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JOZONDJUPA REGION

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CHAPTER 1

ORIENTATION OF THE STUDY

1.1 INTRODUCTION

In Namibia a comprehensive health care approach is practised and motivated by health care delivery institutions. Part of the comprehensive health care approach is promotion of health in maternal and child health care. Maternal and child health care includes women's health, antenatal care, delivery, postnatal care, and care for baby. For purposes of this study the focus was on postnatal care of the mother and the baby. Thus, postnatal care starts in the institution or at home where the baby was born, and is classified as follows. The immediate postpartum period consists of the first twenty four hours after delivery. The early postpartum lasts from the second day after birth to the end of the first week. The postpartum period continues until six weeks or even six months after birth (Bennett & Brown, 1993; Littleton & Engebretson, 2003, p. 878; Osmany, 2007, p. 4).

The post-delivery period is a medical term for the period following childbirth during which body tissues, in particular the genital and pelvic organs of the mother, return to the condition they were in pre-pregnancy (Ayurverda , 2004, p.2).

For the baby this is a period of transition from intra-uterine to extra-uterine life. In fact, the essence of life depends on the successful transition. The extra-uterine adaptation of the baby is usually stabilised in the health institution by careful observation, and nursing care. When the infant is discharged the newborn requires care, dietary energy for adequate development, growth and maintenance of health (Littleton & Engebretson, 2003, p. 1100).

During this time it is important for mother and baby to stay healthy because they will experience numerous physiological, as well as psychological changes. They are thus particularly vulnerable and need special care and assistance because over half a million women encounter complications due to childbirth annually and many die (Ashford, 2004,p.5).

Another aspect that complicates this period is the fact that the mother and baby are discharged sometimes within 48 hours after delivery, if they delivered in a health institution. Compared to years ago mothers now have less time to recover from the birth process and be under professional supervision. Nurses, in turn, have less time to ensure that new mothers are psychologically stable to safely provide care for themselves and their new infant, and able to assume the responsibilities of motherhood.

One of the factors that can enhance promotion of health for mothers and babies after discharge from hospital, or at home is the utilisation of postnatal care services. Postnatal care services are provided by hospitals, private and public, health centres, clinics and/or private practitioners (medical doctors and registered nurses and midwives) and offer a range of services for mothers and babies.

The management of postnatal care begins in the delivery room after delivery and extends throughout the postnatal period and should be directed to achieve the following objectives:

- ensuring that postnatal care is related to the needs of the individual mother and baby;
- promotion of an environment that is conducive for interaction between health care providers and the mother without fear and stress;
- identifying potential problems in physical and/or emotional well-being for mother and baby as early as possible and ensuring prompt and appropriate help and treatment;
- ensuring good communication between all the people providing care for the mother and baby; and
- enabling parents to become confident in the necessary skills of caring for an infant by providing opportunities for learning and discussion (Bennett & Brown, 1993,p.20).

For mothers to be able to utilise postnatal care services they need to be informed about the venues, times, procedures and importance of utilising postnatal care services. Therefore, information in this regard should already be given during the antenatal period. What complicates the issue is that not all women attend antenatal care clinics or deliver in a health care facility. Therefore, other means of communication to spread the message should be utilised like radio, television, leaflets, health education talks at workplaces or educational institutions.

Utilisation of postnatal care services can promote health for mother and baby. Health promotion promotes health behaviour and enhances health status for all people. Health promotion is defined as any combination of health education and related organizational, economic and environmental support for behaviour change of individuals, groups or communities to health (Leahy, 2005, p. 25).

1.2 BACKGROUND TO THE PROBLEM

Utilisation of postnatal services

It is the responsibility of health ministries of governments to provide postnatal care services. However, this is not always done. Firstly, there is the problem that such services are not provided and thus not available, or are provided but on a small scale. This is the trend in developing countries.

According to the World Health Organization (1998, p. 3), only a small proportion of women in developing countries, less than 30%, receive postnatal care. In very poor countries and regions, as few as 5% of women receive such care. For example, according to Dhakal, Chapman, Simkhada, Teiling, Stephen and Raja (2007, p. 7) postnatal care is uncommon in Nepal and where it is available the quality is often poor. The utilisation of postnatal services is low – only 21% of new mothers receive it. In a demographic health survey conducted in Egypt in 2003 only 42.6% of women in Egypt reported having received postnatal care (UNFPA, 2006, p. 7).

A study that was conducted in rural Greece found that most women who delivered in the district towns had received no postnatal care (Tzoumaka-Bakoula & Lovel, 1993, p. 2). According to Bawa, Umar and Onadeko (2004, p. 2410) utilisation of obstetric services in Nigeria is also low with only a third of the deliveries being conducted under the supervision of trained health personnel. Consequently maternal and infant mortality rates are unacceptably high at 1000/100,000 and 100/1000 live births per year respectively. Furthermore, although postnatal care was given to the women, it did not include advice on family planning or child spacing.

According to a report from Safe Motherhood (2002, p.3) the majority of women in developing countries receive almost no postpartum care after delivery. For example, in very poor countries and regions such as those in the Sub-Saharan Africa, only 5% of women receive postnatal care.

Secondly, there is the situation of postnatal services that are provided and available, but women do not make use of it. Women will attend antenatal care services but once the baby is born they are reluctant to utilise postnatal care services for themselves and their babies especially, if they perceived their health status and that of the babies as satisfactory.

In Namibia postnatal care services are available and national guidelines for postnatal care encourage all mothers to make use of postnatal care services. Many women attend antenatal care clinics and give birth in public facilities but the same women do not attend postnatal care clinics. (MoHSS, 2004,p.10).

According to the Health Information System of the Ministry of Health and Social Services for the Grootfontein district in the year 2001, 1145 women attended first antenatal care clinics, 779 women delivered in health facilities, but only 464 attended postnatal care clinics. In the year 2002, 1081 women attended first antenatal care clinics, 719 delivered in health facilities while only 225 attended postnatal care clinics. In the year 2003, 1057 women attended antenatal care clinics, 721 delivered in public health facilities, but only 224 attended postnatal care clinic. In 2004, 1195 women attended antenatal care clinics, 811 delivered in state health facilities and 294 attended postnatal care (MoHSS, 2004, p. 10).

Above statistics clearly show the imbalances in attendance of antenatal care and postnatal care

services. The question to be asked is why this phenomena so. There are consequences if mothers do not utilise postnatal care services or if postnatal care services are not available. The following observations are evidence of this.

A household survey of 16,000 women in developing countries in 2000 revealed that about seven out of ten women reported a health-related problem with their last pregnancy, delivery or postpartum period or a chronic condition associated with delivery and child birth. A study among women in Bangladesh showed that nine out of ten women reported ill-health during the two weeks after delivery and seven in ten were still reporting problems at six weeks. In Tanzania, for instance, puerperal mothers in rural areas with no education are thought to be more at risk of health problems (UNISA, 2000, p. 4).

Also in Thailand, Laimputtong (2004, p. 90) pointed out that many Thai women see their reproductive health problems as the consequences of inadequate postpartum services from the health workers. Although traditional postpartum beliefs and practices of not attending post natal care are bound, the level of adherences differs according to the social structure of the women and their families. Poor rural women seem to hold on to their traditions of not attending post natal care more strongly comparing to their urban counterparts.

Complications following childbirth are more common and aggravated in developing countries. The long-term maternal complications in the postnatal period include chronic pain, impaired mobility, damage to the reproductive system and infertility (Safe Motherhood, 2002,p.4). Some women suffer genital prolapses after bearing several children. This condition is extremely uncomfortable and can lead to other complications in future pregnancies if not properly addressed in the postnatal period

(Ashford, 2004,p3).

WHO (2004,p.7), show that women living in Sub-Saharan Africa has a one in 16 chance of dying in pregnancy, childbirth and after childbirth. There are some contributing factors to this scenario which prevents women from accessing maternal health care services.

Safe Motherhood (1998, p.4) reported that the factors which prevent women in developing countries from getting postnatal care include distance from health services; cost, including direct fees and the cost of transportation; drugs and supplies; multiple demands on women's time; women's lack of power in decision-making within the family; and poor quality of services, including poor handling by health service providers.

However, the World Health Organization (WHO) states that the immediate cause of maternal deaths is the absence, inadequacy or underutilisation of the health care system. Women should not die in childbirth because the vast majority of maternal deaths can be prevented or reduced if women had access to, or visited maternal health services during pregnancy, childbirth and the first month after delivery (WHO, 2004, p. c).

The picture is different in developed countries because, according to the World Health Organization (1998, p. 2) 90 % of mothers received postnatal care. This was also found in a study conducted by Hove, Siziya, Katilo and Tshimanga (1999, p.20) showed that there is an increase in utilisation of postnatal care services at six weeks by women in developed countries.

1.3 PROBLEM STATEMENT

In the Grootfontein Health District postnatal care services are available and accessible at health centres and clinics. However, according to the indicated statistics many women in the Grootfontein district do not utilise postnatal care services.

According to the Health Information System of the Ministry of Health and Social Services for the Grootfontein district in the year 2001, 1145 women attended first antenatal care clinics, 779 women delivered in health facilities, but only 464 attended postnatal care clinics. In the year 2002, 1081 women attended first antenatal care clinics, 719 delivered in health facilities while only 225 attended postnatal care clinics. In the year 2003, 1057 women attended antenatal care clinics, 721 delivered in public health facilities, but only 224 attended postnatal care clinics. In 2004, 1195 women attended antenatal care clinics, 811 delivered in state health facilities and 294 attended postnatal care (MoHSS, 2004, p. 10)

Low attendance of postnatal care services has the chance of increasing the morbidity and mortality of women and children, thereby affecting the economic development of the country.

In the absence of post natal visits of puerperium mothers in Namibia, the researcher assumes that those mothers who do not receive the necessary postnatal care, might be at risk of conditions such as puerperal sepsis, anaemia, problems in lactation management, as well as umbilical cord infection, among others, that could result in the ill health of the mother and the baby.

Little is known about what has happened to those mothers and their babies who do not attend the postnatal care clinics and about their needs. This information is needed to assist midwives to give health education, and also for the government to look at the policies and procedures to enhance the utilisation of postnatal services.

It is against this background that the researcher aims to explore the factors that influence the mothers of this district in utilising postnatal care services, or not.

1.4 AIM OF THE STUDY

The aim of the study was to explore and describe the factors that influence the utilisation of postnatal care services by women in the Grootfontein district.

The objectives of the study were to:

- Determine the demographic data of the respondents.
- Explain reasons for the utilisation or non-utilisation of postnatal care services by women.
- Explore the extent to which women were educated or informed about the importance of utilising postnatal care services.
- Describe how the respondents were received at the health facility for postnatal care.
- To identify ways, if any, that will enable respondents to utilise postnatal care services.

1.5 JUSTIFICATION OF THE STUDY

The study was conducted because the utilisation of postnatal care services by women in the Grootfontein district is low compared to the attendance of antenatal care services. Postnatal care attendance is as important as antenatal care attendance as the focus of the two services is to promote the health of women and their children.

, but the attendance is low.

The questions to be asked: Are patients properly informed about the importance of utilising postnatal care services for the health of mother and baby? What do mothers believe about their health status and that of the baby? Are policies and guidelines concerning postnatal care services properly implemented? Is there any facility or system to follow up on women who are discharged from hospital and do not utilise postnatal care services, for example home visits?

Therefore, there is a need to carry out the study in order to find out why women are not attending postnatal care as expected.

1.6 DEFINITIONS

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

Utilisation – postnatal care services

Utilisation refers to the process of using something (Oxford English Dictionary, 2006, p. 845). For purposes of this study, utilisation refers to the use of postnatal care services by women which include attending the following clinics: postnatal, baby, immunisation, family planning (reproductive health), health promotion and nutrition.

Postnatal care

Postnatal care services include the services rendered by the different health institutions to assist mother and baby until six weeks after delivery (Bandolier 2007,p.1).

Postnatal clinic

In this study a postnatal clinic refers to a clinic in a public health facility where postnatal and physical examinations are conducted on the mother and the necessary care to address given needs (Birrell & Birrell, 2000,p.20).

Baby clinic

In this study a baby clinic refers to a facility in a public health institution where the baby is physically examined to determine its development and attention is given to its specific needs (Glaxo, Smith & Kline, 2005,p.4).

Immunisation clinic

Immunisation clinic refers to a facility in a public health institution where babies, children and adults are immunised (Oxford Minidictionary for Nurses, 2003,p.126).

Family planning clinic (reproductive health)

A family planning clinic is a facility in a health institution where services and care are given concerning patients' needs on all aspects of reproductive health (WHO, 1999,p. x).

Health promotion clinic

For purposes of this study, a health promotion clinic refers to a facility in a public health institution where health education is given on a variety of health related issues, for example HIV/AIDS, PMTCT, development of the baby, and feeding practices (nutrition) (WHO, 2003,p.4).

Mothers

Mother refers to a female parent (Oxford English Dictionary, 2006, p. 589). In this study mothers refer to women who gave birth to a child and who are supposed to attend postnatal care. Mothers include women who have attended and those who did not attend postnatal care.

Newborn

Newborn refers to a recently born baby or child (Oxford English Dictionary, 2006, p. 504).

1.7 SUMMARY

This chapter provides an overview of the study, including background of the problem, problem statement, aim of the study, justification of the study and defined key terms. The researcher outlines

the concern about the low number of mothers attending postnatal care clinics comparing to antenatal care clinics.

The fact that many mothers are not coming to utilise postnatal care services as expected is a concern among health care professionals. It is a well known fact that in the Namibian society, mothers are the ones who are involved in the health care of families and families are more at risk of health problems if mothers are not empowered to take health care into their own hands.

CHAPTER 2

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

The primary purpose of reviewing relevant literature is to gain insight and a broad understanding of the available information about a research problem.

According to Mouton (2001, p. 87) “the importance of the literature review is to learn from other scholars: how they have theorised and conceptualised issues, what they have found empirically, and what instrumentation they have used and to what effect”.

The literature review was done to enhance focus on the research topic, to improve the research methodology and to broaden the knowledge base by obtaining information on studies that have been

undertaken globally on utilisation of postnatal care.

The literature review is discussed under the following headings:

- Postnatal care services
 - Physical examination of mother and baby
 - Reproductive health (family planning and sexually transmitted diseases)
 - Examination of the baby and developmental stages of the baby
 - Immunisation
 - Nutrition
 - Health promotion

- Factors influencing mothers in the utilisation or non-utilisation of postnatal care

2.2 POSTNATAL CARE SERVICES

Postnatal care services consist of different types of services that are offered to the mother and baby. According to the World Programme of Action, postnatal care is regarded as one of the most important maternal health care services for the prevention of impairments and disabilities resulting from childbirth (United Nations, 2002,p.10).

2.2.1 Postnatal physical examinations of mother

It is important that the mother's full recovery from the effects of pregnancy, labour and delivery is confirmed by a postnatal examination when the baby is six weeks old. At this examination the mother's general, physical and emotional health is checked and particular attention is paid to any symptoms of anaemia, urinary tract infection or emotional distress or depression.

A physical examination is carried out on the breasts, abdomen and pelvis to ensure that involution is complete and any trauma which was sustained during delivery is fully healed. The integrity of the pelvic floor should be assessed and the women asked directly if she has any dribbling or stress incontinence. Furthermore the woman is asked whether she has dyspareunia. A cervical smear is usually taken for cytology (Bennett & Brown, 1993,p.15). The blood pressure and vital signs are taken and evaluated, and the mother is observed for possible anaemia.

The mother's emotional state is examined because some mothers struggle with the demands of becoming a new mother and this could lead to postnatal depression. Postnatal depression affects 15% of all women who have delivered (WHO,1998, p. 4). It is also important that this condition be diagnosed early.

2.2.2 Reproductive health

Reproductive health as defined by WHO and adopted by the International Conference on Population Development (ICPD) which specifies that:

“Within the framework of WHO’s definition of health as a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity, reproductive health addresses the reproductive processes, functions, and system at all stages of life. Reproductive health therefore implies that people are able to have a responsible, satisfying, and safe sex life and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so. Implicit in this last condition are the rights of men and women to be informed of and to have access to safe, effective, affordable and acceptable methods of fertility regulation of their choice, and the right of access to appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.”(WHO,1998,p.10)

The following services are usually offered within a reproductive health programme, but can differ from country to country:

- Family planning.
- Management and prevention of sexually transmitted diseases (STDs) and HIV/AIDS.
- Prevention and management of infertility and re-canalisation.

2.2.2.1 Family Planning

Family planning is a basic human right. It is an important component both of primary health care and maternal and child care. According to Bennett and Brown (1993, p. 251) family planning is the means of planning families that are wanted, spaced according to choice and timed to fit in with life decisions such as marriage or a break in career. It includes contraception – the prevention of pregnancy – as well as methods to achieve pregnancy.

Knowledge and access to family planning information, as well as the services and commodities, are essential to protect the health and well-being of women, families and societies as a whole (UNFPA, 2006, p. 1).

According to UNFPA (2006, p. 10) family planning has the following benefits:

- *Reproductive rights and gender equity*

Family planning helps women to be involved in decision-making in their reproductive issues in their families. It helps women to be in charge of their bodies, as they are involved in the spacing of their babies. Family planning involves the use of condoms which help women to prevent the transmission of

HIV/AIDS.

Family planning also has the potential to advance gender equity. It can increase women's educational, work and life opportunities by preventing early pregnancies that force adolescent girls to drop out of school and by letting women have smaller, healthier families that make fewer demands on their time and energy. Family planning helps women or girls to avoid pregnancies and continue with their education; education will let women have a better future and have babies when women are ready to look after the baby.

Educating women about family planning also helps women understand reproductive health, as perceived benefits of action play an important role in health behaviour of people. It is for this reason that nurses' roles concerning education are important. To fulfil this role nurses need current correct information about contraceptive methods and must also feel comfortable discussing contraception and be sensitive to the women's concerns and feelings.

