OPENING DOORS FOR EXCELLENT MATERNAL HEALTH SERVICES: PERCEPTIONS REGARDING MATERNAL HEALTH IN RURAL TANZANIA

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The worldwide maternal mortality rate is excessive. Developing countries such as Tanzania experience the highest maternal mortality rates. The continued exploration of issues to create ease of access for women to quality maternal health care is a significant concern. A central strategy for reducing maternal mortality is that every birth be attended by a skilled birth attendant, therefore special attention was placed on motivations and factors that might lead to an increased utilization of health facilities. This qualitative study assessed the perceptions of local population concerning maternal health services and their recommendations for improved quality of care. The study was conducted in the Karatu District of Tanzania and gathered data through 66 in-depth interviews with participants from 20 villages.

The following components were identified as essential for perceived quality care: medical professionals that demonstrate a caring attitude and share information about procedures; a supportive and nurturing environment during labor and delivery; meaningful and informative maternal health education for the entire community; promotion of men's involvement as an essential part of the system of maternal health; knowledgeable, skilled medical staff with supplies and equipment needed for a safe delivery. By providing these elements, the community will gain trust in health facilities and staff. The alignment the maternal health services offered to the perceived expectation of quality care will create an environment for increased attendance at health facilities by the local population.

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CHAPTER 1

INTRODUCTION

1.1 Country: Tanzania

The United Republic of Tanzania is the most populated country in East Africa with an estimated 44.9 million residents in 2012; nearly three-quarters of its population reside in rural areas. According to the 2013 Human Development Index (HDI), published by the United Nations Development Program (UNDP), Tanzania is listed among the least developed countries ranking 152 out of 186. Life expectancy at birth is 58.9 years of age and according to the 2012 Tanzanian census 44% of the people are under the age of 15, 52% are between the ages of 15 and 64 and 4% are 65 years of age and older (UNDP, 2013). Tanzania suffers from a high total fertility rate of 5.4 births per woman. Early marriage coupled with the low percentage of the population using contraceptives contributes to this situation. According to the World Bank, Tanzania's economic growth has been improving for the last ten years; however, this growth has not been reflected in the quality of life for women (World Bank, 2013). Gender inequality as it affects women's access to health is a social norm of major concern (UNDP, 2013); health disparities reveal an imbalance of access to high quality medical expertise along with its healing power. The phrase "social inequalities produce health inequalities" is most certainly true in Tanzania (Singer & Baer, 2012, p. 176).

In recent years, Tanzania's child mortality rate has been decreasing, but the maternal mortality rate has not experienced that same success. Maternal mortality is a key health indicator in human development and is defined as the death of a woman any time during pregnancy, childbirth and up to 42 days after delivery, excluding accidental

deaths (Shefner-Roger & Sood, 2004). The maternal mortality rate is nominally stated as the number of maternal deaths per 100,000 live births. In 2010, Tanzania experienced a maternal mortality rate of 454 while comparatively all of Africa experienced a rate of 480. In a developed area such as Europe the maternal mortality rate was 20, whereas the worldwide rate was 210 deaths per 100,000 live births (National Bureau of Statistics [Tanzania] and ICF Macroalaam, Tanzania, 2011; USAID, 2011).

1.2 Research Subject: Maternal Health

Though most women deliver a baby with no complications, problems can arise with little or no warning. Worldwide, "[e] very day, approximately 800 women die from preventable causes related to pregnancy and childbirth" with 99% of these taking place in developing countries. (WHO, Media Center: Maternal Mortality, 2013a). Tanzania is one of eleven countries, which together make up 65% of this total (WHO, UNICEF, Population, & Bank, 2012). A woman is at the greatest risk of maternal death during the 24-hour period surrounding the birth of a baby. For this reason, the important strategy to ensure a safe delivery is the presence of a skilled birth attendant. The United Nations Population Fund (UNFPA) explains that,

> [s]killed attendance at all births is considered to be the single most critical intervention for ensuring safe motherhood, because it hastens the timely delivery of emergency obstetric and newborn care when life-threatening complications arise. (UNFPA, 2014)

Therefore, the main indicator used when assessing the success of a country's health assessment is the percentage of women using a skilled attendant at the birth of a child (Blanco & Moore, 2012).

There are both direct and indirect causes of maternal death; and the ability to manage these quickly and efficiently can save lives. Major maternal complications for women during pregnancy and childbirth include: prolonged/obstructed labor, severe bleeding, infections, high blood pressure during pregnancy (pre-eclampsia and eclampsia) and unsafe abortion (WHO, Media Center: Maternal Mortality, 2013a). Figure 1.1 shows the top causes of maternal death along with associated recommended interventions.

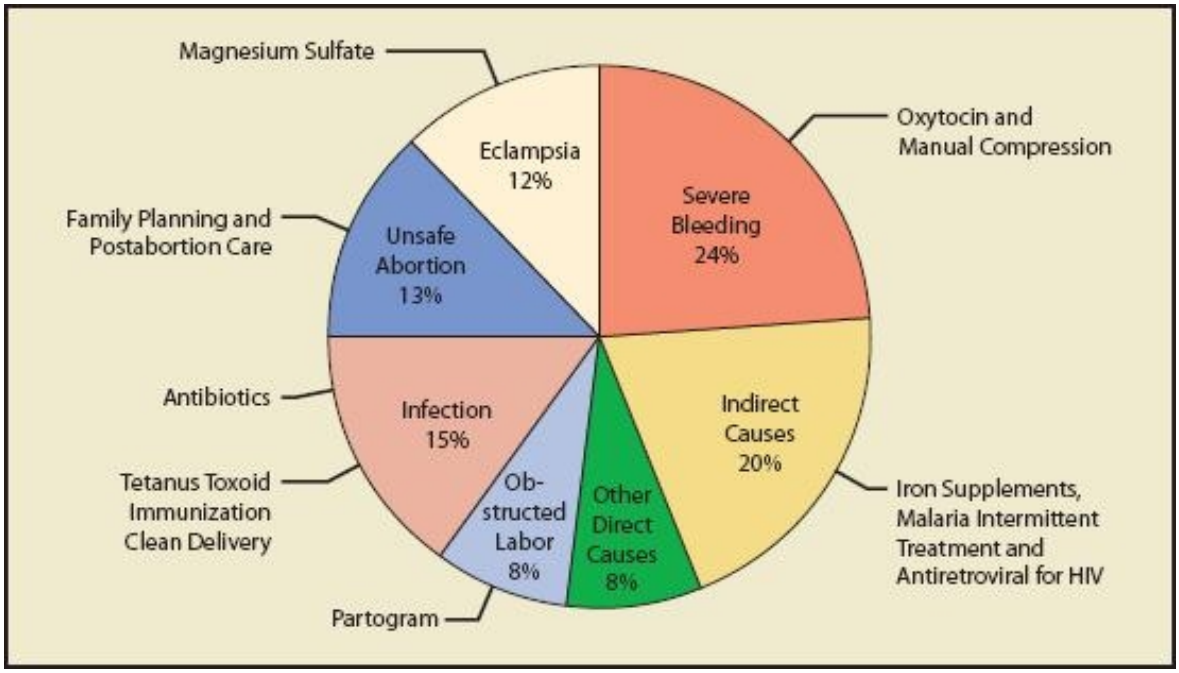

Figure 1.1. Major obstetric complications with interventions. Source: (Nour, 2008).

Postpartum hemorrhage (PPH) is the most common cause of maternal mortality and is identified as severe bleeding, which is the loss of more than 500cc of blood, usually happening within 24 hours after delivery. A healthy woman can die within two hours if left untreated. A trained and equipped midwife can manage this complication by administering oxytocin or misoprostol among other birth management procedures (Marmol, Kwankam, Little, & Poola, 2012).

Pre-eclampsia or eclampsia can happen anytime starting after twenty weeks of pregnancy thru 48 hours after delivery. Identifying factors are high blood pressure and protein in the urine. Eclampsia is when a woman with preeclampsia has seizures. Appropriate management of identified cases can minimize the severity of this condition, however, there is no known method of prevention and the best treatment is early delivery and administration of magnesium sulfate. Women experiencing this condition need to be monitored closely during antenatal care (Marmol, Kwankam, Little, & Poola, 2012).

Infection of the reproductive organs can be caused by a variety of factors including unhygienic conditions at birth, retained placenta and uterine rupture. A woman suffering from an infection might experience high fever, high white-blood cell count and foul smelling discharge usually in the days following delivery. Infections are preventable by maintaining good hygiene at delivery and postpartum. They are also treatable with antibiotics, however some women delay seeking treatment, which can lead to death (Marmol, Kwankam, Little, & Poola, 2012).

Prolonged labor and hypertensive disorders are indicators of the need for a cesarean section. The most basic definition for prolonged labor is regular painful contractions that last more than 12 hours. A more complex definition relates to the length of the different phases of labor (WHO, 2004). Absolute indicators that result in major obstetric intervention include cephalopelvic disproportion, malpresentation, two or more previous cesarean deliveries, antepartum hemorrhage, and uterine rupture. Interventions for these types of complications include cesarean section, hysterectomy,

and laparotomy to repair the uterus (Prytherch, Massawe, Kuelker, Hunger, Mtatifikolo, & Jahn, 2007).

Even though surgical interventions are strategies to reduce maternal mortality, cesarean delivery can be “associated with a significantly higher risk of maternal morbidity and mortality than vaginal delivery” (Hyginus, Eric, Lawrence, & Sylvester, 2012). Women who receive a cesarean surgery also have a secondary risk of developing an infection, which also could lead to death. (Maaloe, Bygbjerg, Rwakyendela, Jorgen, & Sorensen, 2012a). In Tanzania, approximately 2% of all births result in a cesarean section (Prytherch, Massawe, Kuelker, Hunger, Mtatifikolo, & Jahn, 2007). One Tanzanian study indicated that even though there are specific guidelines for indicators leading to a cesarean section, they often take place needlessly, putting women at risk unnecessarily (Maaloe, Sorensen, Onesmo, Secher, & Bygbjerg, 2012b).

In addition to these issues of maternal mortality, there are also complications that result in birth injuries for women. Though they do not carry the risk of death, the quality of life can be reduced. An example is obstetric fistula, which can result from prolonged labor. In these cases, the soft tissue between the vagina and bladder or the vagina and the rectum becomes compressed and necrotic. When an opening is created, there is leakage of urine or feces causing incontinence (Fiander, Ndahani, Mmuya, & Vanneste, 2013). This is a common birth injury for women living in developing countries where many women have reduced access to quality healthcare and labor is allowed to progress beyond the 12-24 hour limits mentioned above. Women, who suffer from an obstetric fistula, have expressed feelings of shame at not being able to control their bodily functions. Due to the uncontrollable odor they have experiences of exclusion from

both society and their husbands. They experience a great sense of loss: “loss of body control, loss of the social role as woman and wife, loss of integration in social life, and loss of dignity and self-worth” (Mselle, Moland, Evjen-Olsen, Mvungi, & Kohi, 2011). By providing education on how women can develop an obstetric fistula, many of these situations can be prevented or the suffering eliminated. In addition, it is important to educate the community and women about what an obstetric fistula is and how they can receive treatment. Tanzania has several fistula projects where women receive free treatment and free transportation to the project site. The fistula projects is working hard to get the word out by networking with health centers to identify women in need of surgical repair and have them referred to the project sites.

Indirect maternal health complications that might lead to death during pregnancy include diseases, both preexisting as well as newly acquired, that might be exacerbated due to pregnancy. Some examples are anemia, malaria, tuberculosis, heart disease, hepatitis, asthma, and HIV/AIDS (Marmol, Kwankam, Little, & Poola, 2012). Research suggests both the community and healthcare providers need to know the possible causes of maternal death as well as being able to recognize danger signs during pregnancy. Health education seminars should be provided for both men and women during antenatal clinics and through other avenues of public health education as a strategy to significantly reduce maternal morbidity and mortality (Daniels & Lewin, 2008; Kabali, Gourbin, & De Brouwere, 2011; Maaloe, Bygbjerg, Rwakyendela, Jorgen, & Sorensen, 2012a; Mselle, Moland, Evjen-Olsen, Mvungi, & Kohi, 2011; Villar et al., 2009).

1.3 Research Field: Applied Medical Anthropology

Applied anthropology is a diverse and multifaceted discipline. Research in this field uses a practical approach to investigate relevant issues or problems in society using methods and theories related to the discipline. Understanding the point of view of members of the community is paramount and requires researching the topic in depth and from several different angles (Ervin, 2005). This approach is often referred to as "practicing anthropology" because the researcher uses the methods and theories of anthropology to support the work of a client within their community. Client organizations can be found in both public and private sectors: government agencies, development offices, nonprofit organizations, social service groups, and individual businesses (McDonald, 2002).

As a research field, medical anthropology seeks to understand how topics of health relate to the local population's cultural concepts and social connections. Developing an understanding of these factors within a culture or society leads to a more complete understanding of how people make choices concerning health and healing (Singer & Baer, 2012).

Cultural concepts: Using the lens of medical anthropology, this study explored how the high maternal mortality rate in Tanzania is related to the cultural concepts of maternal health. The researcher investigated how these concepts affected health-seeking behavior. Specifically, are there cultural norms relating to a woman's choices in birthing locations? Medical anthropology seeks to assist the pertinent actors in understanding how the culture intersects with health and health-seeking behaviors. Research can provide information to the local population, including patients/clients,

health care providers, governmental agencies, non-governmental organizations, as well as international agencies, on ways to reduce maternal mortality (Singer & Baer, 2012).

