation of body mechanics and the prevention of bodily deformities in a patient in the execution of the nursing regimen;

(h) the supervision over and maintenance of a supply of oxygen to a patient;

(i) the supervision over and maintenance of fluid, electrolyte and acid base balance of a patient;

(j) the facilitation of the healing of wounds and fractures, the protection of the skin and the maintenance of sensory functions in a patient;

(k) the facilitation of the maintenance of bodily regulatory mechanisms and functions in a patient;

(l) the facilitation of the maintenance of nutrition of a patient;

(m) the supervision over and maintenance of elimination by a patient;

(n) the facilitation of communication by and with a patient in the execution of the nursing regimen;

(o) the facilitation of the attainment of optimum health for the individual, the family, groups and the community in the execution of the nursing regimen;

(p) the establishment and maintenance, in the execution of the nursing regimen, of an environment in which the physical and mental health of a patient is promoted;

(q) preparation for and assistance with operative, diagnostic and therapeutic acts for the patient;

(r) the co-ordination of the health care regimens provided for the patient by other categories of health personnel;

(s) the provision of effective patient advocacy to enable the patient to obtain the health care he needs;

(t) care of the dying patient and the care of a recently deceased patient within the execution of the nursing regimen.

CHAPTER 3. THE SCOPE OF PRACTICE OF A REGISTERED MIDWIFE

3. The scope of practice of a registered midwife shall entail the following scientifically based acts or procedures which apply to the practice of midwifery and which relate to the mother and child in the course of pregnancy, labour and the puerperium:

(a) the diagnosing of a health need and the facilitation of the attainment of optimum physical and mental health for the mother and child by the prescribing, provision and execution of a midwifery regimen or, where necessary, referral to a registered person or by obtaining the assistance of a registered person, as the case may be;

(b) the execution of a programme of treatment or medication prescribed by a registered person;

(c) the prevention of disease relating to pregnancy, labour and the puerperium and the promotion of health and family planning by teaching and counselling individuals, families and groups of persons, by implementation of family-planning skills and by monitoring the health status of the mother and child;

(d) the monitoring of-

(i) the progress of pregnancy, labour and the puerperium;

(ii) the vital signs of the mother and child;

(iii) the reaction of the mother and child to disease conditions, trauma, stress, anxiety, medication and treatment;

(e) the prevention of complications relating to pregnancy, labour and the puerperium including:

(i) the performance of an episiotomy;

(ii) the suturing of first and second degree tears or an episiotomy;

(iii) the administration of a local anaesthetic;

(f) the administration of medicine to the mother or child;

(g) the prescribing, promotion or maintenance of hygiene, physical comfort and reassurance of the mother and child;

(h) the promotion of exercise, including ante-natal and post-natal exercises, rest and sleep;

(i) the facilitation of body mechanics and the prevention of bodily deformities in the execution of the midwifery regimen;

(j) the supervision over and maintenance of a supply of oxygen to the mother and child;

(k) the supervision over and maintenance of fluid, electrolyte and acid base balance of the mother and child;

(l) the facilitation of the healing of wounds, the protection of the skin and the maintenance of sensory functions in the mother and child;

(m) the facilitation of the maintenance of bodily regulatory mechanisms and functions in the mother and child;

(n) the facilitation, maintenance and, where necessary, the improvement of the nutritional status of the mother and child;

(o) the promotion of breastfeeding;

(p) the supervision over and maintenance of elimination by the mother and child;

(q) the facilitation of communication by and with the mother and father or family in the execution of the midwifery regimen;

(r) the establishment and maintenance, in the execution of the midwifery regimen, of an environment in which the physical and mental health of mother and child is promoted;

(s) preparation for and assistance with operative, diagnostic and therapeutic acts for the mother and child;

(t) the co-ordination of the health care regimens provided for the mother and child by other categories of health personnel;

(u) the provision of effective advocacy to enable the mother and child to obtain the health care they need;

(v) care of the dying patient and a recently deceased patient within the execution of the midwifery regimen.

CHAPTER 4. - THE SCOPE OF PRACTICE OF ENROLLED MIDWIVES

4. The scope of practice of an enrolled midwife shall entail the following acts or procedures which apply to the practice of midwifery:

(a) The identification of a health need and the promotion of the health of the mother and child by means of examination and advice during, and supervision over and handling of, normal pregnancy, uncomplicated labour and normal puerperium;

(b) the promotion or maintenance of hygiene and physical comfort and the reassurance of the mother and child;

(c) the promotion of exercise, rest and sleep;

(d) the control, promotion and maintenance of the following in the mother and child:

(i) Respiratory functions;

(ii) intake and output functions;

(iii) blood pressure, temperature, pulse rate and foetal heart;

(e) the promotion, maintenance and improvement of the nutritional status of the mother and child;

(f) the promotion of breastfeeding;

(g) the provision of information on health and family planning;

(h) the care of a dying patient, a recently deceased patient and a stillborn infant.

