THE PRACTICE OF THE TRADITIONAL BIRTH ATTENDANTS DURING PREGNANCY, LABOR, AND POSTPARTUM PERIOD IN RURAL SOUTH AFRICA

\mathbf{BY}

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ABSTRACT

This study was undertaken to investigate the practice of Traditional Birth Attendants (TBA) during pregnancy, labor, and the postpartum period. The overall goal of this study was to promote safe motherhood. This study was conducted in Abaqulusi, a sub-district of KwaZulu-Natal, Zululand Health District 26, in four rural communities.

A descriptive design with structured interview schedule guided the process. A convenient sample of forty-eight actively practicing trained Traditional Birth Attendants and forty-eight mothers attended by these Traditional Birth Attendants were interviewed. Of these 48 TBAs 47 were women, and one interestingly, was a man. Their age range was from 20 to over 70. Fifty percent of the mothers attended by the TBAs were between 15 and 24 years old. This finding is significant because the result shows that most of the mothers who are attended and delivered by TBAs are a high risk group. Data generated was quantitatively and qualitatively analyzed.

The study revealed that the TBAs attended the mothers during the pregnancy, labor, and postpartum periods. All TBAs examined mothers with their hands, gave education on the importance of good nutrition, child spacing, and follow up care. The study showed that during labor 100 % of TBAs deliver babies on the floor with an old blanket, in the

lithotomy position and encouraged the mother to empty her bladder before and during labor. They wore gloves or plastic bags. They examined mothers before delivery was done. They measured the umbilical cord, tied it with string and cut it. They cleaned the baby's mouth, nose, and eyes with a clean cloth, and wrapped the baby up and put it near the mother. They delivered the placenta, checked it to see if all was out. They washed the mother and put her on her bed. During the postpartum period, 100 % of the TBAs visited the mother at her home for one week to assess and care for the mother and her baby. The TBAs examined the mother, checked the umbilical cord and bathed the baby. They educated the mother about breastfeeding, caring for her breast, and eating balanced meals to produce adequate breast milk. The study revealed that the mothers perceived the TBAs as caring. The mothers loved the TBAs because the TBAs were easily accessible, even at night.

The conclusion reached in this study is that TBAs are of great value to the rural communities of South Africa. They need to be supported by the health professionals so that their practice can be recognized. They form part of the maternal and child health care. Their practice is indispensable.

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DECLARATION

This dissertation represents the original work of the author and it has never been submitted before for any degree or examination in any University. Full acknowledgement is given to all authors' references that are cited and referred to in this thesis.

Signed Ded Agrics

Date: January 7 2004

DEDICATION

This work is dedicated to my loving family, my aged parents, Mr. Matthew Y. Flomo and Mrs. Yassah G. Flomo. To my beloved husband Mr. Ernest C. B. Jones Jr. and my children Sowoe, Agea, Edasa, and Ernest C. B. Jones III, Helenmae Johnson, Louis Steele and Cynthia Awodou, and all my sisters and brothers, who have all encouraged me throughout my years of studying.

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List of Abbreviations and Acronyms

AIDS Acquired Immunodeficiency Syndrome

CIDA Canadian International Development Agency

HIV Human Immunodeficiency Virus

MMR Maternal Mortality Rate

MNPI Maternal and Neonatal Program Effort Index

TBAs Traditional Birth Attendants

UNFPA United Nation Population Fund

UNICEF United Nation Children's Fund

WHO World Health Organization

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Although most primary health care programs embark on massive training of TBAs to improve their practices, successes are limited (Hong, 1987). A contributing factor to many failures is lack of attention to the specific practice of TBAs in the cultural context of the intervention area (Lartson, Sodibe, Ebrahim, and Abel, 1987; Anderson and Staugard, 1988). Each culture has its specific ways to cope with the hazards of pregnancy, labor, postpartum, and its own explanations for the causes of illness.

Studies of current TBAs' practices also provide data about problems or information gaps. Once identified, this data can lead to changes that will improve the TBAs' skills and the health of the women they attend. TBAs are willing to learn and to change their practices if offered relevant options that will enhance their work as birth attendants (Sparks, 1990).

It is becoming increasingly recognized that a better utilization of services will occur if the services are village based and are provided within the context of the prevailing traditional practices and beliefs (Eulalio, 1979). In most traditional rural societies, local women function as primary health care providers for their children, women, and their community. It is strongly believed that TBAs can greatly reduce morbidity and mortality associated with pregnancy, labor, and the postpartum period.

Traditional Birth Attendants are most often trained to refer women for prenatal care, to recognize and refer women who are at risk of or are having complications during the antepartum, intrapartum, and postpartum periods, to conduct safe deliveries, and to offer selected family planning (WHO/UNFPA/UNICEF Statement, 1992). Most maternal deaths occur in the immediate and early postpartum period as a result of postpartum hemorrhage, which is largely unpredictable. Infection also contributes to a significant number of deaths (63%) within 24 hours of birth, with the vast majority (80%) occurring during the first week (Ronsman, Fortney and Quimby 1994). Whether the TBAs are able to recognize these complications, remains a question yet to be answered.

According to World Health Organization (World Health Organization, 1995) statistics, an individual woman in Africa has a lifetime chance of dying from a pregnancy-related problem of 1 in 16. In South Africa that risk is 1 in 7 (World Health Organization Statistic, 1995). Many health care providers have expressed concerns about the high maternal mortality in South Africa. Cooreman, Cronje, and Grobler, (1985) analyzed 81 maternal deaths, which occurred at the Pelonomi hospital, in Bloemfontein, South Africa for the 6 years preceding December 1985.

The overall maternal mortality rate (MMR) was 2.87/1000 deliveries, including deaths related to abortion and ectopic pregnancy. Among booked (register) patients the MMR was 0.32 per 1000 deliveries and among unbooked (not register) patients the (MMR) was 11.13 per 1000 deliveries. The MMR for patients from the Bloemfontein area were 0.72/1000 deliveries. The extremely high MMR for unbooked patients (35 times higher than that of booked patients in this study) was due to cultural factors in black rural women who first seek the help of traditional practitioners and come to hospital only as a last resort. Maternal deaths continue to be unacceptably high, even taking into account the effect of the HIV/AIDS on the mortality rate.

At the international level it is estimated that 514,000 women die annually of pregnancy related causes. Ninety-eight percent of these deaths occur in developing countries where a women's lifetime risk of dying from pregnancy related complications is almost 40 times-higher than that of her counterparts in developed countries. This means that each day some 1,400 women die in pregnancy and childbirth; there is a death every minute (UNFPA Maternal Mortality Update 1998-1999). (Sibley and Armbuster, 1997) documented that untrained persons attend many births and some births are unattended.

Although between 600,000 and one million women die each year from childbirth related causes, only 1 percent of these deaths occur in industrialised countries (Abou-Zahr and Royston, 1991.) The vast majority of maternal deaths take place in cultures of tropical poverty, particularly in Africa. Although only 20 percent of the world's

births take place in Africa, the continent accounts for 40 percent of the world's maternal death. In rural Africa, however, the risk may be as high as one in eight owing to the combination of high fertility, complicated pregnancies, and poor access to health care (ABOU- Zahr and Royston, 1991; World Health Organization, 1996).

Maternal death is tragic, most especially because it can be preventable in nearly all cases. Nonfatal maternal childbirth injuries and maternal morbidity often have devastating social and physical consequences with an impact greater than maternal death. For each woman who dies as the result of a pregnancy complication in developing countries, as many as 20, to 40 or even more women sustain serious, debilitating injuries (Koblinsky, Oona, Campbell, and Harlow, 1999). As with maternal mortality, the burden of maternal morbidity rests largely on the women of developing countries of the world. On the other hand, maternal morbidity in developing countries has also been largely ignored by the international community (Fortney and Smith, 1996).

Like other countries that were trying to reduce maternal death by embarking on training of TBAs, KwaZulu Natal embraced the project started by Canadian nurses to train TBAs in District 26 in 2001. A team of Canadian nurses working with the Canadian International Development Agency (CIDA) funded, a Tier 2 project entitled "Primary Health Care for Women of KwaZulu Natal". They trained fifty TBAs in Region D, now District 26, of KwaZulu-Natal, Providence. The TBAs underwent a one-year training program from a midwife who was trained at the University of Natal. Before their training, baseline data was collected on the current knowledge, practices,

attitudes, and beliefs, of TBAs and women related to pregnancy and childbirth, by the Tier 2-Project Team (Majumdar, 2002).

After one-year of training the TBAs, another follow up study was conducted using fifty TBAs who were trained by the project. The result of the study has not yet been released by the Tier 2-Project Team (Majumdar, 2000).

This study investigated the practice of these Traditional Birth Attendants that were trained by the project during pregnancy, labor, and postpartum in Abaqulusi District.

1.2. Problem Statement

Despite the concern from health professionals and nationals as well, about reduction of maternal mortality and morbidity through training of TBAs, there is no documented evidence about the practices of TBAs and their beneficiary activity in the community. There has been very little research done in South Africa to describe the practices of TBAs and the advantages their practices may have in promoting safe motherhood. In view of the present situation, it is necessary that such a study be conducted to investigate the practices of TBAs during pregnancy, labor, and postpartum period.

1.3. Significance of the problem

The practice of TBAs in the rural context cannot be underrated. The practice needs in fact to be encouraged through training, provision of enabling facilities and funds. It is important to recognize their services and give them the social recognition they deserve in the communities (Geurts, 1997).

This study is important because it sets out to investigate the practices of the TBAs during pregnancy, labor, and postpartum period. This study could lead to the improvement of quality of life for mothers of childbearing age in the community. It could also help to save the lives of many women and their babies in the community.

There is a need to make positive efforts through research based on a firm understanding of what TBAs can and cannot do (WHO/UNFPA/ UNICEF, 1998). It is also important to know the strengths and limitations in TBAs' practice, especially as they affect maternal mortality rate.

1.4 The aim of the study

The aim of the study was to investigate the practices of the Traditional Birth Attendants during pregnancy, labor, and postpartum period, with the overall goal of promoting safe motherhood.

1.5 The objectives of the study

- Describe the practice of the TBAs in the community as perceived by TBA.
- Describe how the mothers perceived the TBAs' practices during pregnancy labor and postpartum period.
- Describe the benefits of having TBAs attending to mothers during pregnancy, labor and postpartum period.

1.6. Research questions

- What did the TBAs do for the women during pregnancy, labour, and postpartum Periods?
- ❖ What types of care did the TBAs give to the mothers?
- What were the benefits of having the TBAs attending to mothers during pregnancy, labor, and postpartum?
- ❖ How did the mothers and TBAs perceive the role of TBAs within the community?

7. Operational definitions

- ❖ Traditional Birth Attendants are women who assist the mother at childbirth and who initially acquired their skills delivering babies on their own or with other TBAs. They live in the community, and are part of the local community culture, and traditions and have a high social standing as well as exerting influence on local health practices. Usually self-taught or informally trained, traditional birth attendants (TBAs) also provide advice and practical help. TBAs generally hold a position of respect and influence within their families, and their communities (http://www.mhn.jhpiego.org/best/tba.asp).
- ★ Maternal mortality and morbidity: Maternal mortality is defined as the death of
 a woman while pregnant or within 42 days of termination of pregnancy, from any

cause except accidents, and intentional injuries. Maternal morbidity is described as illness and disability related to pregnancy, and a condition that has an adverse impact on a woman's physical health during childbirth, beyond what would be expected in a normal delivery (Danel, Berg, Johnson, and Atrash, (2002).

- ❖ Pregnancy is the period during which a woman carries a developing foetus normally in uterus. Pregnancy lasts for approximately 266 days from conception until the baby is born, or 280 days from the first day of the last menstrual period (Sellers, 1993).
- ❖ Labor is the process whereby a viable fetus and placenta and membranes are expelled from the uterus, into the pelvic or birth canal and through the vaginal orifice. Normal labour culminates in the birth of a baby. The management of this birth process is known as the delivery of the baby (Sellers, 1993). It is spontaneous in onset, and low-risk at the start of labour and remaining so throughout labour and delivery. The infant is born spontaneously in the vertex position, between 37 and 42 completed weeks of pregnancy.
 - ❖ Postpartum is the period from delivery to six weeks after giving birth. The postpartum period, or puerperium, starts about an hour after the delivery of the placenta, and includes the six weeks after the mother gives birth (World Health Organization, 1998).
 - Mothers are all women who were attended by traditional birth attendants during pregnancy, labor, and postpartum throughout their childbearing years.

- ❖ Practices are the activities and functions of the traditional birth attendants during pregnancy, labour, and postpartum period. It includes what they do and what they teach the mothers to do during pregnancy, labour, and postpartum period.
- Rural relates to the country side rather than town in urban area.

CHAPTER TWO

LITERATURE REVIEW

The literature review of this research proposal covers the literature on Traditional Birth Attendants (TBAs), maternal mortality and morbidity, pregnancy, labor, and postpartum.

2.1 Traditional Birth Attendants

It is necessary that women should be assisted before pregnancy, during pregnancy and after pregnancy. This is where the knowledge and practice of Traditional Birth Attendants (TBAs) becomes relevant even today, especially in areas where public health facilities are either non-existent or insufficient. TBAs are non-professionals who assist women during pregnancy and deliveries and in some cases advocate some form of family planning. The majorities of TBAs are females in most area. Some of the TBAs do not feel free to perform their duties because of the conflicts they encounter with orthodox medical personnel and fear of non-registration by the establishment (Imago, A. http://mwia.regional.org.au/papers/papers/28 imogie.htm).

Traditional birth attendants (TBAs) are part of the birthing process throughout the developing world, assisting in the birth of a substantial portion of the world's newborns. They are uniquely equipped to inform and assist their families in preparing for birth (http://www.mnh.jhpiego).

Although training programs for TBAs have not contributed directly to reduction in maternal mortality, they do appear to improve the TBAs' effectiveness in reducing neonatal tetanus, increasing the use and provision of antenatal care, and increasing timely referrals for complications (http://www.mnh.jhpiego). The study indicated that appropriate training and supervision have a vital role in the effective performance and utilization of TBAs (Lynch and Derveeuw, 1994).

A literature review of studies assessing traditional birth attendants' training programs worldwide revealed that the critical components that must be present for traditional birth attendants to impact on maternal morbidity and mortality are back-up from a functioning referrals system and support from professionally trained health workers. Unfortunately these components are seldom present (United Nations Population Fund, 1997).

Three published TBA program evaluations showed reduction in mortality rates after TBAs' training interventions (O'Rourke, 1995; Alisjahbana, William, Dharmayanti, Hermawan, Kwast, and Koblinsky, 1995; Greenwood, Bradley, and Byass, 1990) in the absence of a comparison group. Controlled studies in West Java and Bangladesh have shown decreased mortality in areas where TBAs have been trained (Alisjabana, and William, Dharmayanti, Hermawan, Kwast, and Koblinsky 1995; Fauveau, Stewart, and Khan, and Chakraborty, 1991). However, the training programs in these studies were associated with comprehensive primary health care programs, making it difficult to isolate the beneficial effect of TBA training. The only controlled study encountered that specifically evaluated the impact of TBA training was recently

completed in Ghana. The study showed no significant reduction in mortality associated with TBA training (Smith, Fortney, Coleman, de Graft-Johnson, and Blumhagen, 1997).

Training of traditional birth attendants has been carried out in many countries with limited access to health facilities with the goal of improving maternal and prenatal outcomes. Although the benefits of TBA training remain controversial, donor organizations and ministries of health throughout the world have carried out these training programs for many years. Most published evaluation of TBA programs have focused on the knowledge and reported practice of the trained TBAs (Begum, Kabir, and Mollah, 1990; Lynch, and Derveeuw, 1994; and Sparks, 1990). Few have used comparison groups or measured maternal or infant mortality of TBA-attended births (O'Rouke, 1995). The rare controlled studies of mortality have combined TBA trained with other interventions (Greenwood, Bradley, Byass, Greenwood, Snow, and Bennett, 1990). In short TBA training has been widely promoted as a key strategy to improve reproductive health, with little or no evidence from controlled studies that it improves maternal or infant outcomes.

An unpublished TBA evaluation in 1995 showed the number of births reported by the Manica TBAs had risen from 10-32 per year over seven years of the program. Most TBAs had demonstrated adequate knowledge of referral criteria and emergency obstetric management several years after initial training. Because of this positive formative evaluation and the relatively good supervision and generous material support provided, the Manica TBA program was seen as a model program in Mozambique (Gloyd, Floriano, Seunda, Chadreque, Nyangezi, and Platas, 2001).

