

**EVALUATION OF THE NURSING CARE RENDERED TO  
WOMEN WHO DIED DUE TO PREGNANCY RELATED  
PROBLEMS DURING 2001 – 2002 AT OSHAKATI STATE  
HOSPITAL**

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**ABSTRACT**

This descriptive quantitative study was conducted out at Oshakati State Hospital. The purpose of the study was to assess the nursing care rendered to women who later died due to pregnancy related problems during 2001 – 2002 in Oshakati State Hospital.

Thirty one clinical records of women who later died due to pregnancy related problems during 2001 – 2002 were evaluated. The checklist was used for document analysis.

Data was analyzed through statistical analysis and presented as descriptive statistics. Findings were that nursing care rendered to women who were admitted and later died due to pregnancy related problems was of high standard. Many of the aspects were recorded. Women are not attending antenatal visits as early as possible. They took too long before seeking medical assistance. Nurses applied rules of maternal care. Conditions of patients and their changes were clearly stated and close observations were done. Referrals of patient from district hospital to referral hospital take too long.

Recommendations from this study were that:

- In-service training in place should emphasize more on the importance of taking weight, urinalysis of every patient who is seeking maternal services.
- The public should be informed about the importance of attending antenatal visits via media, dramas or role plays and through pamphlets.

- Nurses should be reminded about the importance of proper record keeping with dates and legible signatures all the time.
- Furthermore, it should be emphasized through workshops that records can provide evidence in court.
- Regulations of the referral system on maternal care should strictly be put in place regarding the hours of patients have to stay in labour after complications have been detected.
- Also, negligence found in managing or prolonging referrals should be strictly dealt with or followed up.

**LIST OF ABBREVIATIONS**

AIDS	:	Acquired Immuno Deficiency Syndrome
FHR	:	Fetal Heart Rate
HIV	:	Human Immuno Virus
IRIN	:	Integrated Regional Information Networks
RH	:	Rhesus Factor
RPR	:	Rapid Plasma Reagin
REG. NO	:	Registration Number
TBA	:	Traditional Birth Attendants
MOHSS	:	Ministry of Health and Social Services
UNICEF	:	United Nation Children's Fund
UNFPA	:	United Nation Population Fund
WHO	:	World Health Organization

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This work is dedicated to the memory of my parents Moses and the late Peneyambeko Ndakalako, who provided me with a good beginning.

- To my family who encouraged and cheered me
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**DECLARATION**

I hereby declare that the study on "Evaluation of nursing care rendered to women who later died due to pregnancy related problems during the year 2001 – 2002 at Oshakati State Hospital" is my own independent work and that all the sources I have used or quoted have been indicated and acknowledged by means of a complete reference.

Signed: Shatilwe  
Date: 22 March 2005

## **CHAPTER 1**

### **INTRODUCTION AND BACKGROUND**

#### **1.1 INTRODUCTION**

According to the essential indicators of health, Republic of Namibia (2002:8), maternal death is defined as the death of a women while pregnant, or within 42 days of termination of pregnancy irrespective of the duration of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

World wide, approximately 1600 women die each day of problems related to pregnancy or childbirth. Many of these deaths are preventable. In the United States in 2000, the annual maternal mortality rate was 9.8/100 000. The predominant causes of these deaths are haemmorrhage, infection, pregnancy induced hypertension and ectopic pregnancy (Lowdermilk & Perry, 2004: 6). Healthy People 2010 proposed a goal of 3.3 maternal deaths per 100 000. To achieve this goal, early diagnosis and appropriate intervention must occur (Lowdermilk & Perry, 2004:6).

According to IRIN News Organization (2003: 17), women in Sub-Saharan Africa face the highest maternal mortality rates in the world, with up to one in 16 women running the risk of dying during pregnancy or at childbirth. A study conducted by the World Health Organization (WHO), The United Nations Children Fund (UNICEF) and the United Nations Population Fund (UNFPA) found that in Angola

and Malawi one in seven women faced the risk of dying during pregnancy or at childbirth, compared with one in 2, 800 for a woman from a developed region (IRIN News Organization, 2003: 1).

A report released by the WHO, UNPFA and UNICEF estimated that 529,000 women die each year while pregnant, 99 percent in the developing world, particularly in Africa and Asia (Itano, 2003:1). India has more maternal deaths than any other country, an estimated 136,000 each year, followed by Nigeria and Pakistan. Kenya has the dubious distinction of joining a three-way tie for ninth place with China and civil-war torn Angola (Itano, 2003:1).

In Namibia, maternal mortality is estimated to be 271/100 000 live births (Republic of Namibia, 2000: 21). The major causes of maternal deaths include ruptured uterus due to obstructed labour, ante- and postpartum haemorrhage, eclampsia and septicaemia. HIV/AIDS is also contributing to maternal mortality (Republic of Namibia, 2001: 3). Poor access to services and late referrals are some of the indirect causes of maternal morbidity and mortality, while young age of women at first pregnancy and grand multipara carry a risk for maternal ill-health (Republic of Namibia, 2001: 3). A survey conducted in 1995 indicated that about 40% of women are being delivered by traditional birth attendants (TBA) (Republic of Namibia, 2001:3). However, the Namibia demographic health survey of 2000 indicated a decrease in levels of deliveries by the TBA which stands at 5, 6 percent (Republic of Namibia, 2001: 3). Abortion is likely to be a substantial cause of maternal death.

A study conducted in 1999 in selected government hospitals suggested that about 17% (Seventeen) of women died of abortion related complications (Republic of Namibia, 2001: 3).

## **1.2 Background of the problem**

Maternal mortality has become a major health problem, especially in many African countries compared to European countries. In African countries such as Zambia, Uganda, and Tanzania, to mention but a few, a high rate of maternal mortality is experienced.

Like other African countries, Namibia is also being challenged by maternal mortality although not so extremely as those mentioned above. According to the Oshakati District Health Information Statistics Report, in the year 2000-20 (0,02%) maternal deaths were reported; year 2001-18 (0,018%) maternal deaths while 2002-13 (0,013%) maternal deaths were recorded (Oshakati District Health Information System Office).

World wide strategies to reduce maternal mortality rate include improving access to skilled attendants at birth, providing post abortion care, improving family planning services and providing adolescents with better reproductive health service (Lowdermilk & Perry, 2004: 6).

Maternal mortality is one of the health problems, which the Ministry of Health and Social Services has decided to target through mother and child health care.

This has been reflected in the reproductive health policy which was launched in July 2001 with the main objectives of reducing the maternal mortality from 271 per 100 000 live births to 268 live births by the year 2005 and to reduce perinatal mortality from the current level which is 27/1000 by one-third (Republic of Namibia, 2001:8).

### **1.3 Problem statement**

The fact that pregnant women are still dying unexpectedly is not an acceptable situation. Maternal death is posing a burden to the community, as productive people are dying unexpectedly; some of those were breadwinners in their families. The government is already facing economic consequences by caring for large numbers of orphans due to HIV/AIDS pandemic.

It can affect nurses psychologically because death during pregnancy is not acceptable and unexpected. Studies on maternal deaths are mainly concentrating on factors contributing to maternal death, while not much has been focusing on nursing care specifically (Taaru, 1997: 40 & Ipinge, 1993:29). Therefore this study will concentrate on the nature or quality of nursing care rendered to women who died during 2001-2002 in Oshakati State Hospital.

**Therefore this study aims to answer the following question**

- What is the quality of nursing care that had been rendered to women who died due to pregnancy related problems during 2001 – 2002 in Oshakati State Hospital?

**1.4 PURPOSE AND OBJECTIVES OF THE STUDY****1.4.1 Purpose of the study**

The purpose of the study is to assess the nursing care rendered to women who died due to pregnancy related problems during the year 2001-2002 in Oshakati State Hospital.

**1.4.2 Specific objectives****The specific objectives of the study are**

- To assess the maternal care rendered to women admitted and who died due to pregnancy related conditions.
- To make necessary recommendations to improve the nursing care of women with pregnancy related conditions.

## **1.5 SIGNIFICANCE OF THE STUDY**

The findings of the research will indicate whether the health care providers are implementing the protocol of maternal care properly. The research findings will also give the health care providers recommendations on how to improve maternal care and the health care trainers will also use the outcomes to update their curriculum. The research findings may facilitate the improvement of the management of maternal care in the clinical situation as well as in the training of midwives.

## **1.6 OPERATIONAL DEFINITIONS**

### **Nursing Care**

Nursing care is a direct intervention by a nurse on behalf of a client. It involves observing, evaluation, diagnosing, treating, counseling and serving as an advocate (Duncan, 1997:268).

### **Quality of nursing care**

Quality of nursing care is a care that is provided according to the set standards of nursing (Booyens, 2001: 304).

### **Maternal mortality ratio**

Maternal mortality ratio is the proportion of women die from cause around the time of birth expressed as deaths per 100 000 births (Taaru, 1997:8).

**Maternal mortality rate**

Maternal mortality rate is the number of maternal deaths per 100 000 pregnancy (Vlok, 1991:514).

**A pregnancy related death**

A pregnancy related death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death (Taaru, 1997:8).

**Abortion**

Abortion is a bleeding from the genital tract occurring before the 26<sup>th</sup> week of pregnancy (Sellers, 1993: 1003).

**High – risk patients**

High-risk patients are patients with problems, but with the aid of special guides and policies may be managed by advanced midwives (Sellers, 1993:993).

**Midwifery**

A midwife is a person enrolled as a midwife under section 13 and includes an accoucheur (Nursing Professions Act, 1993:5)

**Evaluate**

Evaluation refers to the formation of an opinion of the amount value or quality of something after thinking about it carefully (Hornby, 2001:396).

## **1.7 SUMMARY**

Many contributing factors have been identified through research. It is, however, essential to ensure that maternal care is of an acceptable standard to reduce/limit the incidence of maternal deaths.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

In this chapter literature review on maternal care, maternal mortality, factors contributing to maternal death and policies related to maternal care will be covered. According to Brink (1996: 76), literature review is defined as a process that involves finding, reading, understanding and forming conclusions about the published research and theory on a particular topic. According to Polit; Beck & Hungler (2001: 20); Mouton (2001: 86) ; Bless & Higson – Smith (2000: 20), the importance of literature review is to sharpen and deepen the theoretical framework of the research, to familiarize the researcher with the latest development in the area of research, as well as in related areas, to identify suitable designs and data collection methods for a study and to assist in interpreting study findings and in developing implications and recommendations.

#### **2.2 THEORETICAL FRAMEWORK**

##### **The scientific method of nursing / nursing process**

In this study, the scientific method of nursing or nursing process will form the theoretical framework. The nursing process/scientific method of nursing is therefore the scientific instrument which enables nurses to render personal, individualized, quality nursing.

It is a problem-solving technique which helps the nurse to identify the problems and needs of the patient, and to plan, render and also evaluate nursing care in an orderly and scientific manner (Booyens, 1996: 204). The nursing process includes the following steps namely assessment, diagnosis, planning, implementation, evaluation and recording.

