The Impact of Traditions and Traditional Birth Attendants on Maternal Mortality: A Case Study of Nyakayojo sub-County, Mbarara District, Uganda

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Abstract

Currently Uganda has one of the highest maternal mortality rates in the world at 550 deaths per 100,000 births. Many different factors combine to create this health situation including poverty, common misconceptions about delivery and family planning, cultural and social factors, and traditional birth attendants (TBAs). Much is known about the clinical and structural factors influencing this high maternal mortality, but less is known about the influence of tradition, culture, and TBAs. The main objective of this study was to examine the factors influencing maternal mortality to determine the key factor. More specifically, the study aimed to determine the impact of traditional beliefs and TBAs on women's health and health-seeking behavior. Thaddeus and Maine's three phases of delay were used to ground the research and interpret the data results in terms of factors delaying women from seeking and utilizing health care services. The area of study was the Nyakayojo sub-county in Mbarara District, Uganda. The main methods used were semi-structured interviews with women, local leaders, experts in the field of public health and medicine, health workers, and traditional birth attendants; and two focus group discussions held with traditional birth attendants. The study found that structural factors such as lack of transportation and poverty greatly influence the ability and decisions of women to access a health center. Common misconceptions surrounding the perceived complications of family planning cause large family sizes and also put women at a greater risk of mortality and morbidity. Many women also believed that going to the hospital is for those with complications and that there is no need to deliver in a health center if a woman has had a normal pregnancy or good deliveries in the past. There are also many cultural beliefs such as bravery associated with home deliveries and the lowered status of women in the society that pose challenges to improving maternal health. TBAs are still helping women to deliver in the villages and are playing an important role in the health of many mothers, giving good care to women. Deliveries with TBAs can pose risks, but the most dangerous deliveries occur at home with a close relative or without any assistance. The persistence of home deliveries poses the greatest challenge to changing the maternal mortality rate. TBAs can play an important future role as mobilizers to encourage women to go to health centers for antenatal care (ANC) and delivery. In the meantime, more TBAs should be trained to handle emergency cases when accessing a health center is not possible. There is also a need for more health education and sensitization for women to reduce misconceptions affecting their willingness to deliver in health centers.

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Glossary of Acronyms

ANC: Antenatal care

C-section: Caesarean section

CIA: Central Intelligence Agency

DHO: District Health Officer

FGD: Focus group discussion

HCI-IV: Health center one through four

LCI-IV: Local Council one through four

MDGs: Millennium Development Goals

MoFPED: Ministry of Finance, Planning and Economic Development

MoH: Ministry of Health

MUST: Mbarara University of Science and Technology

SSI: Semi-structured interview

STI: Sexually Transmitted Infections

TBA: Traditional Birth Attendant

VHT: Village Health Team

WHO: World Health Organization

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Introduction

Maternal mortality and morbidity are some of the most important global health issues facing the world today. Worldwide, approximately 1000 women die each day from pregnancy and childbirth related causes (WHO, 2010). In addition, 99% of these maternal deaths occur in the developing world, with sub-Saharan Africa accounting for over half of these deaths (WHO, 2010). The international community has committed to improving maternal health by 2015 with Millennium Development Goal (MDG) number five, which aims to reduce maternal mortality by three quarters and reach universal access to reproductive health care**.** Even with this commitment, many countries have failed to implement effective programs to reduce maternal mortality and morbidity, and women around the world continue to die or suffer from the complications of pregnancy and childbirth. There are many direct causes of the maternal health situation and a number of underlying factors at the individual, community, and countrywide levels. Complex socio-economic factors, culture, and tradition combine together at all levels to create high morbidity and mortality for women of reproductive age. This paper reports findings from a case study conducted in Nyakayojo sub-country, Mbarara District in western Uganda. It examines maternal mortality and morbidity within Uganda and situates it in a larger theoretical framework of maternal health in developing countries. The study examines multiple factors influencing maternal mortality including cultural beliefs, recognition of complications, perceived quality of care, and traditional birth attendants, and how these factors impact the health and health-seeking behavior of women.

Background

The maternal health statistics in Uganda are fairly grim, with women suffering greatly from disease, complications during pregnancy, and the burden of child rearing. Currently Uganda has one of the highest maternal mortality rates in the world at 550 deaths per 100,000 births (UNICEF, 2004 & 2010). Furthermore, maternal and peri-natal complications comprise the highest health burden in the country (Kamatenesi-Mugisha & Oryem-Origa, 2007). Part of the high maternal mortality can be attributed to the fact that many women do not utilize health facilities with skilled attendants. Instead they choose to use a traditional birth attendant (TBA) or give birth at home unassisted or with the help of a close relative. This is compounded by the country's high fertility rate, which places Ugandan women at even greater risk for morbidity and mortality during each birth. Women rarely use effective family planning methods, which is one of the root causes of Uganda's fertility rate, ranking the second highest in the world at 6.77 births per woman of reproductive age (CIA World Factbook, 2010).

Each year, approximately 1.2 million Ugandan women become pregnant, and approximately 15% of those women experience complications, making it vital for these pregnant women to give birth in the presence of a skilled attendant (MoH, 2004). Skilled attendance at birth is fairly low, even though 94% of women attend antenatal care (ANC) at least once during their pregnancy (MoFPEC, 2010). A health survey conducted in 2006 found that across Uganda, 42% of women deliver in health facilities, 41% with close relatives or by themselves, and 17% with traditional birth attendants (MoH Representative, SSI, Nov 24, 2010). In Mbarara District specifically, where Nyakayojo sub-county resides, approximately 45 to 50 percent of women deliver with a skilled attendant, with the others delivering on their own or seeking the help of a TBA or a close neighbor or relative (DHO, SSI, Nov 4, 2010).

Considering the extremely high birth rate and low skilled attendance at birth, it is not surprising that Uganda has one of the highest maternal mortality rates in the world. This high maternal mortality is influenced by a vast array of factors at the policy, community, and individual levels. In addition to high mortality, Ugandan women also experience high morbidity, caused by complications during pregnancy, which greatly impacts their quality of life and productivity (WHO Representative, SSI, Nov 22, 2010).

Across Uganda, uneven and inadequate access to health care leaves around half the population with no access to modern health care (WHO, 2009). The District Health Officer (DHO) points out that there is limited accessibility to health facilities in terms of physical access and affordability (SSI, Nov 4, 2010). Many women simply do not have the time or money to travel to the health centers. In fact, 80% of the population lives in rural areas with severely limited access to emergency obstetric care, and 80% of the population also lives below the poverty line, creating financial barriers to obtaining proper reproductive health care (Keri, Kaye, & Sibylle, 2010). With few resources to access health centers, many women search for the next best option, which is delivering at home or using a TBA.

According to Kironde, Lukwago, and Ssenvonga (2003), TBAs have been successful in helping women deliver babies in Africa for thousands of years and many of them have been trained with the skills to properly deliver babies. Between 1997 and 2000 some TBAs received training from the Ugandan government or other non-governmental organizations, while others simply learned the tradition from another community member or relative. Those who were trained received supplies in an effort to reduce maternal mortality. The government later found that maternal mortality and morbidity did not decrease, despite the resources allocated to training and equipping TBAs (DHO, SSI, Nov 4, 2010). The government recognized that it could not

simply ban TBAs, but has stopped its training programs and is slowly attempting to shift their role away from delivery (DHO, 2010). The current strategy is to incorporate TBAs as a part of the village health teams (VHTs) that are being implemented across Uganda. The hope is that the TBAs will act as the link between the community and the health centers by encouraging and sensitizing women to access health centers for ANC, family planning, and other services, only carrying out deliveries in emergency situations (Representatives of the WHO & MOH, SSIs, Nov 22/24, 2010). While the government is trying to change the role of the TBAs, this change is slow and many are still conducting deliveries in the villages.

There is still a need in many areas of the country for the services of TBAs, which helps explain why many continue to conduct deliveries. This stems from unmet needs and difficulties in accessing health facilities and services (Participants at the 3rd Regional Reproductive Health Task Force, 2004). Since TBAs outnumber health workers by a factor of 100 or more, and are therefore more accessible, many women turn to TBAs as an alternative to health centers (Keri, Kaye, & Sibylle, 2010). TBAs help women deal with pain and minor problems during pregnancy, treat sexually transmitted infections, and often aid in birth. They use herbal medicines to address a variety of small sicknesses and discomfort associated with pregnancy throughout the prenatal period, and help women through labor and delivery (Bantebya Kyomuhendo, 2003). TBAs play a vital role for pregnant women, providing care that many women would otherwise not be able to access. Many women prefer to consult TBAs for their pregnancy needs because they use methods that are acceptable and familiar to the community, and they have their roots in the culture (Bantebya Kyomuhendo, 2003). For example, women are allowed to deliver in a more comfortable position and receive support and encouragement from the TBAs. TBAs are also flexible about where they help a woman deliver, either delivering from

a prepared place in her own home or travelling to the home of the pregnant mother (FGD Nyarubungo, Nov 9, 2010). This suggests that there are cultural reasons as well as structural factors that explain women's choice of TBAs.