Social connections: Investigating the social connections relating to issues of maternal health can be quite complex with various interconnections involving different levels of relationships including family, community and the larger domains of economic and political forces (Singer & Baer, 2012). On an individual level, maternal health is related to how a woman is viewed within the family and within society. It is important to know who makes the decisions regarding when and where she should seek care. On a societal level, the community's views concerning the use of traditional care providers and biomedical providers are also of interest. What social connections relate to the specific choices women make for maternal health care?

1.4 Client: FAME

The client for this applied thesis project was the Foundation for African Medicine and Education (FAME), a non-governmental organization (NGO) located in the northern Tanzanian town of Karatu. FAME Medical began mobile medical services in 2006 and opened an outpatient clinic in 2008. From these small beginnings, they have been expanding their medical service capabilities, overcoming the many challenges involved with working in a low resource area. Led by onsite American co-founders/co-directors, the Tanzanian team of medical professionals has been able to offer consistent, high quality, and affordable primary care services over the past seven years. FAME completed the construction of a 12-bed in-patient ward and received "health center" status from the Tanzanian Ministry of Health in 2012. This certification allows the

addition of more specialized services including general surgery and urgent care services. Concentrating on the goals to improve the quality, accessibility, and maintainability of medical care to the local population over the long term, FAME continues to expand services as well as providing continuing education for its medical staff.

Future plans for FAME include introducing maternal health services. With careful planning they will expand their infrastructure and services to match the growing patient numbers. The client can use the information gathered in this research as a resource guide to develop and improve their maternal health care services. Maternal health includes family planning, antenatal care, childbirth, and postnatal activities up to 42 days after delivery (WHO, 2014).

1.5 Justification

Pregnant women are a vulnerable population, as “the health risks associated with pregnancy and childbirth are leading causes of death, disease and disability internationally” (Singer & Baer, 2012). There are many organizations working worldwide to improve the maternal mortality rate. This research has focused on the area of Tanzania serviced by FAME.

Women who experience complications during pregnancy and childbirth can suffer from both long and short-term illness, which at times results in death. The health disparity between the rich and the poor is clear as “the lifetime risk of maternal death is 1 in 16 [pregnant women] in the world’s poorest nations and 1 in 2800 in the world’s wealthiest nations” (Singer & Baer, 2012, p. 196). With the initiation of the United

Nations Millennium Development Goals (MDGs), the international community has targeted eight specific goals to fight against poverty worldwide. This study relates specifically to MDG 5, which is to improve maternal mortality (UN Department of Public Information, 2010; WHO, 2013b). The World Health Organization recommends a skilled birth attendant be present at every birth to help reduce maternal mortality. A skilled birth attendant is someone with professional training in delivery skills such as a doctor, nurse, or midwife (Mpembeni et al., 2007). This is a distant goal for Tanzania as approximately 50% of women in Tanzania have home births (National Bureau of Statistics [Tanzania] and ICF Macroalaam, Tanzania, 2011). Many healthcare providers and community members believe the reason for the number of home births is related to cultural beliefs; thus it would be beneficial for FAME to understand the cultural perceptions of the women in their community to better facilitate meeting the needs of the community. With this knowledge, they can begin the work of growing a reproductive/maternal health services department that would be known in this area as the place to have a safe delivery. This approach when combined with skilled birth attendants, necessary equipment and supplies has the potential to assist in reducing maternal mortality. This research provides the client, FAME, with information on the local population's perspectives of maternal health in order to provide FAME with the tools to offer culturally informed care. This knowledge will allow clinicians to better connect with clients/patients and provide them with a feasible plan of care. The FAME medical team can use the information revealed in the study to offer culturally sensitive compassionate care. This will enhance client-provider interaction as the local population

will feel welcomed by the manner in which services are provided and materials prepared.

1.6 Description of Research Questions

The United Nations Millennium Goal 5 pushes for an improvement in maternal health services and for a reduction in the maternal mortality rate by 2015. Considering this initiative within the context of Karatu, Tanzania, this research study has two specific goals.

1) To understand the perceptions of the local population regarding childbirth and maternal health services. With Tanzania having approximately 120 ethnic groups, is there a connection between a woman's ethnic identity and her choice of place for delivery? What needs are being met that lead to the choices women make regarding their preferred birthing location? What does the local population understand regarding possible complications during pregnancy, childbirth and postpartum? What factors influence decisions regarding maternal health, including cultural influences and socioeconomic factors? What are the perceptions of local care providers (traditional birth attendants (TBAs), local midwives, and biomedical personnel) with regard to maternal health in the community?

2) Based on these perceptions, what are the ways FAME Medical can offer excellent maternal health services? What are ways the FAME team can create an environment in which women feel comfortable coming for maternal health services? How can FAME work within the community to teach the local population about safe delivery options in a culturally sensitive way?

The answers to these questions will provide the client with an understanding of the perceptions of the local population on maternal health. This will assist the team in discovering ways to offer excellent maternal health services and work toward reducing maternal death in northern Tanzania. By asking questions about the historical and cultural foundations relating to childbirth, the research will build a framework of women's choices and childbirth options. In the western world, pregnancy and childbirth have become more medicalized or "technocratic" (Davis-Floyd, 2001). Pregnancy is often viewed as a medical condition, where the norm is to provide medical interventions such as inducing labor with medication (Singer & Baer, 2012). One assumption of this study is that the local population views childbirth as a natural part of a woman's life, which does not require a biomedical doctor's attention. However, many women in the developing world die due to complications during childbirth. The majority of these deaths are preventable if prompt medical attention is sought and medical supplies are available (WHO, 2012a). The focus of this study is not to medicalize childbirth in northern Tanzania but to discover ways that FAME Medical can work within the community to reduce maternal deaths by offering "best practices." In addition to providing maternal health services at the health center, the team might also include education for the women, their families and traditional birth attendants, on ways to identify complications before it is too late.

CHAPTER 2

LITERATURE REVIEW

There are numerous publications that discuss concepts to aid in the reduction of maternal mortality. A review of the literature revealed various categories and themes, which were beneficial to this research. They included the current health care system in Tanzania, training of traditional birth attendants, barriers to access care, gender issues, maternal health policies and maternal health as a human right. The common thread among all publications was that the high rate of maternal mortality is not acceptable; therefore, the focus is on identifying and understanding the causes, and then to seek solutions that will make a drastic impact on the life of women.

2.1 The State of Tanzania's Health Care System

Tanzania has been working to create access for women by building a network of health facilities. This includes all health facilities; privately operated, faith-based organizations and government run institutions. The objective is to have health facilities within 5km of all its residents. It is reported that 72% of residents are currently within 5km and 90% within 10km of a health facility. As a strategy to reduce the financial burden for women, maternal health services are offered free of charge at government facilities (Mpembeni et al., 2007). However, women are required to bring delivery supplies with them to these government hospitals. The list of requested items generally includes a razor, gloves, cotton wool and plastic sheeting (Mwifadhi et al., 2007). This requirement to bring supplies can be a barrier for women to choose these health facilities for delivery.

Tanzania's diversity can be found in its various landscapes ranging from tropical to mountains and deserts and in its population of 120+ ethnic groups spread across the nation. These ethnic groups are not homogeneous in their culture or their perspectives about healthcare. It is suggested that the differences are based on culture, an individual's education level, and whether they are an urban or rural dweller (Savage, 2002). Differences are also exhibited in their preferred location for childbirth. Traditionally, many ethnic groups such as the Maasai (Johnsen, 1998) and Chagga (Savage, 2002) utilized local midwives or traditional birth attendants (TBAs).

Though not on track to reach the MDG 5 (reduce maternal mortality) by 2015, Tanzania is considered to be making progress according to the World Health Organization. East Africa as a region has improved the maternal mortality rate by 45% from 1990 to 2010 (WHO, 2012b). While these statistics can be encouraging, it is important to remember that for most developing countries the reporting systems are inadequate, therefore actual deaths can be underreported or misclassified (AbouZahr & Wardlaw, 2001).

Tanzania's situation concerning skilled health care providers is a clear crisis for the country as a whole. The decree from international agencies and even within the Tanzanian government is that having a skilled attendant at birth will reduce maternal mortality (Bureau of Public Affairs, U.S. State Department, 2011). However, the reality is there are not enough trained medical staff, especially for emergency obstetric care, to meet the overwhelming challenges of health care in this low-income country. It is essential to have trained health care workers at the ready to handle emergencies.

The structure of the Tanzanian healthcare system (Figure 2.1) is set up on a referral system intended to reach the most rural populations. A local study (G. Kwesigabo et al., 2012) describes the healthcare system in detail. The first line of defense is the community health post. Next is the local dispensary. If the staff at the dispensary is unable to meet the needs of the patient then the patient receives a referral to the more specialized, central facilities. In this pluralistic health system, the health-seeking behavior of many is to first seek advice from a traditional healer and if that does not work, then the person will visit a biomedical practitioner or vise versa. Once a person enters the biomedical system, this governmental structure aims to provide services on all levels as described here.

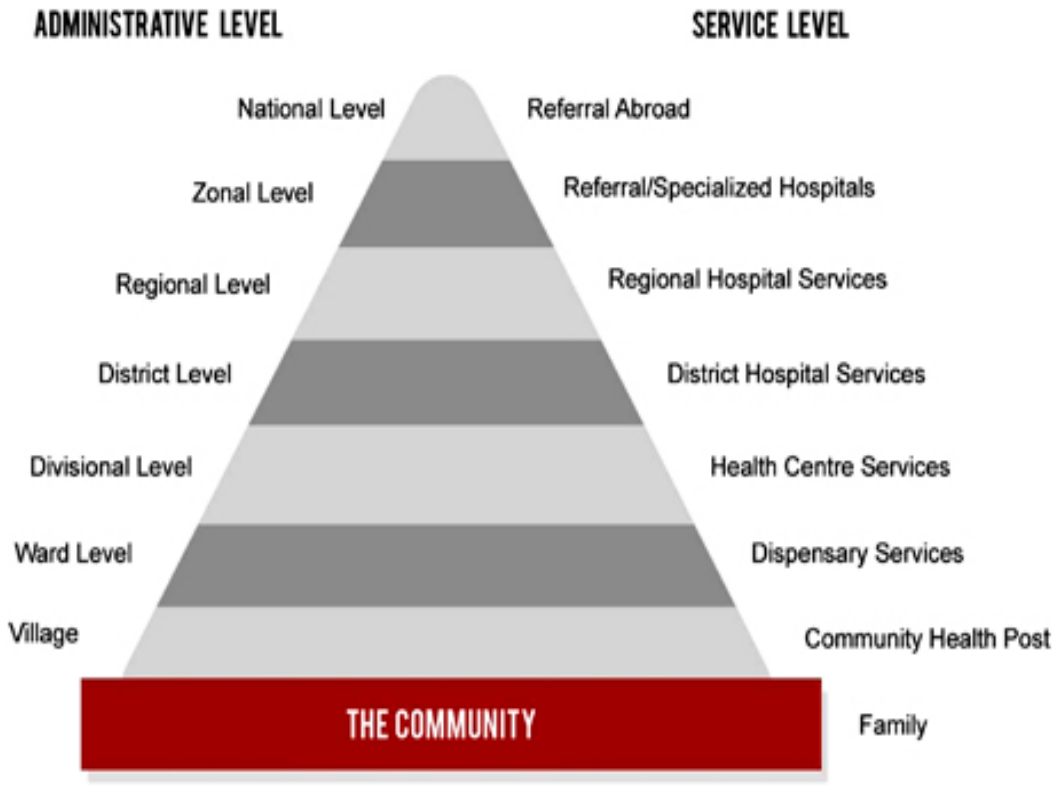

Figure 2.1. Hierarchy of health system on mainland Tanzania. Source: (G. Kwesigabo et al., 2012).

The plan for staffing and services at the government facilities are as follows. At the community health post, most will find a village health worker who has received some training in first aid and care for minor issues in homes. As necessary, patients are referred to the local dispensary. The dispensary's main task is to refer patients as needed to the higher levels. Staff at the dispensary might include a clinical officer and an enrolled nurse. Clinical officers have three years of training to learn how to diagnose and treat common illnesses. Enrolled nurses have two years of nursing education and are able to treat minor ailments. More often than not, these rural dispensaries might only be staffed with a medical assistant who is a health worker with no professional training. Dispensaries are intended to provide services for maternal and child health as well as attending to basic medical needs. The next level of referral is to a health center. These facilities serve populations of approximately 50,000 people (G. Kwesigabo et al., 2012). The main role of the health center is preventive care; however, some have an in-patient ward with up to twenty beds. Health centers provide reproductive health services and handle minor surgeries. The next level on the health system ladder is the hospital. Tanzania has 132 districts and most have a district hospital. These hospitals provide outpatient services and in-patient care on a more specialized level. For example, "on a good day," there are laboratory and x-ray diagnostic services, surgical services, and emergency obstetric care. What is meant by "on a good day," is that often these facilities lack the most basic supplies or even the staff to run certain equipment. At the district hospital, the staff might include assistant medical officers, having 5 years of clinical training. They can also have both enrolled and registered nurses. At the next level, Tanzania has 18 regional hospitals offering similar services to a larger number of

patients. Because the hospitals are able to employ a more highly trained staff of surgeons, physicians, pediatricians, nurses, midwives, and public health staff, they are able to offer more specialized services. At the top rung of the health system ladder are four specialized referral hospitals. They offer services that require advanced technology and highly skilled personnel (G. Kwesigabo et al., 2012).