Assessment is applicable to the study because if a midwife admits a client, she is expected to observe the client and to determine her needs, problems and come up with a diagnosis. Diagnosing refers to comprehensive assessment which includes physical, social and emotional observation. In physical observation, the midwife has to take all vital signs such as blood pressure, pulse, temperature, urinalysis, fetal heart rate and contractions to ensure the maternal and fetal well-being. In social observations, the midwife has to determine the relationship between friends, relatives and the husband of the client, if married. Emotionally she (the midwife) has to observe whether the client is worried, scared, depressed or happy. Research by Cunningham & Zayas (2002: 2) indicates that high levels of stress, low social support networks and depression during pregnancy have a powerful negative effect on maternal functioning and infant development outcomes. She has also to see that the client is oriented.

After a diagnosis has been identified in step one, the midwife has to plan according to the diagnosis. For example, if she has detected that her client has high blood pressure, protein in urine and swollen feet, the nursing system would be to alleviate these problems.

The nursing is designed as a unique therapeutic plan based on the clients' needs and diagnosed problems. If a woman is expected to deliver vaginally, the design of nursing system should be supportive, educative and partly compensatory, but if the need arises for assisted delivery like forceps delivery, vacuum extraction or caesarian section, the actual design for planned care is wholly compensatory (George, 2002: 139).

After planning, the identified nursing interventions are put into action. This process is referred to as implementation. For example, if the midwife has planned to give health education regarding swollen feet, high blood pressure and protein in the urine, she is now implementing it, which means the midwife gives full information of the problems of swollen feet. For instance, she could tell the patient that she has to elevate her legs and that the patient has to go to the clinic regularly for blood pressure check-ups.

According to George (2002:142), in this step, the nurse performs and regulates the patient's self-care tasks, or assists the patient in doing so. She coordinates the performance of self-care with other components of health care, helps patients, families and others to create and use systems of daily living that meet self-care needs in a satisfying way. She guides, directs and supports patients in exercising or not exercising self-care. She stimulates patients' interest in care problems. She supports learning activities, supports and guides the patient in adapting to the needs arising from medical measures.

She monitors and assists in self-monitoring the performance and effects of self-care, the self-care agency and the nursing agency. She adjusts the nursing system as needed.

After the nurse has implemented the action described in the previous step, she has to ensure whether the plan that she has implemented has worked, which means that she has to evaluate it. For example, if she has been giving health education in step 3, now she has to do follow-ups on her client to check whether she has followed everything she has been told such as elevating the legs if she has swollen feet. She has to check whether the swelling has come down and if not, start to plan again other actions she is going to take.

Record keeping is done continuously from admission. Recording is a very important aspect of scientific nursing and is also important for the assurance of quality nursing (Booyens, 2001:219).

### **2.3 MATERNAL CARE**

Maternal services should be woman-focused, readily accessible, responsive and effective and should involve women in planning (Hicks; Spurgeon & Barwell, 2003:617).

### **2.3.1 Antenatal care**

Antenatal care is the care that is given to an expectant (pregnant) woman from the time that conception is confirmed until the beginning of labour (Bennett & Brown, 1999:209 as cited by Kachale, 2002:5). In Sellers (1993:165) antenatal care is defined as, the care given to women during pregnancy to keep the women and the baby under frequent surveillance in order to maintain or even improve her health physically, psychologically and spiritually throughout pregnancy, labour and in the puerperium. Maternal death can only be reduced if the progress of the mother and the baby are properly monitored from the beginning of the pregnancy. It is advisable for the pregnant women to start antenatal care visits at the early beginning of pregnancy so that problems can be detected early and treated in time. Sellers further states that some women's pregnancies commence normally, but tend to develop complications and are then said to be at risk while others are at risk from the beginning of their pregnancy. Complications can and do develop suddenly, and it is therefore vital that these complications be identified as soon as possible (Sellers, 1993:993).

When monitoring pregnant women during antenatal care, the personal information, history taking and observations need to be recorded. Personal information should include full name, full address, telephone numbers, date of birth, race, occupation, religion, matrimonial state, next of kin and doctor's name in case of private doctor. History taking should entail social history, family history, the woman's personal history, present medical history, gynaecological history, past obstetrical history and history of current pregnancy.

Observations should entail the following: blood pressure, temperature, pulse, weight, urine test, blood test such as RPR and haemoglobin, fetal heart rate and abdominal palpation (Sellers, 1993: 170). History taking, observations and personal information will guide the midwives in detecting complications and it will enable the midwives to determine whether the pregnant woman is a high risk or not.

It is surprising that many pregnant women in the world are attending antenatal visits, but only a small percentage of pregnant women are delivering in the hospital. A study conducted in Zambia in 2001 indicated that 96% of women in that country attended antenatal visits (Maimbolwa; Yamba; Diwan & Ransjö- Arvidson, 2003: 263). The Namibia Demographic Health Survey of 2000 also indicated that 93% of pregnant women in Namibia are receiving antenatal care (Namibia Demographic Health Survey, 2000: 117). In the Oshana region alone, 87.2% of pregnant women attended antenatal visits to midwives and 10.2% to doctors. The others are attending either at traditional birth attendants and some are not attending at all (Republic of Namibia, 2000: 118). Only when pregnant women are attending antenatal care visits can complications during labour be reduced.

### **2.3.2 Management of Labour:**

It is the midwife who has the most contact with the woman during labour and she is, therefore, the person to whom the woman will turn in her need.

The midwife's attitudes are of utmost importance and can drastically affect the outcome of the labour.

In fact it can be said that, provided there are no complications to begin with, a natural and uncomplicated delivery will to a very large extent depend upon the care and psychological support which the woman receives from the midwives during labour (Sellers, 1993: 350). Sellers further states that, admission of a woman in labour should only be done by a qualified experienced midwife in order to recognize the slightest sign of any complication. Any complications need proper management to prevent the problem from becoming more serious and if already serious to refer to the doctor (Sellers, 1993: 350).

Labour is divided into 3 stages, namely first stage, second stage and third stage (Sellers, 1993: 327). The midwife has to be able to differentiate between these three stages in order to monitor labour properly. On admission, a pregnant woman's screening starts which include observations, history taking and abdominal palpations. The first stage starts from the dilatation of the cervix until the cervix is fully dilated. During these stages thorough examination and observations should be done to exclude any complications (Sellers, 1993: 327). Complications which can occur during this stage are fetal distress, maternal distress, malpresentations and prolonged labour. Uterine rupture is the most common complication which can occur during this stage, which is a condition characterized by shock and collapse (Sellers, 1993:467). A study done by Iiping (1993: 26) indicated that 27% of pregnant woman who have died have experienced uterine rupture.

The second stage starts from the dilatation of the cervix until the baby is born. During this stage the midwife needs to have knowledge of the technique of delivery. This is important for her to be able to detect any signs of complications on time such as malpresentations, obstructed labour and prolonged labour. After the baby has been born the third stage will follow. The third stage starts after the baby is born until the expulsion of the placenta (Sellers, 1993:327). Complications such as post partum haemorrhage can occur during this stage. Postpartum haemorrhage is a condition during which a woman may experience excessive haemorrhage from the genital tract after the birth of the baby and may lead to death if not immediately handled (Sellers, 1993:1585).

A study done in Indonesia has indicated that 41% of maternal deaths were due to haemorrhage (Supratikto; Wirth; Achadi; Cohen & Ronsmas 2002:1). In Namibia, a hospital based study done in 2000 also indicated that post partum haemorrhage is one the major causes of maternal deaths in Namibia (Republic of Namibia, 2000:31). Another study by Ipinge (1993: 26) indicated that 9% of pregnant women died due to post partum haemorrhage.

### **2.3.3 Post- natal care/Puerperium care**

After the woman has delivered she enters a stage called puerperium or the post delivery stage. At this stage the women still has to remain in the hands of the midwife for one to two days until she is well recovered or until she is in a state to be on her own without supervision.

During this period thorough observations should still continue, because although a woman might deliver normally, she might develop complications such as anaemia, post partum haemorrhage and puerperal sepsis that might lead to death.

An Australian study indicated that excessive or prolonged bleeding is one of the health problems experienced by woman after childbirth (Thompson; Roberts; Currie & Ellwood, 2002:83). A study by Taaru (1997:39) also discovered that anaemia was one of the principal factors that contribute to maternal mortality in the North West Health Directorate. If maternal health facilities are delegated with well trained and dedicated midwives, then maternal mortality will reduce, because minor problems that may lead to serious complications will be detected earlier. When a midwife monitors the observations/parameters on a continuous basis, complications such as anaemia can be managed before resulting in mortality.

#### **2.3.4 Maternal mortality**

Maternal mortality has become one of the major health problems especially in developing countries compared to developed countries. A study done in Mexico in 2000 revealed that maternal mortality ratio was 48/100 000 in 1996 alone compared to Canada which was 2.5/100 000 in 1993 (Castro; Campero; Hernandez & Langer, 2000: 679). In Indonesia the maternal mortality is 390-472 deaths per 100 000 live births (Supratikto et al, 2002:2).

Uganda is one of the developing countries with the highest maternal mortality in the world. Research that was done in 2003 indicated that the maternal mortality in Uganda has been 500/100 000 over the past ten years despite concerted efforts to improve the standard of maternity care (Weeks; Alia; Ononge; Mirambe; Mutangi & Otolorin, 2003:1).

The Zambian Demographic Health Survey of 1997 has indicated a maternal mortality of 649/100 000, but a rural community-based study has reported rates nearly twice as high at 1200/100 000 (Vork et al 1997 as cited by Maimbolwa et al, 2003:264).

As in other developing countries in the world that are experiencing maternal mortality, Namibia also experiences maternal mortality. According to the Namibian Health Survey of 2000, it appears that the maternal mortality ratio has increased overtime from 225 maternal deaths per 100 000 live births for the 10 year period to 271 for the period from the year 1991-2000 (Republic of Namibia, 2000: 21).

Some of the maternal deaths which are happening in the community are not included in the data showed above as some women tend to die just in the community while being attended by the traditional birth attendants. Such deaths are not recorded as maternal deaths.

A survey conducted by UNICEF in 1990 in two areas in Namibia, namely Windhoek and Oshakati, found that only about 50% of the total deliveries took place in health facilities. The other half took place elsewhere in the community.

Maternal mortality was then estimated to be 371 per 100 000 live births (UNICEF 1990 as cited by Ipinge 1993:7). A study by Ipinge (1993:29) in the North West Health Directorate in 1993 estimated maternal mortality at 203/100 000 live births in the region. Maternal mortality can only be reduced if its cause and contributing factors are singled out.

### **2.3.5 Factors contributing to maternal death**

Some of the factors thought to contribute to maternal mortality are long distances to health facilities, poor cultural beliefs and practices, professional practice factors, delay in decision making on the side of the pregnant women, and poor quality of care in health facilities. These were identified as contributing factors to maternal deaths in Indonesia. Other contributing factors are negligence by health workers, traditional birth attendants, socio- economic factors, referral system in maternal health services and health services factors such as shortage of staff, obstetrical condition and HIV/AIDS.

Long distances to health facilities - Some community members might be far from the health facilities and they have to travel long distances before they reach the hospital. A study done in Mexico in 2000 has highlighted that delay in reaching a care facility is one of the contributing factors to maternal death in that country (Castro et al, 2000:682).

Another study in Tanzania in 2001 also indicated that poor roads, long distances and lack of vehicles were also contributing to high maternal death (Schmid; Kanenda; Ahluwalia & Kouletio, 2001:2).