Formal study of the TBAs as well the training program is warranted to expand the knowledge base about these health workers and also to evaluate the effect of the training program on the TBAs' attitudes and practices (Equilion, 1985).

A study that was undertaken in two districts of Brong-AHAFO, Ghana, evaluated the impact of TBA training on maternal and perinatal mortality and morbidity. The results of this study showed little evidence to support the hypothesis that training TBAs results in better outcomes for mothers and newborns (Smith, Fortney, Coleman et al., 1997).

Another study evaluated the effectiveness of programs in Ghana, Mexico, and Bangladesh that trained TBAs, and other traditional health practitioners, to provide primary health care services. A qualitative analysis found that community members were satisfied with the services of trained practitioners, that pregnant women preferentially consulted trained TBAs. In Ghana, statistical records documented a reduction in stillbirths, maternal deaths, and neonatal deaths in regions where trained TBAs worked (Hoff, 1997).

A study that was carried out in The Gambia evaluated the impact of training TBAs as part of a primary health care program in a rural area. Trained TBAs delivered two-thirds of pregnant women. Data collected over a five-year period show increase in the proportion of pregnant women who attended antenatal clinics and received tetanus toxoid injections. The number of women delivered by trained midwives or in a hospital or health center also increased, while maternal and neonatal mortality

decreased. Comparison with villages that did not participate in the program suggests that the trained TBAs contributed to the improved pregnancy outcomes (Greenwood, Greenwood, Bradley, Williams, and Shenton, 1990).

A study evaluated the impact of training 18 illiterate women as TBAs in northern Burkina Faso. Two years after training, the TBAs had considerable knowledge about high-risk pregnancies, hygienic deliveries, and malaria prophylaxis, but not about postpartum hemorrhage. The program had virtually no impact on health indicators. Structural deficits in the health system undermined the training program; the TBAs received infrequent supervision and few supplies, and referral systems did not function (Dehne, 1995).

Qualitative evidence suggests that trained TBAs are performing well in providing antenatal and obstetric care. However, their services are underutilized because they are not publicized. In addition, the lack of education of most TBAs limits their health care training to a rudimentary level. Since TBAs cannot prevent case fatalities themselves, their role is to refer high-risk mothers to health facilities and to promote contraceptive use (Nessa, 1995).

A retrospective study analyzed factors associated with the use of modern health care among couples experiencing childbirth during 1995-1997 in Bangladesh. Trained personnel attended about 11 percent of deliveries, and traditional birth attendants (TBAs) attended the rest. Multivariate analysis showed that delivery complications were the most important factors determining use of modern health care resources for childbirth, followed by parental education and prenatal care. The authors conclude

that training TBAs and community members to respond quickly to delivery complications, along with improving access to hospital and trained TBAs can reduce the risks of infant and maternal morbidity and mortality in rural Bangladesh (Paul and Rumasay, 2002).

A prospective population-based study conducted in Senegal compared Senegalese women through pregnancy, delivery, and postpartum. It compared the levels of maternal morbidity and mortality between the urban Saint- Louis and Kaolack areas, where women gave birth primarily in district health centers, assisted by midwives. Morbidity, however, was greater in Saint-Louis. Most women giving birth in health facilities went to the regional hospital and were assisted by midwives. Morbidity, however, was greater in Saint-Louis than in Kaolack, especially for women delivering in health facilities (9.50 versus 4.84 episodes of obstetric complications per 100 lives births). Analysis of these findings showed that morbidity was associated with the training of the birth attendant, and antenatal care had no effect. The authors suggested that employing the most qualified personnel for monitoring labor health facilities would have the greatest impact on maternal mortality (de Bernis, Bouvier-Colle, Breart et al., 1998).

It is known that part of the high mortality and morbidity estimates found in sub-Sahara Africa can be linked to people's beliefs and practices about health and disease. According to the World Health Organization (1991), it is estimated that 4% of reported maternal mortality is attributable to traditional prescriptions and management of pregnancy, labor and delivery. This mortality is also related to traditional beliefs

and practices that delay the recognition of risks and the taking of prompt action to arrest complications.

A recent study in Ghana however found no statistical difference in eight indicators for whether TBAs' training resulted in better health for mothers. Conducted by Family Health International with the Ghana Ministry of Health it was the first study to examine whether TBAs' training was a factor in dealing with such problems as retained placenta, postpartum fever, foul discharge and excessive bleeding. With a retained placenta or postpartum fever, training seemed to help, but only slightly. Most of the time, training did not make a difference (Smith, Fortney, Coleman, et al., 1997).

2.2 Maternal mortality and morbidity

For every maternal death, hundreds more women suffer morbidity. Maternal mortality levels are an important indicator of disadvantage within a country as well as between developing and developed countries. Over 99% of the annual global estimate of 585,000 maternal deaths occurs in developing countries; a woman in sub-Saharan Africa who becomes pregnant is 75 times more likely to die as the result of this than women in the developing world (WHO and UNICEF, 1996).

Much of the information about maternal mortality in developing countries is based on hospital data, which especially in rural areas are a poor reflection of the extent of the situation in the community (Walraven and Weeks, 1999). Community-based estimates required information on all deaths among women of reproductive age, the caused of the death, and also whether the woman was or had recently been pregnant at the time

of death. Registration of deaths is at best, incomplete in many parts of the world, and prospective community-based studies need to be very large to be reliable.

Research on mortality among women of reproductive age has confirmed the severity of maternal mortality in developing countries (Fauveau, Koening, Chakraborty et al., 1998). Studies have investigated the causes and timing of maternal death, as well as the barriers to timely and appropriate care that increase the likelihood of a woman dying after she develops an obstetric complication (Chiwuiez, 1995; Castro, 2000). Women whose health already is compromised by poor nutrition and disease are more likely to die during an obstetric emergency. Many studies have linked nutrition with two of the main causes of maternal deaths, hemorrhage and obstructed labor (Rush, 2000). Severe anemia, often from iron and folate deficiency, malaria, hookworm and HIV all affect maternal deaths. New studies indicate that nutritional supplementation could reduce maternal morbidity and mortality (Tomkins, 2001).

In addition to medical and hospital factors, community-based or social-cultural factors, such as attitudes and practices, also influence maternal mortality and should be considered in studies of maternal mortality and morbidity (Griffiths and Stephenson, 2001; Okolocha, 1998). Women's low status also contributes to high maternal mortality. Researchers are also investigating indirect causes of maternal deaths and their contribution to overall maternal mortality (Ronsmans, Fortney, and Quimby, 2001).

The importance of adequate and accessible obstetric services at community, health center, and hospital levels has become clear (Kwast, 1995). Where appropriately

trained providers, equipment, and drugs are available, many deaths due to postpartum hemorrhage can be prevented through the active management of the third stage of labor (PATH, 2001). One study estimates that antenatal care and community-based interventions can prevent 26 percent of maternal deaths, and another 48 percent can be avoided by ensuring access to quality essential obstetric care (Jowett, 2000). Policy changes, appropriate allocation of resources, and community mobilization also play important roles in preventing maternal deaths (Koblinsky, Campbell, Oona, et al., 1999).

While interventions at many levels are needed to reduce maternal mortality and morbidity, experiences have shown that much can, and needs to, be accomplished at the community level. By working with the community, individuals and groups can be empowered to identify problems and derive solutions that work in the local context. In Tanzania, communities have been empowered to develop community-based plans for emergency transportation of obstetric patients (Schmid, 2001). Another approach, establishing community loan funds to pay emergency transportation, had limited success in Sierra Leone (Fofana and Kandeh, 1997). Training community motivators or resource persons to increase use of health facilities for emergency obstetric care has had a positive impact, but the associated cost and need for continued supervision are substantial. The "Home-based Life Saving Skills" program is a community and competency-based program to educate, motivate, and mobilize pregnant women, families, and communities to reduce maternal and neonatal mortality (Sibley, and Armbuster, 2001). Having women keep their own home-based maternal records has been useful in identifying and referring women with increased maternal risks, improving reproductive health monitoring, and increasing the participation of the

mother, her family and the community in their own health care (World Health Organization, 1994).

Reduction of maternal mortality is presently considered a high priority in health programs in developing countries. Until recently, reliable data on maternal mortality has been scarce, particularly for sub-Saharan Africa. Most countries do not have estimates from even a single population-base survey and often rely on statistics from central referral hospitals to assess the magnitude and causes of maternal mortality in the whole country (Boerma, and Mati, 1989).

Data from a few population-based studies in Africa show great variation in levels of maternal mortality. Very high levels have been reported in two rural and deprived areas of Gambia averaging 22.3 maternal deaths per 1,000 pregnancies (Greenwood, Greenwood, Bradley et al., 1987). In a retrospective survey in Addis Ababa, Ethiopia, maternal mortality was estimated at 5.7 per 1,000 live births (Kwast, Rochat, and Kidane-Mariam 1986). Some of the highest maternal mortality ratios occurring outside of Africa have been reported in rural Bangladesh, varying from 5.5 to 6.2 maternal deaths per 1,000 live births (Koeing, Fauveau, Chowdhury, et al., 1988).

For South Africa, Population-based data are available from the South Africa Health review which indicates the highest incidence of maternal deaths are being reported in KwaZulu-Natal with 2.59 maternal deaths per 100 000 population. The Eastern Cape reported 1.33/100,000, the North West 1.61/100,000 and the Northern Province 1.26/100 00 maternal deaths. The Department of Health believes that the above four provinces being rural should have a similar rate and argues that there were under-

reporting in the Eastern Cape, Northwest and Northern Provinces. They argue that there may be as many as 2 000 maternal deaths that are not being reported (South Africa Health Review, 1999).

The difficulty of collecting reliable data on maternal mortality and the debate over which indicators to use are challenges for safe motherhood efforts (Graham and Airey, 1987; Stanton, Noureddine, and Kenneth, 2000). Measurement issues are important because they influence program priorities and assessments of program performance. An analytical study of United Nations' data found that attendance at birth by trained personnel correlated with lower maternal mortality rates (Robinson and Wharrad, 2001). Skilled attendants at birth and rate of caesarian deliveries have also been used to assess trends in maternal mortality (AbouZahr and Wardlaw, 2001). It is also possible to measure maternal mortality using a national census (Stanton, Noureddine and Kenneth, 2001).

Researchers continue to seek alternatives to maternal mortality to assess program impact over a short period of time 3- 5 years (Ronsmans, Rowley and Campbell, 1997). The Maternal and Neonatal Program Effort Index (MNPI) rates various components of national programs to reduce maternal and neonatal mortality (Ross, Stover, and Willard, 2001). The index offers a tool for diagnosis and managing programs, and could allow comparisons between countries and regions over time. "Verbal autopsy" to identify and quantity a maternal death has also been used in many places where health records of deaths are limited (Sloan, 2001). Criterion-based clinical audits can also be useful tools for measuring and improving the quality of obstetric care in developing countries (Wagaarachci, 2001). Among the set of process

indicators proposed are indicators of unmet need for family planning and obstetric services; utilization, coverage and access; and quality of care (John Snow, Inc., 1999; Leete, 1998).

There is a continuing controversy over the proper role of TBAs in effort to reduce maternal mortality (Minden and Levitt, 1996). Some researchers question the usefulness of training TBAs, given cultural constraints and their lack of education (Rosario, 1995). Experience in Nepal shows that TBAs were used relatively little in home deliveries; the majority of home deliveries were performed without a skilled person in attendance (Bolam, 1999). To help resolve these issues, researchers have investigated the knowledge and practices of untrained TBAs' obstetric knowledge and practices, as well as on maternal mortality and morbidity (Hoff, 1997; Nessa, 1995). Programs are testing alternative instructional methods and curricula for training TBAs (Sibley, and Armbuster, 1997).

2.3 The Practice of Traditional Birth Attendants during pregnancy

Most TBAs' training programs have an antenatal care component, which all TBAs are expected to follow to identify pregnant women in their community, examine them, give them advice, and follow them up. One main objective of the antenatal care is to establish contact with the women, and identify and manage current and potential risks and problems. Another objective is assessment of maternal health, which includes determining the pregnant woman's overall health status, but also identifying factors which may adversely affect pregnancy outcome, detection of complications, maternal nutritional, and health education (World Health Organization, 1998).

In developing countries which have shortages of well-trained health care personnel, pregnancy-related care is often provided by less qualified staff such as auxiliary nurse/midwives, village midwives, health visitors and trained traditional birth attendants (TBAs). These persons have at least some training and frequently provide the backbone of maternity services at periphery. The outcome of pregnancy and labor can be improved by making use of their services, especially if well-trained midwives supervise them. For the fulfillment of the complete set of tasks required to manage normal pregnancies and births, and to identify, manage and refer complications. Their education training and skills are insufficient and their background may mean that their practice is conditioned by strong culture and traditional norms, which may impede the effectiveness of their training (World Health Organization, Safer Motherhood, 2000). This situation has not changed substantially during the last decade. In rural areas, traditional birth attendants play a significant role in the delivery and care of children. Although their child delivery methods are often unhygienic, the TBAs play an important role in the rural maternal and child health delivery system. They provide antenatal care, and deliver babies, etc.

Even when West African women have easy access to a maternity ward and essential obstetric care, many develop life-threatening complications of pregnancy, and the fatality rate associated with some complications can be quite high (Prual, de Berns, Bouvier-Colle et al., 2000). In a study conducted in cities and towns in six countries, 3-9 women of every 100 giving birth developed a severe complication that was directly related to the pregnancy. Those roughly with one-third sepsis or uterine rupture, and about one-fifth of those with eclampsia, die (Hollander, 2001).

A longitudinal population- based study of a large cohort of pregnant women has shown that 3-9% of pregnant women experienced severe maternal morbidity attributable to direct obstetric cause. The study shows that certain complications, i.e. sepsis, uterine rupture and eclampsia carried a very high risk of death for pregnant women in West Africa, even in a large urban setting where there was good access to health care and its utilization by pregnant women was of a high order. This suggested an unsatisfactory quality of maternal health care (Prual, de Bernis, Bouvier-Colle, 1997).

2.4 The practice of the Traditional Birth Attendants during labor

The physiological process that propels a full-term fetus spontaneously from the uterus through the vagina canal and into the outside world should normally be completed within ten to twelve hours once it has begun. When labor is prolonged beyond this length of time, it is not normal. Numerous studies have shown that women who develop prolonged labor have greatly increased risk of sustaining serious complications from childbirth (Kwast, 1994). These are women who need to be referred to a better-equipped center.

Studies on "alternative birthing care" in developed countries show an average referral rate during labor is 20%, while an equal number of women have been referred during pregnancy. In these studies, risk assessment usually is painstaking, which means that many women are referred who will eventually end up with a normal course of labor. In other settings the number of referrals might be lower. In Kenya it was found that 84.8% of all labors were uncomplicated (Mati and Boerma, 1987). Generally,

between 70% and 80% of all pregnant women may be considered as low -risk at the start of labor.

2.5 The practice of the Traditional Birth Attendants during postpartum

Since up to 50 per cent of maternal deaths occur after delivery, a midwife or a trained and supervised TBA should visit all mothers as soon as possible within 24-48 hours after birth. The TBA should assess the mother's general condition and recovery after childbirth and identify any special needs (World Health Organization, 1998). Postpartum care should respond to the special needs of the mother and baby during this special phase, and should include, the prevention and early detection and treatment of complication and disease, the provision of advice and services on breastfeeding, birth spacing, immunization and maternal nutrition.

The postpartum visit provides an occasion for assessing and discussing issues of cleanliness, care of the newborn, breastfeeding and appropriate methods and timing of family planning, and the referral of the mother in cases of postpartum complication.

Asking women about their experiences is an important method of obtaining information about postpartum morbidity and a critical step towards defining service needs. A number of recent epidemiological studies take this approach and have been instrumental in raising awareness of the hitherto unacknowledged dimensions of the problem of postpartum morbidity (MacArthur, Lewis, and Knox 1991; Glazene, 1995).

A number of serious complications and the majority of maternal deaths occur in the postpartum period, especially in developing countries. Postpartum hemorrhage is the single most important cause of maternal death in the world; it claims 150,000 maternal lives annually, mainly in developing countries (World Health Organization, 1990, Kwast, 1991). The majority of these deaths, which occur within four hours of delivery, (Kane, Ki-Kady, Saleh, Hage, Stanback, and Potter, 1992), indicate that they are the consequence of events in the third stage of labor.

The second most important cause of maternal death in the postpartum period is eclampsia. In developing countries eclampsia is estimated to occur in about 1 in 100-1700 deliveries (Crowther, 1985). A substantial proportion of cases of eclampsia occur in the first days postpartum. Lubarsky, Barton, Friedman, Nasredinne, Ramadan, and Sibai (1994) reported 97 of 334 (29%). Eclampsia occurring more than 48 hours postpartum has traditionally been considered as exceptional but a recent study (Lubarsky, Barton, Friedman et al., 1994) reports that more than 50% of their postpartum cases initially presented 3 or more days postpartum.