The network of facilities within the health system appears to be in place, however there are simply not enough health workers to staff them. In 2006, the government reported employing only 29,000 health workers. This was a staff shortage of 65% at government facilities, and the reported 6000 health workers employed in the private sector represented a staff shortage of 86%. As the government explains in their strategic plan, they will need to train and employ 184,100 health workers by 2017 to meet the number of planned facilities (G. Kwesigabo et al., 2012).

Even though the main idea for this network of facilities was to provide health care to the rural populations, it is going to be a serious challenge to attain it, as most health care professionals live and work in urban hospitals. For example in 2006, 52% of all doctors were based in Dar es Salaam, where there are 25 doctors per 100,000. The national average is 3.5 doctors per 100,000 people. “In 14 out of 26 regions, there was only one doctor per 100,000 people” (G. Kwesigabo et al., 2012; Kwesigabo , Mwangu, Kakoko, & Killewo, 2012).

The challenges that face the current system in providing care are vast. In addition to the critical shortage of skilled health care workers, there are other obstacles that need to be addressed. These include the lack of necessary equipment, lack of expected supplies, lack of supervision, and low motivation among staff on all levels,

poor transportation and communication between levels of referral. “The overall performance of service delivery is unsatisfactory at all levels” (G. Kwesigabo et al., 2012). This grim report of the state of Tanzania’s health system provides some explanation as to why they will not meet the MDG 5 by 2015.

2.2 Training of Traditional Birth Attendants

Most cultures have traditions concerning who attends a woman at the birth of a child. This person, usually an older respected woman in the community, provides both social and emotional support during childbirth. The WHO defines a traditional birth attendant (TBA) as someone who assists a mother at the delivery of her child. A TBA might develop these skills through experience or through apprenticeship with an experienced TBA. A trained TBA or local midwife is one who has attended biomedical training sessions to learn skills to providing clean and safe deliveries. A nurse midwife is an educated biomedical professional.

Though the training of TBAs was not a new idea, as the first formal TBA training was offered in Sudan in 1921 and India, Thailand and the Philippines during the 1950s, it wasn’t until the 1970s that it was identified as the top strategy for reducing maternal mortality (Byrne & Morgan, 2011). UNICEF began working with TBAs to improve maternal healthcare by providing education on the use of safe delivery kits. The World Health Organization (WHO) fully supported the use of training TBAs as an extension of the local health services beginning in 1978 with the Alma Ata Declaration and the goal of “Health for All.” Since this time there has been a steady increase in TBA training

programs worldwide. By of the late 1980's, 85% of developing countries were training TBAs as a tool to enhance healthcare provisions (Sibley & Sipe, 2006).

In 1992, not seeing evidence that this strategy was beneficial, the WHO suggested, "if TBAs are going to contribute to safe motherhood, they must be 'integrated' into the modern health system through training, supervision, and technical support" (Sibley & Sipe, 2006, p. 472). Consequently in 1997, the international community shifted their focus from using TBAs as primary care givers within the community to becoming advocates for the promotion of skilled birth attendants (SBAs). With formal education in maternal health, skilled birth attendants are better equipped to avert and manage obstetric complications (Byrne & Morgan, 2011).

Both of these strategies to reduce maternal mortality have their related obstacles: it was reported that TBAs were successful at improving maternal, neonatal and child health interventions, but were not equipped to manage obstetric complications. The target to achieve universal skilled birth attendance struggles due to shortages of medical personnel, as well as financial, transportation and cultural barriers. On the positive side, the use of SBAs has increased to 66% worldwide; however, there is still a continued desire by women to utilize the services of TBAs based on practical and cultural factors (Byrne & Morgan, 2011). A study in Zimbabwe explained that the strategy of training TBAs failed because the material and methods used were "complicated and inappropriate" for those they were trying to train "due to its reliance on western, urban models of training and for using culturally inappropriate teaching methods" (Mathole, Lindmark, & Ahlberg, 2005). The programs were ineffective because they provided training but did not plan for long-term access to resources and

infrastructure. The facilitators did not take into account the local context, which was necessary for a transfer of knowledge, nor did they coordinate continued support for TBAs, which might have maintained the projects over time.

A 2004 analysis suggested that training TBAs increased their health knowledge; leading to changed behaviors, which allowed them to pass on good advice to the women, they served. The use of the TBA is especially pertinent in locations where healthcare systems are weak and maternal mortality is high (Sibley & Sipe, 2006). Therefore there is still value in the work of the TBA, however the expectations have changed.

In a review of thirty-three articles, Byrne and Morgan identified five approaches allowing TBAs have successfully been integrated with health care systems: “training and supervision of TBAs; collaboration skills for health workers; inclusion of TBAs in facility-based activities; systems for communication between TBAs and SBAs; and defining roles for TBAs and SBAs” (Byrne & Morgan, 2011).

The successful strategies that were discussed included: 1. Consistent quality training of TBA along with planned supervision for TBAs through annual training sessions and regular facility based supervision has increased TBA knowledge, skilled birth attendance and referrals of women to health facilities. However, it is important to note that this can be difficult to maintain with the low availability of medical personnel. 2. A focus on intentional communication and support from professional healthcare workers improves the work of the TBA. 3. There was an increase in skilled birth attendance when medical professionals receive training on how to effectively collaborate with TBAs. Any activity, which created an environment of mutual respect between TBAs and

medical professional, improved the partnership between them. 4. Integrating TBAs into the biomedical health system by inviting them to participate in facility-based duties or hiring them as permanent staff, attending deliveries created a bridge to the community. 6. Allowing the presence of a TBA during facility-based births increased skilled birth attendance. Similarly, allowing TBAs to be included in antenatal care, health education and other general duties increased referrals to health facilities, which also increased the use of skilled birth attendants. 7. And lastly, increased communication between health facility personnel and TBAs through the use of radio, cellphones or referral cards improved the management of high-risk cases in rural areas, as well as obstetric emergencies.

Though these methods of connecting with and utilizing TBAs within the biomedical health systems were successful in specific locations, they were usually part of a larger multifaceted program. Some complimentary activities included, community participation; health system development; and affordability changes. “Community participation is strongly associated with greater increases in skilled birth attendance” (Byrne & Morgan, 2011). Community activities included creating community committees to promote maternal health, providing consultations to women’s groups, blood donations and informational gatherings led by midwife-TBA teams. Figure 2.2 provides a visual aid of the suggestions for the integration of TBAs within the health system using specific strategies (Byrne & Morgan, 2011). Of course all of these are reliant on the context of the health facility and its ability to become an enabling environment. Any strategy must be selected and adjusted based on the capability of the overall health system.

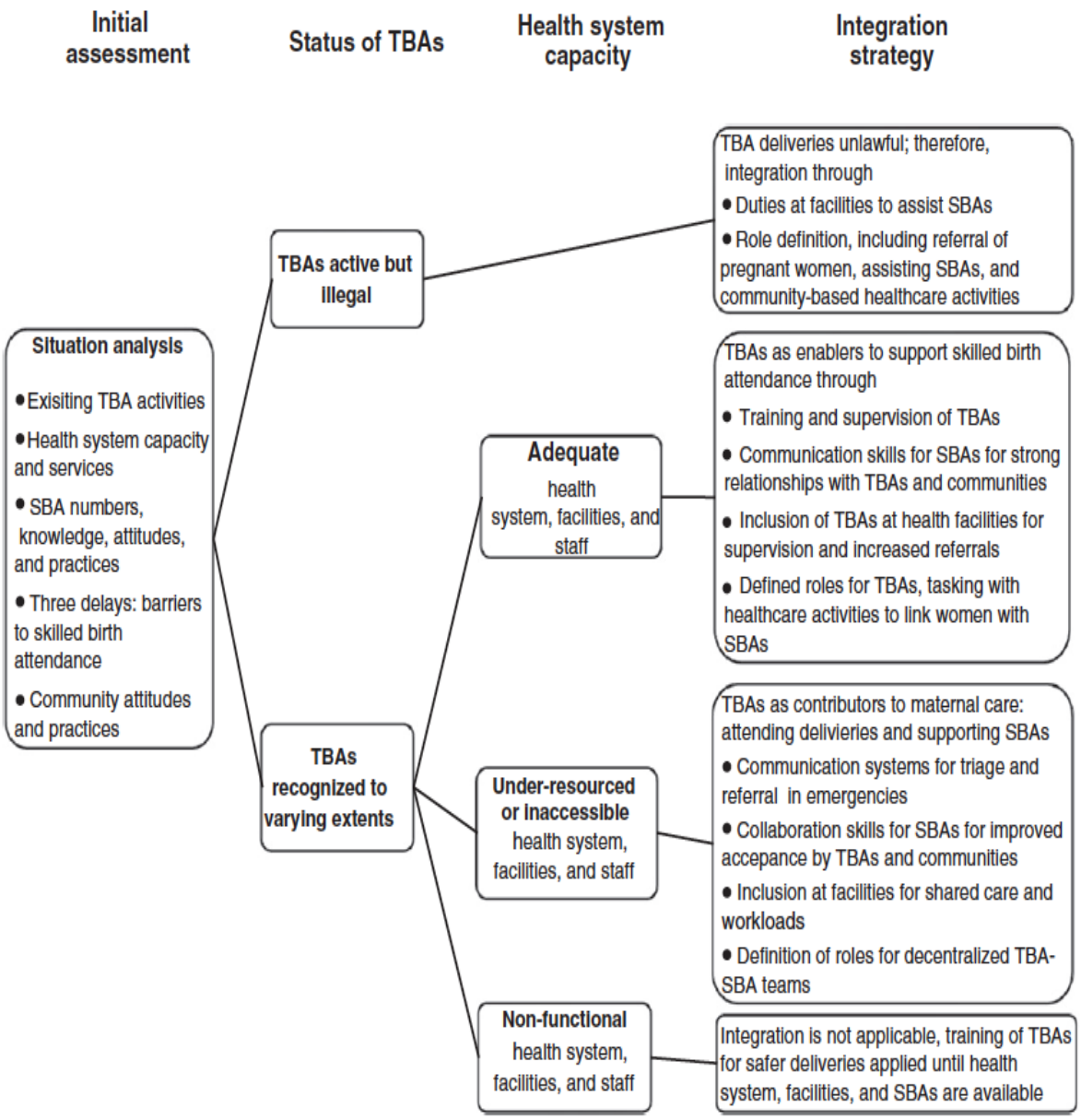

Figure 2.2. Context-appropriate application of traditional integration strategies: Source: (Byrne & Morgan, 2011).

2.3 Obstacles or Barriers

The literature reveals “the three delays” that are the most discussed barriers for pregnant women’s access to medical care in developing countries. Complications in

childbirth can develop quickly and therefore quick access to competent medical attention can save lives (Othman, Kaye, & Osinde, 2011; Pfeiffer & Mwaipopo, 2013).

The “first delay” results from the inability of the woman and/or her family to recognize danger signs and make the decision to seek necessary care. Studies confirm that although most women attend at least one antenatal care visit where education should have taken place, they were not able to name even one complication in pregnancy or childbirth. This lack of knowledge interferes with the ability of the woman and her family to recognize when she is in danger (Othman, Kaye, & Osinde, 2011) (Pfeiffer & Mwaipopo, 2013).

The “second delay” is the process of getting from home to a health facility, which usually relates to the cost of transportation. Little consideration is given to planning for possible emergency evacuations for women living in remote areas. There is no communication system set up to quickly convey the need for emergency transport and the cost of the transportation service is not readily available. These financial barriers are also contributors to delays in planning for any future transportation. It can be a costly decision and potentially not seen as a necessity in preparing for birth.

The “third delay” is evident once a woman arrives at the health care facility and finds staff inadequately trained and/or a lack of medical equipment to render quick emergency aid. Many studies concluded that health centers often lacked vital medicines, blood supplies, and qualified staff. In addition, the attitudes of the medical staff were not conducive to providing excellent care to patients. Unfortunately, all of these delays contribute to the high mortality rate in developing countries (Holmes &

Kennedy, 2010; Kabali, Gourbin, & De Brouwere, 2011; Kwesigabo et al., 2012; Mbaruku, Roosmalen, Kimondo, Bilango, & Bergstrom, 2009).

2.4 Gender Issues

Traditionally, the activities regarding maternal health are considered women's issues. The norms presented in hospital policy and the behavior of health care personnel historically have discouraged men from participation. The fact is "[m]en hold social and economic power and have tremendous control over their partners," (Bhatta, 2013, p. 15). In the patriarchal societies that exist in developing countries men are identified as one of the significant barriers for women's access to care. Subsequently, research now shows the important value of including men in activities to reduce maternal mortality (Othman, Kaye, & Osinde, 2011). Gender roles in Tanzania and other low-income countries demonstrate the clear definitions of male roles as dominating the economic and political domains while female roles are connected to all matters relating to the home and children.

The global processes of development, as well as continual political modifications, have been influencing the change in gender roles along with the gradual transformation of social institutions in Tanzania. Positively encouraging men to participate in antenatal care educational seminars as well as engaging them, as responsible fathers, from the beginning of pregnancy will create an environment where men are more comfortable with the changing responsibilities. A study in Russia reveals the changing behaviors of men as they begin to act as caretakers during pregnancy and start to participate during the birth of their child. Changes are also taking place on an institutional level as hospital

staff begins to allow men in delivery rooms. Some hospitals are providing special training for fathers about childbirth so that they can create comfortable conditions for all involved. As men increase their participation in activities relating to maternal health, the knowledge they acquire allows them to make informed decisions to provide women with a safe delivery (Angelova & Temkina, 2010).