While many choose to deliver with a TBA, there are even more women who choose to deliver at home with no help or with the help of a close relative or friend. Some of these women have the option to deliver with a TBA, but instead decide to deliver at home without the help of a TBA. Although socio-economic factors and individual perceptions play a large role, women's health, health-related behavior and outcomes are also considerably impacted by culture and tradition as will be further discussed later in the paper.

One health behavior rooted in Ugandan culture is the high fertility rate. According to the Ministry of Health (MoH) (2005) "Early and frequent childbearing and large family size reflect long-standing societal norms among most segments of the population" (p. 2). In addition, the use of contraceptives is low in Uganda, with approximately 23% of women using contraceptives (Bantebya Kyomuhendo, 2003). The low use of family planning is also rooted in culture and common misconceptions, especially misunderstandings about the potential side effects and long-term consequences of family planning. Approximately 29% of women who have an unmet need for family planning cited fear of potential side effects as their main reason for not using family planning (Khan, Bradley, Fishel, & Mishra, 2008). This misconception prevents women from having fewer children and better reproductive health.

Theoretical Framework

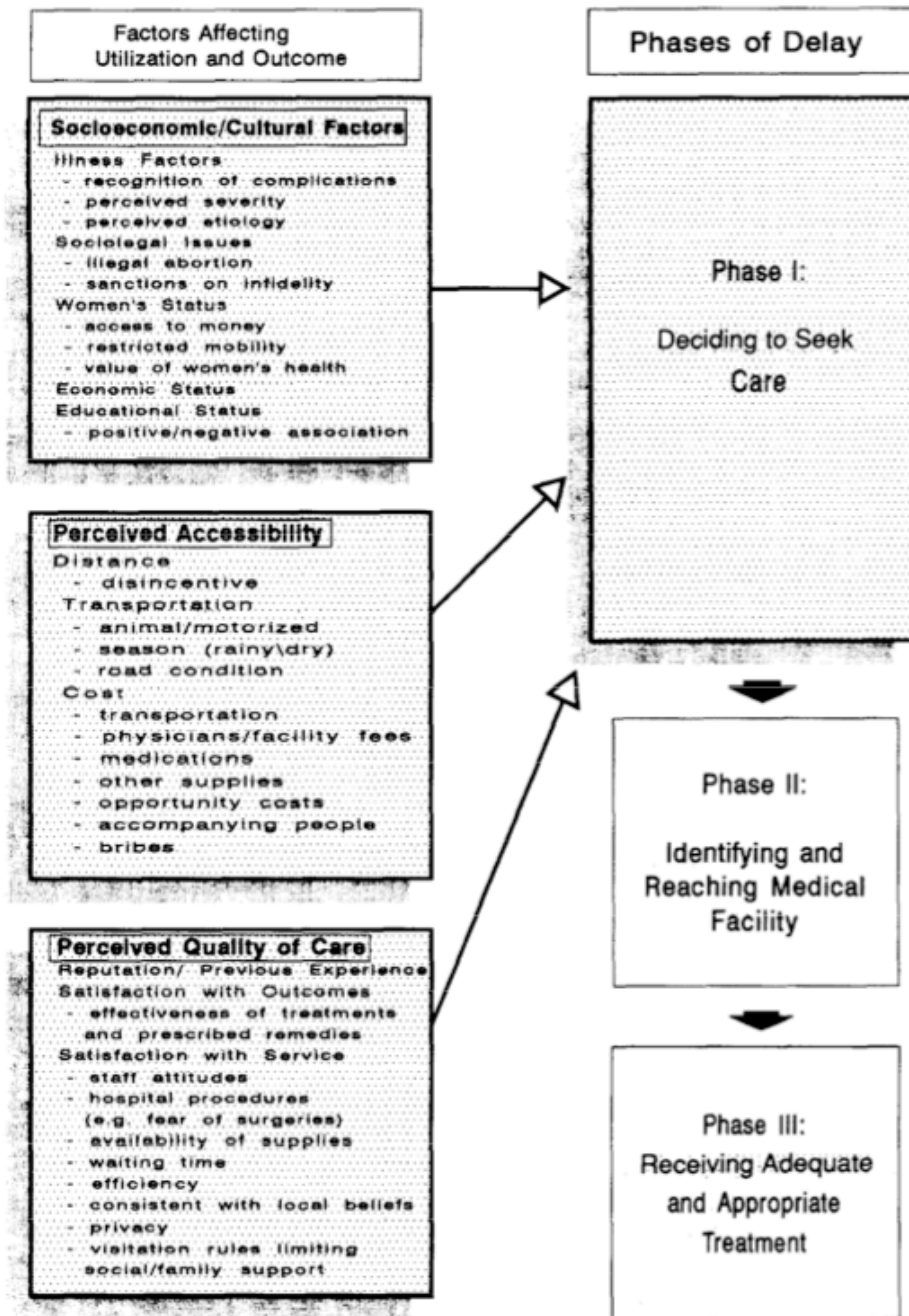
While this study is specific to Uganda, the issue of maternal mortality transcends boundaries and cultures. A strong theoretical framework allows researchers to understand the issue, and hypothesize possible factors that influence maternal mortality within the larger context

of developing countries. One of the most widely sited conceptual frameworks for maternal health is the "Three Phases of Delay" developed by Thaddeus and Maine (1994) in their article "Too Far to Walk: Maternal Mortality in Context." Thadeus and Maine (1994) identify three phases that delay women from accessing life-saving medical care which include:

1. Delay in seeking care which is influenced by socio-economic status, cultural beliefs, perceived accessibility of health care, and the perceived severity of illness.
2. Delay in reaching a health center once the decision to travel is made which is influenced by distance to the health center, transportation means, and the cost of transportation and care.
3. Delay in receiving satisfactory treatment which is influenced by the number of staff and amount of drugs and equipment at the facility.

In the context of Uganda, phase one delays include women's lower status, a traditional emphasis on home delivery, misperception of the severity of complications during pregnancy and delivery, perceived high costs of hospital care versus home care, and a perceived low quality of public health care. Phase two delays include the cost of transportation, availability of transportation, and distance to health centers. In Nyakayojo sub-county, the only option for most is to use private transportation, which is costly for the largely poor population and not easily available on short notice to travel the four miles to the government hospital. Phase three delays include lack of drugs and staff at health centers, lack of emergency obstetric care, and an overall poor quality of the health system. The nearest government health center in Mbarara continuously faces a shortage of staff and drugs, the existing staff is overstretched and unable to provide the highest level of care, and much of the equipment to provide emergency obstetric care is unavailable. While this study touches on all three phases of delay, it focuses mainly on phase

one of delay, which can be summarized below with the chart from Thaddeus and Maine's (1994) publication:


Factors Affecting
Utilization and Outcome
Phases of Delay
Socioeconomic/Cultural Factors
Illness Factors
- recognition of complications
- perceived severity
- perceived etiology
Sociolegal Issues
- illegal abortion
- sanctions on infidelity
Women's Status
- access to money
- restricted mobility
- value of women's health
Economic Status
Educational Status
- positive/negative association
Phase I:
Deciding to Seek
Care
Perceived Accessibility
Distance
- disincentive
Transportation
- animal/motorized
- season (rainy\dry)
- road condition
Cost
- transportation
- physicians/facility fees
- medications
- other supplies
- opportunity costs
- accompanying people
- bribes
Phase II:
Identifying and
Reaching Medical
Facility
Perceived Quality of Care
Reputation/ Previous Experience
Satisfaction with Outcomes
- effectiveness of treatments
and prescribed remedies
Satisfaction with Service
- staff attitudes
- hospital procedures
(e.g. fear of surgeries)
- availability of supplies
- waiting time
- efficiency
- consistent with local beliefs
- privacy
- visitation rules limiting
social/family support
Phase III:
Receiving Adequate
and Appropriate
Treatment

It is vital to understand the underlying factors influencing the decisions of women to seek care and their physical ability to access high quality care for this study. The women in this study lived approximately four miles away from a main government hospital where they could receive both ANC and delivery services, and yet these services are underutilized and the majority of women are still delivering from the village. The discussion to follow examines the circumstances influencing women's health behavior and analyzes choice of delivery site within the context of the three phases of delay, but first the issue examined must be clearly defined.