During consultations with women the nurse should discuss all the available choices for contraception and also determine the women's understanding of contraception aspects, specifically the contraceptive techniques (IPPF Medical Publication, 1998, p.12).

Nurses should also bear in mind that interpersonal influences, family and cultures and norms can play an important role in utilisation of postnatal care services (Pender, Murdaugh & Parsons, 2006,p.40).

- *Economic benefits*

Family planning helps women to have fewer children, which they can afford to feed, educate and look after. In turn this helps families or parents to save resources for their children's education. Educated children will be more likely to find employment and contribute to the economic development of the country. Fewer children will also prevent overpopulation of the country. This will cut down on social services and health services and help the country save resources (UNDP, 2000, p. 10).

2.2.2.2 Sexually Transmitted Infections and HIV/AIDS

As part of post natal care women needs to be educated about Sexually Transmitted Infections and HIV/AIDS. By not attending post natal care in large numbers women are missing out on very important informations.

Sexually Transmitted Infections (STIs) are diseases that can be transmitted through body fluids (semen, vaginal fluids, blood) (MoHSS, 2005,p.11). Being infected with such a disease can be painful, negative and dangerous for those who have them. Some can even cause sterility, neurological damage, cancer or death.

Some STIs, such as Gonorrhoea, Chlamydia and Syphilis can be cured fairly easily by completing a course of medication. Others such as herpes, genital warts and human immuno-deficiency virus (HIV) cannot be cured, although some treatments are available to reduce their symptoms.

Thus, detecting and treating an STI early will decrease the chances of permanent damage. Therefore, people should be educated on the symptoms and signs and the specific treatment. Furthermore, safe sex has to be promoted in order to reduce the risk of contracting STIs with serious consequences to the individual and his/her partner.

HIV/AIDS

Namibia currently ranks as the seventh most infected country in the world with an overall prevalence rate of just under 20% among the adult population, seriously eroding the prospects for increased productivity and human development (UNDP, 2000, p. 9-12).

The HIV virus infects humans mainly through sexual contact. When the HIV virus enters the body, it attacks the immune system and slowly destroys the person's immune system (the system which fights infections when they enter the body) (Legal Assistance Centre, 2002, p. 2). When the immune system is being destroyed, the body loses its ability to fight some diseases, causing the person to become sick frequently. Frequent sicknesses leads to the person not to be able to work, which sometimes leads to loss of income.

As HIV/AIDS is sexually transmitted, it mostly affects people who are sexually active and these are the people who are mostly in the reproductive age group. When people of reproductive age are infected, it leads to frequent illnesses. These illnesses might require the sick person to be away from work leading to low productivity. HIV/AIDS also contributes to deaths causing parents to leave their children at a young age and such children become orphans. Eventually the country will have a small number of

young people caring for a lot of orphans.

It is important for women to be educated about HIV/AIDS during ante natal care, deliveries and post natal care and those who are diagnosed with HIV/AIDS to be educated about the Prevention of Mother-to-Child Transmission (PMTCT) with specific reference to breastfeeding and other modes of transmission, for example blood (MoHSS,2004,p.15). Antenatal and postnatal care services offer an important forum to educate mother in this regard.

2.2.3 Examination of the baby at Baby clinic

It is very important that mothers are educated to attend baby examinations clinics, so that the baby's growth process can be checked and be looked at to make sure the baby is growing accordingly.

Two major factors have contributed to today's awareness of the importance of the process of the infant's transition to extra-uterine life. Firstly, the technology and assessment techniques available to monitor the well-being of the baby after birth. Secondly, the changes in health care policies that have led to shorter hospital-stays for mothers and babies. Thirdly, in the case of home deliveries, the lack of professional care available to assist, have created an increased need for careful assessment of the baby at the baby clinic (postnatal care service).

At the baby clinic all of the babies are examined for any abnormalities. What is of importance at this stage is the growth and development of the baby. Growth is the standard by which infant nutrition is judged. Birth weight triples and length increases by 50 % during the first year. According to Littleton and Engebretson (2003, p. 1100) infant growth is especially rapid during the first few months of life when weekly weight and length gains approximate 200 g and 1 cm respectively.

Furthermore, brain growth is also profound, with the brain tripling in size during infancy to reach 90 % of adult size by 2 years of age (Widdowson, 1991, p.17).

2.2.4 Developmental stages of the baby

During postnatal care, mothers have to be educated on the developmental stages of the babies. This is important to diagnose any problems early. According to the Ball and Bindler (1995, p.40) the following guidelines can be used to match age appropriate activities for the baby:

By the end of first month a baby typically:

- lifts its head for short periods of time;

- shakes head;
- brings hands to face;
- turns to familiar sounds;
- responds to loud sounds; and
- blinks at bright lights.

By the end of second month a baby typically:

- smiles;
- focuses or spots objects with the eyes; and
- makes noises and sounds rather than the crying noise.

By end of third month a baby typically:

- raises head and chest when lying on abdomen;
- lifts head;
- kicks and straightens legs on his/her own when put on back; and
- open and shuts hands.

Ball and Bindler (1995, p. 41) indicated in development till 5 months the following milestones to be

expected:

- Two to three months: rolling over by pushing him-/herself up and rolls back and forth.
- Three to four months: grabbing things and holding them. During this time babies also learn how to drop things and pick them up, starts to play with things.
- Five months: during this time the baby learns how to hug the mother and the father as well as familiar people. The baby also starts to hug things which the baby likes such as cats, puppies and dolls.

2.2.5 Immunisation services (Immunisation Clinic)

Immunisation is a technique used to induce immune resistance to a specific disease in humans by exposing the individual to an antigen in order to raise antibodies to that antigen. When immunised, an individual is given a vaccine. Vaccine refers to a biological product prepared from a killed or attenuated (weakened) virus or bacteria or their toxins, used for vaccinating people to induce specific immunity against an infectious disease. When the person is given a vaccine the body develops resistance against the specific virus or bacteria from which the vaccine has been prepared. Therefore immunisation prepares the human's immune system to be able to ward off specific diseases in the future (WHO, 2004, p. 4).

The goal of immunisation is to protect individuals from vaccine preventable diseases. Although modern vaccines are safe, no vaccine is entirely without risk. After immunisations some people

experience reactions ranging from mild local reactions to life-threatening but rare illnesses. In some cases these reactions are caused by the vaccines while in other cases they are caused by an error in the administration of the vaccine, and others, there is no causal relationship (WHO, 2004, p. 12). If babies are immunised according to the immunisation schedule it will protect them from contracting communicable diseases at a later stage of their lives.

In order to reduce the risk of children getting sick and dying of vaccine-preventable diseases, it is important that mothers are educated and understand through health education to bring their children for immunisation. If children are not immunised, the children will be at risk of contracting childhood diseases targeted for immunisation. Vaccine-preventable diseases still account for a high level of childhood morbidity and mortality in the African region (WHO, 2006, p. i).

Vaccine-preventable diseases are Tuberculosis, Poliomyelitis, Diphtheria, Tetanus, Whooping Cough and Measles (Ministry of Health and Social Services, 1999, p. 24).

The outbreak in Namibia in 2006 of the wild polio virus, after the country had been polio-free for nearly a decade, signalled the importance of continuing programmes to eradicate vaccine-preventable diseases (UNICEF, 2008, p. 4).

2.2.6 Nutrition for mother and baby

Good nutritional practices before conception and during pregnancy leads to healthier newborns. The role of nutrition in the mother and infant's lives remains of utmost importance after the birth.

In many occasions, nurses have the best opportunity to discuss nutritional issues with clients. To effectively counsel mothers about nutritional needs for themselves and their babies, the nurse must be aware of nutritional needs and to be able to assess patients for nutritional risks or deficiency or excess (Littleton & Engebretson, 2003, p. 1).

Usually breastfeeding is encouraged for the baby. The health, nutritional and psychological benefits of breastfeeding is widely recognised in the medical, lay and scientific communities. Therefore, promotion of breastfeeding has become a worldwide health goal for all nations because of the many unique components found only in human milk (WHO, 2003, p. 2)

However, during sessions at postnatal care services, mothers may indicate that they experience some difficulties when breastfeeding. Most complications can be avoided if the mother received information, appropriate guidance and support during initiation of breastfeeding. Some of the common problems are cracked and sore nipples, inverted nipples, breast engorgement and mastitis. Health care providers should have updated knowledge to treat and care for the mother who experiences such problems (Benett & Brown, 1993,p.20).

It can also be that infants receive insufficient nutrition in the infant which is exclusively breastfed. Littleton and Engebretson (2003, p. 1101) indicated the following symptoms and signs that health care providers should be alert for when dealing with the baby:

- low urination;
- low stooling;
- minimal breast changes in the mother after delivery;

- very irritable or sleepy infant; and
- weight loss of more than 10% of the birth weight.

Introduction of solid foods and weaning practices are also dealt with during postnatal care services. Several factors influence the introduction of semi and solid foods and the weaning process. Such factors are the age of the baby (4 – 6 months), kind of food, preparation of the food, time of the day to name a few. Health care providers should provide the mother with all the necessary information (Littleton & Engebretson, 2003,p.1102).

2.2.7 Health promotion

Health promotion on a variety of health issues is done through health education by postnatal care services. Effective inter-personal communication plays a vital role in the promotion of health and success in health maintenance. Prevention of ill health and promotion of wellness all depend on:

- Effective interpersonal interactions in a variety of health care settings and environments.
- The ability to initiate, develop and maintain effective health care relationships.
- The ability to use communication skills to resolve conflicts between health care providers and patients and to solve communication problems related to health and health care (Bouwer, Dreyer,Herselman, Lock & Zeeling, 2001, p. 297).

It is believed that health education makes people understand issues, because health education increases the knowledge of people on issues in which people are educated. When a person's knowledge

increases the person's belief is influenced. Beliefs in turn influence attitudes, which are without exception for or against a certain concept or person .

People attach importance to issues depending on how people value those important issues. The attendance and non-attendance of mothers of postnatal care services depends on the value towards health behaviour attached to postnatal care which can only be obtained through health education.

Health education is important since it can determine how well individuals and families are able to perform behaviours conducive to optimal self care, in this case utilisation of postnatal care services.

The changes in today's healthcare mandate the use of an organised approach to health education so that patients can meet their healthcare needs. Furthermore, the demands from consumers for comprehensive information about their health issues throughout their life cycle accentuate the need for health education to occur in every nurse-patient encounter (Littleton & Engebretson, 2002, p.900).

Health education comprises much of the nurse's responsibilities in postpartum care. With shortened hospital stays, the nurse must streamline her teaching methods and client interaction should become more efficient. The focussed interactions should be directed towards desired client outcomes, empowering the woman and her family. Depending on the facility, client teaching may incorporate a wide range of methodologies. It is before being discharged, the mother must learn how to care for herself and her infant (Littleton & Engebretson, 2002, p. 917).

In spite of the importance of health education not all patients and healthcare providers consider it important. In a study on availability and acceptance of health education among socially 'at risk' pregnant women, it was found that neither patients nor healthcare teams see health education as an integral part of antenatal, as well as postnatal care and that little impact has been made in encouraging patients to plan their pregnancies, stop smoking and eat a more balanced diet (McKnight & Menet, 2008, p. 7).

2.3 FACTORS INFLUENCING UTILISATION OF POSTNATAL CARE SERVICES WITHIN THE CONCEPTUAL FRAMEWORK

2.3.1 Conceptual framework

For the purpose of this study the Health Promotion Model of Pender was used as a conceptual framework. This model first appeared in the nursing literature in the early 1980s and focused on health promoting behaviours. The initial model has been replaced by the Health Promotion Model (revised) as shown in Figure 2.1.

This model was appropriate for the study because it is an approach-orientated model in which the

motivational source for behaviour change is based on the individual's subjective value of change. Also the model indicated the variables that have been shown to have an influence on health behaviour. It also provides a framework for understanding people's perceptions and their decisions concerning their health (Pender, Murdaugh & Parsons, 2006, p. 15). Thus, the purpose of the model is to discover the conditions that either facilitate or impede utilisation of a service.

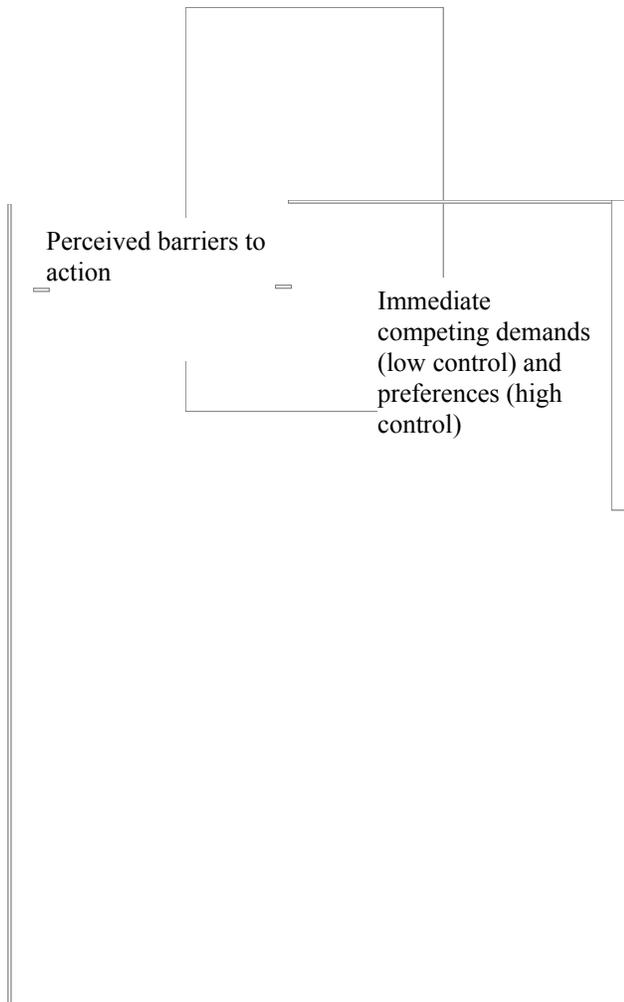
Figure 2.1 The Health Promotion Model (revised)

Behavioural Outcome

Individual Characteristics
& Experiences

Behaviour-Specific
Cognitions & Affect

Behaviour
Outcome





Note: From Health Promotion in Nursing Practice, 5th ed. (p50), by N.J. Pender, C.L. Murdaugh, and M.A. Parsons (2006). Upper Saddle River, NJ: Prentice Hall.

2.3.2 Positive and negative factors influencing utilisation of postnatal care services

2.3.2.1 Positive factors

(i) Individual characteristics and experiences (prior related behaviour)

Biological (for example age)

The age of the mother can influence her decision to utilise postnatal care services or not. For instance, younger women may have more modern attitudes towards health care than older women (Stephenson & Tsui, 2002,p.26). Also the ability to conceptualise a state of health and to respond to changes in health care is directly related to age (Kozier & Erb, 2008, p. 278).

Psychological

Psychological elements like self-esteem, self-motivation, socio-cultural, education, socio-economic status and ethnicity can play a role in utilisation of postnatal care services. Social structure is usually assessed according to education and employment, and the status of women in society. Increased educational attainment influences service use in many ways, including decision-making, power and awareness of health services (Stephenson & Tsui, 2002,p.25).

Health status and motivation

Health is a highly individual perception. Meanings and descriptions of health vary considerably. An individual's personal definition of health may not agree with that of health professionals. According to Kozier and Erb (2008, p. 38) the following factors influence an individual's definition of health: developmental status, social and cultural interactions, previous experiences and perceptions of self.

Thus, the health status of an individual is the health of that person at that given time. Health behaviours are the actions a person takes to understand his/her health status, maintain an optimal state of health, prevent illness and injury and reach his/her maximum physical and mental potential.

Individual health behaviour may or may not be recommended by health care professionals. In this case, the study looks at the utilisation of postnatal care services. It is recommended by health care professionals that women do make use of these services.

Whether or not a person complies with a therapeutic regimen depends on many variables. Among

them are age, education, costs, the complexity of the regimen and its convenience, the individual's value of health and the inconvenience or illness it held.

Becker's Model (1974) indicated that compliance is related to a client's motivation to become well, the value a client places on reducing the threat of illness and the client's belief that compliance will reduce that threat.

Motivation involves the arousal or encouragement of someone to do something. For people to take certain actions, people need to be motivated. For the utilisation of postnatal care some women might be motivated by the need for their health status to be checked while those who are not utilising postnatal care might not see the benefits of attending postnatal care as there are no factors motivating them to utilise it.

Self-confidence – self-esteem

Furthermore, a mother who has self-confidence could also be informed about the different services and utilise them, while a mother who is not self-confident may do the opposite. Also, the self-confident woman will judge her health problems and take a decision that it is sufficient to seek professional help, while the one without self-confidence may be reluctant to do so. An example could be the adolescent mother, because of her inexperience and lack of self-confidence to motherhood, may not utilise the services.

Prior experiences

Prior experiences in the utilisation of services can be negative or positive or both and are usually crucial in attitudes. According to Timyan, Brechin, Meashaw and Ongunleye (1993, p.25) indigenous women, impoverished women and others sometimes face discrimination from health workers. This will result in an unpleasant experience and influence the mother's decision to utilise services at another time. Thus, previous exposure to health care services and the attitudes of the health care providers has been shown to be a strong factor of the mother's susceptibility to make use of available reproductive health services (Stephenson & Tsui, 2002,p.26).

(ii) Behaviours of mothers and health workers are influenced by perceptions and attitudes

Good attitudes are often promoting the use of services by clients. Good attitudes are as perceived based on cultural, biological and other differences, and could have an impact on health promotion behaviours. Perceptions are often influenced by patient background, gender, culture, age, religion, level of education and training, and judgemental abilities (Muller, Bezuidenhout & Jooste, 2006, p. 143).