Studies suggest the optimum situation is for the pregnant woman and her husband to attend educational sessions together. A study conducted in Nepal described an increase in birth preparedness based on the inclusion of male partners in two thirty-five minute maternal health education sessions. It is believed that the education led to improved communication between partners resulting in better planning for birth and unitization of postnatal care services. The assessment for birth preparedness related to the number of preparations a woman had completed to prepare for birth. For example, how many of the following tasks did she complete, had she: obtained a safe delivery kit, saved money for delivery, organized for a blood donor, prearranged for transportation to delivery and made an emergency plan. The more the woman arranged beforehand and the more prepared she was for contingencies correlated with her partner and her attending the education sessions together (Mullany, Becker, & Hindin, 2007).

There are also successful projects targeting only men, which have created an environment for greater impact. One successful Indonesian campaign directed its message toward men to become an “alert husband” (Shefner-Roger & Sood, 2004). The fundamental message was to take care of your wife during her pregnancy and during delivery. A man could demonstrate this by encouraging his wife to go to ANC and for her to deliver with a skilled midwife. An alert husband also attended ANC and was

present at delivery. Together with others in their community, they organized a plan for transportation in case of an obstetric emergency. Being an “alert husband” became a matter of pride. The campaign presented educational materials in a variety of ways including printed material, TV, and radio programming. This information seems to have drawn men together in discussion, which has led to a change in behavior. The campaign’s positive outcome increased men’s knowledge of issues pertaining to maternal health as they committed themselves to being an “alert husband.” These are just a few of several demonstrated avenues to empower men to participate in reducing maternal mortality (Angelova & Temkina, 2010; Bhatta, 2013; Gross, Iddy, & Brigit, 2013; Mullany, Becker, & Hindin, 2007; Shefner-Roger & Sood, 2004). Research shows that biomedicine has presented itself as an “authoritative knowledge,” and men have accepted this as a reality (Gross, Iddy, & Brigit, 2013). For this reason, it appears that public health messages presented by biomedical personnel can influence men to change their behaviors.

Both quantitative and qualitative research describes several ways in which women, when they have the power to choose for themselves, are able to act on their preferred choices in birthing location. Studies show that perceived quality of care is the main factor in a woman’s choice of place for delivery when she has the decision making power. One study conducted in rural Tanzania concluded that some women would actually bypass one health facility for another if they felt they would receive better services farther from home. This suggests there are women who will find the necessary resources to travel farther to get higher standards of care. Women also have a particular type of care in mind when they choose a birthing location (Kruk, McCord,

Moran, Mbaruku, Rockers, & Galea, 2009). In Nigeria, a study (Osubor, Adesegun, & Chiwuzie, 2006) investigating women's health seeking behaviors demonstrated that rural women would select a private midwife center as their first choice in delivery location. Next in order of choice was to be attended by a midwife, and lastly some women would choose a government facility. Women selected the location based on their perceived quality of care. Knowing that they would receive compassionate, respectful care was a top priority. This example shows the importance women place on feeling welcomed, cared for and having a comfortable environment during labor and delivery (Kruk, McCord, Moran, Mbaruku, Rockers, & Galea, 2009; Osubor, Adesegun, & Chiwuzie, 2006).

2.5 Maternal Health Policy

Policies around the world offer guidelines and best practices for health care services. Many international actors focus on the reduction of maternal mortality with related publications and programs: The World Health Organization's "Optimizing Health Worker Roles for Maternal and Newborn Health," The United Nation's "Reducing Maternal Mortality: The Contribution of the Right to the Highest Attainable Standard of Health," the World Bank's "Reproductive Health Action Plan," and USAID's "Respectful Maternity Care Charter and Advocacy Materials" along with "Safe Motherhood" and "The White Ribbon Alliance." All of these organizations promote the strengthening of health systems in countries across the globe citing that women have a right to quality services for maternal health. Each organization or agency provides recommendations and protocols for treatment of maternal health risks, for an increase of qualified health

professionals, for access to family planning options, to increase education, to continue addressing barriers relating to poverty and to increase the status of women (Hunt & De Mesquita, 2007; USAID, 2011; WHO, 2013b; World Bank Group, 2011).

Research provides strong evidence for the creation and implementation of the above policies (Daniels & Lewin, 2008). To understand how national maternal health policies can utilize research as well as information provided by the international organizations, this literature review examined studies completed in South Africa and Tanzania. The first study reviewed presented how South Africa was able to make changes to the national health system with the introduction of democracy in 1994. They reevaluated the entire National Department of Health and set new priorities that included women's health. In 2000 and 2001 respectively, South Africa introduced two policies concerning maternal health: Guidelines for Maternity Care in South Africa and Saving Mothers Policy and Management Guidelines for Common Causes of Maternal Deaths. Prior to this time, there were no standardized policies for maternal health, each institution had to create their own guidelines and protocols. Emphasis was placed on the benefits research can provide policy makers through the presentation of quality evidence. It is important to realize that making research available to policy makers does not constitute their acceptance of its influence on their decisions (Daniels & Lewin, 2008; Deitrick & Draves, 2008).

In the second study reviewed, the Tanzanian government provided an example of how they developed a national Global Health Initiative Strategy with the assistance of the US Global Health Initiative. This five-year plan focused on improving all aspects of health for the Tanzanian people and included strategies involving the creation of

integrated health services, the strengthening of health systems, and the encouragement of good health behaviors. Focusing on maternal health, the targets of this plan included: improving healthcare seeking behavior and creating reproductive health education material for young girls. Smart integration of services is a goal that will provide “women of reproductive age with more access to quality comprehensive healthcare services through linkages found within their communities” (Bureau of Public Affairs, U.S. State Department, 2011, p. 22; Ekman, 2008). Increased communication and learning opportunities along with products and services will be made available to families for use in making both preventive and curative health related decisions. Quality integrated services for women should include: antenatal care, malaria prevention and control, HIV prevention and testing, prevention of mother-to-child transmission of HIV (PMTCT), post-partum care and family planning. The idea is that by providing women with integrated services they will receive a continuity of care, which will help reduce maternal mortality (De Brouwere, 2001; Bureau of Public Affairs, U.S. State Department, 2011; WHO, 2008; Women Deliver, 2009a).

2.6 Clinical Practices/Health Systems

Improving clinical practices and healthcare systems is imperative to reduce maternal mortality. The literature suggests many different areas that need improvement. Examples discussed here include the need for improvements to clinical guidelines for maternal health and working toward finding financial solutions for access to care. Guidelines for maternal health clinical practices need to be created, properly disseminated, and have accountability attached. Suggestions to improve the use of

current maternal health guidelines focus on making sure that all salient maternal health topics are included. They should be in a clear, concise, and understandable format concerning actual clinical practices. They should be distributed to all facilities and made accessible to all healthcare workers. Knowledge delivered to the proper medical personnel can save lives. Once staff has been trained on the information in the guidelines, they should be held accountable (Baker et al., 2012). “It is widely accepted that the improvement of maternal health relies on strengthening the entire health system” (Baker et al., 2012, p. 32). Issues relating to the staffing capacity and their knowledge base make it clear that this is a complex problem. It will require a multifaceted approach to finding solutions that will reduce the number of maternal deaths.

While some countries are working on the standard approaches of facilities and staffing, Rwanda is working on solutions to the financial barriers to reduce maternal mortality. They have made huge strides in increasing health care for women. To solve the issues relating to financial barriers, Rwanda created a community based health insurance program. This has increased childbirth at health centers and there has been an increase in women’s access to “modern” family planning methods through the use of the insurance program (Ekman B, 2008). Financial barriers can be challenging, but it is encouraging to learn about this insurance program approach.

2.7 Maternal Health as a Human Right

Power inequalities prevalent throughout the world are exemplified by the struggle that “no woman should die giving life” (Women Deliver, 2009b). This call to action holds

that all women should have access to family planning, quality care for pregnancy and childbirth and access to safe abortion services when legal. Access to quality care for pregnancy and childbirth includes antenatal care, skilled birth attendance, including emergency obstetric care and neonatal care and immediate postnatal care for mothers and newborns. The connection made by including maternal health as a significant right provides an international mechanism to hold countries accountable. One avenue to initiate change is through activism. Many applied anthropologists work to support activism throughout the world. Nancy Scheper-Hughes encourages them to move beyond the observer and spectator and get emotionally involved: to consider these inequalities, to become a witness for the community and to project the voice of the oppressed. She encourages a critical reflection in the work of applied anthropology (Scheper-Hughes, 2006). This aligns with the call from the website for the International Initiative on Maternal Mortality and Human Rights that explains, "It is time to hold governments to their commitments to respect, protect, and fulfill the human rights of women and guarantee that women will not die while giving life" (IIMMHR, 2009). Governments have a responsibility to ensure women's right to life, access to quality health services and gender equality. One way to accomplish this task is for governments to make laws and create policies that hold up women's right to access essential health services including contraceptives and emergency obstetric care (Women Deliver, 2009a; Csete, 2009). For too long women have been restricted from easy access to a safe delivery, where there are skilled medical staff and ready supplies and equipment. All of these things are achievable if governments make maternal health a priority (IIMMHR, 2009).

Spangler (Spangler, 2011) discusses the concept of embodied inequality as he examines the interconnectedness of socioeconomic status, lack of social capital and health disparities as they relate to maternal health in Tanzania. Three indicators are identified: first, stress from a negative environment, second, the connection between social capital and health status and third, the political economy as it is connected to inequality in the distribution of resources. Often, the power of the woman in labor is suppressed when authoritative knowledge remains in the hands of biomedical personnel. Unfortunately, for many, the care a woman actually receives appears to be based on a process of social exclusion which blocks access to quality care for those who are marginalized (Spangler, 2011). The call for maternal health as a human right needs to be uplifted on behalf of those without a voice. The right for women to have access to the highest attainable standard of health needs to be promoted and protected on behalf of the poor and marginalized (IIMMHR, 2009; Women Deliver, 2009b; Women Deliver, 2009a).

2.8 Theoretical Framework for Maternal Health Research

Several theories and orientations relating to medical anthropology can be used as a framework for this particular research. Based on the assumption that many of the choices women make are culturally based, ethnomedicine explains that health-seeking behavior is rooted in the sociocultural system. For example, one study (Singer & Baer, 2012) describes how the Iraqw people, living in northern Tanzania, prefer the medicine of other ethnic groups, believing that their medicine is stronger. It was suggested that using the medicine of another ethnic group might have been a way to build relationships

between the two groups (Singer & Baer, 2012). This current project seeks to discover the local childbirth traditions and how the local population views them. The use of the ethnomedical perspectives, in which decisions are made based on local or ethnic viewpoints, leads to a better understanding of cultural health beliefs and practices, as well as an understanding of other influencing cultural values.

Ethnomedicine has several perspectives based on what a person or ethnic group believes to be the cause of an illness. This study will investigate the following two categories: personalistic and naturalistic systems. Personalistic systems include the idea that a person or supernatural entity caused the condition. For example, someone might believe that a curse has been placed on the person experiencing the complication. The response to this belief is that the person should seek a healer that understands these types of illnesses, such as a traditional or religious leader. If it were believed that the illness was caused by an imbalance within the body, then a naturalistic healer would be sought. This might include herbalists, chemists, or biomedical practitioners. This study will seek to understand how women might perceive the causes of particular complications, which will provide an understanding of their health-seeking behavior, and why they might delay medical assistance.

Medical pluralism will also be considered in this research. There are many different ethnic groups represented in northern Tanzania. They all have their own particular beliefs in regards to health and healing. Some groups use systems of traditional medicine while others use biomedical treatments. These all coexist in the Karatu district. When there is more than one option for healing, often the dominant medical system will be more evident while the less dominant healing activities will

continue in secret. Therefore, this research must be aware and ask questions to discover the systems that women are utilizing for care during pregnancy, childbirth, and postpartum.

Christie Keifer, in his book titled, “Doing Health Anthropology: Research Methods for Community Assessment and Change,” discusses several applicable theories to investigate the framework of how knowledge concerning maternal health issues are viewed by both women in the community and by local health care providers. Keifer discusses the theory of knowledge called pragmatism theory of truth or the naturalistic theory. This theory describes the natural way that human beings think about what they know to be true for themselves. It is reflected in the way individuals solve problems as they create solutions to ordinary issues. Kiefer explains the four assumptions of the naturalistic theory as: 1. Individuals use their senses to understand their surroundings. 2. Individuals do not need to have an understanding of things outside of their immediate world. 3. Individuals will come up with practical solutions for themselves in relation to their problems. 4. By arriving at a solution to a problem, no other knowledge is needed, if the problem was solved. Therefore, knowledge is locally based, ever changing and grounded in actual circumstances (Kiefer, 2007).

The main idea regarding naturalistic theory is that its natural progression will move in the direction of something useful or practical. In this study, the practical knowledge of the local population will be found beneficial for the client to discern the best way to offer quality maternal health services that are culturally sensitive to women in the area.

Research using naturalistic theory can progress in an organized fashion and lead to practical solutions. Keifer explains that, “one of the purposes of research is to change the way other people think about a problem – to persuade other people to think seriously about our solutions” (Kiefer, 2007, p. 41). In this case, for the sake of reducing maternal mortality, healthcare providers want women to understand the benefits of attending antenatal clinics, where they are not only evaluated as their pregnancy progresses but can learn lifesaving information about the complications that could arise.