Statement of the Problem

Maternal mortality is a significant challenge facing Uganda. Governmental and non-governmental actors have implemented interventions in the past, with little change in the maternal morality rate. The key factors influencing women's health and health-seeking behavior must be better understood for there to be future improvement in maternal morbidity and mortality. While the magnitude of the problem and clinical causes of maternal mortality are well known in Uganda, less is known about the impact of traditional cultural factors, TBAs, and the factors influencing the utilization of care, making this study appropriate. This study addresses these gaps in knowledge and will provide a more comprehensive understanding of the factors influencing the health status of women in Uganda and ways to improve reproductive health.

Objectives

This study has three broad objectives:

1. To examine the factors influencing the high maternal mortality rate in Uganda and determine the most important causes
2. To explore the impact of traditional beliefs on women's health and health-seeking behavior

3. To examine the use and impact of traditional birth attendants on women's health and health-seeking behavior, using both trained and untrained TBAs to determine if each group has a different effect on the situation

Justification

Maternal mortality is of great concern in both Uganda and other developing countries, especially with 2015 fast approaching and many countries hoping to meet the maternal mortality reductions in time for the MDGs. Current projections estimate that Uganda will not meet its goal of reducing maternal mortality and this is severely hindering development within the country.

Women are a vital part of the work force and also play a significant role in society. High maternal mortality and morbidity related to the complications of pregnancy greatly reduces economic productivity, which in turn strains both family and household resources. For each death, six women suffer debilitating complications that greatly impact their quality of life and productivity (Center for Reproductive Rights, 2010). Frequent pregnancies and births take women away from active and full participation in economic activities (MoFPED, 2010). Overall, maternal health is a key indicator of development within the country as "improvement of people's health is both an outcome and a cause of economic development" (MoH, 2009, p 7). A better understanding of the factors influencing poor maternal health is vital to improving both health outcomes and development in Uganda. Research is necessary to identify, understand, and overcome the socio-economic inequalities and inadequacies of the health care infrastructure to be able to improve maternal health outcomes (De Francisco, Dixon-Mueller, d-Arcangues, 2007). More priority must be placed on maternal health and the issue must come to the forefront for real policy change to occur.

Methodology

Scope of the Study

Nyakayojo sub-county in Mbarara District was chosen as the site of study for a variety of reasons. First, the sub-county is home to a very active traditional birth attendants association. For this reason, TBAs were widely available and easily recognizable within the area. In addition, the TBA association contained both trained and untrained TBAs, allowing for an analysis of TBAs with varying characteristics and backgrounds. It was also easier to ask opinions of the TBAs since they were used by women and well known within the community.

Nyakayojo sub-county is one of fourteen sub-counties in Mbarara District and is located four miles outside of the center of the municipality. The main economic activities in the area are related to agriculture such as growing bananas and other crops, and raising livestock. Development challenges in the area include low household income and poor health conditions. Its total population is 29, 396, with women comprising 56% of the population or 15, 141 people (Nyakayojo sub-County Planning Unit, 2010). The majority of the population is from the *Banyankole* ethnic group.

Three distinct groups of subjects were targeted in this study. The first group included experts in the field of public health and medicine, health workers, and local leaders. These key informants were able to provide informed insight into local culture, the factors influencing women and their decisions, as well as information about the health system (Campbell, Cleland, Collumbien, & Southwick, 1999). In total, 5 experts in the field of public health, 3 health workers, and 8 local leaders were interviewed. The sample of local leaders does not cover all parishes due to issues of availability and transport, although 7 of the 8 leaders were from different cells (each parish is comprised of multiple cells or communities).

The second group included traditional birth attendants. The TBAs were all a part of the Nyakayojo Traditional Birth Attendants and Herbalists Association, and came from 4 different parishes in Nyakayojo sub-county and a variety of cells within those parishes. The average years of experience within the sample from the time they began their practice was 17 years. In total, the sample of TBAs included 26 women and 1 man, 15 of them trained, and 12 of them untrained. On average, the TBAs helped approximately 4 women per month deliver. The sample of TBAs covered the majority of the sub-county and is representative of the traditional birth attendants in the area. One source of possible bias comes from the fact that all of the TBAs came from the Nyakayojo Traditional Birth Attendants and Herbalists Association, although this was not considered problematic since the organization contains both trained and untrained TBAs and therefore still fits within the objectives of this study. Both trained and untrained TBAs were chosen in the sample so that a comparison between the two groups could be made in order to analyze the benefits of training TBAs.

The last group included women of reproductive age and just beyond who had at least one pregnancy. The ages of the women in the sample ranged from 19 to 65, with the average being 33 years. The average education level of the women was Primary 6 (roughly equivalent to 6th grade in the United States). Women were selected from 4 of the 6 parishes in order to provide more variation in the sample and verify that the information and opinions gathered were indicative of the entire sub-county. Five women from each cell were randomly selected, using a local guide from that village to guide the researchers to each house. The researcher requested that the guides select women with a variety of educational and socio-economic levels. In total, 52 women comprised the sample size. Considering that the percentage of women in the

population is close to 50 percent, taking a representative sample of one hundred of the entire population lent itself to sampling approximately 50 women.

Research Methods

Both primary and secondary data were gathered in this study. Secondary data was collected from government publications, non-governmental organization publications, and literature from scholars. Method triangulation was used to validate the qualitative information gathered**.** Method triangulation is the process of using multiple research methods to crosscheck data and ensure accuracy, increasing the reliability of the results. While secondary data was gathered, the main focus was on gathering primary data from the three groups of subjects outlined above. This enabled the collection of rich qualitative, opinion-based information about traditional beliefs, TBAs, and common misconceptions surrounding reproduction and family planning.

Two qualitative methods were employed to gather this information, which included in-depth, semi-structured interviews (SSIs) and focus group discussions (FGDs). These methods are both useful and appropriate to gather information about health and recognize the underlying determinants of health behavior (Amooti-Kaguna & Nuwaha, 1999). Interviews were used with the women, experts, leaders, and medical professionals (See Appendix VI). Focus group discussions were employed only with the TBAs (See Appendix VII).

Qualitative data collection was chosen over other quantitative survey methods because of the nature of the study. With surveys, it is difficult to identify specific motives, cultural values, and beliefs that impact health behavior (WHO, 1999). Qualitative interviews are better suited for gathering such information. Furthermore, many of the participants interviewed were illiterate, making a written survey impractical.

For the qualitative interviews, a semi-structured format was employed using a pre-made question guide tailored to each group of subject (see Appendix I - IV). This format was chosen as it allowed for flexibility in the questions, depending on the nature of the responses and the enthusiasm of the respondent, and also allowed for follow-up questions to be asked to delve deeper into specific content. The question guide allowed the same basic set of questions to be asked of each participant, allowing the data to be compared across subjects (Kumar, 2005).

Focus group discussions (FGDs) were chosen for the TBAs because it allowed for a dialogue to occur between the trained and untrained traditional birth attendants about the difference between each group and the benefits of training. The FGD also allowed the respondents to communicate with each other and react to differing or similar viewpoints (Keri, Kaye & Sibylle, 2010). While focus groups have their benefit, they also pose a challenge in that certain people may dominate the discussion or others might change their opinion or be biased upon hearing the opinions of other people (Krueger & Casey, 2000). Holding two FGDs attempted to overcome some of these challenges by evaluating consistency of opinion across the two groups.

The research methods employed also posed other challenges. Kumar (2005) states, "The quality of interaction between an interviewer and interviewee is likely to affect the quality of the information obtained" (p 131). This held true for the study. Considering the limited time period of the study and the large sample size of subjects, it was difficult to build rapport with the subjects and make them more comfortable in the interview situation. With some respondents, it was difficult to extract information, while others were at ease in responding. The study attempted to overcome the issue of time constraints and lack of relationships with the respondents by using a local guide to take the researchers from home to home to interview

women. This however, posed its own challenges because the guides were not always random in their choice of women, as some would choose relatives or friends. The researcher insisted on interviewing a variety of women with different backgrounds when the guides did not seem to be randomly selecting women.