The way mothers then perceive postnatal care services can influence them to utilise or not to utilise it. The attitude of health workers, especially nurses who are in contact with mothers most of the time, is very important. If the attitude of health workers is positive to mothers during antenatal care, mothers are likely to come back for postnatal care. Friendly health care providers, who listen and not judgmental, makes it easier for clients or patients to reveal health concerns. These clients or patients

are likely to return for follow-up care (WHO, 2002, p. 21).

(iii) Location of facility

Accessing a health service may be facilitated by the location and distance of the facility. If the locality of the facility is near the residence of clients and if there is efficient transport to the health facility may enhance the utilisation of health services (Kaufman, 2002, p.4).

(iv) Behaviour-specific cognitions and effect

- ***Awareness of the importance of postnatal care***

Women's awareness of postnatal care services can cover a variety of aspects. It can range from understanding of the importance of utilisation of the services to the logistical aspects, for example, the specific site. It is evident that the knowledge of women on the importance of utilising the services plays an important part in their decision to use it (Collinson & Cowley, 1998, p.499).

In a study that was done in Kampala, Uganda by Nankwanga (2004, p. 65) it was found that most mothers were aware of the services, and quite a large proportion (82%) utilised them.

If mothers are knowledgeable about postnatal care services and what it entails, they will realise how it can benefit them and their babies. If they realise the benefits it can be assumed that they will use them.

(v) Activity-related effect

In utilising postnatal care services there might be activities, like the internal examination of the mother or blood specimens that will be taken, that are enhancing health for the mother, then she could decide to utilise the services.

(vi) Interpersonal influences

Interpersonal influences are a person's perceptions concerning the behaviours, beliefs, or attitudes of others. Family, peers and health professionals are sources of interpersonal influences that can influence a person's health-promoting behaviours. Interpersonal influences include expectations of significant others, social support (e.g. emotional encouragement), and learning through observing others or modelling.

People attach importance to issues depending on how people value those issues. The attendance of mothers at postnatal care clinics depends on the value towards health behaviours attached to postnatal care which can only be obtained through health education.

(vii) Situational influences

Situational influences are direct and indirect influences on health-promoting behaviours and include perceptions of available options, demand characteristics, and the aesthetic features of the environment. An example of an individual's perception of available options can include easy access to health services. Individuals are more eager to perform health promotion behaviours if they are comfortable in the environment rather than feeling alienated. Environments that are considered safe as well as interesting are also desirable aesthetic features that facilitate health promotion behaviours (Kozier & Erb, 2008, p. 280).

2.3.2.2 Negative factors

According to a report by Safe Motherhood (1998, p. a), the significant barriers that prevent women from utilising maternal health services include distance and lack of transport, high cost, and socio-cultural ones as elaborated below:

(i) Distance and lack of transport

The use of health services is known to depend on physical and geographical accessibility of offered health services and one of the factors preventing women in developing countries from seeking health services is distance from health facilities.

(Kasholia and Campbel, 2006, p.1). Because of long distances from health facilities women have to look for transport which is scarce in order to reach health facilities.

(ii) High cost

Cost has often been shown to be a barrier to service use. Due to limited resources, poverty and cultural traditions access to financial resources in the developing world for women is a problem. Without money, women cannot make independent choices about their health or seek the necessary services (Safe Motherhood, 2002, p.2).

Millions of women cannot afford to use postnatal services, even when fees are low or services are delivered for free. This is due to additional, often hidden costs that patients must cover, such as transport, drugs, and even food and lodging for themselves and their families.

(iii) Behaviour-specific cognitions and effect

Awareness of the importance of postnatal care

Women's lack of awareness of postnatal care services can cover a variety of aspects. It can range from lack of understanding of the importance of utilisation of the services to the logistical aspects, for example, the specific site. Lack of knowledge of women on the importance of utilising the services plays an important part in their decision not to use post natal care.

According to Paterson (2007,p 2) in a population survey in Jordan (2002) it was found that only 8 % of mothers received postnatal care which was because of a lack of knowledge on the side of the mothers about the importance of utilising postnatal care services.

(iv) Cultural factors

Culture includes all the beliefs, customs, values and behaviour patterns common to a particular group of people (Concise Oxford Dictionary, 2000, p. 348).

In most Namibian societies, including Grootfontein district in the Otjozondjupa region, men dominates sexual love relationships which are accepted as part of the culture. Men can play a key role in bringing about gender equality since in most societies, men exercise excessive power in nearly every sphere of life, ranging from personal decisions regarding the size of the families to the policy and programme decisions taken at all levels of government (WHO, 2005, p.3). If a culture lacks autonomy for women,

this will often result in women becoming reactive rather than proactive.

If in a culture women are not empowered women might not be proactive to ask for information about postnatal care. This implies that what men take as important in the society is generally respected in society. If men regard antenatal care as more important than postnatal care, the attendance of antenatal care by mothers will be high compared to the attendance of postnatal care.

Culturally women are perceived as the ones responsible for bearing, rearing and bringing up children. In most reproductive health issues men are not involved at the health facility level. The feminisation of reproductive healthy messages has to a large extent absolved men from actively playing a role in reproductive healthy issues

(Links, 2007, p.9).

Cultural beliefs influence facility planning programmes. Men are often neglected in reproductive health interventions although they represent about 50% of the global population. Their roles as leaders in the community, policy makers, technical experts, clinicians and husbands are critical in decision-making for access to reproductive health services including postnatal care services (WHO, 2005, p. 3).

Also, some medical practices could be in direct conflict with cultural beliefs. Pataya, Wendy, and Debra, (2003, p.15) argues that traditional postpartum practices are still dominant in culture and are perpetuated by close female family relatives.

(v) ***Behaviour outcomes***

Taking all the factors into account that could influence health behaviour, there are three options for an individual:

- The first one is that the person is in a position to cope without fear or relapse, strives to prevent stress and relapse, integrate the new lifestyle, make the modifications and takes the necessary steps.
- The second one is acknowledge having a problem, intending to change, but not ready to commit to action.

- The third one is the person relapses and does not take any action to recycle an opportunity to learn from experience and renew efforts to change (Prochaska, Murdaugh & Parsons, 2002, p. 10).

(vi) *Poor information*

Women and communities often do not know how to recognise, prevent, or treat pregnancy complications, or when and where to seek medical care. This has a profound impact on the utilisation of postnatal services.

(vii) *Socio-cultural factors*

Health services often do not respect women's cultural preferences, for example, for privacy, birth position, or treatment by women providers. In addition, women's power to decide when to seek care is restricted in many parts of the world.

(viii) *Low self-esteem*

The lack of knowledge and awareness results in women's lack of self-esteem, especially in areas where the women's status is recognized as inferior to that of men. The low self-esteem leads to the belief that suffering is women's lot and this therefore discourages them from seeking health care, or others taking them for care when problems arise.

(ix) Decision-making dynamics

Sometimes the decisions for women to seek medical care are made by their husbands, family members or community members, except for a few of those who are educated and can make the decision themselves.

2.4 SUMMARY

In this chapter the literature on postnatal care services, such as physical examination of the mother and baby, reproductive health (family planning) and sexually transmitted diseases, nutrition and health promotion was reviewed. Also the factors that influence mothers to utilise or not to utilise postnatal care services within the health promotion framework were discussed. The next chapter deals with the research design and methodology.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter includes the research design and method, study site, target population, sampling strategies and sample size, data collection plan, validity and reliability of the research instrument, pre-testing of the research instrument, ethical considerations and data analysis procedure.

3.2 GEOGRAPHICAL AREA

To understand the research problem more clearly, it is necessary to give some background information of the district in which the study was conducted.

Namibia is divided into thirteen (13) regions. These regions are Kunene, Omusati, Oshana, Oshikoto, Otjozondjupa, Karas, Hardap and Omaheke. Each of the above regions is sub-divided into districts.

Figure 3.1 Map of Namibia showing Namibia's 13 regions



MoHSS 2000: xxii

Context of the study

Otjozondjupa region is situated in the central north of Namibia. The region is divided into four districts which are Grootfontein, Otjiwarongo, Okakarara and Okahandja.

The study was carried out in the public health facility of Grootfontein health district, which includes Grootfontein Clinic, Otjituuo Clinic, Mangetti Dune Health Centre, Tsumkwe Clinic and Gam Clinic.

Figure 3.2 Map of the Otjozondjupa region showing the clinics in the region



MoHSS HIS Otjozondjupa Region

Grootfontein is situated on the north-east of Otjozondjupa region. According to the MoHSS Healthy Information System (HIS) data of Grootfontein (2006, p. 1), in 2006 the district had a population of 35,783 people of which 8,589 are women of child-bearing age and 5,150 are children under five years of age. The district is served by one district hospital, one health centre, 6 clinics and 401 outreach points. The district is characterised by urban and rural features. The study was conducted in the clinics of the Grootfontein district.

Objectives

As the purpose of the study was to explore and describe the factors that influence postnatal care utilisation by women in the Grootfontein district, the specific objectives were to:

- determine the demographic data of the respondents;
- determine reasons for attendance or non-attendance of postnatal care clinics by women by making of comparisons;
- explore the extent to which women were educated or informed about the need to attend postnatal

care;

- find out how the respondents were received at the health facility; and
- explore the ways, if any, that will enable respondents to attend postnatal care clinics.

3.3 RESEARCH DESIGN

The research design is a plan, structure and strategy of investigation; so conceived as to obtain answers to research questions or problems. A research design includes an outline of what the investigator will do from untying the hypothesis, or research questions, and their operational implications to the final analysis of data (Polit & Beck, 2006, p. 203).

Mouton (2001, p. 55) defines research design as a plan or blueprint of someone intending to conduct research. Research design involves how the researcher has planned to carry out the research.

A descriptive, quantitative, explorative and comparative research design was used to investigate the mothers' utilisation of postnatal care services in the Grootfontein district, Otjozondjupa region, Namibia.

3.3.1 Quantitative

A quantitative research study aims at establishing or determining the relationship between one thing and another one in the population (Hopkins, 2000, p. 1). A quantitative research design was selected for this study because it is a formal objective, systemic process in which numerical data are utilised to obtain information (Burns & Grove, 2005, p. 23).

A quantitative research study was used because the study focussed on a defined population and the researcher needed to get views of members of that population on the utilisation of postnatal care services.

The following characteristics of quantitative research made it suitable for this study:

- The researcher used a structured interview instrument to collect the data.
- The researcher used the same structured interview instrument to collect the data on each participant.
- The structured interview instrument had closed questions which were analysed by computer.
- Statistical procedures were used to analyse numerical information which had been obtained from the interview.

3.3.2 Descriptive

A descriptive design was used in this study to describe the situation concerning utilisation of postnatal care services. Descriptive research provides an accurate portrayal or account of the characteristics of a particular individual, situation or group. Descriptive studies provide a means of discovering new meaning, describing what exists, determining the frequency with which something occurs, and categorising information (Burns & Grove, 2005, p. 26).

Descriptive studies can be used to get information concerning the current situation of an aspect in order to describe what exists about that aspect. This study described the utilisation of postnatal care services in the Grootfontein health district.

3.3.3 Exploratory

Exploratory research design refers to social research which explores a certain phenomenon with the primary aim of understanding the phenomenon or situation (Bless & Hingson-Smith, 2000, p. 154).

Exploratory research is also used to get clarity and define the problem at hand clearly (Brink, 2008, p. 120). The research study aimed at exploring the factors influencing the utilisation of postnatal care services by mothers, by interviewing mothers and asking them their views on postnatal care utilisation.

3.3.4 Comparative

A comparative design compares the scores of two groups which are being studied (Welman, Kruger, and Mitchell, 2005, p.212).

In this study two groups were compared, namely the case group and the control group. The case group consisted of mothers who did not attend post natal care while the control group consisted of mothers who attended post natal care.

This two groups were then compared to identify any variables that may be associated with the differences in post natal care attendance outcomes.

3.4 STUDY POPULATION

The target population is the entire population in which the researcher is interested to or which he/she would like to generalise the study results (Polit & Becker, 2006, p. 511).

In this study the population consisted of two groups of women; those who did not attend postnatal care (cases) and those who did attend postnatal care (controls). The research population involves people who have been selected and meet the criteria to participate in the research study. The research population for this study consists of all women who attended antenatal care and delivered in Grootfontein district and who were bringing their own babies for immunisation during the period of the study.

Eligibility criteria

Eligibility criteria refer to “requirements that must be met for an individual to be included in the study” (Burns and Grove, 2001, p. 15).

The eligibility criteria enable all the respondents to have the same characteristics. The criteria to be included in the study include the following:

- Women who attended antenatal care in the Grootfontein district.
- Women who are bringing their babies for the two months old, three and half months old and nine months old immunizations.
- Women who delivered in public health facilities, at home or under the care of traditional birth attendants in the Grootfontein health district.
- Women who did not attend six weeks postnatal care (case).
- Women who attended six weeks postnatal care after giving birth (control).

Post natal care services is provided at six weeks and women who are bringing their babies at six weeks old immunization were not part of the study because they are supposed to attend post natal care that day. From two months old and older immunizations the mother had already attended or did not attend post natal care. Immunization clinics are more attended by mothers comparing to post natal care clinics. That is why this was an inclusive criterion to be able to get hold of the mothers who delivered a baby. Respondents were excluded from the study if they were not willing to participate.

3.5 SAMPLING AND SAMPLE

3.5.1 Sampling

Sampling involves selecting a group of people, events, behaviours or other elements with which to conduct a study (Burn & Grove, 2005, p. 345). Sampling is the process of selecting a number of study units from a defined study population and by studying the sample we may fairly generalise our results back to the population from which they were chosen (Trochim, 2006, p. 1).

By implication sampling involves selecting some people from the researchable population to serve as a study population as in most cases it is not possible to study the whole population. Sampling also involves selecting people who have the same characteristics of the whole population which needs to be studied.

The sampling process

A probability sample of 291 respondents was obtained from an estimated population size of about 1,195 women. The estimated population size was based on the attendance statistics for the year 2004 of women who attended ante natal care at health care facilities as well as those who attended post natal care (294). The sample size was then statistically calculated by a statistician to ensure a 95% confidence interval.

These 291 women were selected during the period of six weeks through a process of selecting every second woman attending the immunisation health care facilities. This selection process was continued until the target of 291 women was reached.

The selected sample included 219 women who did not attend postnatal clinics, they will be called the *case group*, and 72 women who did attend postnatal clinics, they will be called the *control group*.

3.6 THE DEVELOPMENT AND COMBILATION OF THE QUESTIONNAIRE

A through literature was conducted in order to assess the aspects that had to be included in the questionnaire as a data collection instrument or tool.

The research framework of the study was used in order to focus the items and integrate the data collection tool within a broader adapted epidemiological framework.

Data collection tools are devices used to collect data. According to Krumar (1999, p. 109) the tools used are structured interviews schedules or interviews guides, depending on the degree of flexibility of the interview. In this study the structured interview was selected to gather data because the researcher made use of a research assistant. The researcher asks a pre-determined set of questions, using the same wording and order of questions as specified. Thus, a structured questionnaire refers to a document with pre-determined questions. The structured questionnaire was developed and consisted of two sections of open and closed-ended questions.

Content of the structured questionnaire

Section 1: Socio-demographic information

In section one, respondents were asked for personal information with regard to age, marital status, qualifications, religion, employment and income. This information was essential to provide a descriptive profile of the respondents which could influence the utilisation of postnatal care clinics.

Section 2

This section attempted to determine knowledge of postnatal care services and utilisation of postnatal care clinics.

3.7 REFINEMENT OF THE DATA COLLECTION INSTRUMENT

The refinement of the data collection instrument was accomplished by means of completion of the following:

- Determining the validity of the instrument.
- Determining the reliability of the instrument.
- Pre-testing the instrument.

3.7.1 Determining the validity of the instrument

Validity is defined as the degree to which an instrument can measure what it is designed to measure. It ensures that in a study correct procedures have been applied to find answers to a research question; thus, it means that the researchers' scientific observations actually measure what they intended to measure (Krumar, 1999, p. 4, 137; Polit & Beck, 2006, p. 328).

Validity of the instrument covers both the internal and external validity. In this study, internal validity was applied by pre-testing of the data collection instrument (pilot testing). External validity was applied by using a probability sampling strategy (random sampling); the sample might be representative and that as a result would enhance the generalisability of the results.

- **Face validity**

Face validity involves the subjective judgements by experts or respondents about the degree to which the instrument appears to measure the relevant construct (Krumar, 1999, p. 138).

In this study the researcher formulated items in the structured interview that covered a range of issues to be measured, pre-testing of the instrument was done, and three colleagues and a supervisor verified the appropriateness of the items in the questionnaire, who agreed that the items appeared to be representative of the purpose of the study. The items included in the instrument were assessed, and modifications made accordingly.

- **Content validity**

Content validity is a systematic assessment of the content of an instrument to ensure that it adequately represents or includes the entire content area, or domain specified. It is judged on the basis of the extent to which statements or questions represent the issue they are supposed to measure (Burns & Grove, 2005, p. 376; Polit & Beck, 2006, p. 328).

In this study, content validity was determined by the researcher through a literature review as well as giving the structured interview questionnaire to experts in the research domain, those who have knowledge of instrument development and postnatal care to judge the content. The value of a thorough literature review was indisputable. These included two nursing supervisors and one professor in the field of nursing at the University of Namibia.

3.7.2 Determining the reliability of the instrument

Reliability is referred to by De Vos et al (2006, p. 85) as “the accuracy or precision of an instrument or the degree of consistency or agreement between two independent derived sets of scores; and the extent to which independent administrations of the same instrument yield the same results under comparable conditions”. For this study, stability was tested by means of equivalence.