The WHO believes one way to reduce maternal mortality is to have skilled birth attendants at every delivery (WHO, 2004). A benefit of using the naturalistic theory is that one can discover how individuals apply meaning to pregnancy, the birthing process, and complications that might develop. Decisions that people make are based on what particular meaning they have attached to events and this is based on their personal experience and context. Consequently, the meaning for each person might be slightly different. The meaning is also contextually based; therefore, it can be complex as people try to make sense of a situation for themselves and others. Consideration for the entire cultural system needs to be taken into account as any alteration in one area, such as if a woman changes her choice in birthing location, might alter another area of her life, such as the mother-in-law/daughter-in-law relationship. Keifer defines this as a “locally valid model of meaning-formation” (Kiefer, 2007, p. 45). The “meaning” of the choices that people decide to follow is based on their perception of a situation not necessarily the reality of the situation. This leads to socially constructed ideas that hold true for the world, as they know it. When using the naturalistic theory of knowledge, the goal is not tied to validity or consistency but the power is in the ability to arrive at a

practical solution to a problem. Because it is based on a particular context, it cannot necessarily be repeated again and the same results found. However, it is still beneficial for those who have participated in the study.

Another theory presented by Keifer is the “theory of needs,” which can also be used to understand a population’s health-seeking behavior, the premise here is that individuals or communities are seeking to have basic needs met. Sometimes achieving good health is the goal, and other times it might be a means to satisfying a different goal. This can end up being very complex. The following example highlights a woman’s goal of the need for respect. A woman might choose to use a traditional birth attendant to assist in the delivery of a child because she has heard from a relative who had delivered at a health center that while there she had experienced disrespectful nurses. When looking through the lens of the “theory of needs,” this seems like a rational explanation as to why a woman would continue the use of traditional birth attendants. The complexity enters when a woman continues to use a birth attendant rather than going to a health center after she has been identified with a high-risk condition. Her need for respect is greater than her need for a safe delivery. Questions during the data collection phase might ask what needs are being met by women who choose not to have a skilled birth attendant with them at the birth of their child. Once these needs are identified, then the staff at FAME medical might consider how they could meet these needs. They might also consider how to work in partnership with traditional birth attendants, so that women are encouraged and supported in having skilled birth attendants with them during labor and delivery based on their own terms.

CHAPTER 3

METHODOLOGY

3.1 Ethical Clearance and Research Permission

Every effort was made to follow the proper ethical considerations in this study. With the goal to be transparent, the research project and its purpose were fully explained in the local language through an interpreter as necessary to each participant and proper permission for research was obtained from the Tanzanian government. This means that authorization was received on every level. On the highest level, a research permit was received from the Tanzanian governmental office of COSTECH (Commission for Science and Technology), ethical clearance from NIMR (National Institute for Medical Research), in addition to approval from UNT's (University of North Texas) IRB (Institutional Review Board). On the regional level, letters of agreement and introduction for research were obtained through the office of the Regional Administrative Secretary for the Arusha Region. On the district level, permission was granted from the office of the District Administrative Secretary for both the Karatu District and the Ngorongoro District. Permissions were also obtained from the Karatu District Medical Officer and the Chief Conservator of Ngorongoro Conservation Area. Following protocol, these letters were then taken to the village offices and medical facilities respectively as the researcher made introductions to receive permission to speak to the local population. For each visit to a health facility, the researcher introduced herself to the person in charge, explained the study and requested permission to be on-site. With all of the permissions granted, the study commenced.

3.2 Data Collection

Qualitative data collection methods were used. The timeframe for data collection was August 5 - October 20, 2013. Study participants (women, men and service providers) were recruited using purposive sampling and snowballing. For example, some were selected during their visit to the antenatal care clinics, some were identified by another person as a possible participant and some were selected based on relative location. Twenty-one villages in the Karatu area were represented in the study. Biomedical personnel were located at thirteen nearby health facilities that represent the following levels of care available: a community health post, government and private/religious dispensaries and health center and a government hospital. All health facilities visited were within twenty-five kilometers of the client health facility with the exception of interviews conducted in Ngorongoro Conservation Area. Members of the community identified non-biomedical service providers, such as “local” midwives or TBAs. In this study, some were TBAs with apprenticeship training; others received some training from an NGO. Two self-identified as “local” midwives and received different training; one shadowed an obstetric nurse and another was been appointed by her community and received a small training from the government. All participants were more than eighteen years of age. The study was explained to each participant and informed consent was obtained. Illiterate participants placed a fingerprint on the form and a witness confirmed the agreement. Participation in the study was voluntary. Using an interview guide, face-to-face in-depth semi-structured interviews were conducted. Questions gathered socio-demographic information such as age, village, ethnic group, marital status, source of income, education, number of pregnancies, number of children

and childbirth locations. Other questions pertained to maternal health knowledge, opinions on home births and health facility births, reason for choosing a birth location, use of family planning, cultural background relating to pregnancy and childbirth, satisfaction of services offered during antenatal care (ANC) and delivery services. When the opportunity presented itself, women were asked to share personal birth stories. An effort was made to create a relaxed atmosphere by conveying a friendly attitude and appreciating all responses. The average length of an interview was 71 minutes. Women represented the various ethnic groups that make up the local population, mainly Iraqw and Maasai. Including all participants a total of seven ethnic groups were represented in the study. Local translators were used, as needed, to speak in the participant's native language. Translators used in this study spoke Kiswahili (national language), Kiiraqw (Iraqw language) and Maa (Maasai language). With permission, interviews were recorded and then transcribed. To maintain confidentiality names were replaced with an identifier. Additional ethnographic data was obtained through observations at the district hospital, a religious health center, two government dispensaries and a community health post. Observations were made in antenatal clinics, during daily clinic activities, in the hospital obstetric ward, the labor room, and the researcher was present at one birth at a rural clinic. A site visit was made touring a maternal waiting house called a Chigonella. This term means those waiting for delivery. This Chigonella was located near the Dodoma Regional Hospital in Dodoma, Tanzania.

3.3 Data Analysis

Atlas.ti version 7.1.7 computer software for qualitative data analysis was used to

code the transcripts and store the data. The statistical package for social sciences (SPSS®) version 21 was used for quantitative data analysis. Common themes were identified during a thorough review of the data providing the community perceptions of maternal health in the Karatu area. Most important were the participants' perceptions of quality care. These were revealed in comments concerning satisfaction of care received and suggestions made for excellent care offered by both the local population and care providers.

3.4 Limitations of Research

This study recognized many limitations. One is the challenge of using translators and the realization that some of the information might be incomplete. Two, the topic can be considered a sensitive one causing some participants to feel shy and withhold some details. Three, the study recognized the implications that the presence of the researcher often affected the participant responses. With each interview, the researcher reinforced that the study was interested in knowing the perceptions of the participant and not what the participant thought the interviewer wanted to hear. Though these factors can limit the study, the data collected offers a good picture of the general beliefs of the local population. This information can benefit the client and in turn benefit their clients/patients.

CHAPTER 4

FINDINGS AND RESULTS

During the study, 66 interviews were conducted with 37 women, 6 men, 5 “local midwives” or TBAs and 18 healthcare providers. The 36 women have given birth to 148 babies of which seven children have died. Of these 148 babies, 74 were non-facility deliveries and 74 were born in a health facility. One participant was pregnant with her first child and was planning to deliver at the hospital. Providers represent the Chagga (3), Iraqw (9), Maasai (2), Para (2), Rangi (1) and Sukuma (1) ethnic groups. Men are from the Iraqw (4) and Zigna (1) ethnic groups. Women represent the Chagga (1), Iraqw (27), Maasai (7) and Nyiramba (2) ethnic groups. The TBAs represent the Iraqw and the Maasai. Twenty-four of the women have attained at least a standard seven education; this is the highest level of primary education in Tanzania (Figure 4.1 and Table 4.1).

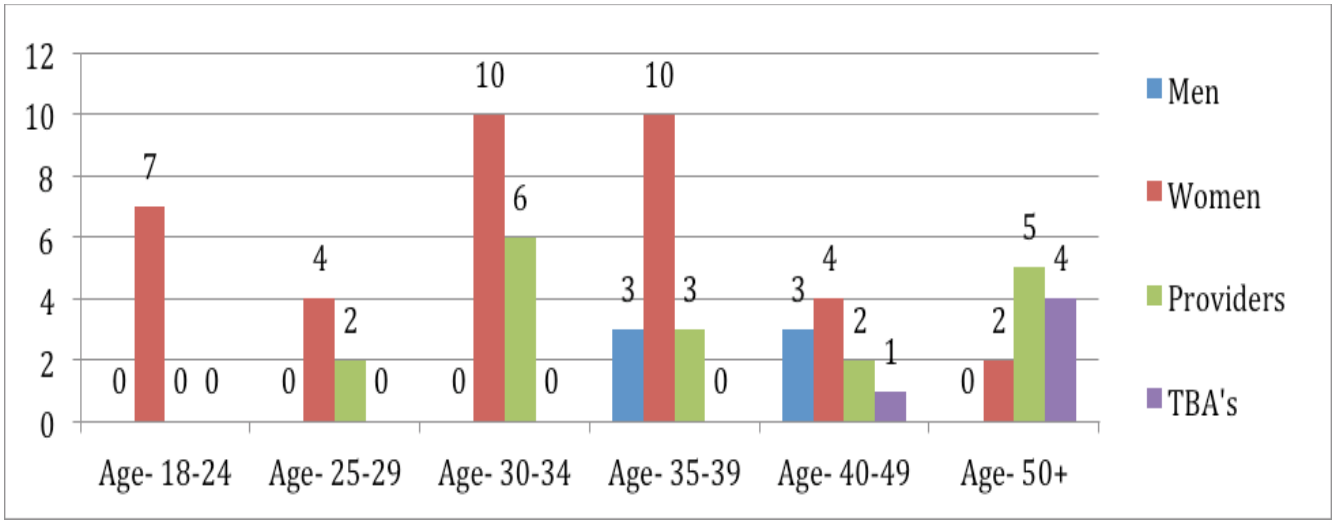

Figure 4.1. Participants by type and age categories.

Table 4.1.

Characteristics of Female Participants

Characteristic		Number
Ethnic Group (N=37)	Chagga	1
	Iraqw	27
	Maasai	7
	Nyiramba	2
Education level (n=37)	Completed Secondary School	3
	Completed Standard 7	24
	Less than Standard 7	1
	No Formal Ed	9
Age Group (n=37)	20-24	8
	25-29	4
	30-34	10
	35-39	9
	40-49	4
	50+	2
Parity (n=36)	5 or more births	13
	2-4 births	17
	1 birth	6
Location of First Delivery (n=36)	Home birth	14
	Dispensary birth	8
	Hospital birth	14
Birth Locations by (N=36)	Women w/only home births	8
	Women w/ only hospital births	14
	Women w/various birth locations	14

An important aspect of maternal health services is the antenatal clinic (ANC) also called reproductive child health (RCH). This change in name is to uplift family planning as well as the involvement of men. The plan of ANC is to include following services: an assessment of the pregnancy, assessment of fetus and to identify gestational age, preventative care, educational components and birth preparedness counseling. Preventive care is provided through administration of tetanus toxoid immunizations, antimalarial medication, worm prevention medication, B complex and folic acid and a

reduced price voucher to purchase a bed net. Investigations include VDRL, which is the rapid screening for syphilis, rapid HIV test. During ANC health education seminars, danger signs in pregnancy should be discussed such as headache, vaginal bleeding, and foul smelling discharge. Indications for automatic referrals, to equipped health center or hospital, mentioned as explained by participants include women with first pregnancy, past cesarean sections, age related (18 and under, 35 and older), five or more pregnancies, malpresentation (includes breech or other abnormal presentations including face, arm, shoulder), woman of short stature and women with a space between pregnancies of more than five years.

Services offered at facilities are based on staffing and available resources. Many smaller facilities reported they were out of stock for the rapid test for syphilis and thus results are not determined. Many rural facilities are limited in resources to check the blood and urine of pregnant women. If the provider suspects an illness, the woman will be referred to a larger facility for investigations.

4.1 Community Perceptions of Antenatal Care Services

This section reports findings concerning the antenatal care clinic from the perspective of the providers, both biomedical and local midwives/TBAs and the local population.

4.1.1 Biomedical Providers' Perspectives of ANC

Healthcare facilities in the Karatu district offer ANC services along with child immunizations and checkups. Based on the size of the facility, some of these services

are offered only on particular days of the week or on certain days of the month. On the woman's first visit, she is registered and she receives an ANC card. This puts her in the system of care and provides her easier access, if needed, for referral to the larger facility. One ANC service provider explains,

> On the first visit, we do the registration. We take a history. We give the first dose of tetanus toxoid, we test for syphilis and we estimate the gestational age of the fetus. On the 24th week, we provide SP (sulphadoxine-pyrimethamine) for malaria prevention, albendazole, which is antiworm medication, and ferrous sulfate for anemia. We record the mama's weight and we check the blood pressure. We also do a general examination. (Participant 28)

In addition to providing a physical checkup of the mother and the pregnancy, as each facility is able they provide a full range of reproductive and child health services (RCH). The integrated plan includes health and nutritional education and counseling, antenatal care, child immunizations, screening and counseling for HIV and syphilis, and family planning to the clients. As this care provider explains,

> Also during antenatal care clinics, we do health education to discuss the dangerous signs of pregnancy, birth preparedness and good diet for pregnant women. Another thing for postnatal mothers and for baby, we discuss nutrition and we counsel for family planning. (Participant 13)

The government has advised that during the first visit to the ANC the woman should come with her husband. At that visit, they should be both tested for HIV and syphilis. The staff also provides health education and discuses birth preparedness (birth location, supplies needed, financial plan), which is taught in groups. A nurse explains,

> We give them health education about pregnancy, especially for those who have had complications in pregnancy. For example, if someone has had a previous C-section or who are Primigravida (first pregnancy) and those who have delivered four children. For our health center, we have to refer them to a larger health facility. (Participant 19)

It was frequently mentioned that men are not responding to the mandate that

they should attend the ANC. Some providers say they try to force men to attend by telling the women that she cannot receive care if her husband does not accompany her on the first visit. However, one nurse explained that she is happy to report, that at their dispensary, they have a high rate of success in the number of men attending antenatal care clinics with their wives. The nurse-midwife described how they took a positive approach.