Cultural beliefs and practices also contribute to maternal deaths. Beliefs that a woman should deliver her first baby at home to show her bravery is one of the beliefs that can contribute to death. This implies that by the time that complications develop (due to the fact that person's pelvis is inadequate to let her deliver on her own), it will be too late to save her life. The Zambian Demographic Health Survey done in 1997 indicated that 54% of women delivered at home and only 5.4% were assisted by trained traditional birth attendants. (Zambian Demographic Health Survey 1997 as cited by Maimbolwa et al, 2003:265). Another study done in Mexico also found that cultural beliefs in that country also contributed to maternal death, because in some cases, symptoms are interpreted as signs of a traditional disease rather than as signs of pregnancy-related complications (Castro et al, 2000:684).

A study done in Nigeria has identified one of the cultural beliefs of traditional birth attendants was that women have "locked" their pregnancy against evil forces and only they have to unlock it for the baby to be born. This is mainly in cases of prolonged labour. (John; Udoma; Udoh; Ndebbio & Idiong, 2002:41).

Ipinge (1993:30) states that cultural practices and beliefs impeded the community in utilizing maternal services especially women from rural areas.

In the similar tone Taaru (1997: 42), identifies cultural factors which equally suppresses rural women in attending maternal service. Amongst others, the negative perception of maternal services, easy access to traditional birth attendants, adverse traditional customs, taboos and to an extent personal incorrect decision making in terms of choice and timing.

Kachale (2002:IV) states in her findings that poor decision-making by some midwives at the health center delay referrals of some high risk pregnant women to the hospital which may contribute to maternal deaths.

There are also professional practices that may contribute to maternal deaths. These include poor case management, lack of knowledge of the staff and negligence of health professionals. This is reflected in failure to do proper observations, proper referrals.

A study done in Indonesia in 2002 has found that delay in decision – making and poor quality of care in health facilities were identified as contributing factors to maternal deaths in Indonesia (Supratikto et al, 2002:1).

In Mexico it was also found that delay in actually receiving care after arrival, and problems associated with the quality of care provided by midwives as well as physicians who cannot provide care all contributed to maternal death (Castro et al, 2000: 685). Negligence by health workers is one of the causes of maternal deaths identified in the North West Health Directorate, Namibia (Ipinge, 1993:31).

Other factors contributing to maternal death of pregnant women are waiting until it is too late before she visits the hospital for antenatal visits or for delivery. Complications might not be detected on time and by the time she reaches the health facility it might be too late. A study done in Mexico by Castro et al (2000:682) found that a delay in deciding to seek help by some women might have resulted in their death.

In a study done by the Namibia Red Cross Society, 61% of the pregnant women responded that they could not see the need for attending antenatal care visits. The same study also found that 76% of the women delivered their last child at home (Namibia Red Cross Society, 2002:78). The same study found that 48% of the women studied who delivered at home had complications (Namibia Red Cross Society, 2002:80).

Traditional birth attendants who are not referring high risk women on time can be also one of the contributing factors, because some of them are trying to solve problems on their own which need to be tried by medical assistance, example, removal of retained placenta manually which might lead the women to bleed to death. A study done in Zambia quoted a traditional birth attendant saying “I push my hand into the vagina to remove the placenta.” (Maimbolwa et al, 2003:268).

This is an indication that traditional birth attendants are not referring women with complications to hospitals. Another study done in Nigeria has identified that traditional birth attendants did not see the need to refer women with persistent malposition of the foetus because they claimed they could easily turn or rotate a baby by external manipulation (John et al, 2002:43).

Research report by Ipinge (1993:26) found that some traditional birth attendants who encountered problems such as mal-presentation, multiple pregnancy and high blood pressure managed their clients themselves. This is an indication that traditional birth attendants do not seem to realize the seriousness of the risky conditions they encountered.

Socio-economic factors such as unemployment might contribute to maternal death, because communities might not have money to pay for transport and services, and even in some areas transport itself is difficult to find. A study done in Tanzania has found that lack of vehicles is heavily contributing to maternal death in the country in Mwanza region (Schmid et al, 2001:2). A study done in Mexico has found that lack of money is one of the most important reasons why many women do not seek care when danger signs appear (Castro et al, 2000:679).

In her study, mentioned earlier, Ipinge (1993:26) indicated that the majority of women were unemployed and lacked money to pay for transport and service. It was therefore concluded that unemployment and lack of money might have contributed to women not using maternal health facility. Referral systems in maternal health services might be also one of the contributing factors to maternal death. Delaying in referring complications to the relevant specialist or to another referral facility might have contributed to maternal death. Complications could have been dealt with as they occurred, but this was only the case when they had been referred on time.

A study done in Tanzania indicated that long delays in obtaining care during obstetric emergencies were major contributors to high maternal death rate in Tanzania (Schmid et al, 2001:1). A study by Taaru (1997: 41) found that onward referral of women from the District Hospital to the regional hospital without clear information as to why the mother was referred can be one of the contributing factors to maternal death.

Health services factors such as shortage of staff might also contribute to maternal death, because if one staff is attending many clients she might not be able to detect all complications that might emerge. The omission of any observation might lead to serious danger and as a result this may lead to death. For example, in cases of uterine rupture, if no proper observation is done, the midwife will not be able to detect any signs of danger. A study by Taaru (1997:41) has indicated that shortage of staff is one the contributing factors to maternal death in North West Health Directorate.

Maternal death can also be contributed to by obstetrical conditions such as uterine rupture, post partum haemorrhage, eclampsia, ectopic pregnancy, pre- partum haemorrhage, malaria, abortion related problems and HIV/AIDS. A study done in Indonesia has revealed some of the obstetrical conditions that may contribute to maternal death such as haemorrhage and hypertensive disorders (Supratikto et al, 2002:1).

A study on risk factors associated with hospital based maternal mortality in Lesotho, Malawi, Uganda and Zambia found that 28% of all maternal deaths were due to abortion (Republic of Namibia, 2000:32).

Another study on hospital based abortion conducted by the Ministry of Health and Social Services between 1995 and 1998 revealed the following obstetrical conditions that caused maternal mortality: eclampsia, ectopic pregnancy, pre and post partum haemorrhage, malaria and abortion-related problems.

In addition, the same study found that about one third of the abortion-related maternal deaths were due to septic and illegally induced abortions, most likely unsafely performed. It further concluded that proportions of maternal deaths due to abortion is significant and is higher than the global average, indicating that abortion is a serious health problem in Namibia (Republic of Namibia, 2000:32).

HIV/AIDS is also one of the major causes of maternal death in the world. Pregnant woman who have been tested with the HIV virus tend to experience complications during pregnancy, labour and puerperium because their immune system is suppressed. According to the WHO regional office for Africa, surveys from HIV sentinel sites using pregnant women continue to show that over 10% of women attending antenatal clinics in urban areas are infected with HIV with rates exceeding 40% in some of the worst affected parts of the continent in several urban areas (Asamoah-Odei, 2000:3).

Asamoah-Odei further highlighted that HIV prevalence in pregnant women continues to rise in several countries in the region. In Francistown, Botswana, HIV prevalence in pregnant women increased by almost 50% from 32% in 1993 to 43% in 1997. In Lusaka, HIV prevalence rates have more than doubled from 8% in 1985 to 25% in 1990, and has been hovering between 20% and 25% since then (Asamoah-Odei, 2000: 3).

In Namibia, the national HIV prevalence in pregnant women is alarmingly high. The national average stands at 19% (Namibia Red Cross Society, 2002:9).

The results of 2000 HIV sentinel zero survey conducted by the Ministry of Health and Social Services show that in all regions a considerable number of pregnant women are infected with HIV (Namibia Red Cross Society, 2002:12). These were just some of the contributing factors to maternal death. There are a number of them although some of them are not yet mentioned here or have not yet been documented.

### **2.3.6 Policies**

As mentioned earlier, maternal mortality is one of the targeted health problems which the Ministry of Health and Social Services has decided to reduce. A reproductive health policy was launched in July 2001. Some of the objectives of this policy are:

- To reduce the maternal mortality from 271/100 000 live births to 268/100 000 live births and to reduce perinatal mortality from the current level by 1/3 (Republic of Namibia, 2001:8).
- The goal of the policy is to promote and protect the health of individuals and families through the provision of equitable, acceptable, accessible and affordable quality reproductive health services (Republic of Namibia, 2001:8).

The Ministry of Health and Social Services' interpretation of reproductive health is derived from the World Health Organization's definition which describes reproductive health as a state of complete physical, mental and emotional well-being and not merely the absence of disease or infirmity in all matters relating to the

reproductive system and its function and process (Namibia Red Cross Society, 2002:4).

Apart from the reproductive health policy, the Ministry of Health and Social Services has also implemented another policy to improve maternal health services in Namibia by training the auxiliary nursing categories to become enrolled nurses and midwives, giving health education to the community on maternal related aspects, as well as the attendance of refresher courses by health care providers.

### **2.3.6 Summary**

The literature study gave an overview of the theory applied to this study. Maternal care, factors contributing to maternal death, maternal mortality globally and locally and policies applied to fight maternal death were presented and discussed.

## CHAPTER 3

### METHODOLOGY

#### 3.1 Introduction

This chapter describes the research approach which has been used to collect the data. Aspects such as terminology used in the study, permission to conduct the study, demarcations of the study, the target population, sampling, preparation of the checklist, pilot study, data collection, data analysis, validity and reliability, ethical considerations, and dissemination of the research report have been discussed.

#### 3.2 Research design

A retrospective descriptive quantitative contextual study has been conducted by means of document analysis. Research design refers to the researcher's overall plan for answering the research questions or testing the research hypotheses (Polit et al, 2001:167). In a quantitative study, the research design spells out the strategies the researcher plans to adopt to develop information that is accurate and interpretable (Polit et al, 2001:167).

##### 3.2.1 Retrospective

A retrospective study is the study which depends upon the availability of data, or records, which allows reconstruction of the exposure of cohorts to a suspected risk factor and follow-up of their mortality or morbidity over time (Rubin & Babbie, 1997: 325).

This study is retrospective, because the researcher has been looking backwards on the events which are maternal deaths that occurred during the period 2001-2002. Through the retrospective approach, the quality of clinical management of maternal cases has been determined through the auditing of patients' clinical records.

### **3.2.2 Descriptive**

Descriptive designs provide descriptions of the variables in order to answer the research questions (Brink, 1996: 109). In this study records have been studied and the reality of findings has been described and documented. A descriptive study has been employed to describe the nursing care rendered to women who later died due to pregnancy related problems.

In quantitative studies, description typically refers to the characteristics of a population based on quantitative data obtained from a sample of people thought to be representative of that population. For this study the problems experienced by women who died due to pregnancy related problems have been identified and described. The management of the problem has also been described.

### **3.2.3 Quantitative**

Quantitative methods involve writing questions for survey and in depth interviews, learning to quantify or count responses, and statistically analyzing archival, historical or our own data (Nardi, 2003: 17). According to Bless & Higson – Smith (2000:37), quantitative research relies on measurement to compare and analyze different variables. In this study different variables have been compared and analyzed.