- **Equivalence**

The equivalence approach is when different observers or raters use an instrument to measure the same phenomena (Polit & Hungler, 1999, p. 248). They afterwards compare the results. A structured interview was done with two women (not part of the study) using the questionnaire, by two registered nurses operating independently. Afterwards the same values were observed to determine whether the two registered nurses interpreted the questions the same way (Polit & Beck, 2006, p. 727). Furthermore, a pilot testing of the instrument was concluded.

3.7.3 Pre-testing of instrument

Pre-testing is a trial run to determine, in so far as is possible, whether the instrument is clearly worded and free from major biases and whether it solicits the type of information imagined (Teijlingen & Hundley, 2001, p. 2).

In this study the pre-testing of the instrument was done in one of the clinics. Ten women who were not part of the study were asked to participate. This pre-test was done to identify any difficulties or ambiguous questions, the sensitivity of the language, estimation of the time required for each interview and the appropriateness of the wording according to the interviewees' educational and socio-cultural backgrounds.

During pre-testing it appeared that because it was a structured interview the respondents did understand the questions after it was translated and explained to them. In addition the research supervisors were also consulted, and they indicated some minor changes.

These modifications were made before the main study. These exercises facilitated the refinement of the instrument. After the interview schedule was finished, it was printed and data collection started.

3.8 DATA COLLECTION METHOD

The method that was used to gather the information was a structured interview. The reason why this

method was selected was because surveys obtain information on people's action, knowledge, intentions, opinions and attitudes; in this case the utilisation of postnatal services (Polit & Beck, 2006, p. 214).

3.8.1 Data collection

Data collection is the process by which information relevant to the characteristics of the population is being studied, is gathered and obtained in a systematic manner (Burns & Grove, 2001, p. 44).

Data was collected through structured interviews by the researcher and the research assistant. Data was collected in six clinics and one health centre in the Grootfontein district. The interviews were conducted in a private room. The room was quiet and there were no interruptions. Health workers working in health facilities were informed of the interviews so not to come and disturb the process. The respondents were welcomed and the nature and purpose of the study was explained to the respondents as well as their rights. The explanation was given to the respondents that the participation in the research study was voluntary, and respondents had the right to withdraw from the study at any time or stage of the study. The respondents were interviewed on a one to one basis. After the interview the researcher thanked the respondents. This was repeated until 291 interviews were completed.

The structured interview was selected to gather data for the reasons that are stated by Hopkins (2000, p. 17), namely:

- The interview was suitable for use with both literate and illiterate respondents.
- The interviewer and the respondents were less likely to deviate from the topic that is the subject matter of the interview.
- Less training was needed for the research assistant.
- There was less risk of results being affected by interviewer bias since the interview was objective.
- The interviewer observed the emotions of the respondents.
- It was to analyse the data.

- The interview was flexible and allows the interviewer possibility to clarify questions.
- The face to face interview allowed respondents to share feelings which are personal in nature.

3.8.2 Recruitment of research assistant

One research assistant was recruited to assist the researcher in collecting data. The research assistant was a medical doctor who had worked in the health facility for a long time. However, the research assistant was orientated and trained by the researcher on how to ask the questions indicated in the questionnaire till the research assistant was confident and comfortable with the content of the questionnaire.

Ensuring collection of quality data

The researcher constantly monitored the research assistant's performance during data collection. The completed structured interview schedules were checked by the researcher to ensure that all the information had been properly collected and recorded. Before and during data processing, the information was checked again for completeness and internal consistency.

3.9 ETHICAL CONSIDERATIONS

Ethics refers to the systematic thinking about the moral consequences of decisions (John & Sack, 2001, p. 395).

The following ethical considerations were observed by the researcher: obtaining permission to conduct

the study and collect data, respecting the respondents' rights to self-determination, privacy, confidentiality and anonymity, fair treatment and protection from discomfort and harm, and obtaining informed consent.

Permission to collect data

For this research study, permission to collect data was sought and obtained from the Permanent Secretary for the Ministry of Health and Social Services (see Annexure A). Verbal consent was obtained from the respondents themselves after an explanation of the study.

Right to self-determination

Right to self-determination is the right to choose one's own actions, so long as doing so does not interfere unduly with the lives and actions of others. The right to self-determination is based on the principle of autonomy. Autonomy refers to the participants' rights to make their own decisions (Van Dyk, 2005, p. 10).

The autonomy of the respondents was respected by the researcher. The respondents were treated as autonomous by the researcher. The respondents were seen as individuals who are not supposed to be influenced by the researcher in any way.

The respondents were: informed about the identity of the researcher; informed about the purpose and significance of the study; allowed to make an informed decision and participate in the study on a voluntary basis; and allowed to withdraw from the study without fear of any penalty.

The participation in the research by the respondents was voluntary. No coercion or deception was practised. The respondents were fully informed in English, Afrikaans, Oshiwambo and Otjiherero, depending on the preferred language as some respondents cannot speak English.

Right to privacy

Privacy is the freedom an individual has to determine the time, extent and general circumstances under which private information will be shared with or withheld from others (Burns & Grove, 2001, p. 163). Privacy involves the obligation of the researcher to protect information from respondents from undesirable or any other interactions or sharing.

The respondent's privacy was respected and protected in that they were informed that data gathered would only be shared with those involved in the research, but not with unnecessary people.

Right to confidentiality and anonymity

Confidentiality refers to the management of information gathered from respondents while anonymity refers to the principle that the identity of research respondents is kept secret (Mouton, 2001, p. 244).

Confidentiality can also indicate a way of not making information given by respondents known to anyone who is not directly involved in the study (Trochim, 2006, p. 2). Anonymity is prevention of disclosure of the information that leads to the identification of the study subject or patient in a report verbal or written.

In this research study the researcher reassured and maintained the respondent's anonymity and confidentiality. No names were used in an interview schedule.

Right to fair treatment

The principle of justice relates to fair treatment. The principle of justice involved in fair treatment is that people should be fairly treated and involves distribution of benefits to that is owed or owned to respondents (Burns & Grove, 2001, p. 167).

The fair treatment of respondents was ensured by the researcher by treating respondents fairly and sensitively and avoiding any harm or discomfort to the respondents.

Right to protection from discomfort and harm

Social research should never injure the people being studied, regardless of whether they volunteer for the study or not (Babbie & Mouton, 2001, p. 522).

The researcher guarded against psychological as well as physical harm to the participants. The researcher was alert and on the lookout for any emotional, physical or psychological discomfort which might be experienced by respondents. The researcher also assured respondents that no harm will come to them during their participation in the research.

Informed consent

Informed consent refers to a process by which potential participants are provided key information about the research study (White,2001, p.96). Human subjects are rational beings, and before they are involved in the research study they should voluntarily agree to participate after having been thoroughly informed.

Informed consent in research is very important; the dignity, safety, physical and mental well-being as well as rights of participants must be the primary considerations in any research practice.

Before the research respondents participate in the study, the following information needs to be given to them: identity of the researcher, a statement of what the study involves, its purpose and expected duration, if there are benefits to the respondents or not, the issue of how confidentiality will be maintained, the right of respondents to decline to participate and to withdraw from the research once

participation has begun

The decision to participate in research should not only be requested from the respondent, but must also be voluntary.

Informed consent must be given freely, without coercion, and must be based on a clear understanding of what participation in the research involves.

The aim, purpose and objectives of the study were explained to the respondents. The extent of the respondent's participation, how the results will be published, and maintenance of privacy, confidentiality and anonymity were explained to the respondents and ensured. The prospective respondents were given an opportunity to choose whether to participate in the study or not.

The researcher and the research assistant also identified themselves to the respondents, and the type of work they are doing as well as the academic qualifications the researcher is studying for. The names of the researcher's supervisors were also mentioned to the respondents.

Research benefits

Benefits refer to valuable products or services that are given to an individual as a by-product of participation in the programme or research study (Hopkins, 2000, p.1).

It was made clear through explanations that the research study involved no material benefits to the

respondents.

3.10 SUMMARY

This chapter described the research design and methodology, including the geographical area of the study, research design, research population, sampling, data collection and ethical considerations. A quantitative research approach was used to guide the study.

Chapter 4 presents the data analysis and findings of the study.

CHAPTER 4

DATA ANALYSIS AND RESEARCH FINDINGS

4.1 INTRODUCTION

The findings were deduced from the interviews that were held with respondents and from a structured questionnaire that was used to collect the information. The researcher and a research assistant conducted the data collection by interviewing the selected respondents.

Data analysis was done using the Statistical Package for the Social Sciences (SPSS) version 13.0 and Microsoft Excel was used to generate figures and graphs. This was done with the assistance of a

statistician.

Descriptive statistical analysis was utilised. Descriptive statistics allow the researcher to summarise and organise data in ways that give meaning and facilitate insight, to examine a phenomenon from a variety of angles in order to understand more clearly what is being observed (Burns & Grove, 2005, p. 461).

The data were analysed according to the research objectives, questions conceptualised according to the elements of the Health Promotion Model (HPM), and the design of the study.

Tables and graphs were utilised to summarise and analyse data. After frequency distributions had been made, a statistical analysis was done to determine whether the differences and associations found were significant or not. Additionally, Chi Squares (X^2) and p-values were used to test the significance of the relationships between variables or categories (Polit & Beck, 2006, p. 374). The test was done to compare the case and control groups in all the close ended questions.

Answers to open-ended, scaled and self-anchored rating scale questions on the structured questionnaire were coded and analysed quantitatively and presented in frequencies.

4.2 OBJECTIVES OF THE STUDY

The research objectives were as follows:

- To determine the demographic data of the respondents.
- To explain reasons for attendance or non-attendance at postnatal care clinics by women by means of comparisons.
- To explore the extent to which women were informed or educated about the need to attend postnatal care.
- To determine how the respondents were received at the health facility.
- To explore the ways, if any, that will enable respondents to attend postnatal care.

4.2.1 Section 1: Respondents' demographic data (individual characteristics)

Demographic data refer to the respondent's characteristics such as age, marital status, religion, educational status, language, employment status and place of residence (MoHSS, 2004a, p. 72).

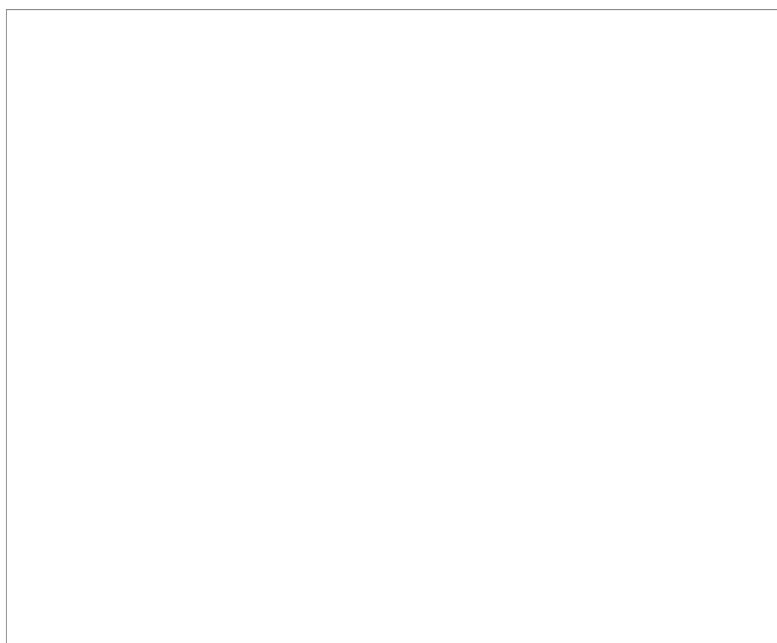
In this study the same format were followed in the presentation and discussion of the data.

The first discussion item is on the age of the respondents.

4.2.1.1 Age of the participants (N=291) (Cases: N=219, Controls: N=72)

The case and control groups were compared with regard to age distribution to identify any association between age and the utilisation of postnatal services. This comparison is depicted in Figure 4.1.

Figure 4.1 Age distribution of the respondents (Cases: N=219, Controls: N=72)



Of the respondents who did not attend postnatal care (cases) 32.9 % (n=72) were 21 – 25 years of age; 26.9 % (n=59) were 15 – 20 years of age; 14.2 % (n= 31) were 31 – 35 years of age; 13.2 % (n=29) were between 26 – 30 years of age; 6.4 % (n=14) were between 36 – 40 years of age; 4.6% (n=10) the age was unknown while 1.8 % (n=4) were 41+ years.

Of the respondents who attended postnatal care (controls) 30.6 % (n=22) were between the ages of 21 – 25; 20.8 % (n=15) were between 26 – 30 years of age; 16.7% (n=12) were between the ages of 31 – 35 years; 13.9 % (n=10) were between the ages of 15 – 20 years; 11.1 % (n=8) were between the ages 36 – 40 years; 5.5% (n=4) the age was unknown while only 1.4 % (n=1) were 41+ years of age.

The women between the ages 15 – 20 years of age appear not to have attended postnatal care in large numbers. People in the age group 15 – 20 years are regarded as in being the adolescent period. Adolescence refers to a journey or transition or changing period from childhood to adulthood (WHO, 2002, p. 5).

The young mothers might experience problems attending post natal care services. This is also indicated in the literature. Authors indicated the reluctance on the utilisation of postnatal care health services by adolescents might be influenced by the following factors: cultural restrictions and barriers, poor quality of clinical services, high cost, gender barriers and peer pressure (WHO, 2004, p.18).

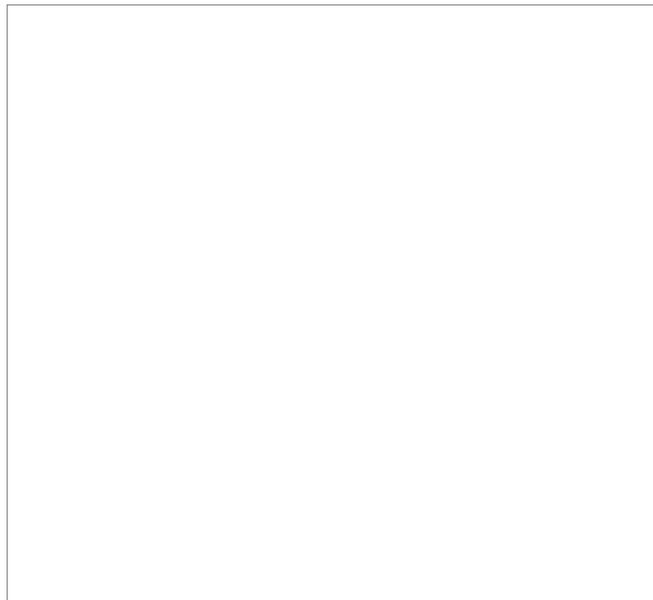
The remainder of the respondents, both the case and the control groups, were evenly distributed with only four cases and one control respondent older than 41 years. However, as the literature indicated the correlation between age and utilisation of services in this study, significant statistical differences were

found between the ages of the cases and controls. Thus, in this study the results indicated that age is a factor associated with utilisation of postnatal care services as the p value was found to be ($p= 0.0161$).

4.2.1.2 Marital status of the participants (N=291) (Cases N=219, Control N=72)

The respondents were asked to state their marital status, in order to see if there is any relation between marital status and the utilisation of postnatal care services.

Figure 4.2 Marital status of respondents (Cases: N=219, Controls: N=72)



Of the respondents in the cases group 74.3 % (n=163) have never married, 24.7 % (n=54) were married and 1 % (n=2) were divorced.

Of the respondents in the control group 56.9 % (n=41) have never married, 41.7 % (n=30) were married and 1.4 % (n=1) were divorced.

Studies in Bangladesh showed that the mother's marital status as married women has a positive influence on the utilisation of health services (Health and Social Care in the Community, 2002, p. 1), but according to the findings of this study, no association between clinic attendance and marital status was found as the p value was found to be (p=0, 157).

4.2.1.3 Religion of the participants (N=291) (Cases: N=219, Controls: N=72)

Figure 4.3 Religion of respondents (Cases: N=219, Controls: N=72)

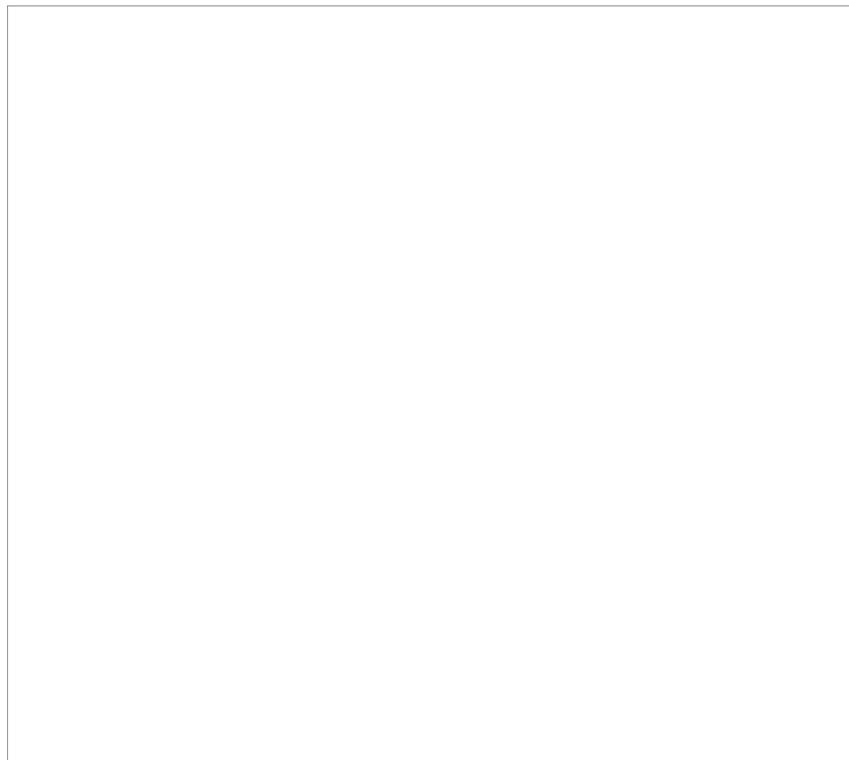


Figure 4.3 indicates that of the respondents in the case group 34.7 % (n=76) belongs to ELCIN; 26.5 %

(n=58) belongs to other religions; 21.0 % (n=46) belong to the Roman Catholic Church (RCC); 10.5 % (n=23) belongs to the Anglican Church; while 7.3 % (n=16) did not know to which religion they belong.