The location of the interviews also posed a challenge to the interview process. Respondents were interviewed in a variety of locations including at home or at their work place. It was difficult to get the respondents alone in many instances, which possibly made the respondents uneasy answering some of the questions with community members, spouses, or children within earshot. While it would have been better to conduct the interviews in private, without the presence of other people who could influence the responses, this was not always possible (Campbell, Cleland, Collumbien, & Southwick, 1999). The researcher attempted to create more privacy by requesting that others leave the area or trying to move to a quieter location for the interview.

Another challenge arose in sampling the population. During the study, the researcher was unable to obtain information about the number of cells and parishes in the sub-county until the very end of the study. Even after sampling many different cells, it was discovered upon obtaining this information, that women from two of the parishes had not been interviewed. While this was the case, the sample of women was still large and there was a high frequency of repetition in the responses across areas, making it fairly safe to assume that similar opinions would have been expressed in the other two parishes. Furthermore, the study still covered all parishes in that the researcher interviewed women, interviewed TBAs, or visited a health center in all of the parishes.

Data Analysis

During both the individual and focus group interviews, an interpreter was used to conduct the SSIs and FGDs in the local language and ensure full comprehension of the questions, as many of the respondents were not fluent in English, or the primary investigator fluent in *Runyankore*. During the interviews, written notes of the responses were taken as well as audio-recordings. Audio recordings were vital as they allowed for further revision of the material to ensure correct interpretation and translation. These methods of data collection were employed in an attempt to overcome the challenges that the language barrier posed.

Shortly after the audio recordings were taken, data were transcribed verbatim from *Runyankore* to English using both the field notes and the audio recordings (see Appendix VIII for some examples). This data was then entered into an Excel document and analyzed using several methods. The first method included frequency, or examining themes across the three groups of subjects and between each category (Keri, Kaye & Sibylle, 2010). Data was also analyzed in terms of number of people that stated similar ideas, using specific quotes to further illustrate the point (Keri, Kaye & Sibylle, 2010). Overall, the most important factor in analyzing the data was the number of times an idea or theme was repeated, and whether it was repeated across different groups of subjects.

Ethics

In this study research ethics were upheld. A consent form (see Appendix V) was used with every interview and FGD conducted to ensure full informed consent of the participants. For those who were not fluent in English, the consent form was read aloud in *Runyankore*. Also, for those participants who were illiterate, the interpreter read aloud the consent form and confirmed consent orally, and then filled out the consent form in the presence of the participant. At the end

of the interview, participants had the chance to choose to have anything they said omitted from the final research report. In addition to obtaining consent, the identity of the subjects has been kept confidential through only providing brief descriptions of the clients and omitting their names or any other identifiers.

Some of the questions asked during the interviews with women and TBAs may have been uncomfortable for some respondents to answer. It was made clear at the beginning of every interview that some of the questions may be embarrassing and that all the information provided was completely voluntary and that the interview could be stopped at any time or a question skipped.

In addition, interview length was kept as short as possible while still maintaining the quality of the interview so as not to take too much valuable time away from the respondents. At the end of every interview, respondents were compensated with a small gift such as a bar of soap, although they did not know at the beginning that they would be receiving this gift so as to ensure voluntary participation.

Validity and Reliability of the Study

The use of SSIs and FGDs allowed for information to be gathered about cultural beliefs and health-seeking behavior in an effective manner because women were allowed to tell their own personal stories. As the researcher came to discover, many of these women had similar experiences and faced similar challenges in terms of health. The TBAs, local leaders, and experts often confirmed this information, increasing the validity of and reliability of what was said. The data was triangulated through comparing responses within and across categories. This information was then compared with published articles and data from government sources and scholars, further increasing the reliability of the information. Many of the findings and

conclusions confirmed much of what is already known about maternal mortality and health-seeking behaviors of women in Uganda, but some of the responses revealed new information and insights, which will be discussed below.

Findings and Discussion

Clinically, women are dying from excess bleeding before and after delivery, complications resulting from high blood pressure, infections contracted during delivery, obstructed labor, and unsafe abortions (Sengendo, 2010). These causes of death are preventable and treatable, and yet many women are still suffering from complications and/or death during pregnancy and delivery. The main purpose of this study was to examine the root causes of maternal mortality in Nyakayojo sub-county with the hope of better understanding the broader problem of maternal mortality throughout Uganda. This was done through examining health and health-seeking behavior. The use of family planning was identified as the most significant health behavior affecting maternal mortality, which is most influenced by cultural beliefs. The most important health-seeking behaviors identified were the decision to access ANC and the site of delivery. This health-seeking behavior is shaped by complex cultural, traditional, and structural factors, which comprise phase one delays of the theoretical framework. TBAs are also impacting the decision of women of whether to deliver from the village, although it was discovered that their role is not as significant as other factors. The most important circumstance affecting maternal mortality is choice of delivery site with women delivering most often from home on their own or with a close relative who may have little experience with the delivery process. Overall, there is an extremely complex relationship between culture, socio-economic factors, traditional birth attendants, and health-seeking behavior and this study was able to capture only a fraction of the interplay between these factors.

Health Behavior

One of the most significant causes of high maternal mortality in Uganda is the extremely high fertility rate, which puts women at a great risk of both morbidity and mortality. As previously stated, high fertility is a key obstacle to improving maternal mortality, and high fertility is rooted in a lack of family planning. 54% of the women in this study were not currently using family planning, which is lower than the national average, but still a significant proportion of the population. Of those who were not using family planning the most commonly cited reason was fear of complications. Some women heard stories of others who had experienced complications and some experienced problems first-hand. Mother 28 from Nyakabungo said that she avoids family planning because "I see all these women who are using it have complications so I do not need it" (SSI, Nov 12, 2010). For other women, they had previously used various family planning methods and experienced side effects that prompted them to stop using it and greatly influenced their current decision to not begin again, even though they may have a desire to space or limit their pregnancies. Mother 23 from Nyarubungo stated, "I used the injectable plan and got complications, so I stopped using it" and also stated that she does not want more children, leading her and her husband to use the less-effective withdraw method (SSI, Nov 12, 2010). The MoH (2005) recognizes that many people have misconceptions about family planning and that perceived short-term and long-term side effects of certain methods of family planning (mainly injectable and oral contraceptives) accounts for a significant portion of the population that is currently not using family planning. The underutilization of family planning greatly affects the health of these mothers as they continue to deliver and face the potential hazards of pregnancy and delivery.

In addition to misconceptions, the lack of family planning is also influenced by cultural beliefs. Traditionally, large family sizes are greatly valued and women are encouraged to bear as many children as they can (Secretary of Social Services, SSI, Nov 3, 2010). Like other cultures across Uganda, *Banyankole* women will continue to bear children if they have not conceived a male child, as they are patriarchal and lineage is passed down through the males. The social norms surrounding large families encourage women to conceive more children, and thus many avoid family planning. Men also play an important role in the decision to use family planning. Many men do not support the use of family planning because they want larger families. When this happens, women often times use family planning secretly. If the husband finds out, it can bring about family problems. Mother 24 from Nyarubungo cell explained:

> It brought a misunderstanding between me and my husband because he wanted more children while I didn't. I used this family planning method secretly, but he later came to know after I got complications. So right now I am not using it because I have to first get his permission. (SSI, Nov 12, 2010)

Others follow the wishes of their husband and do not use family planning, putting them at risk for a greater number of pregnancies. This high fertility poses a threat to maternal health, especially when women are delivering without the help of a skilled attendant.

Health-seeking Behavior

Skilled attendance at birth can help decrease the chance of complications that result in death, but as previously mentioned, skilled attendance at birth across Uganda is approximately 42% (MoH Representative, Nov 24, 2010). In the sample of women from this study, skilled attendance at birth was 50%, slightly higher than the national average. Though only 50% of children were born in skilled hands, 85% of women respondents had given birth to at least one of

their children in a health center, leaving only 15% who had never visited a health center for any of their births. Of that 85% that visited a health center at one point, 14% used a private health center and 86% accessed a government facility. This shows a great dependence on government health services for those who choose to give birth in skilled hands. The remainder of the women gave birth at home or with a TBA. In the sample, 36% of total births occurred at home, with 48% of women giving birth to at least one child at home. Deliveries with TBAs accounted for the remaining 14% of total births and 27% of women used a TBA for one or more deliveries. While the number of women seeking skilled attendance at birth was slightly higher than the national average, women in Nyakayojo sub-county still face many health problems during and after pregnancy, and the number delivering at home is alarmingly high. Much of the health-seeking behavior of the women in this study can be explained by a multitude of factors, which include the perceived severity of the complication, perceptions of the quality of care, cultural and traditional beliefs, and socioeconomic factors. All of these factors delay women's decisions to seek skilled attendance at birth and all are included in the list of Thaddeus and Maine's (1994) phase one delays.