A quantitative research strategy is used to formulate standards, to evaluate the compliance with standards and to describe the findings and results of the study.

#### **3.2.4 Contextual**

A contextual study is one where the phenomenon of interest is studied in terms of its immediate context (Mouton & Marais 1990 in Kasanda, 2003: 20). The context of this study refers to study being undertaken in Oshakati State hospital which is identified for admitting obstetrical cases.

### **3.3 STUDY POPULATION AND SAMPLING**

A study population refers to the entire set of individuals with the same common characteristics (Polit & Hungler, 1999: 278; Uys & Basson 1991: 86). For this study the population included all women who died due to pregnancy related problems. The records of women who died due to pregnancy related problems during the year 2001 – 2002 were used for document analysis. Sampling is the process of selecting a portion of the population to represent the entire population (Polit et al, 2001: 234). In this study, the small amount that the population represented made sampling unnecessary. For this study, the District Health Information System of Oshakati indicated a total amount of 31 maternal deaths for the period 2001 –2002. These records were used for document analysis.

**Preparation of the checklist**

The checklist was prepared based on the scientific method of nursing or the nursing process which comprises of the following steps: assessment, diagnosis, planning, implementation, evaluation and record keeping.

The checklist was drafted with the help of an experienced midwife and then it was reviewed by a specialist gynaecologist for corrections and it was then sent to the study supervisors for evaluation. Minor adjustments were made to the checklist regarding clarity and arrangement of some terms (refer to Annexure A).

**3.4 PILOT STUDY**

According to Yin (2003: 79), the pilot case study helps the researcher to refine the data collection plans with respect to both the content of the data and the procedures to be followed. It also provides some conceptual clarification for the research design as well.

For this study, a pilot study was done and the checklist was pre-tested using 15 files of women who died due to pregnancy related problems for the year 2000 from Oshakati State Hospital. These 15 files were excluded from the final study. No obstacles were experienced during the pilot study. No changes were made in the checklist.

### **3.5 DATA COLLECTION**

The records of 31 women were used for document analysis. Records have been collected for auditing purposes. Records have been audited by means of a checklist one by one then information gathered has been compiled for data analysis. The technique that was used was a case study. Receptions where records were stored were visited, and a list of records numbers collected from the District Health Information System were given to the clerk to facilitate searching. For those records which were kept or stored at the wards such as the maternity wards, special times was arranged for the researcher to locate them. After the collections of records, data were collected from them. Each record was audited with a separate checklist. The checklists were then used for data analysis purposes.

### **3.6 DATA ANALYSIS**

Patients' records were analyzed and the information obtained was categorized. Data was analyzed by a statistician and presented as descriptive statistics. Tables and charts were utilized to present the statistics. Finally, a report was compiled. The findings aim at describing the quality of clinical management of maternal cases, the actual problems experienced by the women who died due to pregnancy related problems and how they were managed.

### **3.7 VALIDITY**

According to Polit et al (2001: 308), an instrument is valid when it measures what it is supposed to measure.

To increase the validity of the study a checklist was drafted with the help of experienced midwives and reviewed by a specialist gynecologist for corrections. After that it was sent to the study supervisor for evaluation. Minor adjustments were made to the checklist regarding to the checklist clarity and arrangements of some terms.

### **3.8 RELIABILITY**

Reliability refers to consistency of measurement that is repeatedly applied to the same object, and yields the same results each time (Babbie & Mouton, 2001: 119; Bless & Higson-Smith, 1995: 130). An instrument is reliable if its measures accurately reflect the true measures of the attribute under investigation (Udjombala, 2001: 50). In this study in order to ensure reliability, the checklist was piloted to determine the accuracy and consistency of the instrument.

### **3.9 ETHICAL CONSIDERATION**

Permission to conduct the research was obtained from the Ministry of Health and Social Services as well as from the Medical Superintendent of Oshakati State Hospital.

A copy of the research proposal accompanied the application letter, and was reviewed and approved by the Research Committee of the Faculty of Medical and Health Science at the University of Namibia, and by the Post Graduates Studies Committee of the University of Namibia.

Confidentiality and anonymity were ensured, meaning no information was exposed regarding the deceased identities. The names of the deceased will not be revealed.

### **3.10 SUMMARY**

In this chapter, the research methodology was discussed in depth. An exploratory, descriptive and contextual research design was used. The population and sampling included all 31 records of women who died due to pregnancy related problems.

A pilot study was done to finalize the instrument. Reliability and validity of the instrument was ensured. Ethical principles were maintained through permission from the Ministry of Health and Social Services and the Medical Superintendent of Oshakati State Hospital.

## **CHAPTER 4**

### **ANALYSIS AND INTERPRETATION OF DATA**

#### **4.1 INTRODUCTION**

In this chapter analysis and interpretation of data are discussed. The 31 (100%) records were obtained from the maternity ward, intensive care unit and obstetrical wards have been analyzed together and have made up the research findings. Records which have been collected from the reception area and from the maternity ward were analyzed together. Twelve records were from maternity ward, thirteen records from the obstetrical ward and six files from the intensive care unit. Findings have been interpreted accordingly.

#### **4.2 RESULTS**

##### **A. GENERAL / PERSONAL PARTICULARS:**

##### **Item 4.2.1 General / personal particulars:**

All 31 (100%) of the records contained the following particulars, hospital, and ward, and registration number, name of patient, surname, age, sex, marital status, dependent's address and religion. All patients were fully identified. Booyens (2001: 350) states that the patient's full name, address, age, next of kin and telephone numbers should be recorded.

Although this information is usually obtained by an admission clerk, it should be checked by the nurse receiving the patient in the unit.

**Antenatal Section:****B. ASSESSMENT PHASE****Item 4.2.2 Past history**

Twenty eight 28 (90.3%) of the records indicated that past history on antenatal was recorded on the following aspects: gynaecology, obstetric history, medical history, surgical history, previous pregnancies, family history, RPR, Rheusus factor , follow-up visits and other problems identified. Three 3 (9.7%) of the records indicated that weights were not recorded.

**TABLE 4.1:** Total number of records indicating recorded weight

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	28	90.3
NA	3	9.7
Total	31	100.00

This is indicates that history on antenatal care is taken. Taking of full information during antenatal care will make doctors and nurses aware of what complications might happen.

**Item 4.2.3 Labour Section**

Admission for delivery

Mode of arrival in the ward

All 31 (100%) records indicated the mode by which the patient arrived in the ward. The mode by which patients arrived in the ward will tell other team members whether the patient is mobile or not and the reason why. This will enhance proper care of the patient. For example, if the patient is experiencing dizziness, then all staff will transport the patient with a wheel chair or with a trolley to prevent injury. According to Booyens (2001:350), the manner in which the patient was brought into the unit should also be recorded, for example, was he brought in by wheelchair, stretcher etc.

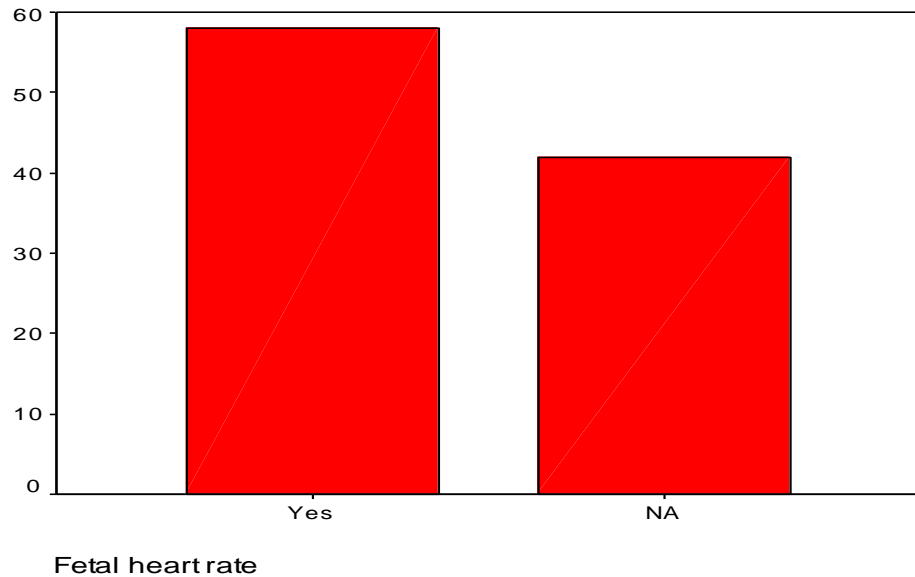
**Item 4.2.4 Reason for admission**

All 31 (100%) of the records indicated that the reason for admission was recorded. All diagnoses were clearly indicated. This shows that nurses know the importance of stating the diagnosis of the patients. By clearly identifying the patient's diagnosis, it will enhance proper standard of nursing care and it will also guide nurses on how to deal with the patient. For example if the patient is admitted with an incomplete abortion, the nurses will know that they have to take haemoglobin and have to observe the bleeding. Booyens (2001: 346) states that information recorded on admission serves as a basis for the planning and continuity of patient care.

**Item 4.2.5 Observations**

Thirty one 31 (100%) of the records indicated that vital signs such as temperature, pulse, blood pressure and haemoglobin were fully taken, 25 (80.6%) of the records indicated that weight and urinalysis were taken, while in 6 (19.4%) of the records weight and analysis were not recorded. Eighteen 18 (58.1%) of the records indicated that fetal heart rate was recorded, while 13 (41.9%) of the records indicated that fetal heart rate was not applicable because patients' weeks of gestation were few and were admitted with a complete abortion or a septic abortion and therefore no fetal heart rate was applicable.

It could therefore be concluded that nurses are aware of the importance of taking vital signs, but still some of the vital signs such as weight and urinalysis have been ignored in some of the patients. Observations enable doctors and nurses to assess the progress of labour (Sellers, 1993:357). After all observations have been done, for example, temperature, pulse, respiration and fetal heart rate should be accurately recorded (Booyens, 2001: 350).

**FIGURE 4.1:** Fetal heart rate recorded

Assessing and recording of vital signs enhance a high standard of nursing care because nurses will be able to detect any complications that might arise, and this will determine whether a patient is a high risk or not.

**Item 4.2.6 Level of consciousness, general physical appearance, movement of extremities and emotional status**

Thirty one 31 (100%) of the records indicated the level of consciousness, general physical appearance, movement of extremities and emotional status. This indicates that nursing care is of high standard and patients are observed thoroughly. Through observation of the patient, nurses will determine what type of nursing care the patient is going to receive. For example, if the patient is in a coma, then nurses will know that this patient has to be nursed in an acute care room.

Booyens (2001: 350) states that the mental state of the patient on admission should be noted and recorded. Indicate whether the patient is conscious, comatosed, depressed, disoriented etc.

#### **Item 4.2.7 Physical examination**

##### **Sensory needs**

Twenty eight 28 (90.3%) of the records indicated that sensory needs on the following aspects were recorded: smell, vision, taste etc. While 3 (9.6%) records indicated that no sensory needs were recorded. This indicates that patients are being examined on sensory needs, although there are a few which are not attended to.

The examination of sensory needs is important, because it directs nursing staff on whether the patient is physically impaired or not and this enhances a good standard of nursing care in the sense that if, for example, a patient is blind or deaf, special care will be needed, like giving a bed pan to a blind person or giving a low bed which is comfortable for her.