Of the respondents in the control group, 40.3 % (n=29) belongs to ELCIN; 34.7 % (n=25) belongs to other religions; 13.9 % (n=10) belongs to the RCC; and 11.1 % (n=8) belongs to the Anglican Church.

In this study there was no relationship found between postnatal care service utilisation and religion of the respondents as the p value is (p=0.3009). Therefore, in this study religion has no influence on the utilisation of postnatal care.

4.2.1.4 Educational status (N=291) (Cases: N=219, Controls: N=72)

The respondents were asked to state their educational status.

Table 4.1 Educational status of respondents (Cases: N=219, Controls: N=72)

	CASES		CONTROLS	
	Numbers	Percentage (%)	Numbers	Percentage (%)
Not attended school	48	21.9	13	18.1
Attended Primary School	45	20.5	14	19.4
Attended Secondary	124	56.6	45	62.5

School				
Tertiary Education	2	1	0	0
TOTAL	219	100	72	100

Table 4.1 indicates that of the respondents in the case group 21.9 % (n=48) did not attend school; 20.5 % (n=45) attended primary school; 56.6 % (n=124) attended secondary school; while 1 % (n=2) completed tertiary education.

Of the respondents in the control group 62.5 % (n=45) attended secondary school; 19.4 % (n=14) attended primary school; 18.1 % (n=13) did not attend school; while no one completed tertiary education.

Despite the clear benefits of educating females in the society, many girls do not go to school at all, or leave school too early; therefore some literature indicates a strong relationship between education and postnatal service utilization. As education of women increases so did the likelihood of attending postnatal health care (UNICEF,2005, p. 4).

Since the findings revealed a low level of education on the case group it correlates with statements of UNICEF (2005, p. 5) that indicated that educating girls drastically and consistently improves their prenatal care, postnatal care and the survival rates of children.

Although the percentage of respondents in the case group who did not attend school is high comparing to those who did not attend school in the control group, in the study there is no statistical significance

between the two groups as the p value is ($p = 0,724$).

4.2.1.5 Language/mother tongue of respondents (N=291) (Cases N=219, Controls N=72)

The respondents were asked to state their language/mother tongue. The languages were chosen according to the most spoken languages in the Grootfontein district. The languages were ranked as follows:

- Oshiwambo
- Otjiherero
- Damara>Nama
- Afrikaans
- Other languages included the Kavango , San, Caprivi - (Lozi), and Tswana.

Of the respondents in the case group 32.4 % ($n=71$) of the mother language is “other languages”; 26 % ($n=57$) is Oshiwambo; 26 % ($n=57$) speak Damara>Nama; 13.2 % ($n=29$) speak Otjiherero; while 2.4 % ($n=5$) the mother language is Afrikaans.

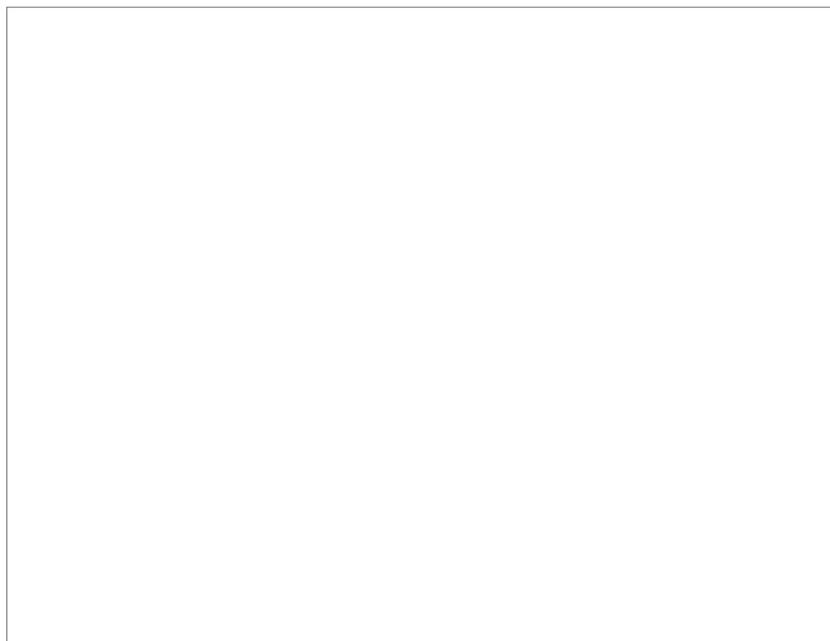
Of the respondents in the control group, 27.8 % ($n=20$) the mother language is Damara>Nama; 27.8 % ($n=20$) the language is “other languages”; 26.3 % ($n=19$) the mother language is Oshiwambo; 15.3 % ($n=11$) the mother language is Otjiherero; and 2.8 % ($n=2$) the mother language is Afrikaans.

According to the study findings there is no significant difference in language between those who utilised and those who did not utilise postnatal care services as the p value is (p=0.0980).

4.2.1.6 Employment of the respondents (N=291) (Cases N=219, Controls N=72)

The respondents were asked about their employment status.

Figure 4.4 Employment status of respondents (Cases N=219, Controls N=72)



Of the respondents in the case group 80.8 % (n=177) were unemployed; while 19.2% (n=42) were employed.

Of the respondents in the control group 72.2 % (n=52) were unemployed; while 27.8 % (n=20) were employed.

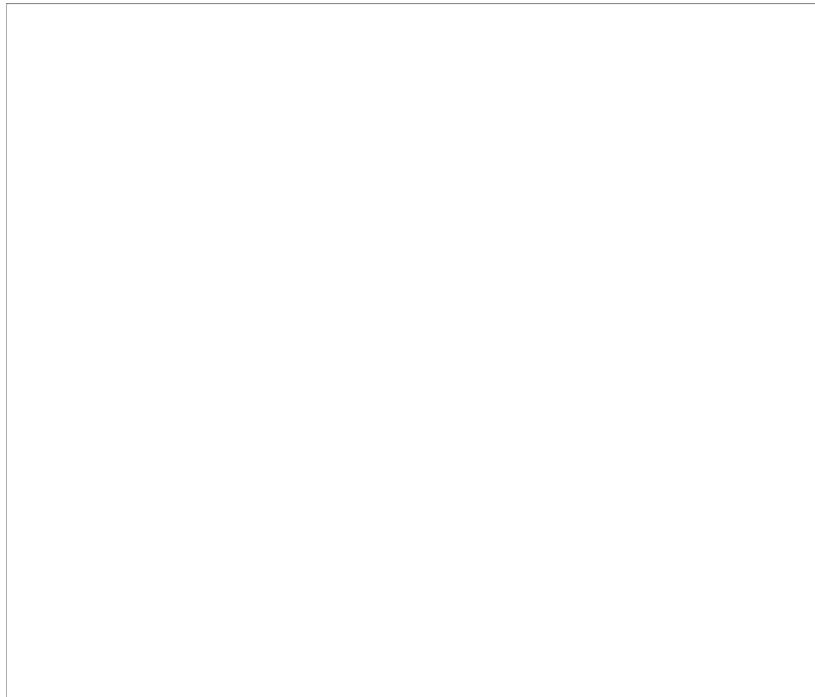
According to WHO (1999, p. xviii) unemployment affects women's status in the society. Unemployment leads to low status in society and women of low status are unlikely to pay much attention to health-related issues.

A large number of respondents in both two groups are unemployed. There was no statistical significance between those who are employed and unemployed in the case and control groups in utilising postnatal care services ($p = 0,122$).

4.2.1.7 Place of residence of the respondents (N=291) (Cases N=219, Controls N=72)

Respondents were asked to state their place of residence.

Figure 4.5 Place of residence of respondents (Cases N=219, Controls N=72)



Of the respondents in the case group 48 % (n = 105) are living in rural areas; 34.2 % (n = 75) are living in urban areas; while 17.8 % (n = 39) are living in semi-urban areas.

Of the respondents in the control group 45.8 % (n = 33) are living in rural areas; 43.1 % (n = 31) are living in urban areas; while 11.1 % (n = 8) are living in semi-urban areas.

Although women living in rural areas are high in both the case and control groups, there is no significant association between places of residence of the respondents and utilisation of postnatal care (p = 0,288).

4.2.1.8 Distance from clinic or health centre (N=291) (Cases N=219, Controls N=72)

This item requires that respondents indicate the distance from their places of residence to the clinic or health centre.

Table 4.2 Distance between respondents` places of residence and health facility (Cases N=219, Controls N=72)

Distance	Cases		Controls	
	Number of respondents	Percentages	Number of respondents	Percentages
Within 2 km	124	56.6%	37	51.4%
Between 2-5 km	14	6.4%	5	6.9%
Between 6-10 km	19	8.7%	6	8.4%
More than 10 km	62	28.3%	24	33.3%

Of the respondents in the case group 56.6 % (n=124) are staying within a distance of <2 km to the health facility; 28.3 % (n=62) indicated staying within a distance of >10 km; 8.7 % (n=19) indicated staying within a distance of 6 – 10 km; and 6.4 % (n=14) indicated staying within a distance of 2.5 km.

Of the respondents in the control group 51.4 % (n=37) are staying within a distance of <2 km; 33.3 % (n = 24) indicated staying within a distance of >10 km; 8.4 % (n=6) indicated staying within a distance of between 6 – 10 km; and 6.9 % (n=5) indicated staying within a distance of between 2 – 5 km.

Although literature indicated that distance is a barrier in utilisation of postnatal care services (Timyan, et al, 1993, p. 72; Worldbank, 2007, p. 1), in this study findings it appears there is no relationship between utilisation of postnatal care services and distance to the nearest health facility (p = 0.858).

4.2.2 Section 2: Items related to the utilisation of postnatal care services

4.2.2.1 How many children do you have? (N=291) (Cases N=219, Controls N=72)

(i) Number of children born alive

The respondents were asked to state the number of children born alive the respondents have. The results are depicted in Table 4.2.

Table 4.3 Number of children born alive to respondents (Cases N=219, Controls N=72)

Number of children born alive	Cases		Controls	
	Numbers	Percentages	Numbers	Percentages

1 – 2	145	66.2%	42	58.3%
3 – 4	54	24.7%	25	34.7%
> 5	20	9.1%	5	7%
Total	219	100	72	100

Of the respondents in Table 4.2, in the cases group 66.2 % (n=145) have one to two children alive; 24.7 % (n=54) have three to four children born alive; while 9.1 % (n=20) have more than five children born alive.

Of the respondents in the control group 58.3 % (n=42) are having one to two children born alive; 34.7 % (n=25) are having three to four children born alive; while 7 % (n=5) have more than five children born alive.

According to the WHO (2003,p.2) women with more children are likely to use maternal health services because are more experienced and might be better to understand the routine of health care services.

According to the study findings there is no statistical significant difference found between case group and the control group with regard to number of children alive and utilisation of post natal care as the p value is (p=0.5336).

(ii) **Number of pregnancies**

The respondents were asked to state the number of pregnancies in their lives. The responses are depicted in Table 4.3.

Table 4.4 Number of pregnancies of respondents (Cases N=219, Controls N=72)

Number of pregnancies	Cases		Controls	
	Number	Percentages (%)	Number	Percentages (%)
1 – 2	144	65.8%	43	59.7%
3 – 4	54	24.7%	24	33.3%
> 5	21	9.5%	5	7%
Total	219	100%	72	100

Of the respondents in Table 4.3, in the case group 65.8 % (n=144) have had one to two pregnancies; 24.7 % (n=54) have had three to four pregnancies; while 9.5 % (n=21) have had more than five pregnancies.

Of the respondents in the control group 59.7 % (n=43) have had one to two pregnancies; 33.3 % (n=24) have had three to four pregnancies; while 7 % (n=5) have had more than five pregnancies.

Based on this results, no statistically significant difference was found between the cases group and the control group with regard the number of pregnancies and utilisation of post natal care (p=0.5350).

This is in contrast with a quotation from WHO (2003, p. 2) where there is an indication women with

more children are likely to use post natal care services.

4.2.2.2 Place of birth of the last child (N=291) (Cases N=219, Controls N=72)

The respondents were asked to state the place of birth of their last child. The places of birth were categorised as follows:

- Hospital
- Home
- Health centre
- Clinic

The health facilities were divided into hospital, health centre and clinic in order to see if there is a significant number of mothers delivering in clinics and health centres which are in rural areas. The figures are depicted in table 4.5.

Table 4.5 Place of birth of last baby of respondents (Cases N=219, Controls N=72)

Place of birth of last baby of respondents	Cases		Controls	
	Numbers	Percentages	Numbers	Percentages
Hospital	163	74.4%	58	80.6%
Home	48	21.9%	12	16.6%
Health centre	3	1.4%	2	2.8%
Clinic	5	2.3%	0	0%

Of the respondents in the case group 74.4 % (n=163) gave birth at the hospital; 21.9 % (n=48) gave birth at home; 2.3 % (n=5) gave birth in clinics; and 1.4 % (n=3) gave birth at the health centre.

In the control group of the respondents 80.6 % (n=58) have delivered in hospitals; 16.6 % (n=12) delivered at home; while 2.8 % (n=2) delivered at health centres.

According to MoHSS (2001:5) about 78 % of women deliver in health facilities. By implication the

majority of respondents have delivered in health facilities. Of the respondents in the case group 74.4 % (n=163) gave birth at the hospital; 2.3 % (n=5) gave birth in clinics and 1.4 % (n=3) gave birth at the health centre. In the control group of the respondents 80.6 % (n=58) have delivered in hospitals; while 2.8 % (n=2) delivered at the health centre.

There has been a decrease in deliveries conducted at home. Deliveries conducted by TBAs are done at home. In 1995 the TBAs delivered 40 % of deliveries and this number has dropped to 5.6 % in 2000 (MoHSS, 2001,p.3). According to the findings of the study 21.9 (n=48) of the respondents in the case group gave birth at home while in the control group 16.6 % (n=12) gave birth at home.

There is no statistical significance between respondents from the case and control group on place of deliveries and utilization of postnatal care services as the p value ($p = 0,245$).

4.2.2.3 Attendance at antenatal care (N=291) (Cases N=219, Controls N=72)

Respondents were asked if they attended antenatal care during the pregnancy of their last babies.

Figure 4.6 Attendance of antenatal care by respondents

(Cases N=219, Controls N=72)



Of the respondents in the case group 93.6 % (n=205) respondents attended antenatal care; while 6.4 % (n=14) did not attend antenatal care.

Of the respondents in the control group 95.8 % (n=69) attended antenatal care; and 4.2 % (n=3) did not attend antenatal care.

By implication a large number of women did attend antenatal care (ANC). This is supported by the literature as according to the MoHSS (2001, p.3) at present 87 % of pregnant women make at least one antenatal care visit, the average number of visits is about four.

Of the respondents in the case group 93.6 % (n=205) and in the control group 95.8 % (n=69) attended

antenatal care.

According to the findings there is no relationship between antenatal care attendance and the utilisation of postnatal care services as the p value is (p=0.6638).

4.2.2.4 Postnatal care attendance (N=291) (Cases N=219, Controls N=72)

The respondents were asked to state if they have attended or not attended postnatal care according to the chronological number of birth of their babies. Some women gave birth to one child only, some two, some three and some more.

In the tables 4.6 (a) and 4.6 (b) there is one column indicating not applicable. This refers to women who are not having babies in that order; they did not utilise postnatal care services after each baby.

Table 4.6 (a) Attendance and non-attendance at postnatal care services according to chronological birth of babies of respondents in the case group (n=219)

Birth order of baby	Number of respondents who attended	Percentage (%)	Number of respondents who did not attend	Percentage (%)	Not applicable	Percentage (%)	Total
1 st Baby	47	21.5	172	78.5	0	0	219
2 nd Baby	22	10.0	101	46.1	96	43.8	219
3 rd	13	5.9	57	26.0	149	68.0	219

Baby							
Other	1	0.5	39	17.8	179	81.7	219

Table 4.6 (b) Attendance and non-attendance at postnatal care services according to chronological birth of babies of respondents in the control group (n=72)

Birth order of baby	Number of respondents who attended	Percentage (%)	Number of respondents who did not attend	Percentage (%)	Not applicable	Percentage (%)	Total
1 st Baby	57	79.2	15	20.8	0	0	72
2 nd Baby	43	59.7	7	9.7	22	30.6	72
3 rd Baby	24	33.3	4	5.6	44	61.1	72
Other	12	16.7	2	2.8	58	80	72

Of the respondents on the case group 21.5 % (n=47) attended postnatal care while 78.5 % (n=172) did not attend postnatal care when they were having the first baby; 10.0 % (n=22) attended postnatal care while 46.1% (n=101) did not attend postnatal care when they were having the second baby; 5.9 % (n=13) attended postnatal care while 26.0 % (n=57) did not attend postnatal care when they were having the third baby; and 0.5 % (n=1) attended postnatal care while 17.8 % (n=39) did not attend postnatal care when they were having the other babies.

Of the respondents in the control group 79.2% (n=57) attended post natal care while 20.8% (n=15) did

not attend post natal care while having the first baby; 59.7% (43) attended post natal care while 9.7% (n=7) did not attend post natal care while having second baby; 33.3% (n=24) attended post natal care while 5.6% (n=4) did not attend post natal care while having third baby; and 16.7% (n=12) attended post natal care while 2.8% (n=2) did not attend post natal care while having other babies.