CHAPTER 5: THE SCOPE OF PRACTICE OF ENROLLED NURSES

5. The scope of practice of an enrolled nurse shall entail the following acts and procedures as part of the nursing regimen planned and initiated by a registered nurse or registered midwife and carried out under his direct or indirect supervision:

(a) The carrying out of nursing care to fulfil the health needs of a patient or a group of patients;

(b) caring for a patient, and executing a nursing care plan for a patient, including the monitoring of vital signs and the observation of reactions to medication and treatment;

(c) the prevention of disease and the promotion of health and family planning by means of information to individuals and groups;

(d) the promotion and maintenance of the hygiene, physical comfort and reassurance of a patient;

(e) the promotion and maintenance of exercise, rest and sleep with a view to the healing and rehabilitation of a patient;

(f) the prevention of physical deformity and other complications in a patient;

(g) the supervision over and maintenance of a supply of oxygen to a patient;

(h) the supervision over and maintenance of the fluid balance of a patient;

(i) the promotion of the healing of wounds and fractures, the protection of the skin and the maintenance of sensory functions in a patient;

(j) the promotion and maintenance of the body regulatory mechanisms and functions in a patient;

(k) the feeding of a patient;

(l) the promotion and maintenance of elimination in a patient;

(m) the promotion of communication and by and with a patient in the execution of nursing care;

(n) the promotion of the attainment of optimal health in the individual, the family, groups and the community;

(o) the promotion and maintenance of an environment in which the physical and mental health of a patient are promoted;

(p) preparation for and assistance with diagnostic and therapeutic acts by a registered person;

(q) preparation for and assistance with surgical procedures and anaesthetic;

(r) care of a dying patient and a recently deceased patient.

CHAPTER 6: THE SCOPE OF PRACTICE OF ENROLLED NURSING ASSISTANTS

The scope of practice of an enrolled nursing assistant shall entail the following acts and procedures as part of the nursing regimen planned and initiated by a registered nurse or registered midwife and carried out under his direct or indirect supervision:

(a) The promotion and maintenance of the health of a patient, a family and a community;

(b) the provision of health and family planning information to individuals and groups;

(c) the care of a patient and the execution of a nursing care plan for a patient;

(d) the promotion and maintenance of the hygiene of a patient, a family and a community;

(e) the promotion and maintenance of the physical comfort, rest, sleep, exercise and reassurance of a patient;

(f) the prevention of physical deformity and other complications in a patient;

(g) the supervision over and maintenance of a supply of oxygen to a patient;

(h) the taking of the blood pressure, temperature, pulse and respiration of a patient;

(i) the promotion and maintenance of the body regulatory functions of a patient;

(j) the promotion of the nutrition of a patient, a family and a community;

(k) the maintenance of intake and elimination in a patient;

(l) the promotion of communication with a patient during his care;

(m) the preparation of individuals and groups for the execution of diagnostic procedures and therapeutic acts by a registered person;

(n) the preparation for and assistance during surgical procedures under anaesthetic;

(o) the care of a dying patient and a recently deceased patient.

APPENDIX P

Registration – University of the Free State

UNIVERSITEIT VAN DIE VRYSTAAT
UNIVERSITY OF THE FREE STATE
YUNIVESITHI YA FREISTATA

POSBUS 339 BLOEMFONTEIN 9300 REPUBLIEK VAN SUID-AFRIKA / REPUBLIC OF SOUTH AFRICA / RIPHABLIKE YA AFRIKA BORWA

STUDENT NUMBER: 1997555519

ENQUIRIES: MS. M DU PLESSIS

TEL.: (051) 4012660

DATE: 28 OCTOBER 2002

IT IS HEREBY CERTIFIED THAT

VIOLET FRANSMAN

IDENTITY NUMBER: 5712240162008

IS A FULL-TIME REGISTERED STUDENT FOR 2002 AT THE UNIVERSITY OF THE FREE STATE FOR THE FOLLOWING FIELDS OF STUDY:

1 MASTER OF SOCIAL SCIENCE IN NURSING

For. REGISTRAR: STUDENT ACADEMIC SERVICES

DIE UNIVERSITEIT VAN DIE O.V.S.
POSBUS 339 P.O. BOX
BLOEMFONTEIN
THE UNIVERSITY OF THE O.F.S.

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