#### **Item 4.2.8 Skin condition**

Twenty nine 29 (93.5%) of the records indicated that skin condition was recorded on the following aspects of dryness of the skin, sores and infection while 2 (6.5%) of the records indicated that no aspects of the skin condition were recorded. It is clear that a number of patients are examined regarding their skin condition although only few of them are not being attended to.

Examination of the skin is important in the sense that skin infection can be contagious and patients with skin infection should be isolated to prevent further transmission to non-infected patients (Sellers, 1993:361).

**TABLE 4.2:** Skin Condition: Dryness - recorded

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	29	93.5
No	2	6.5
Total	31	100.0

#### **Item 4.2.9 Abdominal palpation**

Nineteen 19 (61.3%) of the records indicated that aspects such as fundal height and position were recorded, while 9 (2%) of the records indicated that fundal height and position were not recorded because nine (9) patients was admitted due to septic abortions, abortions and some weeks of gestation were too few for palpation.

It is very much important to do abdominal palpation, because it enables the nurse to determine whether the weeks of gestation have been reached for delivery and to detect premature labour, and to do references to a relevant specialist.

**Item 4.2.10 Vaginal examination**

Twelve 12 (38.7%) of the records indicated that the following aspects of vaginal examination such as the dilatation of the cervix, sutures, position level, effacement, presenting part, and presentation were recorded, while 19 (61.3%) of the records indicated that no vaginal examination was recorded because it was not applicable as some patients were not in labour, some were having vaginal bleeding and some had had abortions.

Obviously vaginal examination is done when applicable and nurses know when to do vaginal examination. They are also abiding by the rules of maternal care that no vaginal examination should be done when the patient is having vaginal bleeding.

**Item 4.2.11 Cardiovascular, Respiratory, Gastro-intestinal, Reproductive and urinary**

Twenty nine 29 (93.5%) of the records indicated that cardiovascular, respiratory, gastro-intestinal, reproductive and urinary examination were recorded. This indicated that patients were fully examined and thus the appropriate standard of nursing care was provided. Through full physical examination nurses might be able to detect some problems which are not visible (Sellers, 1993:361).

**Item 4.2.12 History taking**

All 31 (100%) of the records indicated that the chief complaints of the patients were recorded which shows that history of patients was obtained and this will enhance treatment of the patients, because nurses and doctors will focus on what patients are complaining of (Sellers, 1993:358).

According to Booyens (2001: 350), when the patient is received in the unit, an accurate description of the patient's condition and complaints should be entered into the records. This is important should the patient claim damages for complaints incurred while in the unit.

**Item 4.2.13 Allergies**

All 31 (100%) of the records indicated that information about allergic reactions were recorded. This indicates that nurses are aware of dangers that might occur if allergies that patients have experienced are not recorded. It is important to ask whether the patient is allergic to any medication to prevent unnecessary allergic reaction. Booyens (2001: 350) states that the allergies of the patient should be recorded.

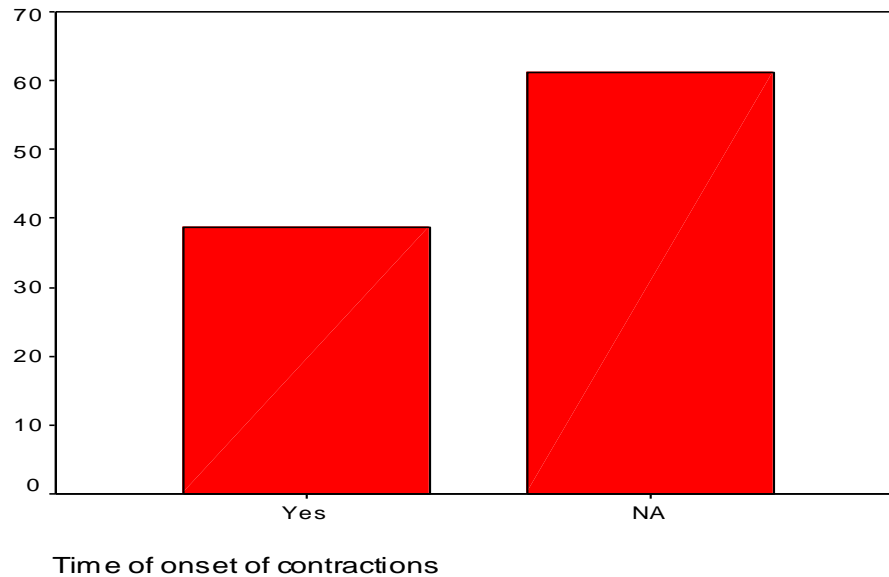
**Item 4.2.14 Previous health problems**

All 31 (100%) of the records indicated that information about previous health problems was recorded. This indicates that the standard of nursing care is being maintained.

The recording of previous health problems is important because it helps or guides the nurses on how to provide nursing care to the patients. For example, if an epileptic patient came into labour, it would help nurses to nurse her in a cradle bed to prevent injury in case of an attack.

**Item 4.2.15 Time of contractions**

Eleven 11 (35.5%) of the records indicated that the time at which contractions had started was recorded while 20 (64.5%) of the records indicated that this was not applicable. This was because some clients or patients were not in labour or they were not having contractions at admission and some came in with abortions. Those 11 (35.5%) records indicated that nurses can determine the length of the stages of labour correctly. This is important because the nurse will know and estimate whether the woman stays long in labour or not in order to prevent prolonged labour (Sellers, 1993:364).

**FIGURE 4.2:** Time of onset of contractions recorded**Item 4.2.16 Nature of contractions**

Out of 31 (100%) records, eleven 11 (35.5%) records indicated the nature of contractions as to whether they started spontaneously or were induced, while 20 (64.5%) records indicated that this was not applicable. This indicates that even though maternal care needs to be improved, nurses are aware of which parts they need to take into consideration. It is much important to record the nature of contractions, because induced contractions need special care and close observation (Sellers, 1993:398).

**Item 4.2.17 Early / active labour**

Out of 31 (100%) records, eleven 11 (35.5%) records indicated the nature of labour as to whether it was early or active, while 20 (64.5%) of the records indicated that it was not applicable because women were not in labour. This indicates that maternal care is at a high standard and nurses are aware of how to care for their clients when in labour. It is important to indicate whether the women is in active labour or not, because active labour needs more attention than early labour.

**Item 4.2.18 Nature of membranes**

Eleven 11 (35.5%) of the records indicated the nature of membranes, whether they were intact or ruptured were recorded, while 20 (64.5%) of the records indicated that the nature of membranes was not applicable because the women were not in labour or they aborted or had threatened abortion on admission.

The recording of the nature of membranes will guide nurses on how to care for the patient. For example, if the membranes have ruptured, nurses have to ask whether the liquor is clear or meconium stained to exclude meconium aspiration of the fetus, and it will also guide them to do a vaginal examination if necessary to exclude cord presentation, especially in cases where the presenting part is high. Sellers (1993: 401) states that occasionally the membranes may rupture spontaneously before the onset of labour, or the membranes may develop a small puncture. Should either of those conditions occur, the woman should be seen by a doctor.

**Item 4.2.19 Time of membranes ruptured**

Eleven 11 (35.5%) of the records indicated that the time which the membranes ruptured was recorded, while 20 (64.5%) of the records indicated the time at which membranes ruptured was not applicable because patients/clients were not in labour. This indicates that nurses are aware of the importance of recording the time when the membranes ruptured and the complications that might occur if some information is missing.

**Item 4.2.20 Membranes ruptured spontaneously or artificially**

Eleven 11 (35,5%) of the records indicated that the method by which membranes ruptured whether spontaneously or artificially was recorded while 20 (65.5%) of the records indicated that it was not applicable because some patients' weeks of gestation were few and some were not in labour. This indicates that nurses are up to date with recording and they are aware that omission of some information will lead to the partial care of the client.

**Item 4.2.20 Time of assessment on admission**

All 31 (100%) of the records indicated that the time at which assessment was done during admission was recorded. This indicates that nurses are aware of the importance of recording the time. It is important to record the time at which assessment was done because it guides other staff to know what was done at a certain time and informs them about what other care should follow.

**Item 4.2.21 Assessment done by a registered nurse**

All 31 (100%) of the records indicated that assessment of the patients on admission was done by a registered nurse. This indicates that problems or complications can be detected easily, because assessment is done by staff that has knowledge and skills in assessment.

**Item 4.2.22 Patient's present condition**

All 31 (100%) of the records indicated that the patient's present condition was recorded. This indicates that nurses are aware of assessing the patient's or client's condition on admission. It is important to assess the patient's condition on admission, to know whether the condition is fair, satisfactory or very sick, because this will guide the nurse regarding which type of care the patient might need.

**Item 4.2.23 Condition reflect any change (improvement, deterioration)**

All 31 (100%) of the records indicated that the patients' changes in condition were recorded. This indicates that patients are being evaluated as to whether they are getting well (improving) or their condition is not improving (deteriorating). Evaluation of patients' conditions plays an important role in her treatment or in the management of her case, because nurses or doctors will be able to change her management from partial care to acute care or from acute care to partial care.

**Item 4.2.24 Problems identified (Physical, physiological, emotional, and social)**

All 31 (100%) of the records indicated that physical, physiological, emotional and social problems were recorded. This indicates that patients/clients are cared for as a whole or holistically. Leaving one part untreated will solve no problems. Patients/clients should be treated as a whole. For example, if a client was admitted in labour with high blood pressure looking depressed, her blood pressure should be lowered or treated and counseling should also be done to find out what is causing depression. According to Sellers (1993: 402), the woman's psychological fortitude and normal physical condition are both essential to the normal progress of labour, because any delay or complication in the progress of labour will sooner or later reflect in the maternal psychological and physical observations made and recorded during the use of labour.

**Item 4.2.25 Problems identified**

All 31 (100%) of the records indicated that problems identified were recorded. This indicated that nurses could detect other problems apart from those complained of by patients.

**Item 4.2.26 Prescribed intervention**

All 31 (100%) of the records indicated that every intervention that had been prescribed was recorded. This indicates that nurses are aware that everything done for the patient should be recorded. Record keeping is very important, because it prevents double care, overdosing of patients and it can be used as evidence in court.

### **3. POST NATAL SECTION**

#### **Post Natal Care**

##### **Item 4.2.27 Transferring of mother to post Natal Care**

Eleven 11 (35.5%) of the records indicated that proper transferring of mother from labour to post natal care was recorded, while 20 (64.5%) of the records were not applicable because some patients died at the labour section or some were not in labour. This indicates that nursing care of patients from labour to post natal is continuous, and further complications that might happen can be prevented. It is very important to the patient because the staff that continues with the patient will be able to know where to start and where to end.

##### **Item 4.2.28 Parameters**

Eleven 11 (35.5%) of the records indicated that parameters such as blood pressure, temperature, pulse, respiration and haemoglobin were recorded at the post natal section, while 20 (64.5%) of the records indicated it was not applicable.

This indicates that nurses are aware of the importance of taking vital signs during puerperium and complications can be detected earlier such as anaemia which might occur due to post partum haemorrhage. Taking of vital signs can guide nurses on what dangers are facing the patient and this may lead to the proper care of the patient (Sellers, 1993:599).