Parity and gravida status influence utilisation of postnatal care services.

It was found that with every subsequent pregnancy the utilisation of postnatal care services declined, this is supported by the literature. According to the MoHSS (2001, p.3) the utilisation of post natal care services is decreasing nationally.

According to the study findings, statistical significance was found between the women who attended postnatal care and those who did not attend postnatal care while they were having their first babies, between the women who attended postnatal care and those who did not attend postnatal care while they were having their second babies as the p value is ($p= 0.00$).

Statistical significance was also found between the women who attended postnatal care and those who did not attend postnatal care while they were having their third babies, and also between the women who attended postnatal care and those who did not attend postnatal care while they were having other babies as the p value is ($p= 0.001$).

It is concluded that more women in the control group have been utilising post natal care services comparing to the women in the case group.

4.2.2.5 Reasons why the respondents did not utilise postnatal care (Cases: N=219)

Respondents were asked to state the reasons why they did not utilise postnatal care.

Table 4.7 Reasons why the respondents did not attend postnatal care (Cases: N=219)

Reasons for not attending postnatal care	Frequency	Percentage (%)
Did not know/not informed to attend postnatal care	159	72.6
Healthy - do not see the need to attend postnatal care	18	8.2
Lack of transport	29	13.1
Service not offered due to staff shortage & knowledge gap/lack of knowledge	8	3.7
No permission from employer	3	1.4
Forget to attend	1	0.5
Busy with something else	1	0.5
Total	219	100

Of the respondents 72.6 % (n=159) indicated that they were not informed and did not know that they were supposed to attend postnatal care; 8.2 % (n=18) indicated that they were healthy and did not see the need to come for postnatal care; 13.1 % (n=29) indicated that they did not attend postnatal care because of lack of transport; 3.7 % (n=8) indicated that they did not attend postnatal care because there was a shortage of staff or the available staff did not know how to do postnatal care; 1.4 % (n=3) indicated that they did not get permission from the employer to attend postnatal care; 0.5 % (n=1)

respondents indicated that they did not attend postnatal care because they forgot to attend; while 0.5 % (n=1) did not attend postnatal care because the respondent was busy with something else.

The results revealed that women were not given health education concerning utilisation of postnatal care services. This finding correlates with a study that was conducted in India on maternal mortality and morbidity that continue to be high due to the under-utilisation of maternal health care services and due to a lack of awareness (Paras, Sigh, Suneela et al, 2007, p. 2).

4.2.2.6 Reasons why the respondents did utilise postnatal care services (Controls: N=72)

Respondents were asked reasons why they attended postnatal care.

Table 4.8 Reasons why the respondents did attend postnatal care (Controls: N=72)

Reasons why respondents attended postnatal care	Frequency	Percentage (%)
Was informed to come for postnatal care	42	58.3
Wanted to know health status such as to make sure if she is healthy, to check if perineal tears have healed, to be examined for abnormalities of reproductive part, breasts, blood pressure	29	40.3
Because of an illness/pain	1	1.4
Total	72	100

Of the respondents of the study indicated that if information is given to clients on postnatal care service utilisation, this information can make clients attend postnatal care services. Information leads to the empowerment of clients who are informed and help them to take decisions. Empowerment is the

process of increasing the capacity of individuals or groups to make choices into desired outcomes and actions. Giving clients health education about the benefits of postnatal care will empower them to understand the benefits and attend postnatal care.

4.2.2.7 The extent to which the respondents were informed to attend postnatal care services during the last pregnancy (N=291) (Cases N=219, Controls N=72)

The respondents were asked to what extent they were informed to attend postnatal care services during the last pregnancy. The responses are depicted in Table 4.9. The respondents' responses were measured on a response scale as follows:

- Not at all
- Once
- Sometimes
- Often
- Always

Table 4.9 The extent to which the respondents were informed to utilise postnatal care (Cases N=219, Controls N=72)

The extent	Cases		Controls	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Not at all	167	76.3	3	4.2
Once	12	5.2	10	13.9
Sometimes	29	13.2	30	41.7
Often	7	3.2	18	25.0
Always	4	1.8	11	15.3
Total	219	100	72	100

Of the respondents in the case group 76.3 % (n=167) were not informed at all to attend postnatal care; 13.2 % (n=29) were sometimes informed to attend postnatal care; 5.2 % (n=12) were informed once; 3.2 % (n=7) were informed often; and 1.8 % (n=4) were always informed to attend postnatal care.

In the control group of the respondents 41.7 % (n=30) were sometimes informed to attend postnatal care; 25.0 % (n=18) were informed often to attend postnatal care; 15.3 % (n=11) were informed every time to attend postnatal care; 13.9 % (n=10) were informed once to attend postnatal care; while 4.2 % (n=3) were not informed at all to attend postnatal care.

According to the literature lack of knowledge on the part of clients makes them not to use health services (MoHSS, 2002, p. 21). Lack of knowledge on postnatal care attendance might have been brought by lack of informing clients to attend postnatal care. It is very important that clients are

informed by nurses to utilise postnatal care, thereby gaining knowledge about all aspects of health promotion for mother and baby.

By comparison, a high number of mothers in the case group were not at all informed to attend postnatal care (76.3 %), while in the control group only 4.2 % of mothers were not informed at all to attend postnatal care, however when the extend to which the respondents were informed to attend post natal care were tested for statistical significance there is no significance between the cases and the control group because the p value is ($p=0.3633$).

4.2.2.8 Source of information on postnatal care services (N=291) (Cases N=219, Controls N=72)

The respondents were asked to state the source of information on postnatal care attendance. The sources of information were ranked as follows:

- Nurse
- Family member(s)
- Neighbour
- Doctor
- Others, such as teachers, TBAs, traditional healers
- Church

Table 4.10 Sources of information on utilisation of postnatal care services

(Cases N=219, Controls N=72)

Sources of information	Cases		Controls	
	Frequency	Percentages	Frequency	Percentage
Nurse	36	16.4%	49	62.2%
Family	10	4.6%	16	20.2%
Neighbour	5	2.3%	2	2.5%
Doctor	5	2.3%	5	6.3%
Other	2	1%	5	6.3%
Church	0	0%	2	2.5%

Of the respondents in the case group, 16.4 % (n=36) were informed by the nurse to attend postnatal care; 4.6 % (n=10) were informed by family members; 2.3 % (n=5) were informed by neighbours; 2.3 % (n=5) were informed by doctors; 1 % (n=2) got information about postnatal care attendance through other sources such as TBAs. No respondents got information about postnatal care from the church.

With regard to the sources of information on utilisation of postnatal care services of the respondents in the control group 62.2% (n=49) were informed to attend postnatal care by the nurses; 20.2 % (n=16) were informed to use postnatal care by family members; 6.3 % (n=5) were informed to utilise postnatal care by the doctors; 6.3 % (n=5) were informed to utilise postnatal care services by other sources such as TBAs; 2.5 % (n=2) were informed to utilise postnatal care services through the church; and 2.5 %

(n=2) were informed to utilise postnatal care services by a neighbour.

Seventy three point five percent (73.5 %) of the respondents in the case group were not informed to utilise postnatal care services; while 100 % in the control group were informed to utilise postnatal care services.

Information is power. Clients' needs and expectations are sometimes not met by health service providers because of lack of information from the health service providers (Alles, Makela & Seuntjens, 1999, p. 24). It can be assumed that women are not utilising postnatal care as expected because of a lack of information about the availability of postnatal care services.

4.2.2.9 The extent to which the respondents were encouraged to attend postnatal care services (N=291) (Cases N=219, Controls N=72)

The respondents were asked to what extent they were encouraged to utilise postnatal care services. The findings are depicted in Table 4.11. The respondents' responses were measured on a scale as follows:

- Not at all
- Once
- Sometimes
- Often
- Always

Table 4.11 Extent to which the respondents were encouraged to attend postnatal care (Cases N=219, Controls N=72)

Extent	Cases		Controls	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Not at all	165	75.3	5	7
Once	22	10.0	7	9.7
Sometimes	16	7.3	25	34.7
Often	15	6.9	21	29.2
Always	0	0.0	14	19.4
No response	1	0.5	0	0.0
Total	219	100	72	100

Of the respondents in the case group 75.3 % (n=165) were not encouraged to attend postnatal care; 10.0 % (n=22) were encouraged once to attend postnatal care; 7.3 % (n=16) were encouraged sometimes; 6.9 % (n=15) were encouraged often to attend postnatal care and 0.5 % (n=1) did not respond.

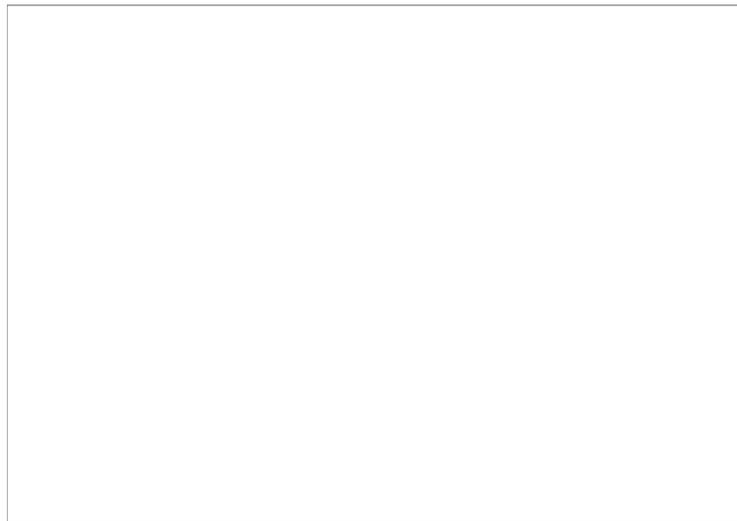
In the control group 34.7 % (n=25) were sometimes encouraged to attend postnatal care; 29.2 % (n=21) were encouraged often to attend postnatal care; 19.4 % (n=14) were always encouraged to attend postnatal care; 9.7 % (n=7) were encouraged once to attend postnatal care; and 7 % (n=5) were not encouraged at all to attend postnatal care.

According to the findings of the study there is no strong relationship between encouragement to utilise postnatal care services and the actual utilisation of postnatal care services as the p value is (p=0.5601).

But according to the literature low figures of health services including post natal care utilisation are caused by failure to inform patients at antenatal clinics and after confinement of the importance of postnatal care examinations (MoHSS 2007 , p, 10).

4.2.2.10 The extent to which the respondents were you given health education during pregnancy and labour

Figure 4.7 Health education about labour



Of the respondents in the case group 63.0 % (n=138) were not given health education about the labour process at all; 14.1 % (n=31) were given health education about the labour process sometimes; 11.0 % (n=24) were given health education about the labour process once; 6.4 % (n=14) were given health education about the labour process always; and 5.5 % (n=12) were given health education about the

labour process often.

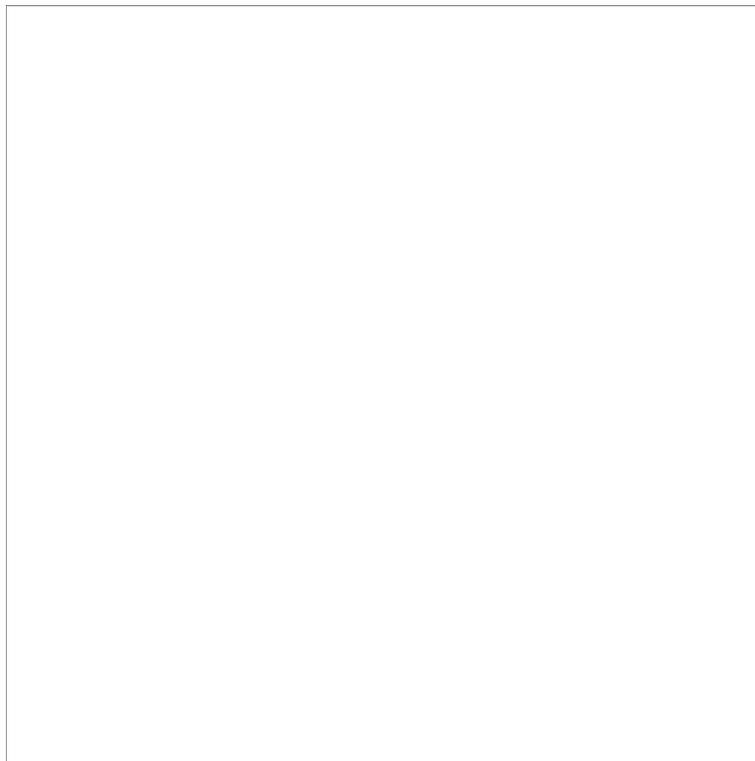
Of the respondents in the control group, 37.5 % (n=27) were not given health education about the labour process at all; 23.6 % (n=17) were given health education sometimes; 19.4 % (n=14) were given health education once; 11.1 % (n=8) were given health education always; 8.4 % (n=6) were given health education often.

This question was asked to determine whether respondents received health education about the whole process of childbirth. The findings of the study indicates a statistical significance between the cases and the control group, the control group have received more health education comparing to the cases group as the p value is ($p=0.0363$).

Giving information to clients is very important, as information makes clients aware of available services (MIB, 2007, p, 10). Women in the control group have received more information about the labour process and this might have prompted them to attend post natal care in large numbers.

Postnatal care

Figure 4.8 Health Education about postnatal care



Of the respondents in the case group 82.2 % (n=180) were not given health education about postnatal care at all; 8.7 % (n=19) were given health education about postnatal care sometimes; 5.9 % (n=13) were given health education about postnatal care often; 1.8 % (n=4) were given health education always; 1.4 % (n=3) were given health education about postnatal care once.

In the control group of the respondents 30.6 % (n=22) were given health education about postnatal care sometimes; 25.0 % (n=18) were not given health education at all; 20.8 % (n=15) were given health education about postnatal care often; 19.4 % (n=14) were given health education about postnatal care

always; while 4.2 % (n=3) were given health education about postnatal care once.

According to WHO (2007, p. 11) the postnatal period is also an excellent opportunity to get information regarding the following:

- Breastfeeding
- Sexual relations
- Diet
- Exercises
- Family planning
- Immunizations of mother and baby
- Sleep

Giving information to women about postnatal care will help women understand about postnatal care and internalise the positive impact of postnatal care on women. The positive understanding of women about postnatal care will serve as an internal motivator to attend postnatal care.

Internal motivation is the personal drive people have that continues to inspire them to act for change over a long period of time (Malan, 2006, p. 51).

In general, existing literature support the belief that giving information about post natal care to women can increase post natal care attendance. The p-value calculated from the research data yielded a p-value

of 0.5606, which was considered not significant according to the study's 5% level of significance. Since $p=0.5606$ falls within our accept region, the conclusion was that data available was not evidence enough for us to dispel the existing belief that a positive relation exists between post natal care health education and attendance.

Enlargement of breasts

The respondents were asked to what extent they were given health education about enlargement of breasts during pregnancy and the puerperium.

In the case group of the respondents 51.1 % (n=112) were not given health education about enlargement of breasts at all; 15.1 % (n=33) were given health education about enlargement of breasts; 13.2 % (n=29) were given health education about enlargement of breasts sometimes; 12.3 % (n=27) were given health education about enlargement of breasts often; 8.3 % (n=18) were given health education about enlargement of breasts always.

In the control group of the respondents 26.4 % (n=19) were not given health education about enlargement of breasts; 23.6 % (n=17) were given health education about enlargement of breasts sometimes; 22.2 % (n=16) were given health education about enlargement of breasts often; 18.1 % (n=13) were given health education about enlargement of breasts once; while 9.7 % (n=7) were given health education about enlargement of breasts always.

Tamir (2002, p. 265) points out that during pregnancy, as a result of secretion of various hormones such as oestrogen, progesterone and prolactin, the glands in the breasts increase in number and size. As

a result of increases in number and sizes of glands, the breasts start to become enlarged as the body is getting ready to produce milk and feed the expected baby.

It is very important for pregnant women visiting the health facilities to get this information so that they can anticipate changes in their bodies.

According to the study findings the p value is ($p=0.2530$) which indicates no statistical significance between the case group and the control group on health education about breast enlargement.

Family planning

Family planning refers to methods which men and women use to prevent having unintended pregnancies and too many children (WHO, 1999, p. x).

According to the WHO (1999, p. x) family planning has the following benefits:

- The family will have children when they choose to.
- The family will have only as many children as it wants and can provide for.
- The family or couple can space their children properly.
- Family planning contributes to the health of the mother, her babies, her family and society in general.

On health education with regard to family planning, of the respondents in the cases group 34.7 %

(n=76) were not given health education at all; 22.8 % (n=50) were given health education about family planning always; 18.7 % (n=41) were given health education about family planning often; 16.9 % (n=37) were given health education about family planning sometimes; 6.9 % (n=15) were given health education about family planning once.

On health education with regard to family planning of the respondents in the control group 40.3 % (n=29) were given health education about family planning often; 31.9 % (n=23) were given health education about family planning always; 13.9 % (n=10) were given health education about family planning sometimes; 12.5 % (n=9) were not given health education at all; while 1.4 % (n=1) were given health education about family planning once.

Women are supposed to be given health education about family planning. Family planning has health and economic benefits.

Ensuring access to family planning information, services and commodities is essential to protecting the health and well-being of women, families and societies as a whole (UNFPA, 2006, p. 1).

However, no statistical significance was found between the case group and the control group about health education with regard to family planning as the p value is ($p=0.06413$).

Immunisation of baby

Immunisation is the most cost-effective preventative health intervention currently available especially

in developing countries (Ministry of Health, 2002, p. 3). Immunisation is a very important strategy as it can save lives as well as help the economy of the country.