"In both developing and the developed countries, more than 60 percent of maternal deaths occurred in the postpartum period" was reported in the analysis of nine studies published since 1985. Hemorrhage, pregnancy, induced hypertension complications, and obstetric infections were the most common causes of postpartum death. Nearly half of the postpartum deaths occurred within one day of delivery and 80 percent within two weeks (Li, Fortney, and Koletchuck, 1996).

Today puerperal infections are still a major cause of maternal mortality in developing countries and, to a lesser degree, in developed countries. Shortly after delivery or during the first days postpartum, the temperature rises and the patient is seriously ill, sometimes in septic shock with low blood pressure and signs of disseminated intravascular coagulation (Swingler, Bigrigg, Hewitt et al., 1988). Elevation of the temperature during labor, or in the first days thereafter, to or close to 38.0 C, should raise suspicion. It is an alarming sign and is often followed by serious postpartum infections. There is little literature about differentiating the seriousness of the infection by assessment of the clinical picture and the time of onset. Nonetheless, the impression exists that a rise of temperature during labor or in the first hours or days after delivery is a danger sign and can lead to grave disease. On the other hand, a rise of temperature on the 3rd or 4th day, after an uneventful vaginal delivery and with a normal temperature during labor, and the first days postpartum could indicate a less serious type of infection (http://www.who.int/reproductive-health/publication/MSM98 3). Other complications that affect women during the postpartum period are complications of the urinary tract, psychological problems, etc. These are just a few examples of complications of labor and postpartum that TBAs can detect and treat if given knowledge.

2.6 Conclusion

Despite the conflicting results of investigations into the effectiveness of training TBAs in various parts of the world revealed by this literature survey, it is clear that TBAs continue to be the chief sources of maternity care and an integral part of rural culture. Although we do not have an accurate count of practising TBAs, it would be safe to assume that most major rural villages have two to three or more TBAs

providing care in rural areas. The TBAs play an important role in the rural maternal and child health delivery systems and consequently the training of TBAs must be constructively pursued, particularly to serve developing countries in under-resourced areas.

CHAPTER THREE

METHODOLOGY

This section covers and describes the design, population and sample, data collection, research instruments and data analysis.

3.1 Research approach

The triangulation of qualitative and quantitative approaches was used in this study. The concept known as triangulation is often used to avoid bias. Triangulation refers to the use of multiple referents or methods to draw conclusions about what constitutes the truth and separate the truth from any bias or other anomalies that characterize the research data. Triangulation refers to the use of multiple sources to converge on the truth (Polit and Hungler, 1995).

Method triangulation involves the use of multiple methods in collecting data about the same phenomenon. In purely qualitative studies, the researcher may use a combination of unstructured data collection methods such as interviews, observation, and diaries. Multiple data collection methods provide an opportunity for evaluating the extent to which an internally consistent picture of the phenomenon emerges. By using multiple methods and perspective, researchers strive to sort out "true" information from "error" information (Polit and Hungler, 1995). Triangulation was

used in this research to examine socio-demography and obstetric data of TBAs and mothers in this study. The nature of the information gathered enabled the researcher to determine the reliability and validity of this study.

3.2 Research design

A descriptive study was the most appropriate design for this type of study. A descriptive study sets out to describe comprehensively the current state of affairs of a certain aspect of health, and is also known as the situation analysis. It gives a community diagnosis, which consists of detailed information about health perceptions in a community (Katzenellenbogen, Joubert, and Abdool-Karim, 1991). The descriptive studies usually set out to describe characteristics of the group being investigated (Polit, and Hungler, 1995). Descriptive designs are used to clarify concepts and generate relationships for use in future research or theory development (Burns and Groves, 1987). Descriptive studies may be used to identify problems with current practice, or justify current practice, make judgements or determine what others in a similar situation are doing (Burns, and Groves, 1987). In this study the TBAs and mothers were interviewed one at a time in a room that was provided at each community clinics. The TBAs described their practice in the community. The mothers that were attended by the TBAs came in the room one at a time and described the practices of the TBAs as they perceived it. The design fits this study because it provides the researcher with a description of the situation as it exists in the community. According to Polit & Hungler, (1996) a descriptive research provides information on the variables of interest in the study without examining how the variables are inter-related.

3.3 Population

The population for this study comprised all Traditional Birth Attendants and all mothers who were attended by the TBAs during pregnancy, labor, and postpartum within the last six months in four communities in Abaqulusi, sub-district, KwaZulu-Natal.

3.4 Sample

A convenience sampling was used in this study. This sampling method was used because it was the most appropriate method of sampling for this study. It was easy and efficient to use because convenience sampling is the selection of the most readily available persons as participants in a study. Therefore the most available TBAs and mothers in the four rural communities were selected to obtain sufficient numbers of potential participants. A convenience sampling of 48 actively practicing, trained TBAs, and 48 mothers who were attended by the TBAs and resided in the district were asked to participate in the study. The TBAs identified and brought mothers who were delivered by them, and they were conveniently sampled. This provided direct evidence of Traditional Birth Attendants and mothers in Abaqulusi, sub-district of District 26, to describe their practices and perception.

3.5 Setting description

The study was conducted in Zululand DC 26. This is a historic region and home of the Zulu's. It is 10,000 sq. miles or 25,900sq. km. in size, and in the north-east of KwaZulu-Natal, South Africa. The Indian Ocean on the east borders Zululand, Mozambique on the north and Swaziland on the west. The terrain rises from a low coastal plain to the foothills of the Drakensberg range (http://www.bartleby.com/65/zu/Zululand.html).

The Zululand Health District 26 has a population of 768,791 and comprises five local authority areas. The District has five District Hospital, three State Aided Hospitals, 58 fixed clinics and 11 mobile clinics with 215 visiting points. The District has two clinics (http://www.southafrica-newyouk.net/consulate/provinces/kwazulu.htm). This region was chosen because it has known traditional births attendants who were trained in 2001. The study was conducted in Abaqulusi, Sub district of KwaZulu-Natal, in four rural communities, which are Ntababomvu, Siyakhathala, Tholakele, and Hartland. See the health district map Appendix A, for further information.

3.6 Data Collection

3.6.1 Data collection process

The researcher identified a field worker from the community who wrote and spoke Zulu and English and trained her to use the instruments. We conveniently selected TBAs and mothers and the research process was explained to them. On entering the study, a written information sheet and consent forms were read to TBAs and mothers, and was given to them to obtain their consent (See Appendix D). These forms were

designed to assure the validity of the study and it complied with the research ethics committee's requirements. The respondents were assured of absolute anonymity and confidentiality and were assure that the interviews were only being used for this research project. After accepting and signing the consent form, the respondents were taken in a private room and the interview was conducted with each participant at a different time of the day, using the interview guide. The TBAs and mother were interviewed in Zulu and it was tape recorded, and then transcribed into the English version of the interview guide. The researcher and the field workers collected the data.

3.6.2 Instrument

Both quantitative and qualitative data were collected by means of a structured interview schedule. This method was chosen because there is a face-to-face interaction, with the interviewer and the interviewee. These approaches also provide a basis for convergence on the truth. This interaction allows the interviewer to probe in depth for clarification (Polit, & Hunger, 1995). An interview guide was developed and divided into two sections for the TBAs and mothers respectively. Section one of the TBAs covers the TBA's demographic characteristics, such as age, number of pregnancies they had attended, number of live children they had delivered, marital status, and education level. Section two covers the TBAs practices in pregnancy, labor and postpartum; their ability to recognize risk factors in childbirth, the sources and nature of their training and fees paid them. The mother's questionnaire of section one includes demographic characteristics, age, number of pregnancies attended by the TBAs; number of live children, marital status, education etc. Section two covers the

mother's perceptions about pregnancy, labor, and postpartum. The interview consists of open and fixed answer formats. In this study, a combination of quantitative and qualitative analysis was used in order to give a holistic explanation of the practice of the Traditional Birth Attendants. In this study the quantitative data was used to assess the numerical data which was obtained from the socio demographic data of TBAs and mothers through statistical procedures to describe the observed situation of the TBAs and mothers and then the magnitude and reliability of the relationship among the data were assessed. Qualitative analysis of this study interpreted the narrative responses of the TBAs and mothers which yielded important underlying dimensional information and patterns of relationships.

3.6.3 Validity and Reliability

Validity and reliability are central issues in all measurement. Both concern how concrete measures are connected to constructs. Perfect reliability and validity are virtually impossible to achieve. Both terms also have multiple meanings. Here they refer to related, desirable aspects of measurement (Neuman, 2000). Validity refers to the truthfulness, or how well a construct and the data for it fit together, and the degree to which instruments measure what they are supposed to be measuring (Polit and Hunger, 1995). It attempts to 'check out' whether the meaning and interpretation of an event is sound or whether a particular measure is an accurate reflection of what the researcher intends to find out. The reliability of the instruments that yield quantitative data is a major criterion for assessing its quality and adequacy. An instrument is reliable if it measures the attribute it is supposed to measure (Polit and Hunger, 1995).

Reliability suggests that the same thing is repeated or recurs under identical or similar conditions (Neuman, 2000). Conducting all the interviews and ensuring consistency in carrying out the interview validated the study.

To assess the interview guide, a pilot study was conducted on three TBAs and three mothers with the same characteristics, as those required for the main study. It was undertaken in eMondlo rural community, far from the four rural communities but closer to Vryheid head quarter of Abaqulusi sub-district. Few problems were identified and the interview guide was adjusted. The researcher timed the completion of each interview, which took about 40 minutes on the average. The result of the pilot was not included in the study. This ensured the validity and reliability of the instruments that were used. Face and content validity was achieved by discussing the instrument in the nursing department research committee.

3.6.4 Data analysis

Data collected were qualitatively and quantitatively analyzed by transcribing and translating the tape recordings into English from Zulu. The data was read and sorted several times to familiarize the researcher with similar and different responses. According to Polit and Hungler (1995), human behavior problems and characteristics are best understood by use of both qualitative and quantitative data. Quantitative data was analyzed using the Statistical Package for Social Sciences (SPSS). Frequencies were used to describe and summarize the data. All the data was screened for missing values. Each subject was coded and summarized. The open-ended responses were sorted into categories and findings complied into quantified numeric form or data.

Data analysis was a way of forming patterns and the use of qualitative methods depends on fining recurrent behaviors, events occurrences from which themes can be formed. The editing style of data analysis was used for the qualitative data. The researcher using the editing style acts as an interpreter who reads through the data in search of meaningful segments and units. Once these segments are identified, and reviewed, the interpreter developed a categorization scheme and corresponding codes that were used to sort and organize the data. The researcher then searched for patterns and structure that connected the thematic categories. The statistical goal was simple data description or estimation of a characteristic in the study population.

3.6.5 Ethical consideration

The University of KwaZulu-Natal Ethic Committee evaluated the research proposal and provided the researcher with ethical clearance. Written permission was obtained from the district services and from participants. The purpose of the research was fully explained to the participants, in order to obtain verbal and written consent. Individual rights to confidentiality were guaranteed. Permission was sought from the Paramount Chief, Town chief, and the Head Master of the community of District 26, Zululand. Permission was sought from the Department of Health in KwaZulu-Natal and from the Abaqulusi, Sub-district of District 26. Confidentiality and anonymity were upheld through the interviews by conducting the interviews in a side room at the community clinic. The TBAs and mothers' names were not written on the interview schedule. See Appendix B and Appendix C for detailed information.

3.6.6 Dissemination of findings

A copy will be placed in the library of the University of Natal. A copy will be given to the Regional Health Office of KwaZulu-Natal, Sub-District Health Office, and World Health Organisation. Articles will be published in an appropriate Nursing Journal. Results will also be sent to the Ministry of Health of Liberia. A nursing workshop will be conducted in Liberia to disseminate the findings of this study.

3.6.7 Limitations of this study

One major limitation that was envisaged from this study was the language barrier, where the use of an interpreter may have not captured all of the rich expressiveness in the transcribing and translating process.

CHAPTER FOUR

PRESENTATION OF RESULTS

4.1 Introduction

The purpose of the study was to describe the practices of the Traditional Birth

Attendants during pregnancy, labor, and postpartum period, with the overall goal
of promoting safe motherhood.

These results display the practice of Traditional Birth Attendants, and how the mothers perceived the Traditional Birth Attendants' practice. The first set of questions dealt with the socio-demographic characteristics of Traditional Birth Attendants and the mothers who were attended by them. The second section, which is the interview guide, focuses on the Traditional Birth Attendants and the mothers' perceptions of the TBAs' practice. The first questions under this section were directed to the TBAs. The TBAs were asked to describe their own practice. The second part of the interview question was directed to mothers who were assisted by the TBAs during pregnancy, labor, and postpartum.

The results of the interview are displayed in the following tables and paragraphs.

4.2 Socio-Demographic Data: Traditional Birth Attendants

4.2.1 Age Distribution

Table 1: Showing age distribution of Traditional Birth Attendants

N=48

	Age in	Frequency	Percent	
Years				
20-39		4	8.3	
40-49		13	27.1	
50-59		14	29.2	
60-69		16	33.3	-
70 and above		1	2.1	
Total		48	100.0	

Four (8.3 %) Traditional Birth Attendants were between the ages of 20 and 39. Thirteen (27.1 %) were between the ages of 40 and 49. Fourteen (29.2 % were between the age range of 50 and 59 years. Sixteen (33.3 %) were between the ages of 60 and 69 years. One (2.1 %) was between 70 years and above. This shows that most of the Traditional Birth attendants were between the ages of 50 and 69 years. It also showed that younger TBAs were between the ages of 20 and 39.

4.2.2 Marital Status

Table 2: Showing marital status of TBAs

N = 48

Marital Status	Frequency	Percent	
Single	7	14.6	
Married	39 .	81.2	
Divorced	0	0	
Widow	2	4.2	
Total	48	100.0	

This table shows that seven (14.6 %) Traditional Birth Attendants were single. Thirty-nine (81.2 %) were married. Two (4.2 %) were widows. One TBA husband had died three weeks before and she almost did not show up for the interview because of the mourning period. The Traditional Birth Attendants who were single have had two to four children of their own.

4.2.3 Education

Table 3: Showing level of education of TBAs

N = 48

Education	Frequency	Percent	
Primary	35	72.9	
Secondary	13	27.1	
Tertiary	0	0	
Other	0	0	
Total	48	100.0	:

Of the Traditional Birth Attendants interviewed, thirty-five (72.9 %) had primary education. Thirteen (27.1 %) had secondary education. All of them had some form of education experience.

4.2.4 Gender

Table 4: Showing gender distribution of TBAs

N = 48

Frequency	Percent	
47	97.9	-
1	2.1	
48	100.0	
	1	47 97.9 1 2.1

The majority of the Traditional Birth Attendants 47 (97.9 %) interviewed were females and only one (2.1 %) was a male.

4.3 Socio-Demographic Data of the Mothers

4. 3. 1 Age Distribution

Table 5: Showing age distribution of mothers attended by TBAs

N = 48

Age in years	Frequency	Percent	
15-25	24	50.0	
26-35	18	37.5	
36-45	4	8.3	
46-55	2	4.2	
Total	48	100.0	

Twenty-four (50.0 %) of the mothers who were attended by the TBAs were between the ages of 15 and 25. Eighteen (37.5 %) were between ages 26 and 35 years. Four

(8.3 %) were between the ages of 36 and 45 and two (4.2 %) were between the ages of 46 and 55. Young mothers, who are probably having their first babies, ages, are between 15 and 25 years.

4.3.2 Marital Status

Table 6: Showing marital status of mothers attended by the TBAs

N = 48

Marital Status	Frequency	Percent	
Single	43	89.6	
Married	5	10.4	
Divorced	0	0	
Widowed	0	0	
Total	48	100.0	

Forty-three (89.6 %) mothers were single and five (10.4 %) were married amongst the respondents.

4.3.3 Education

Table 7: Showing level of education of mothers attended by the TBAs

N = 48

Education	Frequency	Percent	
Lower primary	13	27.1	
Higher primary	34	70.8	
Secondary	1	2.1	
Tertiary	0	0	
Other	0	0	
Total	48	100.0	

This table shows thirteen (27.1 %) of the mothers had lower primary education. According to the South Africa education system, lower primary includes first year, second year, standard one (1), and standard two (2). Higher primary starts from standard three (3) and end to standard five (5). Thirty-four (70.8 %) had acquired higher primary education, and one (2.1 %) had a secondary education.