**Item 4.2.29 Uterus involution or sub involution**

Ten 10 (32.3%) of the records indicated that the fundal height was recorded, while 21 (67.7%) of the records indicate that the recording was not applicable, because some patients were not admitted at the post natal section and some died after delivery before being taken to post natal care.

This indicates that the women's uterus is being observed for involution or sub involution. The uterus should be assessed to see whether it is still contracting or not. Relaxation of the uterus sometimes indicates that some parts of the placenta are left inside and this can cause bleeding or sepsis. According to Bennett & Brown (1999: 475), the uterus is supposed to be contracted with minimal fresh blood after delivery of the placenta. Sellers (1993: 606) states that serious complications of subinvolution of the uterus are infection and / or postpartum/puerperal haemorrhage, and therefore every attempt should be made to prevent subinvolution or at least to recognise the condition early, so that it can be treated before any serious complication occurs.

**Item 4.2.30 Nature of lochia**

Nine 9 (29%) of the records indicated that the nature of lochia such as colour, amount, and odour was recorded, while 22 (71%) of the records indicated that this was not applicable.

This indicates that women are being assessed for signs of infection during post natal care. It is important to assess the lochia to be able to determine any sign of infection and post partum haemorrhage and report it to the doctor (Sellers, 1993:598).

**TABLE 4.3: Responses on the nature of lochia: colour**

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	9	29.0
NA	22	71.0
Total	31	100.0

**Item 4.2.31 Perineum assessment**

Eight 8 (25.8%) records of the indicated that the aspects of intactness, laceration and episiotomy regarding the perineum were recorded, while 23 (74.2%) of the records indicated that it was not applicable because some patients were operated or and some were not in labour while others died the same day after delivery or the day of admission. Twenty five point eight percent (25.8%) of the record indicated that at least a good standard of nursing care was maintained. It is important to assess the perineum to be able to determine its condition and if there is an episiotomy it should be assessed for any sign of infection. It will also guide nurses to which health education might be applicable to the client. According to Sellers (1993: 603), it is essential that the midwife keeps a careful watch on the progress of healing and effects the appropriate treatment at the earliest possible time.

**Item 4.2.32 Suture line**

Seven 7 (22.6%) of the records indicated infection/sepsis, discharge, inflammation, oedema and septic regarding the suture line; while 24 (77.4%) of the records indicated that it was not applicable because some patients delivered intact, some were operated on, some had abortions and some died after delivery. This indicated that nurses are aware of the importance of caring for a suture line and this enhances a good standard of nursing care.

It is important to assess the suture line on daily basis, because nurses will be able to detect the suture line which is open and which are sepsis for referral to the relevant doctor for further management (Sellers, 1993:603).

**Item 4.2.33 Abdominal wounds**

Four 4 (12.9%) of the records indicated that the patient's abdominal wound was recorded, while 27 (87.1) of the records indicated that it was not applicable because they were not operated on. This indicates that nurses are observing their patients.

This is important because patients from an operation need special care. That is why it is important to know whether the patient was operated on or not.

**Item 4.2.34 Condition of abdominal wounds**

Four 4 (12.9%) of the records indicated that the condition of the abdominal wound was recorded regarding septic and discharge while 27 (87.1%) of the records indicated that it was not applicable because these patients were not operated on. This indicates that patients who were operated on are being care for. It is always important to observe the condition of the operated wound, because sometimes they tend to open or to start discharging or draining.

**Item 4.2.35 Nature of breasts**

Ten 10 (32.3%) of the records indicated that the nature of the breasts was recorded regarding softness, fullness and engorgement, while 21 (67.7%) of the records were not applicable. This indicates that nurses are aware of the nursing care that should be rendered post delivery. It is important to assess the breasts so that health education can be given to mothers who are experiencing problems with their breasts.

**Item 4.2.36 Nature of the nipples**

Ten 10 (32.3%) of the records indicated that the nature of the nipples was recorded for cracking, infection and sores, while 21 (67.7%) of the records were not applicable. This indicates that nurses are maintaining a high standard of nursing care. Nipples should be observed for cracking, infection and sores in order to enhance healing by giving health education and treatment as ordered (Sellers, 1993:653; 595).

**Item 4.2.37 Passing of urine post delivery**

Ten 10 (32.3%) of the records indicated that the urine of the patient was recorded, while 21 (67.7%) of the records were not applicable. The midwife should examine the bladder for tender emptiness or pressure and determine whether the women are experiencing pain on micturition or difficulty in passing urine (Sellers, 1993:597).

**Item 4.2.38 Urine testing for ketones, proteins and glucose**

Ten 10 (32.3%) of the records indicated that urine testing for proteins, ketones and glucose was recorded, while 21 (67.7%) of the records indicated that they were not applicable. This indicates that nurses are aware of the importance of testing urine.

**Item 4.2.39 Estimation of urine in 24 hours**

Ten 10 (32.3%) of the records indicated that estimation of urine in 24 hours was recorded, while 21 (67.7%) of the records were not applicable. This indicates that urine intake and output is being maintained. It is important to record the intake and output of the patient to be able to detect whether the patient is experiencing renal failure or not.

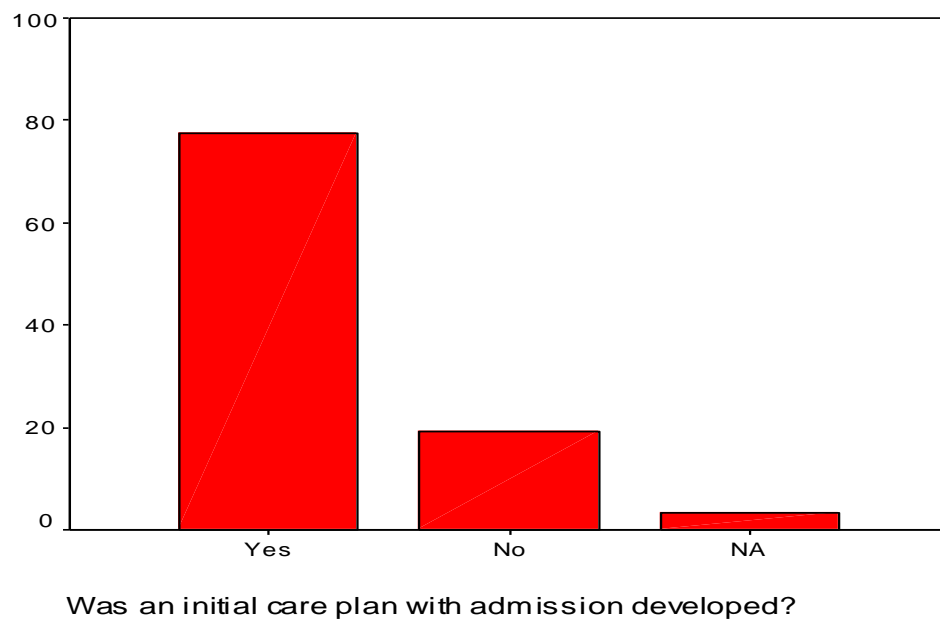
**C. PLANNING****Item 4.2.40 Care plan with admission**

Twenty-four 24 (77.4%) of the records indicated that a care plan on admission was recorded, while 7 (22.6%) of the records indicated that no nursing care plan was recorded.

This indicates that although some files had a care plan, there is still a loophole, because 22.6% of the records did not have a care plan. It is important to develop a care plan on admission so that patients can be cared for according to that plan.

Booyens (2001: 210) states that the nursing care plan is written in accordance with the individuals requirements of the specific patient. Expected results are stated, which then compose the criteria by which to measure the patient's progress.

**Figure 4.3 Percentage of care plan developed**



**Item 4.2.41 Care plan written in clear understanding manner**

Twenty-four 24 (77.4%) of the records indicated that the care plan was recorded in a clear understanding manner, while 7 (22.6%) of the records indicated that no care plan was recorded. This indicates a loophole because there are some patients being cared for without a nursing care plan.

**Item 4.2.42 Care plan indicated any change**

Twenty-four 24 (77.4%) of the records indicated that a care plan indicating change was recorded while 7 (22.6%) of the records did not have a care plan.

This indicates that a nursing care plan is being used properly, although a few records did not have a care plan.

**Table 4.4 Responses on change of care plan**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Yes	24	77.4
No	6	19.4
NA	1	3.2
Total	31	100.0

**Item 4.2.43 Consultation with other team members**

Twenty-four 24 (77.4%) of the records indicated that consultation with other team members was recorded, while 7 (22.6%) of the records did not have a care plan.

Booyens (2001: 346) highlighted that both verbal and written reports are given to bring the staff on the new shift up to date with patients' condition, treatment and progress. This act is essential to ensure that patient care is continuous and effective.

#### **Item 4.2.44 Health education**

Twenty-four 24 (77.4%) of the records indicated that the care plan is recorded with health education to be given, while 7 (22.6%) of the records did not indicate that health education is given. This indicates that at least nurses are aware of the importance of health education. Health education is a crucial part of nursing care. Patients should be given full information related to their illness or health problem (Booyens, 1996:211). Information given to the patient such as health education should be recorded on the patient's records (Booyens, 2001: 353).

#### **D. Implementation**

##### **Item 4.2.45 Implementation recorded in accordance with nursing care.**

Twenty four 24 (77.4%) of the records indicated that implementation was done in accordance with a nursing care plan, while 7 (22.6%) of the records indicated that a nursing care plan was not done. This indicates that implementation is being done according to the nursing care plan. This also indicates that nurses are implementing what they have planned, although a few nursing care plans still need to be improved, because activities to be done should be planned in advance according to the patient's condition (Booyens, 1996:209).

**Item 4.2.46 Response during interaction**

Twenty four 24 (77.4%) of the records indicated that implementation was recorded reflecting patient's response during interaction, while 7 (22.6%) of the records indicated that there was no implementation recorded which reflects the patient's change during interaction. This indicates that implementation is being done according to the patient's response.

**Item 4.2.47 Progress report-continuity of care**

All 31 (100%) of the records indicated that a progress report reflected continuity of care. This indicates that there is always progress in the care that nurses are providing. The manner in which care is being provided is continuous. Booyens (2001: 346) cited that continuity of care and communication between staff is impaired if records, reports and statistics are inadequately kept, and if they are inaccurate patient care is thus neglected.

**Item 4.2.48 Interpretation of obtained data**

All 31 (100%) of the records indicated that the data obtained has been interpreted correctly and recorded. This indicates that nurses are aware of the importance of correctly interpreting the data they have obtained. Correct interpretation of data always guides nurses to what type of nursing care should be provided according to their findings.

**Item 4.2.49 Reporting change to the relevant doctor**

All 31 (100%) of the records indicated that change in patient's condition is being reported to the relevant doctor and it was recorded.

This indicates that changes in the patient's condition is being reported to the relevant doctor. This indicates that nurses are following the patients conditions or they are observing carefully until they came to or reached a stage were they saw that the patient needed to be evaluated by a doctor for further management.

**Item 4.2.50 Death entry**

All 31 (100%) of the records indicated that a death entry was recorded regarding the date of death, time of death and also that a certificate of death by the doctor was obtained. This indicates that record keeping is being kept. It is important to record a death entry for research purposes and for evidence in court.