Phase 1 Delays

Recognition of Complications

One of the primary delays in deciding to seek care is a commonly held misconception that there is no need to go to the hospital for delivery if a woman has had a normal pregnancy and there is no indication that she will experience complications during delivery. Lack of sensitization and commonly held fallacies play a significant role in this perception of the potential for delivery complications. Many women and their families simply do not understand that complications during delivery can be unexpected and sudden and that skilled attendance at

birth is vital to avoid and deal with life-threatening problems should they arise. A significant proportion of women decide to deliver from the village thinking that they will not experience complications. They will delay seeking professional care when complications do arise because many make no prior emergency preparations, assuming the delivery will be normal.

When asked why women chose to deliver from the village, many women and local leaders asserted that when a woman has no complications she feels confident enough to deliver at home. Some of the women even said that they attend ANC just to see if they are fit to deliver at home. Mother 11 from Rwakishakizi cell explained why she goes for ANC at the hospital: "I go to the hospital because I want to know how my pregnancy is developing so when they tell me there are no complications, I feel brave that I can give birth on my own at home" (SSI, Nov 8, 2010). Women in the area lack the knowledge to know that a normal pregnancy does not always result in a normal delivery. A similar study in the Rakai district of Uganda also found that women felt comfortable with delivering at home and saw no need to deliver at a health center if they had gone to ANC and found no complications (Amooti-Kaguna & Nuwaha, 1999). This attitude partly explains why approximately 94% of women attend ANC at least once, but only 42% return for delivery (MoFPED, 2010). It also demonstrates a common delusion that delivery in health centers is for those women with complications, and women with no perceived problems have little reason to go to a health facility.

Similarly, fear of complications was one of the driving forces for why women chose to deliver from a health center. When asked why they chose to deliver in a health facility rather in the village, the majority of women stated that they were worried about getting complications during delivery and therefore wanted to be in the presence of skilled hands to be able to handle these problems should they arise. Mother 23 from Nyarubungo said she chose to deliver from

the hospital instead of the village because she "feared complications" (SSI, Nov 12, 2010). Similarly, Mother 40 from Mitsyamo decided to deliver from the hospital "such that in case I would get some complications, the doctors would be there to help me" (SSI, Nov 15, 2010). Another study conducted in Hoima District, Uganda, had a similar finding in that fear of complications related to pregnancy and delivery was an important factor influencing the decision of delivery site (Parkhurst, Rahman, Ssengooba, 2006).

Many women do a cost-benefit analysis in deciding whether to spend the resources necessary to prepare and travel to a health center for delivery. A female Local Council I (LC I) vice-chairperson pointed out that many of these women are agriculturalists and for them to earn even 20,000 shillings (roughly $9) to take them to the hospital, they would have to work approximately 10 times in someone's garden so when a woman "doesn't feel any complication, she doesn't think of going to the hospital" (SSI, Nov 8, 2010). This notion was repeated by many women who stated that they felt comfortable delivering at home because they felt confident that they would have a normal delivery. Mother 12 from Rwakishakizi 2 stated, "When a woman gets labor pains and she has no complications, there is no need to go to the hospital" and that she chose to deliver at home because she used to have normal deliveries (SSI, Nov 8, 2010). Faced with limited resources and funding, many women find it more cost-effective to deliver from the village and see spending money to travel to the hospital as a waste of resources, especially when they believe they will not experience complications. Often women need a specific reason to go to the hospital, such as knowing or thinking that they have complications. Mother 12 from above delivered one of her children at Mbarara hospital stating, "I got labor pains during the morning, ready to deliver. But after sometime, the labor pains stopped and so my mother-in-law and neighbors were worried there could be a complication and

so I decided to go to the hospital" (SSI, Nov 8, 2010). Seeking care from a health center, is therefore, related to the perceived threat of complications and is not seen by many as something that is done under normal circumstances, making it an important factor in phase one delays.

Perceived Quality of Care

Another important phase one delay is the perceived quality of care. Thaddeus and Maine (1994) state "If the facility has a reputation for unfriendly staff, rude service providers and humiliating treatment, the prospective patient may delay the decision to seek care until the seriousness of her condition necessitates overcoming all barriers" (p 1096). Low quality care was a common complaint from women in this study and a clear factor influencing the decision to seek medical care. Identified problems with health facilities included congestion, lack of staff, medical staff requesting bribes, and rude behavior from staff. Mother 1 from Nyakasa illustrated this when she said she believes that women do not receive good care at the hospital because "sometimes you go there and you find the nurses are not caring or they are busy doing their own things or you find that there are many patients" (SSI, Nov 5, 2010). Mother 28 from Nyakabungo reiterated this sentiment stating, "The nurses are proud and they don't take care of the mother. They also want bribes" (SSI, Nov 12, 2010). Other studies found similar complaints about abuse from medical staff (Keri, Kaye, & Sibylle, p 77). Many women spoke of cases where women would give birth from the hospital compound or other inappropriate locations nearby because of rude treatment or being ignored by the medical staff. Mother 11 from Rwakishakizi cell had an especially powerful story about her experience in a hospital. She described:

> For the child whom I delivered from the hospital, I delivered him myself. They only came to cut the umbilical cord because I was in a room where there was another woman

> delivering so they paid attention to the other one and ignored me. So they would try to chase me out of the room and when the moment came I pushed my baby and they realized that I had already given birth and they only came to cut the umbilical cord so from that moment I developed hatred for delivering from the hospital because I had done it on my own and I asked myself, why hadn't I remained at home to deliver on my own because I realized there was no difference between delivering at home and here at the hospital. (SSI, Nov 8, 2010)

In many instances, women hear of stories like the one from this mother and it negatively influences their decision to deliver from a health center. There may be poor conditions in health centers in some instances, but not all medical facilities face these problems all the time. All but one respondent who had delivered in a health center said they received quality care and were satisfied with the services they received. Even so, many of the women interviewed mentioned negative views of medical centers that either they or other women held, demonstrating a lack of sensitization in the villages about the realities of delivering in a health facility.

A few women, local leaders, and medical professionals also cited an underlying fear of health centers as having a significant influence over the choice of delivery site and seeking professional care in a timely manner. A Nursing Assistant from a HC II explained the root of some of these fears: "These mothers they say that they fear the hospital because they are mistreated and some don't want to be seen by men while they are delivering" (SSI, Nov 3, 2010). A LC 1 Chairperson stated another barrier delaying women in that "These women fear to go to the hospital because they think they will undergo the c-section" (SSI, Nov 10, 2010). For women in this study, the most common fear stated (even by those who had delivered in health facilities already) was the Caesarean section (C-section). Approximately 50% of the respondents

asked said that they feared the C-section. A few even believed that university students performed experiments on women during the C-section. This fear of the C-section is rooted in misconceptions about the C-section. Many women believed that the C-section is painful, takes long to heal, and could even result in death. Others noted the high cost of the C-section. Overall, this fear of the C-section could negatively influence the decision of a woman of whether to access a health center, delaying her from accessing proper care. If she is worried about receiving a C-section, she may avoid travelling to the hospital because not only does it require resources to travel there, but she may also undergo an operation that she believes could kill her or make it difficult for her to work after the delivery.

Traditional and Cultural Beliefs

Certain traditional and cultural beliefs are also an important phase one delay and greatly explain the health-seeking behavior of many women. A significant portion of the population gives birth by themselves or with the help of a relative because historically women delivered at home with the help of a close relative so there was no need to go to a special person and place for delivery (Dean of MUST, SSI, Nov 2, 2010). Home deliveries can lead to complications or even death because many make no prior preparations to travel to the hospital in case of emergency. By the time resources have been gathered to travel to a health center after complications arise, the woman might already be to a critical stage and an increased chance of death (Dean MUST, 2010). Many women are also proud to have delivered by themselves and view a woman who delivers in a hospital as a coward who is afraid of delivery (Dean of MUST, HCIII Clinic Officer, MoH Representative, Chairperson of the Nyakayojo TBAs and Herbalists Association, SSIs, Nov 2010). Mother 12 from Rwakishakizi illustrated this idea when she said, "When a woman gets labor pains and she has no complications, there is no need to go to the

hospital. Women who fear to deliver on their own are the ones that need to go to the hospital to deliver" (SSI, Nov 8, 2010). She believed that delivery was natural and something that should be done at home unless a woman fears delivery or knows she has complications.