4.4 Obstetric Data of the Mothers

4.4.1 Number of Pregnancy Attended by Traditional Birth Attendants

Table 8: Showing the number of pregnancies attended by TBAs

N = 48

Number of Pregnancy	Number of Woman	Total Pregnancy Attended
	Attended by TBAs	by TBAs
One pregnancy	31	31
Two pregnancies	13	26
Three pregnancies	3	9
Four pregnancies	1	4
Total	48	70

The table shows thirty-one mothers each had one pregnancy attended by the TBAs. Thirteen mothers had two pregnancies each attended by the TBAs making a total of twenty- six pregnancies attended by TBAs. Three mothers had three pregnancies each attended by TBAs. One mother had her four pregnancies attended by TBAs. This made and overall total of 70 pregnancies that were attended by TBAs.

4.4.2 Number of Children the Mothers Had That Were Alive and Were Delivered by the TBAs

Table 9: Showing number of children alive that were delivered by TBAs

N = 48

17	
17	17
16	32
4	12
11	44
48	105
	11

The table shows that seventeen mothers had one child each alive that was delivered by the TBAs. Sixteen mothers had two children each alive that was delivered by the TBAs. Four mothers had three children alive that were delivered by the TBAs. Eleven mothers had four children each alive and were delivered by the TBAs. This showed that the mothers had a total of 105 children alive that had been delivered by the TBAs.

4.4.3 Number of Children Born Dead That Were Delivered by the TBAs

Table 10: Showing number of children born dead

N = 48

Children born dead	Frequency of mother	Total children born dead
No children born dead	40	0
One child born dead	5	5
Two children born dead	3	6
Total	48	11

This table show that forty mothers had no child born dead. Five mothers had one child each that was born dead. Three mothers had two children each that were born dead. This table shows that 8 mothers had a total of 11 children born dead.

4.4.4 Number of Children Who Died Within the First Six Weeks after TBAs did Delivery

Table 11: Showing number of children who died within first six weeks

N = 48

Number of children died	Frequency of mother	Totals number of children
within first six weeks after	delivery by TBAs	who died within first six
delivery		weeks after delivery
No child died within first	46	0
six weeks		
One child die	2	2
Total	48	2

The table shows forty-six mothers had no child who died within the first six weeks after delivery. Two mothers had one child each to died within the first six weeks after they had given birth by the TBAs

4.4.5 Number of Deliveries Attended by Traditional Birth Attendants

Table 12: Showing number of deliveries attended by TBAs

 $\tilde{N} = 48$

Number of deliveries TBA	Frequency of mothers	Total Number of
attended	delivered	deliveries attended by the
		TBAs
No delivery attended	1	0
One delivery attended	30	30
Two deliveries attended	13	26
Three deliveries attended	3	9
Four deliveries attended	1	4
Total	48	69

The table shows that one mother reported no delivery done by the TBA because she was taken to the hospital for surgery because she was a high risk patient. Thirty mothers had one delivery attended by the TBAs. Thirteen mothers had two deliveries each attended by the Traditional Birth Attendants. Three mothers had three deliveries each attended by the Traditional Birth Attendants. Two mothers had four deliveries attended by the Traditional Birth attendants.

4.5 Practices of Traditional Birth Attendants

The practice of the TBAs is the main theme that develops from the interview guide.

Under the main theme the following sub-themes emerged. These themes are:

- Training
- Support from Professionals
- Service Provision
- Service Charge
- ❖ Traditional Birth Attendants during Pregnancy
- Traditional Birth Attendants during Labor
- * Traditional Birth Attendants during Postpartum

These sub-themes are discussed individually in the following paragraphs.

4.5.1 Training

Traditional Birth Attendants are trained to identify complications, provide immediate first aid, and know when and where to refer women for additional care. They are trained for appropriate referral of postpartum complications, such as haemorrhage, sepsis, perineal trauma, breastfeeding problems, and newborn complications. With adequate training and supervision, some experienced TBAs can identify complications, refer women with delivery complications to appropriate medical facility, provide care for normal pregnancy through labor, delivery, and the postpartum period; and offer family planning information and services.

Forty-five TBAs reported that they had one year training, from midwives from the Health Facilities. Two TBAs reported that they had two years training, and one mentioned that she had two and half years of training. All of them reported that welltrained nurse midwives trained them. Thirty-six TBAs reported that the training was interesting and very good. They said, "The training was very good." Three of the TBAs said, "The training was very hard, but it was interesting." Two of the TBAs reported that it was interesting, and they were put in groups of ten by a retired nurse midwife. One TBA said "it was interesting because we learned about babies and how to help mothers give birth." Five TBAs stated "at first it was difficult to understand what was being taught, but as we got through it, they started to learn what was taught". All of the TBAs reported that their training included the delivery process, wearing of gloves to protect them from getting infections, delivering of other presenting parts, danger signs, caring for the mothers' complications, caring for mothers, and caring for the baby. Most of the TBAs said "They learned lots of things they did not know; they learned how to tie the umbilical cord, and then cut the cord, and clean the baby, they learned to wait for the placenta to come. They learned when the placenta comes, how to examine it and check to see if all came out. Then they learned to check the mother if she is not bleeding". Another TBA said, "I learned how to put on gloves. I was told that wearing gloves during delivery, protects me from infection, and protects the mothers from getting infection also". One TBA said, "I learned how to handle a baby who comes with the legs." One TBA said, "I learned that if the card of the mother has red pen written on it, this, means that she cannot be delivered by me or any other TBA. She should go to the hospital for care, and for delivery."

4.5.2 Support from Professionals

Traditionally in initiating safe motherhood in the community, the professional health workers, especially the midwife, is responsible for the task of training and providing support to Traditional Birth Attendants to enable them to carry out safe deliveries in the community where she lives. The Traditional Birth Attendants' training program reveals that a critical component that must be present for TBAs to facilitate safe delivery is the support from professional trained health workers. One TBA said, "They allowed us to use the clinic to gain our experience, and that knowledge helped us to work in our community." Thirty of the TBAs mentioned that they received material support from professional health workers. One TBA said "I received a delivery kit and equipment from our trainer." One TBA stated "They give us a lot of things like gloves, scissors, and clippers for use on the umbilical cord." Another TBA said "They supply us with equipment like razor blade, cord tie, and some gloves". Sixteenth of the TBAs mentioned that they lacked support presently from the health workers. One TBA said "The first year, we received support from the clinic such as gloves, pads, cord tie, and spirit. They do not supply me with any equipment to use now." Fifteen TBA said "They do not help us with anything nowadays. When the program started, we were getting some equipment, but now we are not getting anything."

4.5.3 Service provision

The following categories emerged from this sub-theme, as follow:

- Birthing area
- Resources for service provision

Service provided at birthing place

4.5.3.1 Birthing area

To make sure that the services provided are appropriate and of the highest quality, the trained TBAs ensure that all women in the community know where to obtain assistance for antenatal care, delivery, and postpartum care. Most of the Traditional Birth Attendants remarked that the mothers gave birth in their homes. Forty-six of TBAs said "We go to the mother's home even at midnight. It is the mother's place where she feels more comfortable." Two of the TBAs said, "They sometimes do deliveries at my place because; the mother says she wants to deliver at my home." One TBA said, "I don't have a place where we work. They call us to their homes anytime if someone is in labor (24 hours service)."

4.5.3.2 Resources for service provision

Resources are essential components of providing obstetric care to pregnant mothers. Most of the TBAs are those who provide the human resource in the community. All of the TBAs reported that they themselves examined with their hands and cared for the mothers. All of the TBAs mentioned that they use material resources. One TBA said "I used gloves, water, some clean towels, and fire to pass the razor blade over it to kill the germs". Seventeen TBAs reported that they used gloves, razor blade, pinna fetal scope, water, and soap. They added "Then they put an old blanket on the place where she is comfortable". Thirteen TBAs said, "We use gloves for protection, razor blades, clippers to put on the cord, a clean towel to wrap the baby, some newspaper to put on the floor, blanket to put under the mothers, water and soap to wash the mother." Eight TBAs said "We used plastic bags, on our hand, string to tie the cord, razor blade, hot

water, towels, old blanket to put on the floor, and boiling water to fix a drink for the mother when she is tired."

4.5.3.3 Services provided at the birthing place

Table 13: Showing services provided at the birthing places that were mentioned by the TBAs

N = 48

Types of service	Frequency TBAs	Total number of the type
		of service provide as
		mentioned by TBAS
Pregnancy care	48 .	46
Labor care	48	48
Postpartum care	48	48
Nutritional and health	48	44
information		
Encourage use of health	48	47
facilities		
Total	48	233

Forty-six of the TBAs reported that they examined the mothers during the early months of their pregnancy to check if the mothers and babies were doing well. They listened to the baby's heartbeat and told the mother to take care of herself. All of TBAs mentioned that they provide care during labor. The TBAs said "We visit her at her house and check her, listen to the heart beat of the baby. If the mother is ready to deliver the baby then we tell her to push and the baby comes. They care for the baby,

and then we deliver the placenta, check it, and make sure that all is out. Then we wash the mother and care for her". Forty-eight TBAs mentioned that they give postpartum care. The TBAs said, "They examined and checked the baby, showed the mother how to breast-feed the baby and they tell the mother to eat well in order for enough milk to come in her breast." One TBA said "I checked the baby's cord and checked the mother, and then I encouraged her to take her baby to the clinic regularly for vaccines." Forty-four of the TBAs stated that they provided nutrition and health information. TBAs said, "We teach the mother to love her baby, and to eat healthy local nutritional food, and not to eat food with plenty of salt and oil because it will help reduce her BP." Forty-seven of the TBAs mentioned that they encouraged the mothers to visit health facilities. The TBAs said "We encouraged the mothers to visit the clinic regularly for theirs vaccines, family planning matters."

4.5.4 Service charge

The service provided by the TBAs is mainly free, but in area where the TBAs have to purchase their supplies they usually receive some compensation for their service, then they purchase items that need to be replenished in their kits. Thirty-four of the TBAs reported that they did not charge any money for their service. Four TBAs said "They told her to pay R.50 for the service they provided."

4.5.5 Traditional Birth Attendants' practice during pregnancy

Prenatal care is the period during which the TBAs establish contact with the mothers, and identify and manage current and potential risk and problems. This helps the mother and the TBA to make a delivery plan based on the mother's needs and resources. If prenatal care is well planned and carried out, there will be fewer

complications of pregnancy with quality prenatal care. The theme Traditional Birth Attendants practice during prenatal is discussed under the following categories:

- Care during prenatal visits
- Follow up pregnant women
- Advice provided to mother

4.5.5.1 Care during pregnancy

The TBAs assess the mother's overall health status and identify factors which may adversely affect the pregnancy outcome. Forty-eight of the TBA mentioned that they examined the mother and educated her about resting most of the time, especially during the early months of their pregnancy. One TBA said, "I check their abdomen, and feel to see where the baby is lying; I put the pennal fetal scope and listen to the baby's heart beat." One TBA said, "I tell them to eat food rich in protein, fruits, and vegetables, millet meal, which will keep them healthy." Three TBAs said, "We told them to visit the clinic to get their vaccination regularly." Another TBA said, "I taught about the importance of being clean, and how to keep her place, and food clean." One TBA said "I told her not to drink alcohol and not to smoke during pregnancy, and to eat food that will keep her healthy." One TBA said "I examined them, and tell them if they are having problem they should inform me immediately. I told them about the importance of taking vaccine, and child spacing." One TBA said "I check her, make some tea, for her and pray over the water and give it to her to drink."

The TBAs mentioned that other health services are provided to the mothers through health practice, traditional, practice, and religious practice. All of the TBAs said, "We make sugar salt solution and give it to the mothers when they are weak in order to make them strong." A TBA said, I pray then I give her some ash to consume if she is in pain". One mother said "I pray over water and give it to her drink."

4.5.5.2 Follow up pregnant women

The TBAs follow up mothers from their homes in order to give them care. Forty-six of TBAs mentioned "We go and visit them once a month at their homes, and tell them to go to the clinic". One TBA said "I go to the mothers' place once a week until she gives birth." One TBA said "I visit her and sometimes she visits me if she is not well." Two TBAs said, "They come to us once a month and we examined them." One TBA said "Once a week we come to the clinic to check all the pregnant women." One TBA stated "I go to the clinic and the nurse shows me pregnant women; from there I visit each of them twice a month until they gave birth."

4.5.5.3 Advice provided to mother

TBAs provide nutrition and health risk behavior advice to the mothers. All of the TBAs mentioned that they give the mothers advice about nutrition, risky behavior, and health facilities utilization. Three TBAs said, "They advised her to eat well balanced meals, avoid eating salty food, and avoid eating oily food." Four TBAs said, "They advised the mother to use condoms each time she has sex and when she is not sure of the person." One TBA said "I advise them to visit the clinic every month for vaccination."

4.5.6 Traditional Birth Attendants' practice during labor

Because Traditional Birth Attendant assist in deliveries, early identification of the TBAs within the community is essential for carrying out safe delivery. The theme Traditional Birth Attendants' practice during labor is discussed under the sub categories of:

- Description of the delivery process
- Delivery equipment
- Complications during delivery
- Management of complication

4.5.6.1 Description of delivery process

The first priority for delivery is to be safe and perform clean deliveries at the homes of the mother. All of the TBAs mentioned that they conducted delivery for mothers in the community. Three TBAs stated "When the mother comes to me I tell her to urinate. If, her bladder is empty, then I put on my gloves and check her. If she is ready to give birth, I tell the mother to push and breath until the baby comes. Then I measure the umbilical cord and tie it and then cut the cord. I clean the baby and put the baby near the mother. Then I allow the placenta to come, and I check it to make sure that all is out. I check the mother to make sure that she is not bleeding, and then I wash the mother and put her on the bed". Four TBAs said, "Firstly, they clean the place where the mothers are going to give birth, and then they put a blanket down on the floor, wash my hands, and put on my gloves. Then we checked the mothers. If the mothers are fully ready to push, they are told to push slowly until the baby comes. Then the umbilical cord is measured, the clipper is put on the cord, then the cord is cut. They wipe the baby with a clean cloth, and wrap the baby up and put it on the

mother. Then they deliver the placenta, and check it. Then the mothers are clean and put on the bed to rest." Eight TBAs said "They wash their hands, put a blanket on the sponge, and then they put on two plastic bags because they don't have gloves, then they tell her to lie down and checked her. When the mother is fully ready, and in pain, they tell the mother to take in a deep breath and push until the baby come. When the baby comes in our hand, we take a clean cloth and wipe the baby's eyes, and mouth. They tie the umbilical cord with a string, and cut it. Then they wrap the baby in a blanket and put it on the mother. When the placenta is ready to come, they tell the mother to push until the placenta comes out. They checked it to see if all is out. Then they cleaned the mother and where they did the delivery. We checked the mother for the second time and put her on her bed to rest".

4.5.6.2 Delivery equipment

Traditional Birth Attendants, most often have basic equipment they used for the delivery process. Seventeen TBAs said, "They used gloves, razor blades, and clippers to put on the cord". Eighteen TBAs mentioned "They used gloves, razor blade, sprit, and string for the cord". Three TBAs said, "They have basic equipment like, gloves, sprit, and pads, razor blades, and blankets, fire to kill germs on the razor blade, newspaper, and water." Fifteenth TBAs mentioned "We used string, razor blade plastic bags, and water to wash the mother and the place."

4.5.6.3 Complications during delivery

It is very essential for the TBAs to prevent complication during delivery, and safe the mother from death and illness of childbirth. Most of the mother reported complications during labor. Twelve TBAs said, "They had babies being born with

legs, shoulders, and buttocks." Five TBAs said "The mother bled during delivery we was so afraid that they took her to the clinic." Three TBAs stated "They delivered the mother, but the baby was born dead." Two TBAs said "the mother's feet and hands were swollen and I referred her to the clinic." One TBA mentioned "The placenta did not come, so I took her to the clinic in a family car." Another TBA said, "The mother was sick and vomited all through the delivery."

4.5.6.4 Management of complications

To manage complications the TBAs must be quick in making the decision to refer mothers for prompt treatment. Most of the TBAs said "I only did what I was taught, if I was not able, I sent her to the clinic." One TBA said, "I clean her first and I try to bring the baby's other foot down, but I was able through prayers, and the baby was delivered." One TBA said "I put more pillows on her back, in order to help the baby to come easy." One TBA stated "I did try to help the baby by putting my hands in the mother's vagina, and brought the arm down and slowly I was able to deliver the baby." Two TBAs said "They made sugar, salt solution (soror), and gave it to her to her to drink in order to give her strength."