**Item 4.2.51 Other appropriate records**

All 31 (100%) of the records indicated that the other records such as a fluid balance chart, a doctors' prescription chart and a medicine administration chart were present.

**General Legal requirements****Item 4.2.52 Legible handwriting**

Thirty one 31 (100%) of the records contained handwriting that was legible or that could be read.

This indicates that nurses are aware of the importance of keeping their records legible. Reports should be written clearly so that everyone who is reading them can understand the message. According to Booyens (2001: 347), legible and indelible writing will ensure that everyone who makes use of the recording will be able to read them and that the erasure of entries will be prevented.

#### **Item 4.2.53 Time**

Thirty-one 31 (100%) of the records indicated that all the recording was indicated with times on which a certain activity was performed. This indicates that nurses are aware of the importance of recording time. Time recording in nursing care is very important, because it will prevent overdosing of patients and repetition of activities. Booyens (2001: 347) emphasized that each entry should be accurately dated, timed and signed, and if it is necessary to continue on another page, the date and time should be given at the beginning of each new page.

#### **Item 4.2.54 Date**

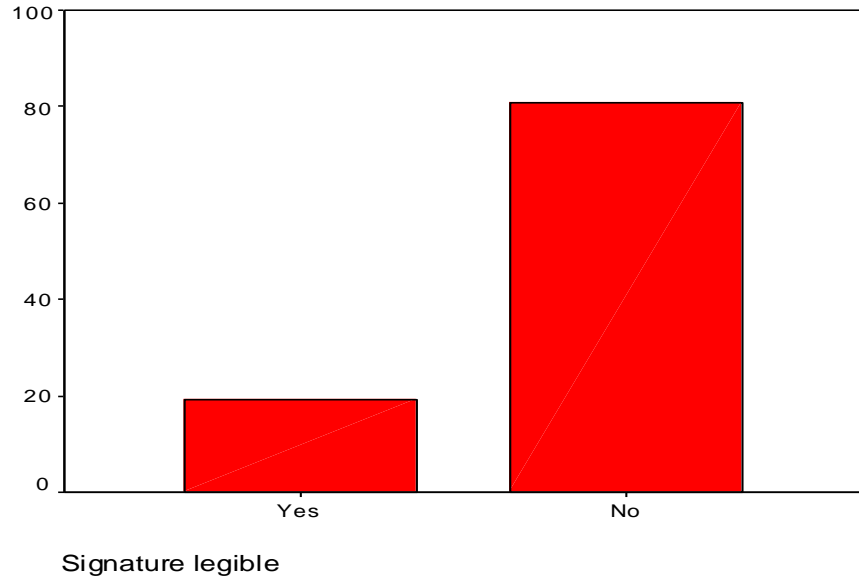
Twenty-five 25 (80.6%) of the records indicated that date was not always being recorded, while 6 (19.4%) of the records contained the date. This indicates that there is a loophole. Nurses need to be reminded about the importance of recording the date. This indicates that they do not know the danger that might occur if the records are not dated. All records should be written with the date, so that the other staff members who are continuing with nursing care of the patient will know when a certain procedure was performed.

**Table 4.5 Responses on date recorded in records**

Responses	Frequency	Percent
Yes	6	19.4
No	25	80.6
Total	31	100.0

**Item 4.2.55 Signature Legible**

Twenty six 26 (83.9%) of the records indicated that recordings were not signed with legible signatures, while 5 (16.1%) of the records indicated that recordings were signed with legible signatures. This indicates that nurses are not aware of the importance of signing with clear signatures. Signatures which are not complete or legible have been identified as one of the problem areas in record-keeping (Booyens, 2001: 349). Signatures should be written clearly so that people will be able to read them and identify the people who have signed certain activities.

**Figure 4.4 Percentage of legible signatures****Item 4.2.56 Signatures with all recordings**

All 31 (100%) of the records indicated that all recordings were done with signatures.

This indicates that staffs are aware of the importance of signing the recordings.

**4.2 SUMMARY**

This chapter presented the analysis and interpretation of the data. Raw data were analyzed and presented as descriptive statistics in a frequency distribution. Tables and bars have been used to present the data statistically. The following chapter will deal with conclusions and recommendations.

## **CHAPTER 5**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION:**

In this Chapter a summary of the study, summary of findings, conclusions, recommendations and limitations of the study are presented.

#### **5.2 SUMMARY OF THE STUDY**

The purpose of the study was to assess the nursing care rendered to women who later died due to pregnancy related problems during the year 2001 – 2002 in Oshakati State Hospital.

The researcher conducted a document analysis of 31 records of women who had died due to pregnancy related problems with a checklist as an instrument in order to achieve the purpose of the study. A retrospective descriptive, quantitative, contextual study has been conducted by means of a case study. The researcher has been looking backwards on the events which are maternal deaths that occurred during the period 2001 – 2002. A descriptive study has been done to describe the nursing care rendered to women who later died due to pregnancy related problems.

The population for this study is the records of women who died due to pregnancy related problems during the year 2001 – 2002. Data were analyzed and information was classified into categories. Data was statistically analyzed with the help of a statistician and presented as descriptive statistics.

Tables and charts were used to present the statistics. The study was conducted with permission granted by the Ministry of Health and Social Services as well as from the Medical Superintendent of the Oshakati State Hospital.

### **5.3 FINDINGS AND CONCLUSIONS**

In this section the findings are presented in relation to the assessment of maternal care rendered to women admitted and later died due to pregnancy related conditions.

#### **5.3.1 Objective One**

To assess the maternal care rendered to women admitted and later died due to pregnancy related conditions.

#### **5.3.2 Conclusion**

This study has revealed that the nursing care rendered to women who were admitted and later died due to pregnancy related problems was of a high standard. Many of the aspects were recorded which is an indication that they were done. Nevertheless, there were some of the patients' observations such as weight, urinalysis and skin condition that were not recorded or taken.

The study has also found that nurses are not only providing a good standard of nursing care, but they are also aware of the rules applied to maternal care such as no vaginal examinations should be done if a woman is bleeding vaginally.

It was also found that conditions of patients and their changes were clearly stated and a close observation was done. However, the study has also revealed that referral of patients to the main hospital takes too long. Otherwise some complications could have been prevented. For example, patients with prolonged labour were kept too long before being transferred. The researcher observed that parameters at post natal were fully taken. This is another merit of good nursing care. However, the study has also found that 22.6% of patients were nursed without a nursing care plan. The study further revealed that the continuity of care was of high standard, as the patient has to be observed accordingly and the relevant doctors were informed as well and immediate management given.

Some loopholes in the study were also identified such as not recording the date on which a certain activity was done as well as not signing clearly. Also, the researcher was unable to read the signatures of some nurses who had done certain activities in the patients' files.

### **5.3.3 Recommendations**

- In-service training should emphasize the importance of taking weight and urinalysis to each and every patient who is seeking maternal services as well as observing the skin condition of the patients to prevent further cross infection.
- The public should be given health education via media, dramas or role-plays and through pamphlets regarding the following during pregnancy:

- The importance of attending antenatal visits.
  - Taking of anti-malaria treatment as prophylaxis measures.
  - Using nets and repellents to prevent mosquitoes bites.
- 
- Regulations of the referral system on maternal care should strictly be put in place regarding the hours the patients have to stay in labour after complications has been detected. Negligence found in managing or prolonging referrals should be strictly dealt with or followed up.
  - Nurses should be reminded in workshops about the importance of proper record keeping with dates and legible signatures all the time and about the importance of record keeping in event of court cases.
  - Proper health education should be given to the public about HIV counseling before planning to get pregnant. This will prevent death during pregnancy or after delivery, because during this time the immune system is always suppressed and it won't be strong enough to fight the infection. The public should also be encouraged to use condoms as a protective measure to prevent further transmission of infections.
  - Pregnant women should be discouraged from seeking treatment from traditional healers and should be warned about the dangers of taking herbs while pregnant.

- The filing system of Oshakati State Hospital should be improved because some of the maternal records are kept in plastic bags and it is very difficult to trace the old files. Researchers have to scratch in these plastic bags. A big store room with enough shelves is needed.

#### **5.4 Limitations**

- The research committee of the Ministry of Health took too long to grant permission to conduct the research. The research proposal was returned for corrections, and as a result, the study was delayed.
- Many of the sources could only be traced on the internet, as many of the books are outdated so the researcher had to spend more time on the internet and when copies were needed, the researcher had to pay.
- It was difficult for the researcher to find the files because they are stored in plastic bags which are dusty. The researcher had to wear aprons, gloves and a face mask in order to trace them.

## **5.5 Overall conclusion**

This study looked at the nursing care rendered to women who later died due to pregnancy related problems. In the problem statement it was stated that nursing care rendered could also be associated with maternal death. This study has revealed that the nursing care rendered was of a high standard and the researcher has no doubt but to be against the problem statement.

The study has found that 29,03% died due to AIDS, 29,03% died due to Malaria, 16,1% died due to abortion and 25.8% died due to causes such as post partum haemorrhage, plural effusion, pulmonary thrombo-embolism, prolonged labour, encephalopathy, renal failure and anaemia, uterus rupture, pre-eclampsia, and puerperal sepsis.

It is hoped that the study will make a contribution to the improvement of the management of maternal care and it is also hoped that healthcare trainers will also use the findings to strengthen the process where there is a loophole.

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## **ANNEXTURE A**

# **DATA COLLECTION INSTRUMENT**

CHECKLIST FOR THE ANALYSIS OF THE FILES OF THE WOMEN WHO  
DIED DUE TO PREGNANCY RELATED PROBLEMS DURING THE YEAR  
2001 – 2002 AT OSHAKATI STATE HOSPITAL

*By: Shatilwe Joyce Twahafifwa*

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**TITLE**

**INVESTIGATION OF THE NURSING CARE RENDERED TO  
WOMEN WHO LATER DIED DUE TO PREGNANCY RELATED  
PROBLEMS DURING THE YEAR 2001-2002 AT OSHAKATI  
STATE HOSPITAL**

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**DEPARTMENT OF MEDICAL AND HEALTH SCIENCES  
AT THE UNIVERSITY OF NAMIBIA**

.....

***SUPERVISOR:***

*1. Dr. L. Hoases –Gorases*

.....