In Namibia there is a programme called Expanded Programme on Immunisation within the Ministry of Health and Social Services. The programme focuses on the prevention of childhood vaccine preventable diseases through maintaining high routine immunisation coverage levels (MoHSS, 2006, p. 4).

The respondents were asked to what extent they were given health education during pregnancy and labour about immunisation of the baby.

**Table 4.12 Health education about immunisations during pregnancy and labour
(Cases N=219, Control N=72)**

The extent	Cases		Controls	
	Frequencies	Percentages (%)	Frequencies	Percentages (%)
	Not at all	15	7	3
Once	6	2.7	0	0.0
Sometimes	29	13.2	10	13.9
Often	57	26.0	22	30.6
Always	112	51.1	37	51.3

Total	219	100	72	100
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Of the respondents in the case group, 51.1 % (n=112) were given health education always; 26.0 % (n=57) were given health education often about immunisations; 13.2 % (n=29) were given health education sometimes; 7 % (n=15) were not given health education at all; while 2.7 % (n=6) were given health education once about immunisation.

Of the respondents in the control group 51.3 % (n=37) were given health education always; 30.6 % (n=22) were given health education often; 13.9 % (n=10) were given health education sometimes about immunisations; while 4.2 % (n=3) were not given health education at all.

According to the study findings there is statistical significance between the case group and the control group with regard to health education about immunization and post natal care utilization as the p value is (p=0.0008).

Personal hygiene

Hygiene is the science of health and its maintenance. Personal hygiene is the self-care by which people maintain health (Kozier, Erb & Bufalino, 1995).

Of the respondents in the case group 41.5% (n=91) were given health education always; 22.4 % (n=49) were given health education often; 19.6 % (n= 43) were not given health education at all; 11.9 %

(n=26) were given health education sometimes; 4.6 % (n= 10) were given health education once.

Of the respondents in the control group 37.5 % (n=27) were given health education always; 34.7 % (n=25) were given health education often; 15.3 % (n=11) were given health education sometimes; 11.1 % (n=8) were not given health education at all; while 1.4 % (n=1) were given health education once.

It is very important that mothers or clients are given health education about personal hygiene. Personal hygiene is one of the basic ways to reduce the risk of infections and promote someone's health. By giving mothers health education about personal hygiene, health workers are promoting the health of mothers and their babies.

According to the study findings there is no statistical significance between the cases group and the control group with regard to the utilisation of post natal care and health education on personal hygiene as the p value ($p=0.0651$).

Safe sex

Safe sex is also said to be a set of practices that are designed to reduce the risk of infection during sexual intercourse to avoid developing sexually transmitted diseases and infections (STDs) (Webster, 2007, p. 1).

It is important for clients to be given health education on how to prevent or to reduce the risk of

contracting sexually transmitted infections. If they are not given health education about sexually transmitted infections, they will lack knowledge which might increase sexually transmitted infections in the community.

On the issue of health education with regard to safe sex of the respondents in the case group 52.1 % (n=114) were given health education always; 23.7 % (n=52) were not given health education at all; 15.1 % (n=33) were given health education often; 6.4 % (n=14) were given health education sometimes; while 2.7 % (n=6) were given health education once.

On the issue of health education with regard to safe sex of the respondents in the control group 53% (n=39) were given health education always; 19.5 % (n=14) were given health education often; 13 % (n= 9) were given health education sometimes; 13 % (n=9) were not given health education at all; 1.5 % (n=1) were given health education once.

By implication a large number of respondents were given health education about safe sex. A relationship was found between utilisation of post natal care and health education on safe sex as the p value is (p=0.172).

4.2.2.11 The extent to which the respondents were given health education during pregnancy and childbirth concerning the care of the newborn baby (N=291) (Cases N=219, Control N=72)

The respondents were asked to what extent they were given health education during pregnancy and

childbirth concerning the care of the newborn with regard to the following:

- Umbilical care
- Bathing baby
- Sore buttocks
- Breastfeeding
- Jaundice
- Developmental milestones
- Immunisations

Umbilical care

Umbilical care involves keeping the stub of the umbilicus clean and dry as it shrivels and eventually it will fall off (WHO, 2004, p.4).

It is very important for mothers to be educated on how to care for the umbilicus in order to keep it clean and hygienic.

Keeping the umbilical area clean helps to prevent or reduce the risk of infections and prevents infections. Mothers should be advised not to put things like herbs, soil, soaps, animal faeces or any other substances on the umbilical stub which might cause infection.

Of the respondents in the case group 33.8 % (n=74) were not given health education at all about umbilical care; 22.4 % (n=49) were given health education sometimes; 16.4 % (n=36) were given health education always; 16.0 % (n=35) were given health education once; 11.4 % (n=25) were given health education often.

Of the respondents in the control group 32 % (n=23) were given health education sometimes about umbilical care; 23.6 % (n=17) were given health education about umbilical care often; 19.4 % (n=14) were given health education on this topic always; 19.4 % (n=14) were not given health education on this topic at all; 5.6 % (n=4) were given health education on this topic once.

By the findings of the study of the respondents in the case group 16.4 % (n=36) were given health education on this topic always, while 19.4 % (n=14) in the control group were given health education on this topic always. There are no significant differences on how health education about umbilical care was given between the case and the control groups as the p value is (p=0.8089).

Bathing baby

Of the respondents in the case group 29.6 % (n=65) were not given health education at all about bathing the baby; 22.4 % (n=49) were given health education on this topic always; 21.5 % (n=47) were given health education sometimes about bathing the baby; 14.6 % (n=32) were given health education often about bathing baby; 11.9 % (n=26) were given health education once about bathing baby.

In the control group of the respondents 29.2% (n=21) were given health education about bathing baby always; 29.2 % (n=21) were given health education about bathing baby sometimes; 22.2 % (n=16) were given health education about bathing baby often; 11.1 % (n=8) were given health education about bathing baby once; while 8.3 % (n=6) were not given health education on this topic at all.

No significant difference was found between case group and control group with regard to health education about bathing baby and utilisation of post natal care as the p value is ($p=0.9194$).

Sore buttocks

Sore buttocks can be said to be the buttock's skin reaction to irritations in which the buttocks become reddish and sometimes swollen (WHO, 2007, p.5). The baby's buttocks might become red due to contact between urine and the skin and especially if there is prolonged wetness.

Sore buttocks can be a source of great discomfort for the baby. Due to irritation of the buttocks the baby can become irritated and cry and eventually sore buttocks can become a source of discomfort to the mother.

In the case group of the respondents 58.0 % (n=127) were not given health education at all about sore buttocks; 13.2 % (n=29) were given health education always about sore buttocks; 11.0 % (n=24) were given health education on this topic often; 9.1 % (n=20) were given health education on this topic sometimes; while 8.7 % (n=19) were given health education on this topic once.

In the control group if the respondents 48.6 % (n=35) were not given health education on this topic at all; 19.5 % (n=14) were given health education once about sore buttocks; 12.5 % (n=9) were given health education about sore buttocks once; 11.1 % (n=8) were given health education on this topic often; while 8.3 % (n=6) were given health education.

By implications of the study findings there is a significant difference between the cases group and the control group with regard to health education about sore buttocks and the utilisation of post natal care as the p value is ($p=0.142$).

Breastfeeding

Breastfeeding refers to the feeding of an infant or young child with milk from a woman's breasts. Babies have a sucking reflex that enables them to suck and swallow milk (WHO, 2007, p 3).

Breastfeeding is the best form of infant feeding, except when contra-indicated on medical grounds. Therefore it is important for nurses or doctors to teach mothers how to breastfeed as well as explain the importance of breastfeeding.

Of the respondents in the case group 43.8 % (n=96) were given health education on this topic always; 22.4 % (n=49) were given health education about breastfeeding often; 16.5 % (n=36) were not given health education on this topic at all; 13.2 % (n=29) were given health education sometimes about breastfeeding; while 4.1 % (n=9) were given health education once about breastfeeding.

Of the respondents in the control group 51.3 % (n=37) were given health education on this topic always; 26.4 % (n=19) were given health education often about breastfeeding; 15.3 % (n=11) were given health education once about breastfeeding; 5.6 % (n=4) were not given health education at all; while 1.4 % (n=1) were given health education sometimes about breastfeeding.

Most of the respondents in the study were given health education on breastfeeding. In the case group only 16.4 % and in the control group only 5.6 % were not given health education on this topic at all, as a result no significant difference was found between health education about breastfeeding and utilisation of post natal care as the p value is ($p=0.0663$) .

According to the literature is very important that health workers give health education about breastfeeding. According to Katz (2002, p. 1) breastfeeding has the following advantages:

- It enables the mother to bond with her baby.
- It is cheap, as it is readily available.
- It saves time, as there is no need to prepare milk.
- It helps the uterus to contract to its normal size.

Mothers need information about issues of breastfeeding. Although breastfeeding has a lot of advantages compared to other types of feeding, at times mothers need to be guided to make informed choices. “Breastfeeding is normally the best way to feed an infant. However, when the mother is infected with HIV, it may be best to replace breast milk to reduce the risk of transmitting HIV to the

infant” (WHO, 1999, p. 13). One of the issues of concern is HIV/AIDS.

According to the MoHSS (2006, p. iii) the national HIV prevalence was 19.7 % in 2004. HIV is a virus which can be transmitted from the HIV positive mother to the baby through breast milk. Mothers need to be informed of the relationship between HIV transmission and breastfeeding.

Although breast milk is best for all babies, babies born to HIV positive mothers need special feeding.

According to the MoHSS (2007, p. 52) the HIV positive mothers need to be counselled to choose between the following types of feeding:

- Exclusive breastfeeding for the first four months of the child’s life and then abruptly stopping, followed by alternative feeding options.
- Exclusive replacement feeding of the infants with infant formula or modified cow or goat’s milk where they are available, acceptable, safe and sustainable in the home.

Therefore it is important that nurses and midwives educate mothers on breastfeeding and infant feeding according to the mother’s condition.

Jaundice

Of the respondents in the case group 84.0 % (n=184) were not given health education on this topic at

all; 8.7 % (n=19) were given health education about jaundice once; 3.2 % (n=7) were given health education about jaundice often; 2.7 % (n=6) were given health education about jaundice always; 1.4 % (n=3) were given health education about jaundice sometimes.

Of the respondents in the control group 77.7 % (n=56) were not given health education on this topic at all; 8.3 % (n=6) were given health education about jaundice once; 5.6 % (n=4) were given health education about jaundice sometimes; 4.2 % (n=3) were given health education about jaundice often; while 4.2 % (n=3) were given health education about jaundice all the time.

A significant statistical difference was found between health education about jaundice and post natal care utilisation as the p value is (p=0.0001). The majority of the respondents in both the case (84.0 %) and control (77.8 %) groups were not given health education about jaundice.

Developmental milestones

Developmental milestones involve the stages or the process of development of important events in the baby's life. Milestones are punctuations in a baby's growth and development (Ball and Bindler, 1995, p.40).

Milestones involve the development of abilities to perform certain tasks as the baby grows up. Milestones involve physical development by the baby. Developmental milestones depend on the baby's age and different babies can develop the same skills at different ages.

Of the respondents in the case group 84.0 % (n=184) were not given health education on milestones at all; 7.3 % (n=16) were given health education about milestones once; 5.0 % (n=11) were given health education always; 2.3 % (n=5) were given health education about milestones often; while 1.4 % (n=3) were given health education about milestones sometimes.

Of the respondents in the control group 69.4 % (n=50) were not given health education on milestones at all; 9.7 % (n=7) were given health education about milestones always; 9.7 % (n=7) were given health education about milestones once; 7 % (n=5) were given health education about milestones sometimes; while 4.2 % (n=3) were given health education about milestones often.

By implications of the study, statistical significance was found between health education about developmental milestones and utilisation of post natal care as the p value is (p=0.0001).

It is very important for mothers to be informed that as the baby grows, it will start to develop or do things which other human beings are doing. Different babies of the same age may not perform similar milestones or actions at the same time, the development of milestones may differ from one baby to another. But if mothers are in doubt, they should always be reassured to visit the nearest health facility for advice.

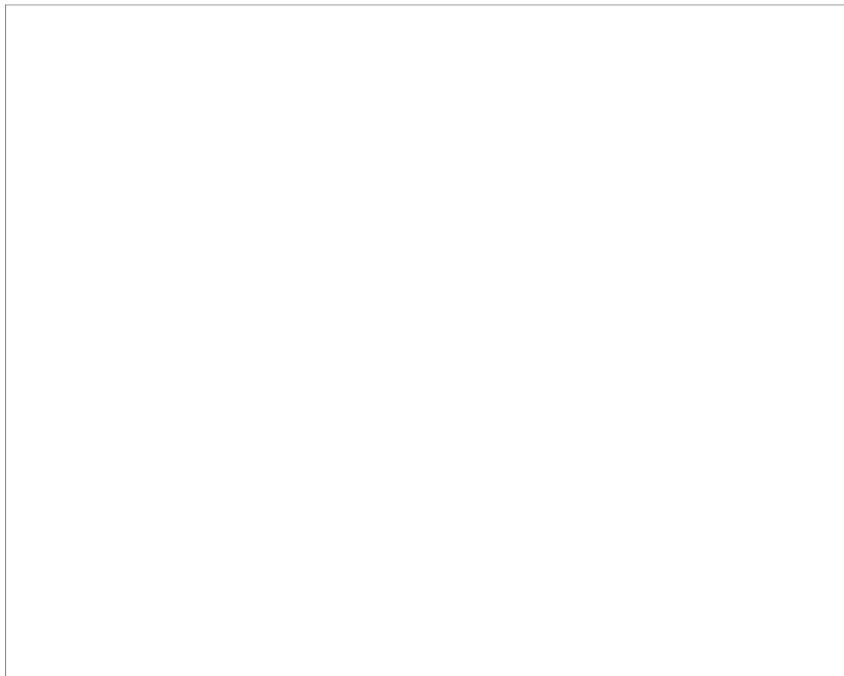
Immunisation

The respondents were asked to what extent they were given health education about immunisation of baby.

The responses are depicted in figure 4.9.

Figure 4.9 Health education about immunisation

(Cases N=219, Controls N=72)



In the case group of the respondents 75.8 % (n=166) were given health education on this topic always;

8.7 % (n=19) were given health education about immunisations often; 7.3 % (n=16) were not given health education on this topic at all; 5.9 % (n=13) were given health education about immunisations sometimes; while 2.3 % (n=5) were given health education about immunisations once.

In the control group of the respondents 81.9 % (n=59) were given health education on this topic always; 12.5 % (n=9) were given health education about immunisation often; 4.2 % (n=3) were given health education about immunisation sometimes; while 1.4 % (n=1) were not given health education on this topic at all.

Immunisation promotes health, prevents diseases and disability. Women who are given information about other health services are likely to use post natal care.

By implication of the study, respondents were given health education to a large extent about immunisations. In the case group 75.8 % were given health education about immunisations always, while in the control group 81.9 % were given health education about immunisations always, according to the study findings a significant difference was found between health education about immunisation and utilisation of post natal care services as the p value is ($p=0.0004$) .

4.2.2.12 How were the respondents received at the health facility (N=291) (Cases N=219, Control N=72)

The respondents were given words to choose one which expresses the way they were received at the facility.

The respondents were asked to choose from:

- Friendly
- Very friendly
- Neutral
- Hurried
- Unfriendly
- Rude
- Slow

Table 4.13 Respondents' responses on how they were received at the health facility

Variables	Cases		Controls	
	Number of respondents	Percentage (%)	Number of respondents	Percentage (%)
Friendly	71	32.4	21	29.2
Very friendly	34	15.5	24	33.3
Neutral	30	13.6	4	5.6
Hurried	38	17.4	21	27.7
Unfriendly	5	2.3	1	1.4
Rude	14	6.4	1	1.4

Slow	26	11.9	1	1.4
No response	1	0.5	0	0.0
Total	219	100	72	100

Of the respondents in the case group 32.4 % (n=71) were received in a friendly way; 17.4 % (n=38) were received hurriedly; 15.5 % (n=34) were received in a very friendly way; 13.6 % (n=30) were received in a neutral way; 11.9 % (n=26) were received in a slow manner; 6.4 % (n=14) reported to be received in a rude way; 2.3 % (n=5) reported to be received in an unfriendly way; 0.5 % (n=1) did not respond.

Of the respondents in the control group 33.3 % (n=24) reported to be received in a very friendly way; 29.2 % (n=21) reported to be received in a friendly way; 29.2 % (n=21) reported to be received in a hurried way; 5.6 % (n=4) reported to be received in a neutral way; 1.4 % (n=1) reported to be received in an unfriendly way; 1.4 % (n=1) reported to be received in a rude way; while 1.4 % (n=1) reported to have been received in a slow way.

Users of services can evaluate their experiences and provide feedback on how they received the service. The feedback can be about how the client was received and how the client was treated (Ministry of Social Affairs and Health, 1999, p. 15).

It is very important that clients are received in a friendly way, because if clients are so received they (clients) will listen well to what health workers are telling them. Receiving clients in a friendly way will also encourage clients to attend postnatal care. Positive attitudes promote cooperation between

clients and health workers. Receiving clients in a negative way makes clients reluctant to use health services. This is even more serious especially when dealing with adolescents.

4.2.2.13 Indicate the ways, if any, that will enable you to attend postnatal clinics

It was indicated by both groups that they need adequate information about the importance of the utilisation of postnatal care services.

4.3 SUMMARY

The results were discussed in this chapter. Some observations were made that although demographic variables like age, marital status, distance and transport play a role in utilising services in this study, there was no significant finding between the two groups. What was important was the fact that women were not informed about the importance of utilisation of the services. The next chapter deals with the conclusions, recommendations and limitations.