4.5.7 Traditional Birth Attendants' Practice During Postpartum

The postpartum visit provides an occasion for assessing and discussing issues of cleanliness, care of the newborn, breastfeeding, and appropriate methods, and reproductive health. The theme TBAs' practice during postpartum is discussed under the following categories:

- Postpartum Care
- Home visits

- Problems of postpartum
- Management of problems

4.5.7.1 Postpartum care

The TBAs assess the mother's general conditional and recovery after childbirth and identifies any special needs. Forty-eight of the TBAs mentioned that they visited the mother for a week to care for the mother and the baby. Three TBAs said, "They examined her to see if her bleeding had subsided, and then they checked the umbilical cord of the baby, and then bathed the baby for her. Then they taught the mother how to breastfeed the baby, and taught the mother about the various kinds of food to eat in order to get plenty of breast milk for the baby." All of the TBAs said, "They checked the umbilical cord of the baby, and told the mother not to put anything on the cord. Then they checked the mother to see if the mother is well. They told the mother to breast-feed the baby whenever the baby was hungry and after breastfeeding they should put the baby on their shoulder and pat the back for the baby to burp. Then they taught them to clean their breast, and apply oil to protect it from getting sore, and then advise the mothers to take their babies to the clinic regularly." Two TBA said "They taught the mother to eat food like fruits, vegetables, and drink plenty of water to keep healthy, and breastfeed the baby when the baby wants to breastfeed, and to clean around the breast each time she is ready to breast feed. They checked her vagina gave her pads, made some food for her to eat, and told her to take the baby to the clinic for routine vaccination".

4.5.7.2 Home visits

The visitation of the TBA was usually made at a time that was convenient for the mothers. All of the TBAs stated that they visited the mother's homes once a day for a week to provide care to the mother and baby. All of the TBAs said that when they visited the mothers, they checked the mother, and make warm water and give the baby bath and cleaned the cord. One TBA said "I encouraged the mother to take the baby to the clinic to start immunization".

4.5.7.3 Problems of postpartum

During the postpartum visit the TBAs assessed for postpartum problems. All of the TBAs mentioned about problems they encountered during their practice. Eight TBAs said, "The mothers did not have proper food to eat." Two TBA said, "The mothers did not have enough to eat, as a result the breast did not have enough breast milk". Most of the TBAs said "the mother had pain in her breast, and the breast was swollen." Four TBAs said, "The mothers did not have support from family members who were not giving them help with the baby."

4.3.5.4 Management of postpartum problems

The TBAs manage the problems that they encounter through advice, education, and referral. All of the TBAs said, "They advised the mothers to use protection each time they had sex, and not rush to have sex until the baby gets big, and if they wanted to have sex they must use condoms." All of the TBAs said, "They educated the mother to clean their breasts, and breast feed their babies until the child was about six months old." Five TBAs mentioned that they taught the mothers about the importance of keeping their surroundings clean, and that this would protect them from getting sick.

Two TBAs said "They sent the mother to the clinic because the mother was sick, and vomiting."

4.6 Mother's Perceptions of the Traditional Birth Attendants' Practice

The mother's perceptions of TBAs' practice are the second main theme that emerged from the interview guide. The mothers were asked to describe the TBAs practice. From this theme the following sub-themes emerged:

- ❖ The mother's perceptions of TBAs during pregnancy
- The mother's perceptions of TBAs during labor
- ❖ The mother's perceptions of the TBAs during postpartum
- Perceived advantages of using the Traditional Birth Attendants.

Each theme is discussed in the following paragraph individually.

4.6.1 Perceptions of TBAs Practice during pregnancy

From this sub-theme the following categories emerged which are:

- Perception of the birthing place
- Perception of birthing charge
- Perception of the utilisation of community service
- Perception of the care during pregnancy
- Perception of the pregnancy related problems

4.6.1.1 Perception of the birthing place

The birthing place was perceived as very convenient; as the mothers' homes were used to assess them during the pregnancy period. Most of the mother responded

confidently that they utilized the birthing place of their homes. Seven mothers mentioned that they utilized the TBAs' homes in the first three months of their pregnancy. Two mothers said "They visited the TBAs homes during their early months of pregnancy to get advice from the TBAs." One mother said, "When I was one month pregnant I called the TBA to come to see me." Another said, "I was three months when I went to see the TBA."

Ten of the mothers sought the Traditional Birth Attendants during the second trimester of pregnancy (middle three months). One mother stated "They visited me when I was five months pregnant." Another said, "I was four months when I called her to come and check me."

Twenty-one of the mothers sought the care of Traditional Birth Attendants during the third trimester of pregnancy (last three months). One mother said "I started to visit them when I was seven months pregnant." One mother said, "When I was eight months I asked her to examine me."

All of the mothers reported that their homes were used for giving birth. One mother said, "I deliver at my home, on the floor on an old blanket." Another mother said, "I gave birth at my place on the bed."

All of the mothers mentioned that the Traditional Birth Attendants gave care to them at their homes for a week, after their babies were born. One mother said "She came to my house for one week to check if I was sick, and she examined my breasts and showed me how to handle and, clean them, and showed me how to breast-feed the

baby." Another mother said "She came to my house the next morning, and checked the cut that was on my vagina, and she took me to the clinic for them to stitch me."

4.6.1.2 Perceptions of birthing charges

The service of the Traditional Birth Attendants was perceived as almost free of charge. Mothers mentioned that they do not pay any fees during pregnancy and postpartum period. Thirty-three said, "That did not pay for the service of the TBAs. Most of the mother said, that did not pay anything." One mother said, "It is free of charge" Eleven of the mother said "That they paid the Traditional Birth attendants fifty Rand for birthing." Seven mothers mentioned that they gave tokens of appreciation. Another mother said, "I gave her some present to show her that I liked her service."

4.6.1.3 Perceptions of the utilization of community service

The utilization of community service was most often used to obtain vaccinations, for their babies, and the mothers. Most mothers said that the utilization of the community services was often during an emergency. One mother said, "She encouraged me to go to the clinic for my vaccines." Another mother said, "TheTBAs told us to go to the clinic regularly for vaccines and medicines." Yet another mother said "The TBA helped me a lot when I was pregnant and the TBA gave me money to pay the hospital bill to a private clinic in town."

4.6.1.4 Perceptions of care during pregnancy

Care during pregnancy was perceived as being careful and examining with care. Most of the mothers mentioned that the care provided by the TBAs was educational and

provided good health information for them. Twenty-five of the mothers said the TBAs provided care by examining the mothers, advising, and educating them about good hygiene. One mother said, "They examined me, and checked if the baby is fine." Another mother stated that, "The TBA examined me, told me to eat well balanced meals, like fruits, vegetables, other good local food that are rich in vitamins, and taught me how to care for myself." Another mother said "The TBAs did not give me much care because I went to her already in labor."

4.6.1.5 Perceptions of pregnancy related problem

During pregnancy some mothers develop pregnancy-related problems, which required attention. Eight of the mothers had pregnancy related problems like, headaches, swollen feet, painful legs and no fetal movement. One mother said, "I did not have serious problems, but my legs would hurt me a lot." One mother said, "My legs and hands would sometimes get swollen, and I was sent to the clinic for medicine." One mother said "My baby did not play in my stomach (there was no fetal movement) and they send me to the clinic for the doctor to check me and give me care." Another mother mentioned that she had headaches most of the time.

4.6.2 Perceptions of Traditional Birth Attendants' Practice during labor

The first priorities for delivery are to be safe, atraumatic and clean. The mothers regard pregnancy as a normal event, but have high perceptions of the need for assistance from TBAs in their community. The mother usually calls the TBA when labor is in progress or when she has a problem. The mother's perception of labor was discussed under these categories:

Perceptions of delivery process

- Perceptions of complications during labor
- Perceptions of the nature of cases referred
- Perceptions of children delivered by Traditional Birth Attendants

4.6.2.1 Perceptions of delivery process

Delivery procedures are clean procedures carried out during labor by the TBAs.

Under this category the following sub categories emerged:

- ❖ Perceptions of the management of first stage of labor
- Perceptions of the management of second stage of labor
- Perceptions of the management of third stage of labor

4.6.2.1.1 Perceptions of the management of first stage of labor

This section discusses the mothers' perception of the delivery process. All of mothers reported that they called the TBAs at their homes, and the TBA put an old blanket on the floor, and told me to lie down on the blanket facing up, with my leg apart. She put on her gloves, and examined me, to see if the baby's head had come down in the right place. When she sees that I am fully ready she tells me to push until the baby comes. Two mothers said, "They prepare the floor with a blanket. She put on her gloves, and told me to lie down. She told me to obey the orders, and I did. She told me to push, and I pushed and the baby came." One mother said, "The TBA came in when I was in labor pain, she put on her gloves, and she told me to lie down on the bed. She checked me, when she saw that I was ready, she told me to push, and then she cut me with the razor blade, and told me to push again, until the baby came." Eight mothers said "They put a blanket on the floor, told me to lie down. She put on two plastic bags on her hands and then they told us to push and the baby came."

4.6.2.1.2 Perceptions of the management of second stage of labor

The mothers perceived the management of this stage of labor as being careful and providing much support. All of the mothers said that the baby's cord was cared for, and their babies were given to them to hold. Five mothers said, "After the baby came they tied the umbilical cord, and cut it." They cleaned the baby's eyes and mouth, and wrapped the baby up and put the baby on me." One mother said "They washed the baby and wrapped the baby in a clean blanket and gave the baby to me to breast-feed." One mother said "She cut the cord and cared for it, then she brought the baby to me all wrapped up."

4.6.2.1.2.1 Perceptions of infant death during labor

Forty-four of the mothers had normal and live babies. All of them spoke confidently that they had all of their children alive by God's power.

Four of the mothers reported that they had had children who died during delivery. One mother mentioned "My child came dead because the cord was wrapper around the neck". Another mother said, "My baby was born dead." One mother said, "My baby was just blue and did not cry at all, she was dead."

4.6.2.1.3 Perceptions of the management of the third stage of labor

The management of the third stage of labor is not complete until the placenta; membranes and umbilical cord have been thoroughly examined.

One mother reported, "After I delivered the baby, the TBA waited for some time and when she examined me, and saw the placenta, she told me to push and the placenta came out. She checked the placenta to see if all was out, and then she cleaned me and put me on the bed." One mother mentioned, "It took some time before the placenta came, so the TBA put in her hand, and removed the placenta out slowly (manual removal)." All the mothers mentioned that the TBAs checked the placenta and checked if the entire placenta was out, then washed the mothers and checked to make sure that the mother was not bleeding. Then the placenta was put aside to be buried." Most of the mother reported that the TBAs washed them and cleaned the area where they gave birth, and then she checked the mothers for the second time to make sure that they were not bleeding.

4.6.2.2 Perceptions of complications of labor

Many mothers have a change of behavior at the second stage of labor. Some mothers vomit at the onset of the second stage. This is probably due to the very painful contractions experienced at this time (Sellers, 2003). Most mothers did not encounter problems. Those who had problems reported the problems, as they perceived their problems.

Two of the mothers reported encountering painful labor and vomiting. One mother reported "I had strong pain throughout my labor". Another stated "I started vomiting from the beginning of my labor until I delivered."

Forty-six of the mothers reported that they did not have any problems during labor.

The mother's said "Our delivery was easy and safe".

4.6.2.3 Perceptions of the nature of cases referred

Referral is the transfers of mothers to a comprehensive local health facility where essentials of obstetric care such as vaginal tears and others complications are performed safely. One mother said "After I took a bath she checked my vagina to see if the tear was improving. It was not healing so the TBA took me to the clinic for the midwife to stitch the tear I had on my vagina." Another mother mentioned "My feet and hand were swollen and the TBA took me to the clinic to be checked by the nurse."

A mother mentioned that I started to bleed before my labor started and I was rushed to the clinic and the bleeding was taken care of by the hospital people.

4.6.2.4 Children delivered by Traditional Birth Attendants as reported by the mothers

Table 14: Showing number of children delivered by TBAs

N = 48

Number of children	Frequency of mothers	Total numbers of
deliver by TBAs		children delivered by the
		TBAs
One child delivered by	31	31
TBA		
Two children delivered	13	26
Three children delivered	3	9
Four children	1	4
Total	48	70

In general TBAs look after the mothers in the community, therefore most mothers had good idea of the number of children the TBAs had delivered Thirty-one of the mothers had had one child delivered by the TBAs. One mother reported "This is my first child to be delivered by the TBA". Thirteen of the mothers had had two children each delivered by TBAs. One mother stated that "She delivered my two children and I had a safe delivery." Three had had three children each delivered by TBAs. One had four children delivered by the TBA. One mother reported, "The TBAs are the only one I can count on to do my delivery." A total of 70 of children were delivered by the TBAs.

4.6.3. Perception of the Traditional Birth Attendants' practice during postpartum

The Traditional Birth Attendants visit all mothers as soon as possible within the first 24-48 hours after birth. The TBA assesses the mother's general condition and recovery after childbirth and identifies any special needs (World Health Organization, Safe Motherhood, 1998). The postpartum visit provides an occasion for assessing and discussing issues of cleanliness, care of the newborn, breast feeding and the appropriate method and timing of family. From the sub-theme Perception of TBAs' practice during postpartum the following categories emerged, and are discussed as:

- Perceptions of practice during postpartum
- Perceptions of home visits
- Perceptions of education
- Perceptions of management of problems

4.6.3.1 Perceptions of Practice during postpartum

Care of the mother is mainly to assess the woman's condition after delivery, with special attention to conditions which could be dangerous during the postpartum period. Mothers describe the practice of the TBAs as being a caring person who provided care during postpartum period as they care for the mothers, and the babies. Most of the mothers said "When the TBAs come to visit us after delivery they checked our womb and checked to see if we do not have any bleeding." One mother said, "She made me something to drink and checked to see if I am well." All of the mothers said, "The TBAs washed the baby, checked the umbilical cord and cleaned around it."

Six of mothers stated that "She gives care to us, and she checks us. If there is any problem she helps us to manage the problem."

All of the mothers reported that, "The TBAs made warm water, bathed the baby, checked the umbilical cord, and then cleaned around the cord. Then the TBAs examined us, and showed us how to hold the breast, when we are feeding the baby. They checked if there was any problem". One mother reported "The TBA checked my stomach, checked if I was bleeding too much, and then cleaned me well and put clean clothes on me. Then she put me on the bed to rest." Another mother said "The TBA checked me, and then washed me, and put me on the bed, and then cleaned the area where I had the baby." One mother said "She washed me and put me on the bed and checked me one more time to see if I was fine."

4.6.3.2 Perceptions of home visit

The mother perceived visitation at their home by TBAs as a time when safe and loving care was provided to the mothers and children after delivery. All of the mothers mentioned that the Traditional Birth Attendants visited the mothers for a week after the birth of their babies. One mother said, "The TBA examined the cut that was on my vagina to see how it was looking. After the TBA saw it was not look good she took me to the clinic for stitching." One mother said "The TBA came to my house for one week to check if I was not sick, she examined my breast, and my womb, and showed me how to clean them and keep my whole body clean."

4.6.3.3 Perception of education

Education is the process of teaching the mothers issues surrounding the improvement of their health. The sub-categories of education emerged as follow:

- Breastfeeding
- Child spacing information
- ❖ Safe sex information

4.6.3.3.1 Breastfeeding

Most of the mothers said "The TBAs bath the baby, and taught us how to clean our breast before breastfeeding and after breast-feeding the baby. Then we were told to breast-feed the baby as often as the baby wants the breast. The TBAs told us to give the breast milk as long as the baby wants it because breast milk was good for the baby".

The TBAs taught the mothers to eat balanced meals, especially locally grown food. Most of the mothers reported "The TBAs told us to breast-feed our babies." One mother said "The TBAs told us to give breast milk because breast milk was good for the baby, and it has every thing in it that will make the baby healthy." One mother said "They told us to eat lots of fresh fruits, vegetables, and other good local food, and drink plenty of water so that the body can be healthy, and make plenty of milk for the baby."

Most of the mother did not mentioned about burping their baby. All of the mothers said, "We put the breast properly in the baby mouth and hold the baby properly in our arms while feeding them."

4.6.3.3.2 Child spacing information

Child spacing information is the provision of information to the mother concerning family planning by the Traditional Birth Attendants. Seventeen of the mothers mentioned that they were given information on child spacing. One mother said "She told me to breast feed my baby for a year, and stay away from sex until the child grows." Another mother said "They told us to stay away from sex and let the baby get strong and big. They said we should breast-feed the baby with only breast milk for six months and then we can give some other good food to the baby to help the baby grow well."

All of the mothers mentioned that the TBAs told us that breastfeeding for long time like a year helps us to space our children.