**CO-SUPERVISOR**

1. Mrs. L. Van Der Westhuizen

**CHECKLIST**

<b>A. GENERAL / PERSONAL PARTICULARS COMPLETED</b>	<b>Y</b>	<b>N</b>	<b>NA</b>
	1	0	
• Hospital			
• Ward			
• Reg. No.			
• Name / Surname			
• Age			
• Sex			
• Marital Status			
• Dependents			
• Address			
• Religion			
<b>ANTENATAL SECTION</b>			
<b>B. ASSESSMENT PHASE</b>			
1. Antenatal History			
the following aspects is recorded:			
• Gynaecology and obstetric history			
• Medical history			
• Surgical history			
• Previous pregnancies			
• Family history			
• RPR			
• RH factor			
• Weight			
• Follow-up visit			
• Other problems attended to			
<b>LABOUR SECTION</b>			
<b>ADMISSION FOR DELIVERY</b>			
<b>THE FOLLOWING IS INDICATED</b>			
• Mode of Arrival			
• Reason for admission			
<b>1.1.1 The following observations are recorded:</b>			
• Temperature			
• Pulse			
• Blood pressure			
• Weight			
• Haemoglobin			
• Fetal heart rate			
• Urinalysis			
• Level of consciousness			
• General physical appearance			
• Movement of extremities			

• Emotional status			
<b>1.2 PHYSICAL EXAMINATION</b>			
<b>The following is done:</b>			
• Sensory needs - observation of the mouth for sores			
- observation of the eyes for vision			
- observation of the ears for hearing			
- observation of the nose for smell			
• Skin condition observed for - Dryness			
- Sores			
- Infection			
• Abdominal palpation observed for - Fundal height			
- Position			
• Vaginal examination for - Dilatation of the cervix			
- Sutures			
- Position			
- Level			
- Effacement			
- Presenting part			
- Presentation			
• Cardiovascular			
• Respiratory			
• Gastrointestinal			
• Reproductive			
• Urinary			
<b>1.3 HISTORY TAKING</b>			
The following is recorded:			
• Chief complaint			
• Allergies			
• Previous health problems			
• <b>Onset of labour</b>			
The following is recorded:			
▪ Onset of labour is indicated			
▪ The nature of labour is indicated			
▪ The woman in early or active labour			
• Nature of membranes			
▪ The nature of membranes is indicated			
▪ Time of membranes ruptured is recorded			
▪ Membranes ruptured spontaneous or artificial is indicated			
<b>1.4 TIME OF ASSESSMENT ON ADMISSION IS INDICATED</b>			
• Assessment is done by a Registered Midwife			
<b>1.5 THE FOLLOWING IS RECORDED DURING</b>			

<b>ASSESSMENT:</b>			
• Patient present condition			
• Patient condition is reflecting any change (improvement / deterioration)			
• All problems identified adequately			
• Physical			
• Physiological			
• Emotional / spiritual			
• Social			
• Problems identified is recorded			
• Prescribed intervention is recorded			
<b>Post Natal Section</b>			
The following is recorded:			
▪ Proper transferring of mother to post natal unit is recorded			
▪ The following observations are recorded			
• Blood pressure			
• Temperature			
• Pulse			
• Respiration			
• Haemoglobin			
▪ Estimated measurements of fundal height to determine the involution of uterus or subinvolution is indicated.			
▪ The nature of Lochia is indicated such as:			
• Colour			
• Amount			
• Odour			
▪ The perineum is assessed regarding the following:			
• Intact			
• Laceration			
• Episiotomy			
▪ The suture line is assessed for:			
• On/off stitches			
• Infection / sepsis			
• Discharge			
• Inflammation			
• Oedema			
• Septic			
▪ The patient's abdominal wound is recorded			
▪ The condition of the abdominal wound is observed for:			
• Septic			

• Discharge			
▪ The nature of breasts is indicated for the following			
• Soft			
• Full			
• Engorged			
▪ The nature of the nipples is assessed for:			
• Cracking			
• Infection			
• Sores			
▪ The patient's urine intake and output is recorded post delivery			
▪ Urine is tested for:			
• Protein			
• Ketones			
• Glucose etc.			
▪ Urine is estimated in 24 hours			
<b>C. PLANNING</b>			
1. The initial care plan is developed with admission			
• Developed by Registered Nurse who did assessment			
• The nursing care plan is written in clear understanding manner			
2. Subsequent care plan is indicating any change			
• Indicating consultation with other team members			
• Health Education is given			
<b>D. IMPLEMENTATION</b>			
1. Implementation is recorded regarding the following:			
• In accordance with Nursing Care Plan			
• Reflect patient response during interaction			
• <b>Progress report is reflecting the following:</b>			
- Continuity of care			
- Proper use of partogram during labour			
- Interpret the obtained data correctly			
- Reporting change in condition to relevant doctor			
2. <b>TRANSFER IS RECORDED REGARDING THE FOLLOWING:</b>			
• Date			
• Time			
• Condition			
3. <b>DEATH IS RECORDED REGARDING THE FOLLOWING:</b>			



## **ANNEXTURE B1**

# **APPLICATION TO THE HEAD OF RESEARCH AND ETHICS COMMITTEE IN THE MINISTRY OF HEALTH AND SOCIAL SERVICES**

PO Box 3362  
**ONGWEDIVA**  
Namibia  
7 April 2004

Enquiries: J. T. Shatilwe  
Tel: (065) - 2233000 (W)  
(065) - 231669 (H)

**THE PERMANENT SECRETARY**  
Ministry of Health and Social Services  
**WINDHOEK**

Dear Sir

**RE: APPLICATION FOR PERMISSION TO CONDUCT A RESEARCH STUDY IN  
OSHAKATI STATE HOSPITAL**

I am a Masters-Degree student at the University of Namibia, I wish to conduct a research in Oshakati State Hospital as from May 2004 - November 2004. The study title is as follows: Investigation on the nursing care rendered to women who had died due to pregnancy related problems during the year 2001 - 2002, at Oshakati State Hospital.

The study population will include the files or records of women who had died due to pregnancy related problems during the year 2001 - 2002. The intention of the study is to see whether the health care providers are applying the protocol of maternal care properly and the findings will also give the health care providers recommendations on how to improve the Nursing Care of maternal care.

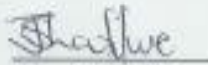
Therefore, I humbly request your good office to grant me permission to conduct my study.

Attached find a copy of the research proposal, which was approved by UNAM.

It will be highly appreciated if my application receives you favorable attention.

Thanking you in advance.

Yours sincerely

  
Joyce T. Shatilwe

**ANNEXURE B2**

**PERMISSION FROM THE PERMANENT  
SECRETARY IN THE MINISTRY OF  
HEALTH AND SOCIAL SERVICES**



REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13198      Ministerial Building      Tel: (061) 2032507  
Windhoek      Harvey Street      Fax: (061) 227607  
Namibia      Windhoek      E-mail: sowoses@mhss.gov.na  
Enquiries: Ms. S. Owoses      Ref.: 17/3/3/AP      Date: 13 August 2004

**OFFICE OF THE PERMANENT SECRETARY**

Ms. J. Shatiwe  
P. O. Box 3362  
Ongwediva

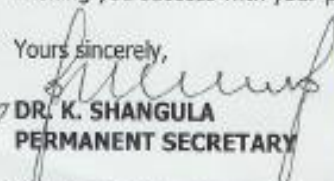
Dear Ms. Shatiwe,

**INVESTIGATION OF THE NURSING CARE RENDERED TO WOMEN WHO LATER DIE DUE TO PREGNANCY RELATED PROBLEMS DURING THE YEAR 2001-2002 AT OSHAKATI STATE HOSPITAL**

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit. However, some issues in the proposal need to be revisited. Please find attached comments/recommendations for consideration.
3. Kindly be informed that approval has been granted under the following conditions:
  - 3.1. The data collected is only to be used for your Masters degree;
  - 3.2. A quarterly progress report is to be submitted to the Ministry's Research Unit;
  - 3.3. Preliminary findings are to be submitted to the Ministry before the final report;
  - 3.4. Final report to be submitted upon completion of the study;
  - 3.5. Separate permission to be sought from the Ministry for the publication of the findings.

Wishing you success with your project.

Yours sincerely,

  
**DR. K. SHANGULA**  
PERMANENT SECRETARY



Directorate: Policy, Planning and HRD  
Subdivision: Management Information and Research

*Forward with Health for all Namibians by the Year 2000 and Beyond!*

**ANNEXURE C1**

**APPLICATION TO THE MANAGEMENT OF  
OSHAKATI STATE HOSPITAL**

PO Box 3362  
**ONGWEDIVA**  
Namibia  
Tel: (065) – 2233000 / 3384 (W)  
(065) – 231669 (Home)  
04 September 2004

*Enquiries: J.T. Shatilwe*

The Medical Superintendent  
OSHAKATI INTERMEDIATE HOSPITAL  
Private Bag 5501  
**OSHAKATI**  
Namibia

**RE: APPLICATION TO CONDUCT THE RESEARCH STUDY IN THE  
INTERMEDIATE HOSPITAL OSHAKATI**

I, Joyce Twahafifwa Shatilwe, a Masters Degree student at the University of Namibia, I am required to conduct a research study. I would like to conduct my research study in the Intermediate Hospital Oshakati from September 2004 – 2005. The study title is: **Investigation on the nursing care rendered to women who later died due to pregnancy related problems during the year 2001 – 2002, at Oshakati State Hospital.**

The study population includes the records of patients who died due to pregnancy related problems during the year 2001 – 2002. The information to be collected will be treated confidential and be used only for study purposes.


Therefore, I humbly request your good office to grant me permission to conduct my research study in the Oshakati Intermediate Hospital.

Attached find copies of the approval from UNAM and the Ministry of Health and Social Services.

It will be highly appreciated if my application receives favorable attention.

Thanking you in advance.

Yours sincerely

  
\_\_\_\_\_  
Joyce T. Shatilwe

**ANNEXURE C2**

**PERMISSION FROM THE MANAGEMENT  
OF OSHAKATI STATE HOSPITAL**



9 - 0 / 0001

REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

OSHAKATI STATE HOSPITAL

Tel. No.: (065) 2233143  
Fax No.: (065) 221380

Intermediate Hospital Oshakati  
Private Bag 5501  
Oshakati

Enquiries: Dr Korbinian V. Amutenya

10 September 2004

Ms. Joyce T. Shatilwe  
P. O. Box 3362  
Ongwediva  
NAMIBIA


Dear Madam

**RE: APPLICATION TO CONDUCT THE RESEARCH STUDY AT  
INTERMEDIATE HOSPITAL OSHAKATI**

1. The above matter refers following your letter dated 4 September 2004.
2. Permission is hereby granted to carry out your Study as from September 2004.
3. This permission is granted on condition that you will abide by the conditions of the Permanent Secretary and that the Hospital Management will be given a copy of your findings.

We wish you well and success in your study.

Yours Sincerely

  
DR KORBINIAN V. AMUTENYA  
SENIOR MEDICAL SUPERINTENDENT



cc: Mrs. L. S. Nuses  
Chairman of Academic Committee

*Forward with Health for all Namibians by the Year 2000!*

**ANNEXURE D**  
**LETTER FROM THE EDITOR**



Our place to lodge in style

FAX MESSAGE

To	For Ms. Joyce T. Shatilwe	From	Chief Ankama
Fax		pages	1
Tel		Date	10 March 2005
Re:		Cc;	

urgent | review | comment | reply

To whom it may concern

RE: Language review of the dissertation of Ms. Joyce Twahafifwa Shatilwe

I Chief Ankama lecturer for English at the UNAM Northern Campus Language Center hereby inform you that I have reviewed the dissertation of Ms. Joyce Twahafifwa Shatilwe titled: "Evaluation Of The Nursing Care Rendered To Women Who Later Died Due To Pregnancy Related Problems During 2001 – 2002 At Oshakati State Hospital"

This language review was wide ranging including structures, tenses, plurals, consistency, spelling and more. The review was penciled on a hard copy (printed) and Joyce is expected to accept or reject these corrections and suggestions as necessary.

Yours truly

Chief Ankama