The DHO also identified another cultural attitude "that everything is pre-determined by God" and delivery is a natural phenomenon that has always happened even before the advent of modern medicine (SSI, Nov 4, 2010). Therefore, women view home deliveries as natural and culturally appropriate, and await the outcome God has determined. Thaddeus and Maine (1994) found a similar attitude about the normalcy of delivery and recognized this attitude as an important delay in that a normal, natural phenomenon is not something that necessitates planning ahead or spending money for hospital expenses. These cultural beliefs influence women's decision of whether to travel to a health facility. Bantebya Kyomuhendo describes these behaviors and beliefs as being rooted in a "fatalistic culture" towards birth in that childbirth is normalized and a natural process that women are supposed to endure and does not require special attention (SSI, Oct 29, 2010). This belief delays women going to health facilities because they are expected to bravely withstand the delivery process and the complications it could bring. Another study in south western Uganda had similar findings that childbirth and death during childbirth is considered a normal occurrence and that women dying during childbirth "is equated to a soldier dying during a war", which "undermines the status of women and the right to medical care during pregnancy" (Kamatenesi-Mugisha, & Oryem-Origa, 2007,p. 1). These cultural beliefs are a challenge to increasing the number of women delivering in health centers because they discourage taking extra measures to ensure the health of the mother and baby.

Low Status of Women

Another socio-cultural factor contributing to phase one delays is the lower status of women in *Banyankole* society. The MoH (2004) has identified the "low status of women in Ugandan society and lack of male involvement in reproductive health" as a challenge to improving maternal mortality (p. 7). Women face many health-related challenges because of their lower social status and dependence on men. In the sub-county, women comprise 70-80% of the agricultural work force and domestic work and yet only account for 56% of the population (Nyakayojo sub-County Planning unit, 2010). This illustrates unequal gender relations in the area. Since women provide so much of the work force, they often work late into pregnancy, which could negatively impact their health or the health of their baby. In addition, men are also the primary decision makers regarding reproduction, family planning, and the choice of delivery site (Center for Reproductive Rights, 2010). This relationship puts women's reproductive decisions in the hands of their husband.

Many women generate little income on their own, if any at all, creating dependence on their husbands for transportation money to go to ANC or delivery at a health center. With small amounts of their own income and little to no support from their husbands, accessing health centers is a challenge. Support from the husband is therefore vital to have adequate resources and confidence to reach health facilities for reproductive health services. In the sample, 4 women said they received no support from their husbands during pregnancy, and many more stated that the support they received was inadequate. Mother 25 from Nyarubungo stated that the support from her husband was inadequate "because he did not have any idea about delivery and he would not help me in case I had complications or I fell sick" (SSI, Nov 12, 2010). A HC II Nursing Assistant in the sub-county confirmed that during pregnancy most women have to provide for themselves to meet their needs because of a lack of involvement of their husbands

(SSI, Nov 3, 2010). Those in the sample that received no support had a higher incidence of giving birth in the village than the average woman in the study. Mother 52 from Nyamiyaga cell said, “There is no support. I try to look for some money through digging” (SSI, Nov 18, 2010). This particular woman had all but one child delivered at home and only delivered the one in the hospital because she had an extremely prolonged labor and thought there was a complication.

Socioeconomic Factors

While the previous factors play an extremely important role in phase one delays, one of the most significant and pervasive factors is the low socio-economic status of many women in this study. Physical access to health centers and financial costs associated with accessing health facilities are the main constraints affecting women in Nyakayojo sub-county (MoFPED, 2010). When respondents from all groups were asked about the factors that prevent women from going to the hospital, the most commonly cited factors were lack of money and transport (something which also requires money). The LC III Chairperson for the Nyakayojo sub-county verified this notion when he said, “It all rotates on poverty” (SSI, Nov 3, 2010**)**. Poverty affects the ability of women to get transport, purchase the required supplies to be prepared for the time of delivery, and greatly impacts their decision of whether or not to travel to health centers.

The majority of the women would prefer to go to the hospital for delivery, but choose to not spend the money doing so. Mother 18 from Mpambazi cell said, “I would prefer to deliver from the hospital, but the problem is that I do not have the money” (SSI, Nov 11, 2010). A study conducted in eastern Uganda had similar findings in that participants stated their preference for delivering in health centers, but did not do so because of the need to purchase supplies, lack of transportation, and lack of access to health centers at night (Waiswa et al, 2008). While government facilities are technically free to all users, there are still costs associated with

transportation and purchasing the supplies asked for by the nurses and midwives such as gloves, polythene paper, and cotton wool. Many women fear to go to the hospital if they cannot purchase the required supplies because of shame and a perception that nurses may abuse them or not pay attention to them if they arrive without the resources (TBA from Nyakabungo, SSI, Nov 12, 2010). Keri, Kaye, and Sibylle (2010) also found that embarrassment at being poor and not being able to purchase certain supplies caused women to avoid health centers.

The Chairperson for the Nyakayojo TBAs and Herbalists Association pointed out, it is more "cost-effective" for a woman to deliver in the village at home, making village deliveries an easier option for women with unsupportive spouses (SSI, Nov 3, 2010). A study in the Wakiso and Mukono Districts of Uganda also discovered that husbands were unwilling to give money to their wives to go to health centers and instead decided to save money by sending their wives to traditional birth attendants (Keri, Kaye, & Sibylle, 2010). Delivering at home is even less expensive than delivering with a TBA because they usually have a standard fee of 10,000 shillings (approximately $4.50) for their services, but do not normally turn mothers away if they cannot afford the fee, accepting other forms of payment or anything the mother can provide in appreciation (FGD Nyarubungo & Kicwamba, Nov 9/11, 2010). Overall, poverty is an extremely important phase one delay in seeking medical treatment and something that must be addressed first to see substantial change in health-seeking behavior and the maternal mortality rate.

Phase 2 Delays

Delay in Reaching a Health Center

After a woman decides to travel to a health center for medical treatment, phase two delays such as location and distance of health centers and finding transportation act as negative

forces that can delay a woman in reaching a health facility in time. The women in Nyakayojo sub-county face an issue of accessibility and proximity to delivery services, especially free government services. Two government health center IIs (HC IIs) are located in the sub-county, closer to the people, but these HC IIs are not equipped for deliveries. Women have to travel to HC IIIs or IVs for delivery, which are further away from women living deep in the villages and away from main roads. In Nyakayojo sub-county, there is one HC III, but it is currently under construction and not offering delivery services. Therefore, women in the area have to travel to Mbarara Hospital or other private health facilities to deliver. While Mbarara Hospital is approximately four miles away from the sub-county, it is far enough that is requires some form of motorized transport to reach.

Women face difficulties in finding transportation to the hospital that is affordable and quick. Those who decide to deliver from the village face an especially large challenge in obtaining last-minute transportation to the hospital in case complications arise, which could delay life-saving interventions and possibly lead to death (Chalo, Salihu, Nabukera, Zirambamuzaal, 2005). One of the only transportation options available to women in sub-county is hiring a car, as travelling on a motorcycle is dangerous and difficult while in labor. Cars are expensive to hire and are not always available immediately, forcing many women to deliver from the village, especially if they have short labor.

Short labor and labor at night were other commonly cited factors preventing women from going to health facilities. Mother 7 from Nyakasa cell illustrated these difficulties:

> They usually get labor pains at night and fail to get transport means. I had a case where I helped a woman deliver at 5 am because she never had anyone to help her. That lady

> delivered from behind my house in my banana plantation as she was on her way to the hospital. (SSI, Nov 5, 2010)

Having short labor or labor at night only complicates the transportation situation, as transportation takes longer to find at night. While short labor and labor at night are undoubtedly large factors, they are also greatly influenced by the amount of preparation women have made for the time of delivery. Some women do not adequately prepare in advance with the money, tools, and transportation necessary to take them to the hospital at the onset of labor, which delays them from leaving the village, often forcing a woman to deliver at home or with a TBA. Mother 3 from Nyakasa faced this challenge. She explained, "By the time I prepared myself it was too late so I delivered before I could go to the hospital" (SSI, Nov 5, 2010). Another mother from Kagando also identified lack of preparation as a barrier to going to health centers when she said, "Some have short labor and by the time they prepare to go to the hospital, they deliver" (SSI, Nov 17, 2010). If complications arise during delivery, women are left with few options if they have nothing prepared to take them to the health center, which often causes women to reach a critical condition before accessing help, increasing the likelihood of disability or death.