4.6.3.3.3 Safe sex information

Safe sex is provision of information about safe sex during the postpartum period. Seven of the mothers mentioned that the TBAs gave them information on safe sex. One mother said, "She advised me that I must not rush to have sex, I must use condoms." One mother said, "She told me to abstain from sex while the baby is still young. She said "I must be very careful about sexually transmitted infection." One mother stated "They told us to practice safe sex by using condoms to help us from getting HIV/AIDS."

Most of the mothers reported that the TBAs told us to stay with one partner. This will also keep us safe from sexually transmitted diseases and HIV/AIDS.

4.7. Perceived Advantages of using the Traditional Birth Attendants

The mothers' preferences for the Traditional Birth Attendants were expressed in different ways, as discussed under the following categories.

- Love
- Caring
- Educator
- **❖** Accessibility
- Cost effectiveness

4.7.1 Love

Love as described by the mothers was to like very much, show love or great care for the Traditional Birth Attendants. One mother said, "I love them." Another mother said, "I love the TBAs' care" One mother said, "I really like the TBAs because they took good care of us."

4.7.2 Caring

Caring was described as the provision of what is necessary for the health and welfare of the mothers. The Traditional Birth Attendants' willingness to provide good service, provision of health care and other forms of gesture of good practice to the mothers was appreciated, such as looking after and providing for their needs. All of the mothers preferred the TBAs because they were caring. One mother stated, "They care

a lot; even if you wake them up at night they come to your call." Another mother said "They know how to take good care of us; they have tender loving care."

4.7.3 Education

The mothers see the TBAs as educators, providing information on particular subjects, and instructions of good practices, for improving their health. One mother said, "They teach us how to eat good food when we are pregnant, how to look after our baby, and how to care for ourselves."

Most of the mother mentioned "they were educated by the TBAs on how to breast-feed, and clean our breast and apply oil to prevent sores from coming around the nipple."

One mother said, "The TBA told me to be clean, not to wear skintight skirt, and high shoes." Another mother said "They taught us about danger sign that we should know, such as bleeding in pregnancy. When we have problems we must call them."

4.7.4 Accessibility

Another advantage of the Traditional Birth Attendants is that they are in close proximity to the mothers. One mother said, "They are close to us, and even at night when transportation is not available, they are in a position to care for us." One mother stated that they were friendly and easy to talk to; and always there when needed"

Another mother said "They helped me when I was not feeling well: I would just call them to come and they would come."

4.7.5 Cost effectiveness

Cost effectiveness is the effectiveness and productiveness of the TBAs in relation to their cost. Most government health facilities do not charge fees for pregnant women, but these facilities are far off. Therefore the mothers called the TBAs, in their communities to provide care for them. One mother mentioned that she did not give anything to the TBAs. Another mother said, "It is free of charge." Most of the mothers said "We do not pay the TBAs because we do not have money to pay them for the work they do for us."

4.8 Conclusion

In conclusion this chapter discussed the findings of the study of both TBAs and mothers who were interviewed. This group of TBAs, with a year's of training, copped

with their pregnancy, labor, and postpartum practices competently. The TBAs were highly motivated to provide safe health care to the mothers in the communities, and the mothers attended by them were appreciative of the care they were giving and had confidence in the TBAs. They study indicates that safer care is practiced by these TBAs. The mothers preferred to use the TBAs for their care.

Overall it was found that knowledge and skills the TBAs learned in their practice contributed to the improved birth practices in the rural communities. They had considerable knowledge of clean and safe deliveries, and the referring of high-risk pregnancy mothers to the clinic rather than attempting them.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

The main purpose of this study was to investigate the practice of the Traditional Birth Attendants during pregnancy, labor, and postpartum period with the overall goal of promoting safe motherhood. Findings from this study have highlighted the practice of the Traditional Birth Attendants. This study contributes to the limited research on the practice of Traditional Birth Attendants. In this chapter, discussion, and summary of the major findings from both the quantitative and qualitative analysis is first presented and then recommendations are made on how the practice of TBAs can be initiated in other rural communities to promote "best practice" and provide a basic level of maternity care.

5.1 Discussion of the results

The forty-eight Traditional Birth Attendants, and forty-eight mothers interviewed for this study showed that the practice of helping mothers to give birth is similar to what was done years ago, and with training, the TBAs' practice has improved the lives of mothers in the community. The study showed that most of the TBAs are between the ages of 50-59 years or in their middle ages. It also revealed 8.3 % of the TBAs were younger between the ages of 20-39, who were practicing with middle aged TBAs. Although this finding contradicts the traditional notion that TBAs are elderly women.

Singh, (1994) supports the finding that a TBA usually learned her trade through apprenticeship with older TBAs.

The study showed that 100% of the TBAs spoke the Zulu language, which the mothers they attended also spoke. Therefore it was suitable for practicing and giving care. Literature supports that the TBAs should speak the same language, and share the same beliefs as the woman for whom they provide care (Singh, 1994).

The study showed that 86.0 % of the TBAs were married or widowed. Fourteen percent were single. Those that were single had children and were respected also in their community. It is quit interesting to see that this result is similar to those in previous studies (Ntoane, 1998; Annelies, bij de Vaate, Colaman, Manneh and Walraven, 2002).

As shown in this study, all of the TBAs had either primary or secondary education. They kept record of deliveries they had done and had their signatures affixed to their record. None of the TBAs had tertiary education. Literature supports that women who are educated may also practice healthier behaviors and may be able to identify danger signs. They are likely to assist women, thereby reducing their lifetime risk of dying from maternal related causes (Shiffman, 2000).

The study revealed that 97.9 % of the TBAs were female, and showed one (2.1%) male was a practicing Traditional Birth Attendant who had also gone through the training. It has often been assumed that TBAs are female; it was interesting to find a man working and practicing as a Traditional Birth Attendant. This is contrary to

findings from other studies, which report that TBAs are mostly illiterate women who have learned their trade through apprenticeship with older female TBAs (Singh, 1994; Ntoane, 1988).

The study showed that mothers who were delivered by the TBAs were young mothers between the ages of 15-35 years, and most of them were having their first child. This is a critical finding. Other studies revealed that women often had too many births, too closely spaced, and either too early or too late in life. These serial births were generally attended by TBAs who were frequently experienced but often engaged in practices that placed birthing mothers, newborns, and TBAs at serious problem and risk for disease (Turshen, 1991).

The study reveals that most of the mothers were singles. Only five of them were married. Literature supports that the most common choice of being single among older teenagers can be attributed to the fact that single unmarried women are socially more acceptable today than ever before (Greathead, 1988).

As shown from the study 70.8 % of the mothers had acquired higher primary education and 27.1% of the mothers had lower primary education. Dargeut, Molina, James, Strogatz and Savitz (1994) have pointed out that maternal education plays an important role in determining infant survival in developing countries. Women who are educated may also practice healthier behavior throughout the course of their pregnancies. They are likely to bear fewer children, thereby reducing their lifetime risk of dying from maternity-related causes (Shiffman, 2000).

5.1.1 Obstetric data of mother

The study revealed that 64.0 % of the pregnancies attended to by the TBAs were first pregnancies. The patronage of TBAs is strong among the mothers in the rural area. Literature suggests that TBAs continue to be the chief source of maternity care in rural communities, where they conduct 60 % to 80 % of deliveries (Singh, 1994). As shown from this study, all of the mothers mentioned that the TBA attended one or more of their pregnancies.

The study showed that 40 mothers had no children born dead and 5 mothers had one child each born dead. Three mothers had two children each that were born dead. A total of eight mothers had 11 children born dead. Literature supports, that most infant death occur during the neonatal period (1-28 days). There is a distinct possibility that they were due to premature birth injuries, or an aftereffect of obstructed or prolonged labor (Bhatia, 1981).

The study revealed that 95.8 % of the mothers did not have any children who had die within the first week after delivery. This shows that most of these mothers' first deliveries were normal and they had no problems. Literature supports that care in normal childbirth is to achieve a healthy mother and child with the least possible levels of intervention that is compatible with safety (<a href="http://www.who.int/reproductive-health-publications/MSM-96-24/MSM-96-2

Literature supports that appropriate training and supervision has a vital role in effective performance and utilization of TBAs (Lynch and Derveew, 1994).

The study revealed that most of the TBAs trained in groups of ten, and the TBAs' training included the delivery process, universal precautions, delivering of the presenting part, identifying danger signs such as bleeding, caring for complications, caring for mothers, and babies. The study revealed that the TBAs also learned to identify high risk mothers by checking their card for red notes. Literature supports that it is possible to train TBAs to provide a basic level of maternity care (Annelies bij de Vaate, Colaman, Manneh, and Walraven, 2002).

The study showed that the TBAs received support from professional health workers at the initial stage of their training. Thirty-four percent indicated that they were not receiving material support presently from health workers. The literature supports that social support enhances the adaptation process of self and the abilities to cope with new task and roles (Callangham and Morrisey, 1993).

The study showed that the TBAs used the mothers' homes as birthing places. Four percent of the mothers went to the TBAs' homes for delivery. Literature supports that 90 % of all children in rural area are born at home (Boerma, and Mati, 1989).

As shown in this study, the TBAs examined mothers with their hands. They felt for baby body parts and heartbeats. They used basic simple cleaned unsterile equipment like, gloves, cord string, razor blade, and pads. Seventeen percent of the TBAs used plastic bags as hand gloves. Literature supports that training TBAs in the use of basic

equipment, enhances TBAs' skills to practice effectively, and eliminate unhealthy practice (Conway-Turner, 1997).

The study showed that TBAs provided care from prenatal to the postpartum period. Forty-six TBAs mentioned that they provided pregnancy care, forty-eight of the TBAs mentioned that they gave care during labor, forty-eight of the TBAs mentioned that they provided postpartum care, and forty-eight of the TBAs mentioned that they provided nutritional and health care information to the mothers. Forty-seven TBAs mentioned that they encouraging health service utilization such as referring their patient to a provider in health facility if complications are anticipated or if they occur. Literature supports that TBAs are part of the birthing process throughout the developing world, assisting in the births of a substantial portion of the world's newborns (http://www.mnh.jhpiego.org/best/tba.asp). In this study the TBAs showed that they were an effective force in their area, as other trained TBAs have proved in other parts of the world.

The study showed that the TBAs provided free service but 8.4 % of the TBAs asked the mother to pay Rand 50.00 for the service they provided. In other studies some evidence suggests that TBAs received different amounts of cash or other compensation, depending on the sex and birth order of infant (Singh, 1994).

5.1.2 Traditional Birth Attendants' practice during pregnancy

The study revealed that the TBAs gave prenatal education, about the importance of good nutrition, and the harmful effect of drinking, or smoking. Evidence supports that great efforts are made to ensure a normal pregnancy and healthy baby (Sparks, 1998).

As shown in this study the TBAs follow up pregnant mothers in their homes. Two percent of the TBAs follow their patients from the clinic and visit the mothers twice a month until they give birth. Literature supports that elements of traditional practices might provide the most appropriate approach for midwives to follow in their care of the diversity in South Africa (Seller, 2003). Women select TBAs because they are familiar birth attendants and they want the familiarity and support of a TBA they know and trust (Kelly, 2000).

The study showed that the TBAs' advice to the mother revolves around nutritional education, risky behavior, and health facilities utilization. Other studies reported that TBAs discuss matters such as nutrition, rest, sexual activities and breastfeeding (Sparks, 1998; Singh, 1994).

5.1.3 Traditional Birth Attendants' practice during labor

The study showed that the TBAs made homemade (soror) sugar salt solution and gave it to the mothers to drink when they were weak. Two percent of the TBAs used prayers to help the mother when she was in pain. It was shown that ash was given to the mother to take to help her when she was in pain. Literature supports that TBAs

offer the laboring women warm tea or porridge and avoid using cold substances because it is believed that they stop labor (Sparks, 1990).

The study showed that the TBAs did the delivery on the floor on an old blanket, in lithotomy position, after encouraging the mother to empty her bladder. They wore gloves or plastic bags, examined the mothers before the delivery was done. They measured the umbilical cord, tied it with string, or put a clipper on it, and cut it. They cleaned the baby's mouth, nose, and eyes with a clean cloth to remove the mucus. They wrapped the baby in a clean cloth and put the baby near the mother. The placenta was delivered, and checked, to make sure that all of it came out. The mother was then checked and cared for to make sure she was not bleeding. The TBAs washed the mother and put her to bed, and then cleaned the place where she gave birth. Literature supports that with adequate training and supervision, some TBAs can provide care for a normal pregnancy through labor, delivery, and the postpartum period. They can identify complications, refer women with delivery complications to appropriate medical facilities, and offer family planning service (World Health Organization, Safe Motherhood, 1998). All this was borne out by the evidence of the present study.

As shown in this study 36.0 % of TBAs used gloves, razor blade, and clippers to clip on the cord. It was also shown that 61.0 % used gloves or plastic bags, spirit, razor blades, blankets, fire to kill germs on the blades, water, and newspaper Literature supports the findings that though modern equipment is scarce, most TBAs have scissors, or razor blades, umbilical tape, and alcohol (Lang and Elkin, 1997).

The study revealed that the TBAs were able to deal with some complications. Few of the TBAs delivered mothers with malpresentation (breech-leg and shoulder). Five TBAs dealt with mothers with postpartum hemorrhage. They took these mothers to the clinic for professional help. Other evidence suggests that most TBAs had few skills to handle complication of pregnancy, and labor (Lang and Elkin, 1997).

The study showed that the TBAs referred mothers to the clinic when they encountered complications that they were unable to handle. One TBA used prayer to manage complication. The study showed that one TBA mentioned the used of additional pillows at the mothers' back to facilitate a safe and easy delivery. Literature supports that those TBAs who are trained, must be able to refer the woman or the baby to a higher level of care, when interventions are required which are beyond their competence (http://www.who.int/reproduction_health/publication/MSM_96-24-MSM MSM 96 24 Chapter 3).

5.5.4 Traditional Birth Attendants' practice during postpartum

The study showed that the TBAs mentioned that they visited the mother at her home for a week to assess and care for the mother and baby. They examined the mother to find out if she was bleeding or not, and checked the umbilical cord, and gave a bath to the baby, and educated the mother about breast feeding, caring for her breast and eating well balanced meals to produce adequate breast milk for her baby. Literature supports that trained and supervised TBAs should visit all mothers as soon as possible within the first 24-48 hours after birth. The TBAs should check on the mother's general condition and recovery after childbirth and identify any special need and provide care (World Health Organization, Safe Motherhood, 1998).

The study showed that the TBAs visited the mother's home once a day for a week. They gave the mother and baby a hot bath, and encouraged the mother to take the baby to the clinic. Literature supports that a home visit during the postpartum period is an occasion for assessing and discussing issues of cleanliness, care of the newborn, breastfeeding, and appropriate methods and timing of family planning (World Health Organization, Safe Motherhood, 1998).

As shown in the study, the TBAs mentioned that mothers had postpartum problems that they had to deal with. Seventeen percent of the mothers did not have proper food to eat. Two mothers did not have adequate breast milk so the baby was not getting enough milk. Six percent of the mothers had breast engorgement. It was shown also that the mothers did not have support from their family. Literature supports that a regular diet should be offered as soon as the patient requests foods, sometimes after delivery. The breast may become painfully engorged during early lactation, when the amount of milk is beginning to increase

(http://www.merck.com/pubs/mmanual/section18/chapter254/245a.htm).

The study showed that the TBAs managed postpartum problems by providing advice on good nutrition, condom use, educating the mothers how to care for their breasts and breast feed their babies. The study showed also that mothers were encouraged to use the clinic. Literature supports that during the first few days after delivery, mothers are instructed by the TBAs about care of the baby and appropriate nourishment and rest for themselves. Sexual intercourse is discouraged for the first postpartum month (Sparks, 1990).

5.1.5 Mother's perception of Traditional Birth Attendants' practice during pregnancy

The mother's views were ascertained from this study to prove a crosscheck on the TBAs' performance and to give an impression about the mother's perception of the TBAs. The study showed that what the mothers said of the TBAs was similar to what was said and done by the TBAs for the mothers. All of the mothers mentioned that their homes were used as the birthing place. Literature supports that majority of births in most developing countries; particularly in the rural areas, take place at home, usually assisted by relatives or TBAs (Paul, 1993).

Although the literature on the topic had laid the foundations for this research, the responses from the mothers who had been attended by the TBAs expressed an overwhelming nature of their perceptions of the TBAs during pregnancy, labor, and postpartum period.