> We prepared a letter to inform the fathers about the need to come to the meeting with the mama and health workers. We congratulate the fathers and provide a date for them to come… If you come to the clinic with your partner, we will give you first priority in our services. When the men received the letter they come with a happy heart and they are proud to participate. (Participant 23)

She continues, “It is important for the man to hear the health education information directly from the care provider, this avoids disputes about the mother's need for good nutrition and other supplies for pregnancy and delivery” (Participant 23). When there is a lack of understanding on the part of men, they can create challenges for the women by refusing to provide money to buy certain things because they think the woman is wasting money on herself unnecessarily. Consequently, there is a governmental initiative mandating that men need to attend the first ANC visit to increase their understanding and encourage support for a healthy pregnancy and healthy child from the men.

One provider explained that during ANC, if a woman were identified as being HIV positive she would be added to the PTCMT (preventing-mother-to-child-transmission) program. She will receive special counseling and at 16 weeks of pregnancy, she receives ATZ medication until delivery. She is instructed to deliver at the hospital to promote a safe delivery following PMTCT procedures; everyone is protected and

ensures that the mother and child have access to the proper medications. After delivery, she is encouraged to exclusively breastfeed the baby for six months.

4.1.2 TBA or “Local Midwife” Perspectives on ANC

Assumptions could be made that women who are not using health facilities for delivery do not attend ANC, however that is not the case. Local midwives and TBAs who assist women with non-health facility births see the value in the mothers attending the antenatal care clinics. They reported that when they discuss childbirth with a woman they always encourage them to go to ANC to be evaluated and to receive an antenatal care card. One TBA explained that this way the mother would get a full evaluation of her pregnancy. Another local midwife explained that she would not work with a woman if she does not have the card from ANC, showing that she has been evaluated at the clinic. Therefore, if she needed to refer the mama, she would have access to the clinic or hospital.

4.1.3 Community Perspectives on ANC

It has become commonplace for women to attend ANC. Thirty-three of the thirty-seven women interviewed attended an antenatal care clinic at least once during their last pregnancy (Figure 4.2). Women say they believe that attending ANC is a benefit. However, they describe both positive and negative experiences.

One woman described her satisfaction in receiving good services at ANC,

> Because when I first came, I did not know anything. And now I am going out with some ideas about what to expect. I didn't know that there were some challenges. Because this is my first pregnancy but now I have some understanding. (Participant 34)

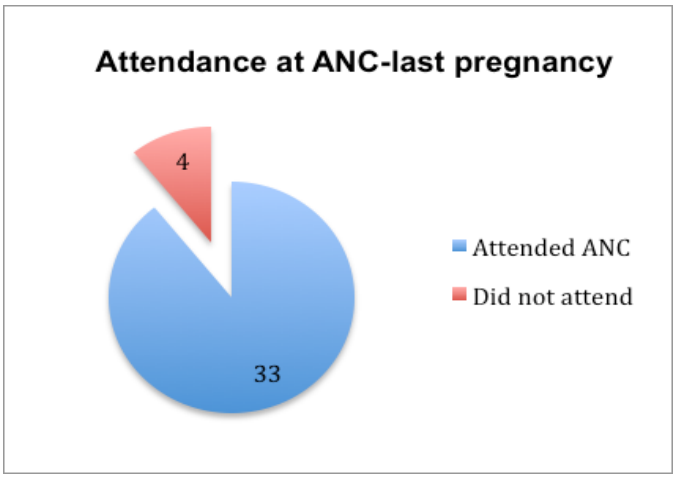

Figure 4.2. Women attending ANC during last pregnancy.

Another mother describes that she is happy to know the health status of both the mother and child. She explains, "Yes, it is very important to have the antenatal care clinics, in this way you know how the baby is, if you are sick or not and if the baby is sick or not" (Participant 34).

Negative experiences during ANC centered on the attitudes of the staff and the wait time. One mother describes her initial satisfaction with services as she appreciates the time the staff takes to listen to her, but receiving this kindness depends on the staff at each clinic. She shares, "I feel like they listened to me, to my concerns and they kindly answered my questions" (Participant 39). But sometimes women are required to wait for services. She continues,

> In some places, the service providers are a bit of a challenge. Sometimes they leave you for so long and when they are finished having you wait, they use abusive language. I don't know about others but this is what happened to me. (Participant 39)

Others expressed a general dissatisfaction with services. Here a woman describes her experience of waiting for ANC services with could be alleviated with good communication between provider and client.

> Sometimes when you show up for ANC, they provide a service to many of the mamas around, and then they stop and go to lunch. They will disappear for a long time. So it is upon you to decide, to go back home or to wait until they show up. If you stay you can spend the entire day waiting for services. (Participant 44)

Another woman clarifies that the services might be positive but the wait is a negative. She explains, “I think that there is a big delay but the service is good, so when I discussed the negative thing it is the delay I'm talking about” (Participant 47).

Some women feel the negative experiences are based on the cultural and educational bias of the providers as the providers are from other ethnic groups and have higher levels of education. She explains,

> Here is an example of when I felt I was not respected because I am Maasai. If I go to a certain clinic, the Maasai women will go there and then wait in the reception and no one will attend to them. They will not begin the clinic until a Swahili woman shows up. Then they will assist the Swahili woman first while the Maasai women continue to wait.” “I must say. To be treated this way, it will reduce the frequency of the Maasai women from coming for clinic. Because if you are not attended to, you sit there all day, and then they use harsh language… COME! GO THERE! For this treatment, they will go and get the ANC card and then they don't go back. (Participant 52)

For clarification, this mama was referring to non-Maasai women who she identified based on clothing and language.

Different attitudes and experiences are also seen as based on facility affiliations. Participants feel there is a difference between private and public services. One mother expressing a feeling a being respected and given full attention during ANC. She explains,

> When I go to the clinic, which is private I have to pay 2500 Tanzanian shillings (TZS)(~$1.53) and I think at that place, I receive more respect. I feel I'm taken care of because of the amount of money I paid. At the government clinic they don't show you care because you didn't pay for any services. (Participant 47)

Some men appreciate the clinic services. One father explains, “These days,

actually we get some education. The advice given by the nurses or doctors helps us to care for a child" (Participant 9). Another gentleman explains that he goes to the clinic but he does not always listen to the seminars. Then in the end he expresses there is power in numbers.

> I'm the father of five children, my wife has delivered at both the hospital and at home. I went to the antenatal care clinic with my wife for every child at least once. Mostly, it is to be close to my wife. But what they teach I don't learn, because I actually go to visit the community while my wife is at the session. I did go for the HIV testing for the last pregnancy. When I went with my wife, they mostly advised about family planning. It is good for both the man and the wife to hear what they have to say, then they can discuss together later and if one of the two did not understand the other can explain. (Participant 10)

Men are concerned with what the community will think if they attend the ANC with their wife. This man explains why it can be difficult for men to attend. He says,

> To attend it can be tricky, in the community for those who don't understand, they will think that the man is being led around by his wife. That is not good. But for those who do understand the importance of learning from the nurse, they will see the man as good and knows how to care for his family. (Participant 10)

Another difficulty for men is the scheduling of the ANC. He explains, "It is difficult for men to attend ANC because it interferes with their working duties" (Participant 08). The role of men tends to be away from the home, either through stable employment or as casual or seasonal laborers, which might require the man to be away during the day or even for days at a time. He also shares possible avenues in which men might receive ANC education. He offers these suggestions, "That maybe men can be instructed or educated through seminars or maybe through village leaders meetings" (Participant 08).

4.2 Challenges for Women In Tanzania

Challenges or barriers for Tanzanian women to access excellent care include

financial obstacles, social challenges, and infrastructure. These can be complex as many challenges are intertwined.

4.2.1 Financial Challenges

Finances seem to affect many aspects of a woman's ability to attain good health status during pregnancy. On the most basic level, women with low financial ability are unable to find funds to purchase food with high nutritional value. At ANC educational seminars, the women are instructed to eat lots of fruits and vegetables, which tends not to be standard fare for those living in poverty. A local midwife explains that, "some mothers may eat only a single food every day, such as Ugali (maize flour dish) with a single vegetable" (Participant 56).

Lack of finances also affects those in need of transportation. The farther away from town, the higher the cost of transportation and those living in the most rural areas are often those with the lowest financial resources. If a laboring woman does not have money, she cannot call for a taxi to get to a health facility.

As a strategy to assist with financial barriers, maternal health care in Tanzania is free of charge at government health facilities. However, there are secondary costs as this participant, a mother of two, expresses her concern for services. Women are instructed to gather supplies and if a woman comes without then a nurse will send a family member to go and purchase the needed items in town. This might include supplies that are out of stock at the facility such as a syringe or pain medication as this mother explained, "even though it is the government it is not completely free. There are

still some costs. You have to bring things with you like a syringe, gloves, and paracetamol. And you have to pay for the transportation" (Participant 44).

The nurses at ANC encourage women to save money as part of their personal birth preparedness plan. This includes having money to cover the cost of emergency care and transportation costs to reach a health facility that provides emergency obstetric care. However, many women find it difficult to put aside funds, because there always seems to be another pressing issue.

Furthermore, some care might be delayed or refused based on the patient's ability to pay. A nurse explained, "patients must pay first, before surgery and C-sections can be expensive" (Participant 61).

4.2.2 Sociocultural Challenges

Sociocultural obstacles often relate to a woman's power in her society. These obstacles include uncontrolled exposure to sexually transmitted diseases, gender violence and abuses, the expectations of a woman's duties, her lack of choice in birth spacing due to unmet family planning needs and the fact that others are the decision makers for her access to having a skilled birth attendant present at delivery. For many women, they need specific permission from their husband to go to a health care facility for delivery.

Many Iraqw participants explained that the cultural norm for the Iraqw is for the husband to assume the responsibilities of his wife during late pregnancy and postpartum. To fulfill his responsibility as a good husband, he tends to the daily activities that usually fall to the wife such as cooking and tending to children. However,

other participants believe it is the men who bring the problems. A professional health worker, explains how “men are the gatekeepers, they control the money. Without their permission women do not have access to money to use for transportation” (Participant 13). One Iraqw male respondent states, “most of the men are not really serious about taking care of their wives during their pregnancy” (Participant 9). If a woman cannot convince her husband that he should pay for services or for good food, then she has to go without. In addition to blocking access to financial support, it was also mentioned that men are often unsupportive to their wives in general. For example, not providing encouragement for their wife to attend ANC for care or discouraging the use of family planning. Furthermore, many participants stated that it is the men who often spread disease. This can be particularly true for men who abuse alcohol, which is a common problem mentioned by several participants. One male participant explains, “Sometimes men take too much alcohol. They don’t care about the women, they might kick them (pregnant wife) and cause loss of one or both of their lives” (Participant 08). Men who have multiple sexual partners may bring sexually transmitted diseases home to their wives.

The challenges relating to the role of women in their society can be seen in the many duties women are expected to complete, both inside and outside the home. The hard work expected is normal for these rural women, however many suffer from anemia, which causes them to feel tired and weak. A male participant explained that “women carry heavy loads, they have farming activities, they look after the cows… all contribute to the difficulties of the women” (Participant 08).

The role of the women is to follow the advice she is given by her husband and elders. Traditional beliefs can create a challenge explains a Maasai TBA, “Maasai are aware that when a woman delivers at home anything can happen. But it is still recommended that we follow this tradition. The elders and community advise them to please deliver at home. That is a challenge” (Participant 59).

Another social issue is family planning. Both the Iraqw and Maasai responses express that although attitudes are changing, it is still thought that a successful man or woman is someone who has many children. Children make you happy. Infertility is seen as negative for a woman. Among the Iraqw, a woman can be rejected if she is unable to produce children. Men often are not supportive of family planning; a clinical officer explains the challenge this way,

> Many men are against family planning … but it is the right of the mother to choose the duration between the children. The longer the space between children, the healthier the womb and health status of the mama. Children also benefit. The health status is increased for both the mother and the child. (Participant 08)

For both the Iraqw and the Maasai there is a cultural provision for infertility. Among the Iraqw a person can ask to inherit or adopt a child from another. Among the Maasai, an infertile woman will most likely be given a child from a close relative. For example, among the children of co-wives, if a woman dies in childbirth that child will be given to an infertile woman within their extended family unit to raise as her own.

4.2.3 Perceptions of Challenges Concerning Infrastructure

Challenges relating to infrastructure include distance, transportation and health facilities. Not all health facilities are created equal. The ability of the staff and available

resources varies greatly. The first challenge is distance. Although some women are able to walk to the closest health facility during their pregnancy for antenatal care, it can be a challenge for women living far from a health facility. For some of the most rural women such a trip might take three hours. This is especially challenging during the rainy seasons because paths and roads are not paved. One provider explained, “Most challenging for the mamas is infrastructure. For example, when a mama is having contractions, it is difficult to walk a far distance” (Participant 17). Another describes distance and geographical locations as a problem. She says,

> The mothers living beyond this mountain are very far away. The lack of a health center is a problem. It is not a simple thing to get medical assistance. Transportation and even communication is a problem because there is no cell service in that area. So you cannot even call a car. (Participant 59)

The second challenge is transportation. For those who have been identified as high risk and are instructed to deliver at the district hospital instead of a nearby dispensary will need to use a taxi. Again during the rainy season, many roads are impassible. For emergencies, participants discussed lack of enough ambulances as problematic. It was reported that the district has at least one if not two ambulances as well as two private health centers. For a woman in a rural area it can take hours for the ambulance to arrive to her location and then hours to get her back to the hospital.