Role of Traditional Birth Attendants (TBAs)

TBAs play an important role in the maternal mortality situation in Uganda, acting as both a positive and negative force depending on the situation. Even though the government is attempting to phase out TBAs and no longer supports their role of delivering babies, all of the TBAs interviewed are still offering delivery services. The TBAs are trusted because of their roots in the community, their cultural knowledge, and their experience with local conditions of poverty, inequality, and disease (Homsy, King, Balaba, and Kabatesi, 2004). While births with

TBAs are less frequent than births at home or in a health facility, a good number of women (approximately 14% of the sample) still used them for delivery.

In the sub-county there are both trained and untrained TBAs. Most of the trained ones were trained by a program sponsored through UNICEF. The training lasted for three years and the women studied from Monday to Friday, with vacation breaks like they would in school (FGD Nyarubungo, Nov 9, 2010). There are also those who are untrained who learned the practice from a close relative or community member. The majority of the TBAs from this sample learned from their grandmothers or mothers (FGD Nyarubungo & Kicwamba, Nov 9/11, 2010). All of the untrained TBAs interviewed were very enthusiastic in their desire to receive training as they noted a large difference between the skills of the untrained and the trained within their TBA group (FGD Nyarubungo & Kicwamba, Nov 9/11, 2010). One TBA from the focus group discussion in Kicwamba noted, "I think when we get the training and certificates we will have more confidence to learn and help women deliver well. We will also learn how to advise these mothers to go to the hospital for antenatal and delivery in case of complications" (Nov 11, 2010). Health workers, experts, and women also noted a difference between the trained and untrained TBAs, and the vast majority were positive about trained TBAs.

When asked about accusations that TBAs are killing women, some experts, community leaders, and many TBAs said that it was the untrained TBAs that kill women. The trained TBAs said that they refer clients to health centers if they identify complications or high-risk cases. One traditional birth attendant stated:

> The untrained ones were not trained on how to check these mothers and in case of complications to send the mothers to the hospitals. So in case they make any mistakes, it is also us, the trained ones, who are blamed. So it's better if all of us can get the training

> so we all do uniform work because over the radio I hear some people blaming us, the traditional birth attendants, that we are not doing good work and are leading to the maternal mortality. (FGD Nyarubungo, Nov 9, 2010)

Although TBAs are commonly lumped into one group, there are vast differences in delivery methods, experience, and training levels, demonstrating a heterogeneous group. Other local leaders and a HC III Clinic Officer were positive about the trained TBAs because of their adoption of certain modern methods of delivery and hygiene, as well as the practice of referring clients in cases of high-risk births and complications.

The TBAs from the Nyakayojo Traditional Birth Attendants and Herbalists Association have a common practice of referring patients to health centers. 11 of 15 TBAs at one FGD had personally escorted women to the health centers (FGD Kicwamba, Nov 11, 2010). This has improved communications between the TBAs and the health facilities, allowing for an improved working relationship. The Nyakayojo Traditional Birth Attendants and Herbalists Association demonstrated that TBAs can easily cooperate with the health centers, and can act as a bridge between the community and the health centers. A HC II nursing assistant stated that he works "hand in hand" with the TBAs and that the TBAs are helping him to mobilize women in the community to come to the health center, especially for immunization (SSI, Nov 3, 2010). The TBAs were also proud of their role in helping women access health centers. One TBA stated:

> Very many women in the village do not have self-confidence so as a traditional birth attendant I help these mothers come from the villages and give them some piece of advice such that they can build their confidence to go to the hospitals. After delivery I also advise them to take their babies for immunization and treatment in case the baby falls sick. (FGD Nyarubungo, Nov 9, 2010)

The trained TBAs also often request that their clients bring them their medical record cards given to women during ANC, which encourages women to attend ANC. They have learned to read these medical record cards, allowing them to better identify possible complications, refer, and support their clients to go to the health center for delivery. Training has also increased the ability of the TBAs to refer patients to the hospital and strengthened the relationship with medical staff. During the TBA FGD, many said that trained TBAs with certificates are treated better by medical staff when they refer a patient. Overall, training has provided a great benefit to the TBAs in Nyakayojo. Many women were also positive about the services of the TBAs and cited good treatment and delivery with them, especially the trained ones.

Although many women generally agreed about quality services provided by TBAs, others also recognized the potential risks delivering with them. Women, local leaders, and health experts identified that TBAs are not able to handle complications if they arise, which could lead to disability or death. A HC II Registered Nurse explained:

> They do deliver but the procedures they follow are not effective. They use the same pair of gloves for examination as for delivery. Mothers may get infection. Some don't know how to examine and they even deliver complicated patients and they refer patients when they are in critical conditions. Delivering from traditional birth attendants is a risk. (SSI, Nov 5, 2010).

Deliveries with TBAs have the potential of being unhygienic and some lack basic equipment such as new sterile gloves. All groups interviewed pointed out this lack of equipment as a challenge to safe deliveries with a TBA. Mother 25 from Nyarubungo believed that TBAs do not provide quality services because the TBAs "do not have enough equipment. In case of over bleeding, she cannot deal with it and in case one needs a C-section, she cannot carry it out" (SSI,

Nov 12, 2010). The TBAs live in similar conditions as the other community members and many are poor. Lack of money makes it difficult for TBAs to buy proper equipment for delivery such as gloves, disinfectant, thread, and razor blades, causing some of them to re-use supplies or go without them. Women not purchasing these supplies when requested complicate the situation. In cases when women bring nothing with them at the time of delivery, TBAs are forced to use their own money (if they have money available) to purchase the necessary supplies. A HC II registered nurse poignantly stated, "Even in some hospitals, you find that they don't have enough facilities to use during delivery. What do you expect from the village?" (SSI, Nov 5, 2010). Without proper equipment, the chance for infection and other complications is increased.

The risk associated with delivering with a TBA can be compounded by an inability to quickly mobilize the resources necessary to travel to the health center in case of emergency, delaying women from accessing life-saving interventions and increasing the chance of death (Chalo, Salihu, Nabukera, Zirabamuzaal, 2005). Because of the challenges faced by TBAs and the unpredictability of complications during delivery, maternal deaths still occur in the hands of TBAs. When a woman dies in the care of a TBA, however, it may not always be the fault of the TBA. Many times, as happens in the facilities as well, women begin their deliveries at home and as soon as complications arise, they call the TBA when the woman is already in a critical state (HC III Clinic Officer, SSI, Nov 3, 2010). This leaves the TBA with the choice of trying to handle the situation on her own, or quickly refer a patient, but if the resources for referral are not accessible, few options to save the life of the mother are available.

While there are potential challenges to delivering with a TBA, the riskier option is to deliver at home with someone who most likely has less experience with the delivery process than a TBA. In the sample, approximately twice as many women gave birth at home than with a

TBA. Home deliveries increase the chance of infection, and if complications arise there are few options available to handle them. According to Amooti-Kaguna and Nuwaha (1999), home deliveries play a role in high maternal mortality because “they are bound to be unhygienic, unsupervised and when intervention is required it is usually not at hand” (p 203). The vast majority of women who knew other women who had died during delivery stated that these women died from complications after delivery while delivering at home with a relative or untrained TBA. Mother 30 described her own experience delivering at home: “My placenta failed to come our so the friend I had was using her bare hands to try to pull it out without even gloves and this is very risky” (SSI, Nov 12, 2010). Situations similar to this one happened to other women as well and many stated that home deliveries were risky. TBAs at least have experience in helping women deliver and many in the area have training, increasing their ability to help women deliver successfully. Considering that home deliveries are the biggest issue, TBAs have an important role to play in the future to encourage women to deliver outside their homes.

Recommendations

The Future Role of Traditional Birth Attendants

Traditional birth attendants are still being used in delivery in the villages of Nyakayojo sub-County. These TBAs will continue to deliver babies as long as women are demanding their services and until government facilities are accessible and affordable enough to eliminate the need for TBAs (Shaikh, 2010). For the women who do not have the money or ability to go to a health facility and choose to deliver from the village, trained TBAs are a much better option than a delivery with an untrained person. In the end, the ultimate goal is to have every woman

attended to by a skilled medical attendant, but in the mean time the best solution is to train and support TBAs who are already delivering in the communities (Bulterys et al, 2002).

More TBAs should be trained to be able to recognize complications, and learn more reproductive health information to be able to better inform pregnant mothers about good practices during pregnancy, refer those with high-risks for complications, and conduct deliveries in cases where women cannot access health centers. It is vital that someone with training be available in the community for emergency delivery purposes. De Francisco, Dixon-Mueller, and d'Arcangues (2007) state,

> Given the suddenness and unpredictability of complications, the distance to emergency facilities and the difficulty of arranging transport…the priority for most resource-poor settings will be to provide community-based skilled attendants with the training and supplies necessary to manage, at least temporarily, the most likely life-threatening complications (p. 53).