The study showed similar findings to what the TBAs mentioned about birthing charge. Thirty of the mothers mentioned that they did not pay any fees for pregnancy, delivery, and postpartum service. However, ten of the mothers paid R.50 to the TBAs for delivery. Eight of the mothers gave tokens of appreciation or some present. Literature supports that the traditional of payment for delivery services is deeply entrenched in this informal health care system. Usually after birth the families present the TBAs with goods, such as chicken, sugar, a dress or bowl and sometimes \$5 or \$10 are substituted for the goods (Sparks, 1990).

As shown in this study, all of the mothers mentioned that the TBAs encouraged them to visit the health facilities. The literature supports that trained birth attendants usually accompany the mothers and newborn to the clinic for a checkup by the nurse within few days after birth. At this time the TBAs often discussed the birth with nurses and received tips on how to care for the needs of new mothers (Conway-Turners, 1997).

The study showed that most of the mothers perceived that the care provided by the TBAs during pregnancy was good. Most of the mothers mentioned that TBAs examined them and encouraged them to eat proper nutritional meals and follow healthy habits. Literature supports that diet is generally poor in iron and folic acid; and during pregnancy certain food taboos may aggravate the situation. The poor health and nutritional status of women is also reflected in the high incidence of low birth weight (Boerma, and Mati, 1989).

The study revealed that eight of the mothers confirmed that they had pregnancy-related problems, like headaches, swollen feet and hands, painful legs. Literature supports that it is critically important to identify and manage complications as they arise among all pregnant women (World Health Organization, Safe Motherhood, 1998).

5.1.6 Mother's perception of Traditional Birth Attendants' practice during labor

The study revealed that the mother perceived that the TBAs managed the first stage
of labor well. When the TBAs are called to the mother's homes the mothers are far

advanced in labor and it is about time for them to give birth. All of the mothers mentioned that the TBAs put an old blanket on the floor and asked them to lie down, face up, with their legs apart. The TBAs put on their gloves, examine the mother to see if the head is down and tells the mother to push. Literature supports that birth attendants should be able to assess the normal progress of the first stage of labor; the prerequisites for a normal labor must be present before the second stage begins (Seller, 1993).

The study showed that the mothers perceived that the TBAs managed the second stage of labor by delivering the baby, tying the cord and cutting it. She cleaned the baby's eyes, and mouth, and wrapped the baby up in a clean blanket and put the baby near the mother. Literature supports that second stage of labor commences when the cervix is fully dilated. This indicates that the cervix has been pulled up over the widest diameter of that part of the fetus, which is presenting, allowing the fetus to be expelled from the uterus (Seller, 1993).

The study showed that most of the mothers mentioned that they had normal and live babies. Eight of the mothers mentioned that they had had a child to die during the second stage of labor while being delivered by the TBAs. Literature supports that unless delivery is accomplished promptly as soon as labor becomes obstructed; the fetus almost invariably dies from trauma, hemorrhage, asphyxiation, and sepsis (Arrowsmith, 1994).

As shown from this study the mothers perceived that the TBAs managed the third stage of labor by waiting for a while and when the placenta was ready to come out,

the TBA told the mother to push it out and then the TBA checked the placenta. One mother mentioned that the TBA manually removed the placenta. Literature supports that management of the third stage of labor is not completed until the placenta membranes and umbilical cord have been thoroughly examined (Sellers, 1993).

The study showed that the mothers did not encounter problems. The mothers had easy and safe deliveries although two mothers had painful labor and vomited throughout labor. Most of the mothers did not have any complications during labor. Literature supports that some women vomit at the onset of the first stage of labor. This is probably due to the very painful contractions experienced at this time (Sellers, 1993).

As shown in this study the mothers mentioned that the TBAs referred mothers when there were complications, such as bleeding, tears and swollen feet and hands. Literature supports that TBAs should be trained for appropriate referral of complications, such as hemorrhage, sepsis, perineal trauma, breastfeeding problems and newborn complications that required additional surveillance and for treatment (World Health Organization, Safe Motherhood, 1994).

The study revealed that all mothers had between one and four of their children delivered by the TBAs. Literature supports that even when the mothers undergo pregnancy check ups in the health centers, they go to the TBAs when it is time for them to give birth (Dursin, 2000).

5.1.7 Mother's perception of the Traditional Birth Attendants' practice during postpartum

The study showed that the mother perceived the TBAs' practice as one of caring during the postpartum period. Thirteen percent mentioned that TBAs checked the mother's womb, and checked that the mothers were not bleeding. All of the mothers mentioned that the TBAs made warm water and bathed the baby, checked and cleaned the umbilical cord and checked the mother. Literature supports that during the first few days after delivery, the new mothers are instructed by the TBAs about the care of the baby and appropriate nourishment and rest for themselves (Sparks, 1990).

The study showed that all the mothers mentioned that TBAs visited their homes for a week, examined them, and checked for any vagina tears. Literature supports that; the TBAs should visit all mothers as soon as possible within the first 24-48 hours after birth (World Health Organization Safe Motherhood, 1998).

The study revealed that the mothers mentioned that the TBAs taught them how to care for their breasts and to breast feed their baby; and that the mother should eat well balanced meals, such as green vegetables, and fruits. Literature supports that recommending such food for new mothers is constructive. They provide vitamin A and iron in a traditional diet, which is low in these vitamins (Padgett, 1995).

The study revealed that the mothers saw TBAs as educators who provided them with information about child spacing, nutrition and sex education etc. Literature supports

that, with adequate training and supervision TBAs can offer family planning information and services (World Health Organization, 1998).

The study revealed that the mother mentioned that the TBAs taught them about using condoms whenever they wanted to engage in sex. This would protect them from getting HIV/AID and protect them from getting pregnant early. Literature supports that in addition to providing emotional and household support to the woman and her family, the TBA should provide health education in nutrition, prevention of sexually transmitted infections including HIV, breastfeeding and family planning (http://www.mnh.jhpiego.org/best/tba.asp). Studies have also shown that safe sex could prevent an unwanted pregnancy, and sexual transmitted infections. Even though safe sex entails more than the use of condoms, it also includes non-penetrative sex and being faithful to one partner (Varga, 1997, Aids Action, 1999).

5.1.8 Perceived Advantages of using the Traditional Birth Attendants

The study showed that all of the mothers preferred to use the Traditional Birth Attendants. The mothers mentioned that the TBAs took good care of them, provided good service for them, and came to their call at night. The TBAs educated them about good nutrition, and care of the breast; they are accessible. The mother preferred the TBAs because they were cost effective their service is free of charge. Even those who did pay some money mentioned that they preferred to go to the TBAs for care. Literature supports that the mothers preferred TBAs because they wanted the familiarity and support of a midwife who they knew and trusted. The continuity of care offered by the community midwife provides an avenue for a relationship to be

maintained (Kelly, 2000). This study shows that mothers preferred the TBAs in order to enhance the natural facilitation of childbirth process.

5.2 Summary of major findings

The findings revealed that four of the Traditional Birth Attendants were younger than what has been found in previous studies, and they were practicing with elderly TBAs. The findings also revealed that the TBAs spoke the same language as the mothers they served which made it suitable for them to practice and give care.

The findings revealed that most of the TBAs had primary education and one had secondary education. This finding is not consistent with other studies which indicated that TBAs are illiterate.

This study included one male TBA, who was equally accepted by the mothers in the community. There was no gender difference in the care that was given.

The quantitative findings of the mothers revealed that TBAs attend younger mothers who were having their first babies.

The TBAs in this study did not mention about any of their patients dying during the time they were giving care. They mentioned only few problems.

Quantitative obstetric data and qualitative analysis revealed that the mothers' pregnancy, labor, and postpartum care were attended by the TBAs. The patronage of

TBAs is strong among the mothers in the rural community. They are dependent on the TBAs to facilitate their birth process.

The study revealed that eight mother had a total of eleven babies that were born dead this is consistent with other studies which found that most infant death occur during the neonatal period.

The qualitative analysis through structure interview showed that in rural South Africa delivery care is part of the function of the TBAs. They are generally well informed about pregnancy, labor and postpartum care. They received support from professional workers at the beginning of their training, but were presently not receiving material support to enhance their practice. Adequate supply of birthing materials was not available, and the TBAs improvised by using local material, such as plastic bags for gloves. They were using fire to sterilize the razor blades because they could not acquire new razor blades. It would be preferable if TBAs were able to use new razor blades for each delivery.

The results showed that the TBAs were trained prior to their practice for one to one and half years in birthing practice. Childbirth was regarded as normal practice and a private event of the mothers, and the TBAs were called to the mothers' homes most often when the labor was well advanced. Clean delivery practice was done. TBAs did have some problems, which they managed or referred when they were unable to handle the problems. That the motivation of TBAs in rural South Africa was to provide safe, skilled care to their families, friends, and mothers in the community was apparent. Positive changes in TBAs' practices have been found as a result of previous

courses they had had. Evidence has been presented that indicates that safer care is practiced by the TBAs who have had training (Sparks, 1990).

Other findings from the qualitative analysis revealed that TBAs used homemade remedies to give the mothers strength during delivery. They gave ashes to the mother to aid her when she was having pains. They used additional pillows on the mother's back to facilitate safe and easy delivery, and the use of prayers to manage complications. Practices like giving ashes at times causes delay in referral, and a refresher course should be considered as an important factor that could prevent maternal mortality.

Another major finding from the study revealed that all the TBAs visited the mother's homes during the first week to assess her and the baby during the postpartum period. This is consistent with findings from other studies that during the first few days after delivery, the mothers are instructed by the TBAs about the care of the baby, appropriate nourishment, and rest for themselves (Sparks, 1990, World Health Organization, 1998).

Findings from the qualitative section of the mother's perceptions revealed that their perception of the TBAs' practice was consistent with the care given to the mothers. The mother's impression of the TBAs' practice was similar to what the TBA said and demonstrated about their practice. Factors that were linked to the mother's perception were that mothers in the district seem to make a conscious choice of home delivery. As part of that choice, they utilize the service of the Traditional Birth Attendants who are familiar caregivers through the birthing process.

Other findings from the qualitative analysis revealed that the mothers preferred to use TBAs because TBAs showed love and care. The close proximity at which these TBAs live to the mothers provides a supportive welcoming presence for the young mothers. The TBAs encourage the mothers to be safe, and prepared for labor, birth and parenting. Mothers preferred the TBAs because their service is cost effective. Even with a low social economic status they can still find support from the TBA.

5.3 Recommendation

Considering all these findings in the study it is obvious that the practice of these TBAs can be improved further. Some recommendations follow:

- Traditional Birth Attendant training should not be a one shot program. In order to maintain continued contract with the TBAs, to retain their interest in their practices in the health, and care of mothers and family planning program, and to resupply the TBAs with items, periodic refresher programs should be organized to upgrade their skills. These programs should be held every six months, for two to three days. Such programs would also help to strengthen ties between the trained TBA and Primary Health Care staff.
- ❖ It is recommended that the training program be made part of the national health policy, which aims at reducing maternal and child morbidity and mortality. An evaluation program should be initiated to measure TBAs' practice on maternal care.

- It is also recommended that the Department of Health set goals for percentages of both home and health facilities birth, according to available resources.
- ❖ More research into traditional birth practices should be done, if health workers want to shape maternity care towards the community's life style and expectations for maximum maternity coverage.
- ❖ The TBAs should be recognized in all rural communities and trained by the government since these TBAs are the first contact for the majority in most communities. They should be financially and materially supported. These TBAs want to know when they will receive pay from government.
- The training program could be made more attractive if careful attention were paid to supervision and follow-up of trained TBAs. Training should be replicated in all rural communities of South Africa.
- All TBAs should be encouraged to keep records of mortality, and morbidity of mothers and babies that they deliver. This record would provide an understanding of the nature of maternal deaths and problems in the community.

To sum up, these TBAs had basic knowledge of safe obstetric practices. They were able to recognize or appropriately handle high-risk situations that necessitated referrals. They were familiar with basic life saving skills, which helped to lessen maternal mortality and improve maternal coverage in the rural communities. To

continue to support this effort there is a continuous need to supervise, have refresher classes, and provide supplies and financial support to all TBAs.

5.4 Limitations

The study has several limitations. One major limitation of this study was the language barrier. The structured interview was done in English first then translated into Zulu. After collecting the data in Zulu, it was then translated back to English for analysis. A professor in the Zulu language department at the University of Natal did the translation from English to Zulu.

None of the experiences reported by the TBAs and mother could be independently confirmed and thus they were subject to reporting error, information bias, or potential response bias.

The TBAs' perceptions of the researcher's motives may also have affected some of the responses. Although most TBAs were open and receptive to talk with us, some felt a bit hesitant to talk but became open in the end.

Distances were long and much time was spent getting to the rural communities. It was costly getting commercial transport to commute to the research sites.

5.5 Implications for nursing research

It would be useful to perform well conducted observation studies and interventions with women and family members, to get information about the practices of the TBAs, to assess in depth the extent to which these practices contribute to maternal mortality. The practice of these TBAs in the improvement of safe motherhood cannot be ignored. Traditional Birth Attendants remain the major resources in the Abaqulusi district where they serve.

5.6 Implications for nursing midwifery practice

We as Nurse Midwives should view the whole issue of working with TBAs as reciprocal, that is, while teaching the TBAs, we should also learn from them. The benefits accrued from the use of the TBAs in other countries should be used as a lesson for other developing countries, as similar problems may present themselves differently under different conditions.

Implications for future practice would be to conduct community needs assessment in other rural communities and see how training programs in these other communities could be started, to improve the TBAs' standard of practice.

5.7 Implications for primary health care

In field practice areas of Primary Health care, regular continuing education sessions for TBAs should be held so that their skills are upgraded regularly. This approach could provide nationwide maternal coverage in health care system. It would establish a channel of communication between traditional practitioners and experts of the

Primary Health Care System. Such measures would help to strengthen government maternity services in rural areas by optimally utilizing the pool of TBAs.

It should be emphasized that as the TBAS are involved in Primary Health Care, a mechanism for compensating them economically for their services should be considered and addressed.

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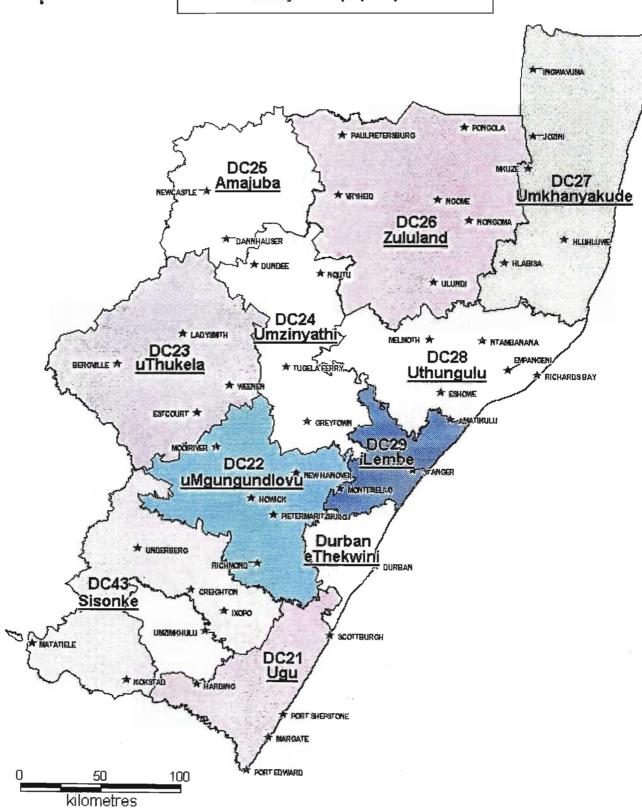
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APPENDIX A

KWAZULU-NATAL HEALTH DISTRICTS

Population - 9 070 457 Area - 92 440 Sq. km Density - 98 People per Sq. km



4	PF	FN	DIX	В

DATE: DDMMYY
CODING NUMBER

DEMOGRAPHIC QUESTIONNAIRS FOR THE TRADITIONAL BIRTH ATTENDANTS

Section	A
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Instruction

Answer this section by circling the correct answer.

			CODING
1.	How old are you?		
	20-39		1
	40-49		2
	50-59		3
	60-69		4
2.	What language do you s	peak?_	
	Zulu		1
	Xhosa		2
	English		3
	Sotho		4

3.	Married status Single Married Divorced Widow	1 2 3 4
4.	Education Primary Secondary Tertiary Other	1 2 3 4

APPENDIX B: 2

DATE: DDMMYY CODING NUMBER

INTERVIEW GUIIDE FOR THE TRADITIONAL BIRTH ATTENDANTS

Section B

TRAINING

- 1. Have you had any training as a Traditional Birth Attendant?
- 2. What was the training like?
- 3. What did you learn from the training?
- 4. What support did you receive from professionally trained health workers?