A third challenge concerning infrastructure relates to the health facilities. Upon reaching a health facility, the women might find there are insufficient staff, and a lack of resources, medications or supplies. The situation concerning the shortage affects staff behavior. One woman describes that “when there are not enough workers, the mood of the staff will change and they may become aggressive. I think the problem of being aggressive comes from being loaded with work” (Participant 37).

4.3 Reasons for Home Deliveries

Women in the Karatu area deliver their children both at home and at health facilities (Figure 4.3). Among the Iraqw, those who living closer to town are more likely to deliver at health facilities, whereas rural Iraqw are more likely to deliver at home. Among the rural Maasai, home births are a cultural norm. They are not completely opposed to the idea of birth in a clinic; however, the perception is that if there is not a problem there is no need to go to a health facility. One woman explains that, "I delivered my six children at home. I feel that it is a safe place to deliver. I appreciate the work of the TBA; she helps me from the beginning to the very end. She stays very close" (Participant 06). Although home births are their first choice, if there is a complication during pregnancy, they will go to the health center if possible.

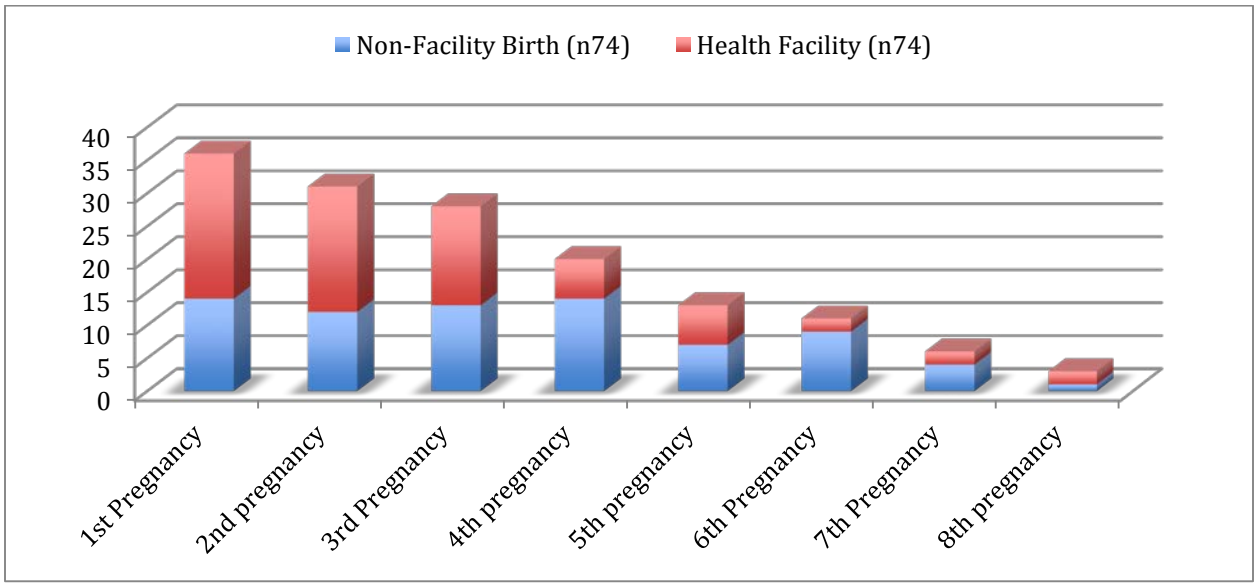

Figure 4.3. Pregnancy and birth location.

This study investigated the perceptions of the local population as to the reasons for both non-facility/home births and health facility births. On occasion, the term "non-health facility" birth is used due to the fact that not all of the non-facility births take place

in the home of the pregnant woman. The study visited one local midwife who uses her home as a birthing center. She runs the center in an organized fashion, scheduling one day per week for those needing checkups during their pregnancy. She also sends the women to attend the ANC. Just before their due date they come to stay at the home of the midwife. The women might bring food to share with the others who are staying at there as they wait for labor to begin. One women interviewed at this location traveled a great distant to use this midwife based on the recommendation of a relative. The midwife is not far from the district hospital and has a taxi on call for any transfers to the hospital if needed.

The female participants expressed several reasons for home deliveries; these include a family's economic situation, lack of education, dissatisfaction in services, cultural tradition, and circumstances relating to convenience for example time of day or rapid labor.

Iraqw midwives explained many deliveries at home are due to financial reasons and/or distance. Once labor begins, with the health center far away and no money to pay for a taxi, the women will call a local midwife. With the local midwife living close by, it is easy to call her for assistance. An HIV positive mother with seven children explains why five of her children were born at home with no assistance at all,

> At the time I was in a bad financial situation. I grind my food with the stone. At the time these children were to be born, I felt shy and didn't want to go to the clinic. I didn't have any good clothes. I did not feel presentable to the community. I did not feel it was good for others to see me this way so I did not go to the clinic. (Participant 47)

When asked about the hospital births of her last two children she explained that the church had helped her.

Many people reason that women deliver at home because they lack education about the possible complications or why health care is important. A male participant explained, “I think they (women) lack education. Because most people feel like, it's easy to give birth. So, of course, why not give birth at home” (Participant 07).

Others say that women deliver at home because they are afraid of the experience at the clinic or they have a fear of unnecessary surgery. Based on previous negative experiences at different health facilities, this mother chose to have a home birth with a local midwife.

> I delivered my fourth child at home because of bad experiences at clinics. When I started to feel pains and was ready to have my third child, my mother and I, we went to the clinic. It was evening hours. The nurses checked me and said the time is not yet. They left me and went to sleep. It was not long before the baby came. My mother had to help me. Then my mother went to get the nurses and they gave me an injection. So, I was at the clinic but the nurses did not help, so why should I go. (Participant 47)

Some do not receive a warm welcome when they go to health facilities. For Maasai, when they seek assistance at a clinic they often have a negative experience. One mother shared that,

> Sometimes the nurses attend to patients in a negative way. They can be rude and use unpleasant language… I have delivered two babies in the hospital, so I have tasted the experience. For childbirth at home, the TBA stays close to you and gives you good care. Relatives are there and they give you encouragement. The space is warm. (Participant 12)

Some say their choice is based on the advice of an elder who may suggest homebirth. An Iraqw woman describes the birth of her first child.

> I delivered at home. The contractions came in the night. My mother and my grandmother were with me and they convinced me to stay. They said, ‘keep on and you will deliver.’ They used very nice language and made me feel comfortable delivering at home. (Participant 37)

Circumstances and convenience often dictate the birth location for many women. Time of day is a factor for many. For others labor is short. This woman explains her reason for birth location.

> I have delivered at both a clinic and at home. I don't have a concrete reason. It is just when I was living near the clinic, I gave birth there. When labor began with my fourth child, the clinic was far from where I was living. So, I just delivered at home (Participant 40)

One male participant describes the reason for his wife's home birth this way,

> For my wife, labor came in the night. She called for my mother who was living nearby. My mother checked to see what stage of labor she was in and if she would be able to travel by car. My mother told her there was no need to go to the hospital. It is fine for her to deliver at home. And that is what happened. (Participant 07)

A father of five, who had two children born at home, told his story this way.

> What happened the first time my wife delivered at home, was that she told me to go and find transport. When I came back with a taxi, I found we already have a baby. The same thing happened for the birth of our last child. It just took too long to find transportation. (Participant 08)

A mother of two explained her plan was to go to the hospital but she delivered at home.

> The reason I delivered my first child at home was because it was an emergency. The labor began in the middle of the night around 3 AM. My mother and my grandmother were with me. My grandmother is very experienced but she is not a local midwife. I had gathered all of the supplies based on the ANC instructions. Once it was morning, my mother called for a taxi but the baby was born before it arrived. For my second child, I was living near a local midwife and decided to deliver at home. I did not have any problem with the first baby. I did go to ANC and again gathered all the supplies in case I needed to go to the hospital. (Participant 40)

4.4 Reasons for Health Center Deliveries

An increasing number of women choose to deliver at a dispensary, health center or hospital. Though there were many reasons cited, the idea of a safe environment and

good services were mentioned the most often. Others mentioned they made the decision based on the advice of others such as the nurse at ANC or a family member. For many, the choice of a particular dispensary or health center is based on its proximity to home. Others choose the location because they know someone working there.

One woman explained that she chose to go to the hospital based on her perceptions that it is safe there; there is protection from disease. She chose the hospital, “because at the hospital you're protected from disease transmission. At the hospital, they have supplies, they wear gloves, they have instruments for cutting and the environment is clean” (Participant 02).

Another first-time mother explained she was just following the advice of her parents, who felt that if there were an emergency she would receive the required interventions. “My parents told me I must go to the hospital because it was my first child. They said if I need surgery it would be available there” (Participant 11).

Expectation of “good” services is the reason this mother of four chose a health facility birth. Her perception is that everything will be available such as a knowledge staff, supplies and equipment. She explains,

> I went to the hospital to receive good service. Once labor started, I walked a half an hour to get to the facility. It was four in the afternoon when I arrived. The nurses welcomed me and took me to the labor room. By this time, my contractions were pretty hard. There was a nurse with me when I began to push. And soon the baby was born. (Participant 50)

4.5 Suggestions for Excellent Care

The study investigated the perceptions of excellent care by asking participants to describe what they would consider excellent maternal health services. Emerging

themes are education, cost, patient care, staffing, hospital environment, and supplies and equipment.

4.5.1 Suggestions for Excellent Care: Health Education

Comments relating to education included the importance of seminars on maternal health topics to help improve the local population's understanding of the subject. This provides knowledge allowing the family to reduce the response when making a decision in seeking medical treatment if case of a complication. The importance of postnatal care should be included. In conjunction with staff led educational programming, the use of instructional videos could prove helpful if shown in the waiting area.

4.5.2 Suggestions for Excellent Care: User Fees/Cost

The participants expressed an understanding that private facilities do need to charge user fees. One participant suggests to draw in new patients/clients when offering new services, a clinic might, " At the beginning… do a promotional- providing services for a small amount of money and then discuss with the community to find a good amount to charge that they can afford" (Participant 59).

Other factors mentioned include selecting a reasonable fee based on the economic status of the patients. This will open doors allowing excellent care to be within the reach of the larger population. Ensuring that the cost is not too high, participants offered the following suggestions. For a normal vaginal delivery, fees for a 24-hour stay should be in the range of 10,000-50,000 TZS (~$6-$31). The cost of cesarean delivery

could be 50,000 TZS to 60,000 TZS (~$31-$37). Complications requiring a hospital stay of 7 to 10 days, maybe 70,000 TZS (~$44). Consideration for those living in rural areas having the additional cost of transportation would be helpful. Fees for ANC might be 3000 TZS (~$2).

4.5.3 Suggestions for Excellent Care: Medical Staff

Four descriptors for excellent services relating to professional medical staff members where mentioned. 1) Total cooperation from the head of the hospital down to those working directly with the patients. 2) Having enough skilled providers who are in the position to use their skills and knowledge to provide excellent care in a timely manner. 3) Make sure to have an operating theater along with assistant medical officers and medical doctors who can perform C-sections. 4) It would also be good to have specialized doctors such as a gynecologist on-site.

A clinical officer stated the importance of having “permanent RCH (Reproductive Child Health) leaders available. These can be a registered nurse and several assistants” (Participant 25) to provide continuity of care. Nurses/providers should be trained to provide health education in a good way and should be able to provide care with a good attitude towards all patients; this also creates a welcoming environment.

4.5.4 Suggestions for Excellent Care: Facility Environment

The hospital environment is also important to potential patients. Characteristics listed in participants’ expectations for excellent care includes having a clean, well-ventilated, well-lit, safe, private place with a bed for every woman. Also mentioned is the

importance of having a room with a good temperature. There was a common concern about women being exposed to cold air. It was explained as this not good for a mother who has lost blood and they fear that the hospital environment tends to be cold. Practical elements that were proposed included a good gynecological bed for delivery and baby cots. Thoughtful design of the facilities to include rooms or space for registration and medical file room, doctor's office, examination room, maternity rooms, delivery room, and surgical theater. The delivery room should have cabinets with essential supplies including delivery kits and emergency medications as well as a place equipped with weight scale and resuscitation equipment for newborn care. Another idea was to offer consideration for women wanting to use an alternative position during delivery. This might be as simple as placing a mattress on the floor. In the patient rooms, there should be cabinets for the mother to store her personal items. Having a welcoming and nurturing environment, where the nurses stay close to the patient and use polite language was repeated many times. Finally, following the norms of the local population, the women need on-site access to food such as soups and tea to regain their strength after delivery.

4.5.5 Suggestions for Excellent Care: Supplies and Equipment

Many participants both the community and providers described the importance of having the proper equipment in good working order. Onsite there should always be basic items such as gloves, syringes, basins, adult weight scale, blood pressure machine, and necessary medications. Specifically mentioned was an ultrasound

machine nearby as well as a suction machine for the baby. It would be helpful to have an ambulance service or vehicle for emergencies, even if there is a cost.

4.5.6 Suggestions for Excellent Care: Patient/Client Care

Excellent patient care is important for good outcomes, especially patient satisfaction. It is important for the patients/clients to feel welcomed, accepted and supported by use of good-mannered language and care during examinations by medical professionals. One TBA explained the following, “During labor the woman is in pain and the nurse should understand that and treat her with kindness” (Participant 58).