CHAPTER 5

CONCLUSION, RECOMMENDATION AND LIMITATIONS

5.1 INTRODUCTION

This chapter contains conclusions, recommendations and the limitations of the study. The study originated from the evidence and recognition that women do not utilise postnatal care services as they should in the Grootfontein health district. The health of mothers and their babies is a concern worldwide and in Namibia. It is against this background that the study was undertaken to identify factors that influence a mother's decision to utilise postnatal care services or not. More specifically the objectives of the study were to:

- Determine the demographic data of the respondents.
- Explain the reasons for the utilisation or non-utilisation of postnatal care services by women.
- Explore the extent to which women were informed/educated/encouraged about the importance of utilising postnatal care services.
- Describe how respondents were received by staff at the health care facilities for postnatal care.
- Identify needs that will enable respondents to attend postnatal care services.

The study relied on the Health Promotion Model of Pender (HPM) as a guide which indicates factors that influence people's health behaviour.

5.2 CONCLUSIONS

The study clearly established some factors and information that contribute to the utilisation or non-utilisation of postnatal care services. The conclusions will be presented according to the objectives of the study and the conceptual framework that was used.

Objective 1: *To determine the demographic data of the respondents (individual characteristics)*

It was concluded that:

Significant statistical difference were found some demographic data being age

- No significant statistical differences were found in the demographic data of respondents, marital status, religion, educational status, language, employment, place of residence and distance from clinic or health centre.
- Significant statistical difference were found on the demographic data of age

Objective 2: *Explain reasons for attendance or non-attendance of postnatal care services by women (behaviour-specific cognition and effect)*

It was concluded that:

- Firstly, there was a significant statistical difference concerning post natal care attendance in

subsequent pregnancies between the case and the control group and utilisation of postnatal care services. It was clear that with every subsequent pregnancy and childbirth the utilisation of postnatal care services declined.

- Secondly, there were several reasons for not utilising postnatal care services in which the most was a lack of information. This was evident from the following findings. The reasons given were:
 - did not know, was not informed (159 – 72.6 %);
 - did not see need to utilise service;
 - lack of transport;
 - no service available – lack of staff;
 - no permission of employer;
 - was busy; and
 - had forgotten.
- Thirdly, the women who utilised the services (control group) did so because they were informed. The following findings are evidence of that. The reasons for utilisation of services were given as:
 - were informed to do so (42 – 58.3 %);
 - wanted to know health status; and
 - because of pain.

Objective 3: *To explore the extent to which women were informed or encouraged and educated about utilisation of postnatal care services (behaviour-specific cognition and effect)*

It was concluded that most of the women (167 – 76.3 %) in the case group were not informed at all to utilise postnatal care services. In the control group 18 (25 %) were informed often and 11 (15.3 %) were always informed.

Furthermore, most respondents in both groups (case 36 (16.4%) and control 49 (62.2%)) indicated that they were informed by a nurse.

Concerning encouragement, again most of the respondents in the case group (165 – 75.3 %) were not encouraged to utilise services while 21 (29.2 %) in the control group were often encouraged to utilise services.

Regarding health education about post natal care, 180 (82.2 %) respondents in the case group were not given health education, and in the control group 22 (30.6 %) were given health education sometimes.

On health education during pregnancy it can be concluded that the items that most of the case group did not get health education on were:

- Postnatal care: 180 (82.2 %)
- Labour process: 138 (63.0 %)

- Breast enlargement: 112 (51.1 %)
- Family planning: 76 (34.7 %)

Aspects which most of the control group received health education on were:

- Postnatal care: 17 (23.6 %)
- Labour process: 17 (13.6 %) (not)
- Breast enlargement: 17 (23.6 %)
- Family planning: 29 (40.3 %)

Both groups had education on:

- Personal hygiene
- Safe sex
- Immunisation of baby

It seems that most respondents in the two groups were not given health education on the labour process.

Concerning health education on the baby it can be concluded that most respondents in the case group were not given health education on umbilical cord care (74–33.8%) while most respondents in the control group (17 – 23.6 %) were given the necessary health education on this topic. Also, the same was found concerning the bathing of the baby where most respondents in the case group (65 – 29.6 %) were not given health education at all in this regard, while most of the respondents in the control group (21 – 29.2 %) did receive health education on this topic.

It seemed that most respondents in both groups did get health education on breastfeeding, but did not get health education on sore buttocks and jaundice of the baby.

Objective 4: *To determine how respondents were received at the health facility (situational influence)*

It can be concluded that the majority of the respondents in both the case and control group indicated that they were received in either a friendly or very friendly manner.

Of the respondents in the case group 32.4 % (n=71) were received in a friendly way, while 29.2 % (n=21) in the control group were received in a friendly way. Of the respondents in the case group 15.5 % (n=34) were received in a very friendly way, while 33.3 % (n=24) in the control group were received in a very friendly way.

Users of services can evaluate their experiences and provide feedback on the services received. The feedback may concern how the process of providing feedback went, what happened and how the client or customer was treated (Ministry of Social Affairs and Health, 1999,p.15).

Through the study, the respondents were asked to give feedback on how they were received at the health facility.

It is important that clients are received in a friendly or very friendly way. If clients are not received in such manner they might not come back to receive services.

Objective 5: *To identify the needs, if any, that will enable respondents to utilise postnatal care services (cognitive factors and effect)*

It was concluded that both groups expressed the need for health education on the importance of utilising postnatal care services. In the case group 180 (82.1 %) and the control group 59 (84.9 %) indicated this need.

5.3 RECOMMENDATIONS

It was clear from the findings that not all women were informed about the importance of utilising postnatal care services. Therefore, the first recommendation is:

- **Effective and continuous health education by all members of the health team**

Health education is education given to clients in order to tell them to act in a manner which will influence their behaviour favourably (WHO, 1998, p.23).

The client has a right to be informed about postnatal and its benefits through health education. It is the obligation of the service providers and caregivers to provide this information in an honest way, while respecting the client's right to confidentiality.

It is believed that health education makes people understand issues, because health education increases the knowledge of people on health issues. When a person's knowledge increases the person's belief is influenced. "Beliefs in turn influence attitudes, which are without exception for or against a certain concept or person." (Bouwer, Dreyer, Herselman, Lock & Zeeling, 2001, p. 64).

People attach importance to issues depending on how people value those important issues. The attendance and non-attendance of mothers at postnatal care clinics depends on the value towards health behaviours attached to postnatal care which can only be obtained through health education.

Health education is important since it can determine how well individuals and families are able to perform behaviours conducive to optimal self-care, in this case utilisation of postnatal care services.

The changes in today's health care environment require the use of an organised approach to health education so that patients can meet their health care needs. Furthermore, the demands from consumers for comprehensive information about their health issues throughout their lifecycle emphasise the need for health education to occur in every nurse-patient encounter.

The emphasis on health education stems in part from the public's right to comprehensive health care, which includes health education. Health education can help individuals to adapt to illness, prevent complications and solve problems when confronted with new situations.

The second recommendation relates to:

- **Health service provider**

A proper system on how health information should be communicated to patients should be implemented covering the following aspects:

- Importance of postnatal care for mother and baby
- Dates to return to the health facility
- What can be expected from different services

This can be done by means of:

- Booklets on admission to patients

- Cards with dates on discharge of patients
- Radio broadcasting
- Television

The third recommendation relates to:

- **Education of patients/clients**

Health education about postnatal care for women on a regular basis is very important. Health education about the importance of postnatal care can be done during antenatal care sessions in clinics by the nurses. This can be made routine in all health facilities providing antenatal and postnatal care.

Knowledge and skills are needed for active participation of clients in health promotion efforts (WHO, 1998, p. 23).

For clients to participate and utilise postnatal care services, they have to be made to understand what postnatal care is and its importance. It is through health education that clients can be empowered to utilise postnatal care. Individual clients should be given health education at antenatal clinics and in maternity wards in order to come to postnatal clinics. Clients who are eligible to attend postnatal care should be given dates written on their passports on when to come for postnatal care. It should be emphasized to clients that postnatal care is important just like antenatal care even if someone is not feeling sick.

The fourth recommendation relates to:

- **Community involvement**

Community participation is one of the important ways to bring community members closer to health services. The community can offer a lot of opportunities for the improvement of health services.

“We are living in a time of unprecedented opportunities for health” (WHO, 2004, p. 3). If community participation in health programmes is strengthened, there are a lot of opportunities for health care delivery to be improved. In the community there are Community Own Resource Persons (CORPs) who are trusted by community members. The CORPs includes TBAs, religious leaders, traditional leaders, retired teachers and nurses, etc. The Community Own Resource Persons have to be informed about the importance of postnatal care by nurses working in those respective communities. In turn the Community Own Resource Persons have to educate community members about postnatal care. In this way the community might feel involved and understand the importance of postnatal care.

The development by community members of a sense of ownership, a sense of authority and control, and empowering people to take control of their lives is very important for the success of health services. And the community is likely to participate in any programme when they understand the benefits.

The fifth recommendation relates to:

- **Social mobilization**

Social mobilization is a process of bringing all social partners in health in order to raise awareness about a particular subject of interest (MoHSS, 1999, p. 1).

For postnatal care and the benefits derived from it to be well known, health workers, especially nurses in Primary Health Care, and needs to be organized at the local level to include postnatal care as one of the topics during inter-sectoral meetings in their catchments areas. Inter-sectoral meetings have to be conducted with social partners in the communities depending on the locality of the community. Social partners in most communities includes traditional leaders, business people, non-governmental organizations, line ministries, churches, political party representative, youth organizations, men's organizations, women's organizations, etc. Through this many community members will become aware of postnatal care.

Outreach services will help women who are far away from health facilities to access postnatal care. Outreach services have to be organized by primary health care supervisors and be carried out by nurses in conjunction with other health services. Outreach services can be provided on a monthly basis as the resources permit.

The sixth recommendation relates to:

- **Education and training of health workers**

Providers of health care services (doctors, nurses) should be able to attend in-service education sessions, workshops and seminars to improve their knowledge and skills about postnatal care services and health education that should be given to patients. Health care providers have a crucial role to play in advocating the utilisation of postnatal care services (MoHSS, 1999, p. 11).

The seventh recommendation relates to:

- **Follow-up system**

A system should be in place to at least be able to trace patients who gave birth in hospital or clinics.

This can be done by mail, telephone, primary health care services, community leaders, to name a few.

- **Further research**

Finally, the researcher recommends that further research be conducted in the following topics:

- Determine whether there are empowerment needs for health workers to carry out health education to clients with regard to postnatal care.
- An in-depth study of postnatal care attendance by mothers, using focus group discussions.

5.4 LIMITATIONS OF THE STUDY

- The study was only conducted in one district that is the Grootfontein district of the Otjozondjupa region, and does not include the views of women from other districts or regions, which could affect the generalisability of the study's findings.

- Conducting research by interviewing women by the researcher who is a male might have been uncomfortable for some women.
- Research on the same topic, but with a different design (qualitative) may produce different research findings.
- The interview schedule should have included more open-ended questions to allow women to share more of their feelings in a personal way.

5.5 SUMMARY

This chapter has provided conclusions and possible recommendations that could be used by management of service providers to improve the utilisation of postnatal care services. It is important for health care professionals to understand the barriers that hinder women from utilising such services and to try to assist women to overcome these barriers.

5.6 CONCLUDING REMARKS

Utilisation of postnatal care services in Grootfontein health care district is low. The factors that influenced this phenomenon were indicated as mainly lack of information and proper education on the importance of postnatal care. A positive attitude to utilise postnatal care services is needed, because complications for mother and baby that occur because of under-utilisation of these services pose a major problem for health care service providers.

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ANNEXURE A

Application and permission to carry out research study:

Application to carry out research study

Permission from the Ministry of Health and Social Services

Permission from the University of Namibia

ANNEXURE B

Explanation letter to get oral permission from the participants

Questionnaire/Structured Interview

QUESTIONNAIRE / STRUCTURED INTERVIEW

Mr R T Nandjila

Student number: 9218130

University of Namibia

Feel free to contact my supervisors if needed:

1. Professor Agnes van Dyk – Dean of the Faculty of Medical and Health Sciences

University of Namibia

Tel: 061-206 3826

2. Mrs Kathe Hofnie

University of Namibia

Tel: 061-206 3207 or 061-27 1846

Cell: 081-234 3205

Dear participant

Patients have to attend antenatal care clinics during the forty weeks of pregnancy and postnatal clinics six weeks after delivery. Antenatal care clinics are attended by large numbers of pregnant women and also large numbers of women give birth in public health facilities. The problem, however, is that only a few women come back to utilise postnatal care services in the Grootfontein health district.

Therefore the purpose of the study is to determine the factors that are associated with the low utilization of postnatal care services. A survey will be done using a structured interview to gather the information.

Confidentiality will be maintained throughout the study by keeping participants anonymous. Participation is voluntary and you may withdraw at any stage of the structured interview. The information that will be gathered will be used to recommend for improvements of shortcomings in the system.

Permission was obtained from the University of Namibian and the Ministry of Health and Social Services to conduct the study.

SECTION 1

DEMOGRAPHIC DATA

1. Age

Indicate your age in the correct space below with an X:

15 – 20 years	<input type="checkbox"/>
21 – 25 years	<input type="checkbox"/>
26 – 30 years	<input type="checkbox"/>
31 – 35 years	<input type="checkbox"/>
36 – 40 years	<input type="checkbox"/>
41 years and above	<input type="checkbox"/>

2. Marital status

Indicate your marital status in the correct space with an X:

Married	<input type="checkbox"/>
Never married	<input type="checkbox"/>
Divorced	<input type="checkbox"/>
Widowed	<input type="checkbox"/>

3. Religion

Indicate your religion in the correct space with an X:

Roman Catholic	<input type="checkbox"/>
	<input type="checkbox"/>
Anglican	<input type="checkbox"/>
	<input type="checkbox"/>
ELCIN	<input type="checkbox"/>
	<input type="checkbox"/>
Muslim	<input type="checkbox"/>
	<input type="checkbox"/>
Others (specify)	<input type="checkbox"/>
	<input type="checkbox"/>

4. Educational status

Indicate your educational status in the correct space with an X:

Not attended school	<input type="checkbox"/>
	<input type="checkbox"/>
Attended primary school	<input type="checkbox"/>
	<input type="checkbox"/>
Attended secondary school	<input type="checkbox"/>
	<input type="checkbox"/>
Tertiary education	<input type="checkbox"/>
	<input type="checkbox"/>

5. Language or mother tongue

Indicate your mother tongue in the correct space with an X:

Oshiwambo	<input type="checkbox"/>
	<input type="checkbox"/>
Otjiherero	<input type="checkbox"/>
	<input type="checkbox"/>
Damara>Nama	<input type="checkbox"/>
	<input type="checkbox"/>
Afrikaans	<input type="checkbox"/>
	<input type="checkbox"/>
Others (specify)	<input type="checkbox"/>
	<input type="checkbox"/>

6. Employment

Indicate whether you are employed or not:

Yes	<input type="checkbox"/>
	<input type="checkbox"/>
No	<input type="checkbox"/>
	<input type="checkbox"/>

7. Place of residence

Indicate the correct answer with an X:

Rural	<input type="checkbox"/>
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	<input type="checkbox"/>
Urban	<input type="checkbox"/>
Semi-urban squatters	<input type="checkbox"/>
	<input type="checkbox"/>

8. Distance from clinic or health centre

Indicate the correct answer with an X:

< 2 km	<input type="checkbox"/>
Between 2 – 5 km	<input type="checkbox"/>
Between 6 – 10 km	<input type="checkbox"/>
> 10 km	<input type="checkbox"/>
	<input type="checkbox"/>

SECTION 2

QUESTIONS RELATED TO UTILIZATION OF POSTNATAL CARE SERVICES

9. How many living children to you have? (Abortion, IUDS, ectopic pregnancies, neonatal deaths)

Parity	<input type="text"/>
	<input type="text"/>
Gravidity	<input type="text"/>
	<input type="text"/>

10. Where did you give birth to your last child?

Home	<input type="text"/>
	<input type="text"/>
Hospital	<input type="text"/>
	<input type="text"/>
Clinic	<input type="text"/>
	<input type="text"/>
Health Centre	<input type="text"/>
	<input type="text"/>

11. Have you attended antenatal care?

Yes	<input type="text"/>
	<input type="text"/>
No	<input type="text"/>
	<input type="text"/>

12. Have you ever attended postnatal clinic after the births of your baby/babies?

<input type="text"/>	Yes	No
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1 st baby		
2 nd baby		
3 rd baby		
Others (specify)		

13. Indicate the reasons why you did not attend postnatal care.

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14. Indicate the reasons why you did attend postnatal care.

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15. To what extent were you informed to attend postnatal care?

Not at all 1 2 3 4 5 always

16. Who did inform you to attend postnatal clinic? Indicate with an X in the correct space.

Neighbour	
Family	
Church	
Nurse	
Doctor	
Other	

17. To what extent were you encouraged to attend postnatal care?

Not at all 1 2 3 4 5 always

18. To what extent were you given health education during pregnancy and labour about the following?

	Not at all	1	2	3	4	5	Always
Labour process							
Postnatal care							

Enlargement of breasts							
Family planning							
Immunization of baby							
Personal hygiene							
Safe sex							

19. To what extent were you given health education during pregnancy and childbirth concerning the care of the newborn?

	Not at all	1	2	3	4	5	Always
Umbilical care							
Bathing baby							
Sore buttocks							
Breastfeeding							
Yellow discoloration (Jaundice)							
Milestones							
Immunization							

20. How were you received at the health facility?

	Yes	No
Friendly		

Very friendly		
Neutral		
Hurried		
Rude		
Slow		

21. Indicate the needs if there is any that will enable you to attend postnatal care?

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Interpretation of scale – question numbers 15, 17, 18, 19:

1. *Refers to not at all*
2. *Refers to once*
3. *Refers to sometimes*
4. *Refers to often*
5. *Refers to always*