SERVICE

- 1. Where do you use for providing your service?
- 2. What do you use for providing service?
- 3. What service do you render to the mothers?
- 4. How much do you charge for your service?
- 5. What problems or challenges have you encountered while providing service to the mothers?

Traditional Birth Attendants Practice during Prenatal Care

- 1. Describe how you get your pregnant women, at the stage of pregnancy?
- 2. How do you follow up pregnant women when they are pregnant?
- 3. What care do you provide for the mothers during the prenatal visits?
- 4. What examination do you do on the mothers?
- 5. What advice do you provide to the mother about nutrition, health risks or problems?
- 6. What other services do you offer the mother when they come for prenatal service?

Traditional Birth Attendants Practice during Labor

- 1. Describe the things you do for the mothers when they come to you in labor.
- 2. Where do you delivery the mothers?
- 3. What equipment do you have for doing delivery?
- 4. How many deliveries have you done in the past five years?
- 5. What types of deliveries have you done in the past five years?
- 6. What complications have you had during the delivery?

- 7. How did you handle the mothers who had complications?
- 8. How did you refer mothers when they had complication?
- 9. How many mothers died while they were giving birth or six weeks after giving birth?
- 10. What was the cause of the death?

Traditional Birth Attendants Practice during Postpartum

- 1. Describe the service you render to mothers after delivery?
- 2. How do you go about visiting the mothers after delivery?
- 3. Where do you see the mothers after delivery?
- 4. What care do you give baby?
- 5. What were some of the problem that mother s had at this time?
- 6. What do you do for the baby when you visit the mother?
- 7. How often do you visit the mothers?
- 8. How did the mothers feel about you visiting them?
- 9. What advice do you give regarding self-care and care of the baby?

Thanks very much for helping me to do the study.

Do you have any question?

APPENDIX C

	DATE: DDMMYY
	CODING NUMBER:
INSTRUMENTS	
The Demographic Questionnaire for	r mothers
Section A	
Instructions:	
Please fill in the questionnaires by circ	cling the best answer.
A. Personal information	CODING
1. How old are you?	
15-25	1
26-35	2
36-45	3
46-55	. 4
2. What language do you speak?	
Zulu	1
Xhosa	2
Sotho	3
English	4
3. Married status	
Single	1
Married \square	2
Divorced	3
Widow	4
4. Education	
Lower Primary	1
High Primary	2
Secondary	3
Tertiary	4

		2
	Other	
5.	How many of your pregnancies were attended by the TBA?	
	0	1
	1	2
	2	3
	3	4
	4 or more	5
6.	How many live children do you have?	
	0	1
		2 3
	$\frac{2}{3}$	3 4
	4 or more	5
7.	How many of your children were born dead?	
		1 .
	$\overline{}$	2 3
	3	4
	5 or more	5 6
		O
8.	How many of your children died within the first six weeks after birth?	
	0	1
	$\frac{1}{2}$	2
	3	3 4
	4 or more	5
9. <u>1</u>	How many deliveries did Traditional Birth Attendants attend?	1
1		1
2	2	2 3
3		4
4	or more	5

APPENDIX C: 2

DATE: DDMMYY	
CODING NUMBER	

INTERVIEW GUIDE FOR MOTHERS Section B

SERVICE

- 1. Describe where you go to give birth.
- 2. When did you use the service of the Traditional Birth Attendants?
- 3. What do you like about the TBA care?
- 4. What do you not like about the TBA care?
- 5. How often do you visit the service?
- 6. How much do you pay for the care?
- 7. What other community services do you use?

Mother's Perception about Traditional Birth Attendants practice in prenatal care

- 1. Describe the Prenatal service provided by the Traditional Birth Attendants.
- 2. How helpful were the Traditional Birth Attendants to you when you were pregnant?
- 3. When did you start visiting the Traditional Births Attendants?
- 4. What kind of care did she gives when you were pregnant?
- 5. What problems did you have during your pregnancy?

6. Did the TBA ever refer you? If yes where?
7. If yes, why were you referred?
8. Where did she send you?
9. How did she send you?
Mother's Perception of Traditional Birth Attendants Practice in Labor 1. What type of delivery did you have?
2. Have you ever been attended by TBAs during labor?
3. How many of your children were delivered by TBAs?
4. What problem did you encounter during labor?
5. Did you have any children who died during delivery?
6. What did you like about being attended by the TBAs?
Mother's Perception about the Traditional Birth Attendants practice in Postpartum 1. Describe the service provided by the Traditional Birth Attendants after delivery.
2. How many times did the Traditional Birth Attendants visit you after you give birth?
3. What did she do during the visit?
4. How did you feel about Traditional Birth Attendants visit at your house?
5. What advice did the TBA give you regarding self care and care of your baby?

Is there any other question you want to ask me?

Pause for questions.

Thank you very much for helping me to do the study and together we will improve women health.

APPENDIX D

Information Sheet and Informed consent

<u>Title of the study</u>: The Practice of The Traditional Birth Attendants During Pregnancy, Labour, And Postpartum Period In Rural South Africa.

Researcher: Dedeh F. Jones (Master Student-Community Nursing, School of Nursing, University of Natal

Research Supervisor: Dr. Sarah Muhulungulu, School of Nursing University of Natal,

You have been selected conveniently to participate in a research study, which aims to investigate the practices of the Traditional Birth Attendants during pregnancy, labour, and postpartum period, with the overall goal of promoting safe motherhood. You will not benefit directly from this study; however, the result will lead to the improvement of the quality of life for mothers of childbearing age in the community. To the researcher knowledge there are no harmful effects you will encounter during your participation in the study. Your participation will require you to participate in an interview. The interview is aim to investigate your practices as a TBA and how you perceived your practice. The interview will take 40 minutes, and will be conducted in a private place. The interview will be tape recorded, and only the researcher will have access to the interview. The interview will only be used for the purpose of this study.

Your participation in this study is voluntary, and under no obligation to participate. You are free to withdraw from the study at any time, without any penalty, you have the right to refuse to give any information, and you may ask for clarification for a better understanding on any aspect of the research.

APPENDIX D 2

Consent	
I have explained the above information with to understands the risks, benefits and obligations. Ethics Board of the University of Natal has appeared been sought from the appropriate departments	s of participating in the study. The pproved this study, and permission has
Researcher's signature	Date
Consent for participant I understand that my participation in this reservefuse to participate or stop taking part at any I agree to take part in this study.	•
Participant's Signature	Date

School of Nursing Faculty of Community and Development Disciplines

Durban 4041 South Africa

Telephone: +27 (0)31 260 2499 Facsimile: +27 (0)31 260 1543

14, July 2003

Abagulusi, Office Vryheid Sub-district Health Administration KwaZulu-Natal Facsimile: 034-981 5709

racsimile. 034-201 3702

*Attention: Ms. Nana Nkosi

<u>Permission to Utilize the Community of Abagulusi, Vryheid Sub-district as site for Research Study</u>

Dear Madame,

I am Dedeh F. Jones a master student at the University of Natal majoring in Community Nursing. As part of my requirement towards my master degree, I have to undertake a research project in the community, which is titled: The Practice of The Traditional Birth Attendants During Pregnancy, Labour, And Postpartum Period In Rural South Africa.

In view of the above, I am kindly asking you to grant me permission to use the subdistrict of Abagulusi, Office Vryheid to interview Traditional Birth Attendants (TBAs), and mothers who they attend, on the practice of TBAs during pregnancy, labour, and postpartum period.

I will adhere to all laws, regulations, and ethical guideline of the district.

Please find attached ethical clearance from the University of Natal.

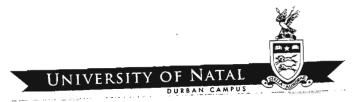
Thanks for your kind consideration, and I await a respond.

Sincerely yours,

Dedeh F. Jones

Approved:

Dr. Sarah Mahlungulu Research Supervisor University of Natal



School of Nursing Faculty of Community and Development Disciplines

Durban 4041 South Africa

Telephone: +27 (0)31 260 2499 Facsimile: +27 (0)31 260 1543

14, July 2003

Department of Health KwaZulu-Natal KwaZulu- Natal Provincial Administration P/Bag X 9051 Pietermaritzburg 3200

Facsimile: 033-394 5868

*Attention: Dr. L.L. Nkonozo-Mthembu

Permission to Utilize the Communities of District 26 as site for Research Study

Dear Sir/Madame,

I am Dedeh F. Jones a master student at the University of Natal majoring in Community Nursing. As part of my requirement towards my master degree, I have to undertake a research project in the community, which is titled: The Practice of the Traditional Birth Attendants During Pregnancy, Labour, And Postpartum Period In Rural South Africa.

In view of the above, I am kindly asking you to grant me permission to use the subdistrict of Abagulusi, Office Vryheid to interview Traditional Birth Attendants, and mothers who they attend, on the practice of Traditional Birth Attendants during pregnancy, labour, and postpartum period.

I will adhere to all law, regulations, and ethical guideline of the district.

Please find attached ethical clearance from the University of Natal,

Thanks for your kind consideration and I await a speedy respond.

Sincerely your,

Dedeh F Tones

Approved: Mahla

Dr. Sarah Mahlungulu Research Supervisor

University of Natal



School of Nursing Faculty of Community and Development Disciplines

Durban 4041 South Africa

Telephone: +27 (0)31 260 2499 Facsimile: +27 (0)31 260 1543

14, July 2003

District 26 Health Community Zululand Health District KwaZulu-Natal Facsimile: 035-874 2457

*Attention: Ms. D. T. Memela

Permission to Utilize the Communities of Abagulusi Office Vryheid, for Research Study

Dear Sir/Madame,

I am Dedeh F. Jones a master student at the University of Natal, majoring in Community Nursing. As part of my requirement towards my master degree, I have to undertake a research project in the community, which is titled: The Practice of The Traditional Birth Attendants During Pregnancy, Labour, And Postpartum Period In Rural South Africa.

In view of the above, I am kindly asking you to grant me permission to use the sub-district of Abagulusi, Office Vryheid to interview Traditional Birth Attendants (TBAs), and mothers they attend, on the practice of TBAs during pregnancy, labour, and postpartum period.

I will adhere to all laws, regulations and ethical guideline of the district.

Please find attached ethical clearance from the University of Natal.

Thanks for your kind consideration and I await a speedy respond.

Sincerely yours,

Dedeh F. Jones

Approved: The Dr. Sarah Mahlungulu

Research Supervisor University of Natal

PROVINCE OF KWAZULU-NATAL **HEALTH SERVICES**

033-3952111

033-3426744

TEL.

FAX

ISIFUNDAZWE SEKWAZULU-NATALI EZEMPILO

PROVINSIE KWAZULU-NATAL DEPARTEMENT VAN GESONDHEID

NATALIA 330 LONGMARKET STREET **PIETERMARITZBURG**

Private Bag

Esikhwama Seposi : Pietermaritzburg

Privantsak

: 3200

Enquiries: Mr G.J. Tromp

Extension: 2761 Reference: 9/2/3/R

Ms D.F. Jones University of Natal School of Nursing Faculty of Community And Development Disciplines DURBAN 4041

Dear Madam

PERMISSION TO UTILIZE THE COMMUNITIES OF DISTRICT 26 AS SITE FOR RESEARCH STUDY

Your letter dated 15 July 2003 addressed to Dr L.L. Nkonzo-Mthembu, refers.

Please be advised that authority is granted for you to undertake a research project in the community of District 26, which is titled: The Practice of the Traditional Birth Attendants During Pregnancy, Labour and Postpartum Period In Rural South Africa, provided that :-

- Prior approval is obtained from the Heads of the relevant Institutions; (a)
- Confidentiality is maintained; (þ)
- The Department is acknowledged; and (c)
- (d) The Department receives a copy of the report on completion.
- (e) That the staff of the hospital are not disturbed and/or inconvenienced in their work and that patient care is not compromised.

Yours sincerely

HEAD: DEPARTMENT OF HEALTH

APPENDIX

E

PROVINCE OF KWAZULU-NATAL HEALTH \$ERVIRCES ISIFUNDAZWE SEKWAZULU-NATAL EZEMPILO PROVINSIE VAN KWAZULU-NATAL GESONDHEIDSDIENSTE



OFFICE OF THE DISTRICT UNIT CO-ORDINATOR ABAQULUSI

Isikhwama Seposi Private Bag P.O.Box 235 Vryheid	Fax :034 – 9813305	Telephone :034 -9813305
Enquires : Miss N.M. Nkosi	Date: 2003.07.15	References:

Attention to: D. F. Jones University of Natal Durban

Re: Permission to utilize Abaqulusi Sub-District Office for interviews

Permission is granted to D.F. Jones a Master Student at University of Natal, to utilize Abaqulusi Health Sub-District Office to interview Traditional birth attendants.

Please inform us in advance about the dates for the research.

Your co-operation in this regard will be highly appreciated.

Thank You

Wanda.

Miss N.M. Nkosi (District Unit Co-ordinator)

KZN ABAQULUS: DISTRICT HEALTH VRYHEID

TEL./FAX.: (034) 981 3305

PROVINCE OF KWAZULU-NATAL HEALTH SERVICES ISIFUNDAZWE SAKWAZULU-NATALI EZEMPILO PROVINCIE KWAZULU NATAL GESONDHEIDSDIENSTE



IHOVISI LIKA:
UMQONDISI WEZEMPILO

OFFICE OF: THE DISTRICT MANAGER

Ikheli Locingo: Telegraphic Address	Isikhwama Seposi: Private Bag:	Ucingo:	035-8742303
IMPILO	X 81 ULUNDI 3838	Telephone:	
		Fax:	035-8742457
imbuzo:	Usuku:	Inkomba:	
Enquiries: Mrs D. T. Memela	Date: 2003-07-22	Reference:	

University Of Natal School Of Nursing Faculty Of Community And Development Disciplines Durban 4041

Attention: Dedeh F. Jones

- PERMISSION TO UTILIZE THE COMMUNITIES OF ABAQULUSI OFFICE VRYHEID, FOR RESEARCH STUDY.

With reference to the attached letter from Abaqulusi permission is granted. But as indicated in the letter please inform them in advance when you're coming.

MOumilaul of Mrs D. T. Memela

District Manager: DC 26



School of Nursing Faculty of Community and Development Disciplines

Durban 4041 South Africa

Telephone: +27 (0)31 260 2499 Facsimile: +27 (0)31 260 1543

11, July 2003

District 26

Zululand, Health District

*Attention Paramount Chief

Permission to Utilize the Communities of Abagulusi Office Vryheid as sit for Research Study

Dear Sir/ Madame,

Mina Dedeh F. Jones ngingumfundi Lapha Enyuvesi YaseNatali ngenza izigu zami Engicwaninga ngakho yilokhu ukubizwa ngokusiza umphakathi: Yikho-ke Okungiholela Eqhuzwini Lami Lesibili Isihloko Engizocwaninga Ngaso Yilesi Esibizwa (TBAs) Omama Ababelethisayo Emakhaya.

Mina ongasenhla bengicela imvume Yokusebenzisa ihovisi lesifundazwe se Vryheid ukuba buza imibuzo nge TBA uma omama bevizitha iTBA ngesikhathi Bekhulelwe, bebeletha nangemuva kokubeletha.

Ngizolandela umthetho. Nemigomo, nendlela engizoyinikezwa yisifunda.

Ngiyabonga kakhulu ngizolindela impendulo.

Devel F Tones

APPENDIX F



School of Nursing Decentralised Programmes

Durban 4041 South Africa
Telephone +27 (0)31 260 3122
Facsimile +27 (0)31 260 1543

RESEARCH ETHICS COMMITTEE

Student: DEDEH. F. JONES NO.202521098				
Research Title: The Practice of The Traditional Birth Attendants During Pregnancy				
Labour and Postpartum Period in Rural South Africa.				
A. The proposal meets the professional code of ethics of the Researcher:				
YES NO				
B. The proposal also meets the following ethical requirements:				
	YES	NO		
Provision has been made to obtain informed consent of the participants.	V			
2. Potential psychological and physical risks have been considered and minimised				
 Provision has been made to avoid undue intrusion with regard to participants and community. 				
 Rights of participants will be safe-guarded in relation to: 4.1 Measures for the protection of anonymity and the maintenance of confidentiality. 	f			
4.2 Access to research information and findings.	L			
4.3 Termination of involvement without compromise.	i,			
4.4 Misleading promises regarding benefits of the research.	V			
Signature of Student: Afgonos Date: 30/6/0.3				
Signature of Supervisor: Manhaget Date: 30/6/03				
Signature of Head of School: Date: Date:				
Signature of Chairperson of the Committee:				