Transparency is important. Professional staff should explain the plan of care to the mothers in a way they can understand, as well as listen to her concerns in a respectful manner. Because nurses can be very busy, a TBA suggested one way to offer support to the mother would be, “To have attendants available to assist the mama, not necessarily a TBA from the village, it could be someone onsite acting on behalf of the TBA. Providing encouragement to the mamas” (Participant 59). For first-time visitors, a welcoming staff is important as well as someone to guide the women where they need to go. Many cannot read, therefore, signs with pictures might be useful.

4.5.7 Suggestions for Excellent Care: Other

Some participants offered suggestions for excellent maternal health services that fell outside these themes; this might be considered as community outreach. Iraqw custom does not allow women to purchase items for the baby prior to birth. Two participants suggested that it would be nice to have basic baby clothing items for sale or

given as a gift to new mothers. Outreach programs might be created targeting two topics of concern. One to reduce the fear of delivering in a health facility by finding ways to reassure the women that surgery will not be performed unnecessarily. Two, introduce new services to outlying areas by sending staff members to talk with the villages, specifically to discuss with the women the purpose and plan of new programs, especially if opening a maternal waiting house.

CHAPTER 5

DISCUSSION

This study is focused on giving the client beneficial approaches to offering quality maternal health services to the people of Karatu, Tanzania. It identifies three salient themes that influence the population's health seeking behavior: cultural norms, socioeconomic considerations and concern for the quality of care. As services are implemented, these influences will assist the creation of a strong connection between the health facility and the local community.

Examination of the connection between cultural norms and health seeking behavior revealed two primary components: the role of a traditional healer and the power of the decision maker. The Maasai freely share their culture and traditions, but the Iraqw are more private and secretive about beliefs and activities relating to culture. Even with their own people, the Iraqw do not share information easily, keeping secrets within clans or family units.

In Tanzania, many ethnic groups use both traditional healers and biomedical services revealing a network of pluralistic medicine. With biomedical options being the dominant system based on governmental initiatives, traditional healing activities are often suppressed, more for the Iraqw than the Maasai. For example, when someone visits a biomedical health worker they will not disclose any use of traditional medicines. This might be based on a person's expectation that the biomedical health worker would discredit the use of traditional medicine, leading to feelings of not being accepted or even welcomed into the biomedical community.

The introduction of Christianity and its related educational and health care practices have had a great effect on the choice for biomedicine in Tanzania. The Iraqw feel the tension between their Christian beliefs and historical traditions. Even though the Iraqw place value on the biomedical options, many women still seek the advice of a local healer during their pregnancy. Women visit a traditional healer for an assessment of their pregnancy and to receive prophecy regarding their delivery; even though many believe the local healer is just using general observations for financial gain. Many Iraqw believe in the concept of black magic, though they keep its use private. This practice might have been traditional, but many now keep it hidden due to Christian teachings. When something negative happens to a pregnant woman, for example if she has passed her delivery due date, she might perceive that someone has caused harm to her through the use of black magic. She may think she angered a neighbor or relative and thus will seek assistance from a local healer to receive a remedy for the situation. The Iraqw traditional healer will prescribe a ritualistic cure. This activity aligns with the personalistic theory in ethnomedicine that if the person believes the causation of illness or a concern relating to pregnancy is supernatural, they will seek the advice of a healer as opposed to a doctor or nurse.

The decision-making process is another cultural norm that must be taken into account when thinking about the connection between culture and health seeking behaviors. When a woman is considering where she will deliver her baby, she will naturally consider the thoughts of her tribal elders and those thoughts will be a strong factor in whether or not she will go to a health facility. Historically for both the Maasai and Iraqw, the birth location decision-maker was the husband or mother-in-law. Societal

changes are affecting this decision-making process. Many Iraqw couples now make the decision together, though they do listen to advice from an elder.

For the Maasai, the TBA and the traditional healer are the primary decision-makers for a pregnant woman. This status reveals the culture's hierarchical powerbase. The importance and power of the elders is strong and the *Laiboni* or Maasai traditional healer and TBA are the most revered. For the Maasai, the TBA is the highest advisor in the life of a pregnant woman. Following cultural tradition creates a strong sense of community that is not easily broken or altered. The TBA is the one who directs the woman to follow the cultural practices related to food restrictions during pregnancy. Looking through the lens of the naturalistic or pragmatism theory concerning the restriction of food during pregnancy, these behaviors follow a practical logic for the Maasai. The purpose of the food restriction is to ensure an easy and safe delivery. They fear a "fat" baby will make for a difficult delivery and a difficult delivery in the bush can cause loss of life. Therefore it is considered a life saving cultural tradition.

Considering the pregnant Iraqw woman's health seeking behavior in relation to naturalistic theory, one can see her decision is based on her belief in the causation of disease or concern during pregnancy. If she experiences a problem during pregnancy and she thinks the problem is caused by an issue in the body, following the naturalistic explanation of disease, she will go to the nurse, however if she believes it is caused by the supernatural, she will follow the personalistic explanation and go to the traditional healer.

The main factor in the connection between social norms and health seeking behavior appears to be the relation of gender roles within the family and society. Men

are the gatekeepers. They have the power to withhold financial support preventing a woman from receiving good nutrition, proper care, and transportation to health facilities. When men attended the ANC sessions, they received health education concerning sexually transmitted diseases and issues concerning birth preparedness. According to the literature, when they are encouraged and invited in a positive, supportive and encouraging way this increases their involvement in the entire process from early pregnancy, childbirth and childrearing.

When the community as a whole commits to uplifting the importance of men becoming involved in the process, the community can hold them accountable. Recent studies explain how creating a sense of pride in the men can accomplish this goal. Educating the whole community at one time will help mitigate any teasing that men might receive from their peers. Increased male involvement allows women more freedom of access to services for a healthy pregnancy and safe delivery.

Considering the links between quality of care and health seeking behaviors involves many complex issues. As people experience quality care they develop a sense of trust in their care providers and feel respected, valued and safe. Based on the theory of needs women can be divided into two general groups. Some women have an overwhelming need to deliver a baby in safety knowing there are skilled nurses and doctors available for assistance. For others the primary need is to be in a nurturing environment where the birth attendant stays close during the entire labor and delivery. The ability to have family members around for support and encouragement is essential. Women choosing this type of environment trust they will be taken care of and are in good hands.

The need for a safe environment demands a competent staff and ready equipment. There is often a disconnect between going to a facility for a safe delivery and actually receiving the quality care that insures a safe delivery. Government messages encouraging women to deliver in health facilities have resulted in an increase in the number of women delivering with a skilled birth attendant present. However, many women, once at the health facility, are dissatisfied with the care they receive. They report many care providers use abusive language, treat them with disrespect and make them wait for services. Often there are not enough supplies, equipment or staff. This results in many women redirecting their choice of birth location. The perceptions of quality care are extremely important in encouraging women to deliver all their babies in health facilities. These perceptions include a staff that is welcoming, knowledgeable, competent and caring, as well as facilities that are clean and equipped with the proper equipment and necessary supplies.

Considering the “theory of needs,” one can see how a woman makes her choices based on her sensitivity toward her greatest need. Participants discussed this in relation to both the use of the ANC and delivery services. If a woman has a greater need for respect and a nurturing environment, she will attend ANC for assessment, gather the ANC card and then most likely deliver at home. Many women feel they are not the priority for staff. Nurses spend little time with them and do not explain procedures. Many women have come a great distance for services, they are engaged, but know they only have so much time if they are to return home before dark. Some of these negative experiences are thus related to the effort it takes the women to get to the facility and some are related to an inadequate number of staff members.

On the other hand, many women stated they appreciate the benefits of ANC and confirmation of a healthy pregnancy. Their choice for delivery location is a dispensary, clinic or the hospital because it is safe and they believe these facilities have life saving supplies. This choice is based on their greatest need for safety when using the lens of the theory of needs.

This study identified the elements of the perceptions of quality care by the local population as including; having knowledgeable, competent and compassionate healthcare providers; good health educational seminars; a caring environment and all the necessary equipment and supplies at the birthing location.

Many of the negative behaviors have been attributed to the health care system itself, due to inadequate number of staff, lack of supplies or not having enough beds. Regardless of negative experiences, the local population considers biomedical healthcare providers the authoritative knowledge on issues concerning healthcare. They expect that all health facilities have the required and necessary items available to provide for a safe delivery. To meet these expectations, it is important that continuing education is available for health care workers. All providers working in maternal health need both continuing education and specialty education such as emergency obstetric care training. Healthcare providers with a good working knowledge of maternal health are equipped to save lives. This includes competence in understanding danger signs, risk factors and possible complications along with their respective treatments and procedures. With this solid foundation, they are also equipped to teach the community about maternal health needs, family involvement and available services.

Offering a welcoming environment with caring staff will increase utilization of health facilities. A professional attitude along with sensitivity for the local cultures allows patients to feel valued and respected. This is important, as the healthcare providers tend to come from different cultural backgrounds and have a more urban mindset. Improvements in these factors will increase the trust between the facility staff and the community; building the necessary reassurance that the facility staff will not perform any unnecessary procedures. This environment will alleviate the fear many women currently express concerning obstetric surgery. Consequently, knowledgeable and competent medical providers working together with the local population as well as partnering with local midwives/TBAs will successfully improve the overall maternal mortality rate.

As competent staff offers health education seminars to the local population, the community will develop a better understanding of danger signs which will give families the ability to respond more quickly should these signs appear. This in conjunction with having a good birth preparedness plan will reduce the delays women can have seeking medical assistance. The birth preparedness plan should include advance decision making for birth location, transportation, sibling care, mother's support person and financial concerns.

Quality care is also identified by the use of compassionate and culturally sensitive care. Women who deliver their babies at home appreciate the closeness of the birth attendant. In this situation, they feel respected, accepted and cared for. Knowing that they will be spoken to with kind words and a gentle voice is important. Medical professionals can create this same type of environment by using polite language and projecting a caring attitude. Patients/clients appreciate knowing that each person has

the same priority and not one ethnic group or social class is being treated with preference over another. Because it is often difficult for a nurse to fulfill this role of nurturing birth attendant, it is important to consider assigning another person to act as labor attendant/care provider within the health facility.

One option is to arrange for a caring supportive person to replace the need for the TBA when delivering in the health facility. Studies in both the United States and Malawi, recognized the benefits a supportive person or doula (mother's helper) can have on the birthing process. In developing countries, this eliminates the possibility of women delivering alone in the health facility setting. This strategy allows for one-on-one support and creates a caring environment, which leads to a positive birth experience/outcome. This has been reported as a safe and rewarding option. (Kumbani, Bjune, Chirwa, Malata, & Odland, 2013; Deitrick & Draves, 2008; Ekman B, 2008).

Because the role of the TBA in the community is an expected comfort, strategies for them to stay connected to the health care system are important. Maintaining a connection between medical professionals and TBAs allows for continued training and higher rates of referrals to health facilities. (Bhutta, Darmstadt, Haws, Yakoob, & Lawn, 2009).

Perceptions of quality care include knowing that all necessary supplies, medications and equipment are available for a safe delivery. There is an expectation that when a woman comes to a health facility everything she needs to have a safe successful birthing experience is available and in working order. When women deliver at government facilities, they are required to bring many supplies themselves. If a facility were providing quality care, it would be expected to have the necessary supplies and

equipment on-site. This allows the woman to focus on getting herself to the health facility.

An increase in education for both the provider and the community is needed. Continuing education for medical staff targeting topics such as best practices in maternal health and emergency obstetric care are essential. Train the trainer education to teach techniques on how to present topics to the community in culturally sensitive ways will allow all in a broad area to hear the same message. This approach will build confidence within the community.

Compassionate care training for providers will build trust and improve patient provider relations. Providing adequate staff will allow the provider to take extra time with each patient to listen to their concerns, allowing room for trust to grow. Where there is inadequate staff, inform patients of approximate wait time, allowing them to successfully plan their day. Receiving quality care and respect will increase the likelihood that women will return to the health facilities and return visits will help reduce maternal mortality.

Community outreach programming is needed to seek opportunities to increase the general knowledge of maternal health in the community; this should include birth preparedness and identifying maternal health danger signs. Work within the community to support continuing education possibilities for local midwives and TBAs will increase their knowledge of current safe birthing practices and encourage referrals. In a long-term perspective, continued education will begin to change attitudes and increase familiarity with healthcare facilities and capabilities.

Healthcare facilities with a welcoming atmosphere will not only improve the utilization of maternal health services but also increase the use of preventive and curative medical services. This approach will in turn improve the general health status of the population as a whole.

It is understood that not every expectation can be accomplished by every facility. However, knowing that the issues have been identified and a thoughtful plan has been prepared to achieve these solutions, the community will gain ever more confidence and trust in the staff and facility.

CHAPTER 6

CONCLUSION

Clearly, the process of reducing maternal mortality involves a long-term commitment. The best results for creating an excellent maternal health program will come from developing strategies that can be implemented in an organized and transparent manner over a specific timeline. The intermediate plans will allow the health facility to demonstrate constant improvement within the constraints of financial and staffing capabilities. Incremental increases in the overall plan for the provider facility and community will help the successes build upon each wave of implementation. A slower, but consistent improvement schedule is far more beneficial than a large one-time program. As the health facilities consider the trajectory for maternal health services, the key components for consideration include provider education including both skills and caregiving, community health education, ANC staffing and coordination. Ultimately, a program, which meets the needs of the local population, will help to reduce maternal mortality in Tanzania.

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