TBAs can fulfill this roll of a community-based skilled attendant if they receive the proper training. Data from Ghana demonstrated that within three years of training TBAs, the number of women delivering with TBAs increased by 20%, and there was decrease in neonatal deaths and maternal deaths over a two-year period (Amooti-Kaguna & Nuwaha, 1999). TBAs already play an important role in the communities and could greatly help to improve the health status of mothers if they have more training and support. Delivering babies should be their last priority, done only in cases of emergencies or when a woman feels incapable of traveling to a health center. Instead, the future role of the TBAs should be shifted more towards health education, mobilization, and acting as a link between the health system and the community.

The TBAs in the sub-county are already encouraging women to go to ANC and also advising them on how to take care of their pregnancies. The role of these TBAs needs to be expanded to be more active in seeking out pregnant women early in their pregnancies to counsel them on proper care during their pregnancies, encourage them to deliver in health centers, and check up on them during multiple stages before and after delivery. Right now one of the biggest reasons for maternal mortality is home deliveries. TBAs need to work to bring women out of their homes to deliver with someone who as least has some training, whether it is with a TBA or at a health center. Shifting their role will eventually phase out the need for their delivery services, as they work to encourage women to go to the health centers, and more women make the choice to deliver in health units. Change is always incremental and as the DHO points out, health-seeking behavior is a social issue by which an illegal act or demanding that they stop will not actually change the behavior (SSI, Nov 4, 2010). The way to change health-seeking behavior is through education and support, and the TBAs can be used to do this.

TBAs can also be used to help deliver cost-effective and life-saving interventions to pregnant women to increase their health during pregnancy and decrease the chance of complications during pregnancy. Two interventions that TBAs would be well suited to implement are providing vitamin A and iron supplements to pregnant women, both of which require minimal training and are highly effective (Gericke, Kurowski, Ransom, Mills, 2003). Providing vitamin A to pregnant women in Nepal reduced pregnancy-related deaths by 44% and iron is important for reducing anemia and the risk of hemorrhage after delivery (Gericke, Kurowski, Ransom, Mills, 2003). A similar result could occur in Uganda if the intervention were put in place.

Training TBAs with better skills and the ability to implement interventions like the one described above is not enough however. Training must be complemented by support from health centers. TBAs must work more closely with medical staff at health centers and the Nyakayojo sub-county is a good case study of building relationships between the health centers and the TBAs as the TBAs are already working "hand in hand" with one of the HC IIs. This must be expanded to happen in other places for as Fleming (1994) points out, "TBAs cannot reduce maternal mortality by themselves; they need the support of suitably skilled, equipped and available midwives" (p. 146). While many of the structural barriers hindering women from accessing health centers will be in place in the near future, TBAs can work to overcome the cultural and social attitudes preventing women from going to the health centers. They can act as a positive force in giving women confidence to access health units.

The government has already taken appropriate steps in integrating TBAs into Village Health Teams (VHTs). This role needs to be expanded and more TBAs should be trained. While funding is undoubtedly needed to train TBAs, it should come from a non-governmental source. The government needs to put its money into strengthening the health care system and improving obstetric care to better serve pregnant mothers and should not be taking funding away from that to train TBAs. Training TBAs, however, is very important and could improve the maternal health situation in the country if an intervention is properly implemented that is high quality, offers continuous support and guidance to TBAs, and also strengthens links to the formal health care system (Gericke, Kurowski, Ransom, Mills, 2003). Improving the health care system with advocacy from the TBAs and better, more affordable services would remove some of the barriers to accessing health facilities and encourage mothers to deliver from health centers.

Coupled with training TBAs and expanding their role, needs to be interventions targeted at women to change their health-seeking behavior.

Women and Men

Women in the villages are in great need of health education and sensitization. While there are structural factors creating barriers to accessing health centers and family planning, socio-cultural beliefs and misconceptions also play a key role. Many hold misconceptions about only needing to go to the hospital in case of complications and that family planning can cause great complications that are hindering them from improving their health behavior. Health education about the delivery process and more knowledge about family planning could greatly benefit women in the villages and start the process of changing health and health-seeking behavior. Health behavior can only be changed by shifting attitudes and social norms while also increasing support for a change in behavior and perception (Amooti-Kaguna & Nuwaha, 1999). A key to changing these attitudes is more education and sensitization and TBAs, with their position in the communities, could be used to impart this health information and encourage family planning.

Another important aspect of changing the health-seeking behavior of women is to involve men in the pregnancy and delivery process. Men play an important role in the decisions of their wives of whether to access health centers or use family planning. Amooti-Kaguna and Nuwaha (1999) state, "Any measures aimed at encouraging women to deliver in health units will have to involve the men if they are to be successful" (p 211). Considering the importance that husbands had in impacting the health behavior of women in this study, more male involvement has the potential to greatly improve the health status of women. Men are especially important in planning ahead for the time of delivery to ensure that their wives have the money, transport, and

proper tools to have a successful delivery in a health center (Pankhurst, Rahman, Ssengooba, 2006). Increasing their involvement would increase the ability of women to take care of their pregnancy and access health units for delivery. Changing the attitudes of men, however, is something that will take time as gender roles are something deeply rooted in culture and tradition.

A more immediate solution is to increase the use of family planning. Filling the current unmet needs for family planning in Uganda could avert up to 25% of maternal deaths each year (MoH, 2005). Limiting family size and reducing fertility rates would greatly improve the maternal mortality and morbidity rate as well as quality of life for women. Increasing the time between births is proven to reduce maternal mortality (MoFPED, 2010). To increase the use of family planning, women need more sensitization about the benefits and possible side effects that they can get to reduce misconceptions surrounding its use. Family planning methods also need to be made more available and affordable at health centers. Men must also be involved in this process since they are the primary decision makers regarding family planning and their support is crucial to increasing use. For this reason, educational programs should be implemented that specifically target men to teach them about the importance of family planning, the different family planning methods available, reproductive health, and being involved in the delivery process. Education is the first step towards involving men and changing their mindset.

Conclusion

The current maternal health situation in Uganda is influenced by many different factors and delays that can mainly be broken into structural factors, cultural and traditional beliefs, and common misconceptions held by women. Traditional birth attendants play a role in the maternal

mortality picture, but the most significant factor is the fact that so many births are conducted at home without the use of a traditional birth attendant.

The government is currently working to address many of the structural factors. In general, the condition of health centers, lack of staff, and lack of delivery services and emergency obstetric care within reach of the majority of the population must be improved to change maternal health outcomes. In the meantime, however, many cultural and social factors must first be addressed to bring women out of their houses and into the hands of skilled professionals for delivery. These factors include the misperception that hospitals are only for women with complications and that women are brave for delivering at home. Education, sensitization, and support for these mothers can help to slowly change the socio-cultural factors. Although not the focus of this study, education of men is also vital for changing cultural and structural barriers to accessing health services.

Overall, improving maternal mortality necessitates a greater investment into the health sector, especially reproductive health, as well as more sensitization and education for women in the villages. Traditional birth attendants can play a large role in increasing sensitization and acting as a link between the village and the health units, and training TBAs is a good solution for the immediate future until other factors can be addressed.

Appendix I: Question Guide for Women

1. How old are you?
2. How many years of schooling did you complete?
3. How old were you at the birth of your first child?
4. How many children do you have? Are they all still alive?
5. How many of your children were born in a health center or hospital?
    a. Which health center or hospital were they born from?
    b. How did you travel to that health facility?
    c. Did anyone accompany you to the facility?
    d. What supplies did you have to bring with you?
    e. Why did you choose to deliver at a health center instead of from the village?
6. Do you believe that women receive good care in a health facility?
7. How many of your children were born with the help of a traditional birth attendant?
    a. Why did you choose to use a traditional birth attendant?
    b. Did you feel like you received good quality care from this traditional birth attendant?
8. Do you think all traditional birth attendants give quality services to their clients?
9. How many of your children were born at home?
    a. Who helped you deliver at home?
    b. Why did you choose to deliver at home?
10. Where do the majority of women from this community deliver?
11. What problems or challenges do you see with delivering at a health facility? With a traditional birth attendant? At home?
12. Do you seek antenatal care for your pregnancies? If yes, where and why at that specific location?
13. If you had to choose between delivering the natural way or having a cesarean section, which would you choose and why?
14. Did you ever use herbs and traditional medicines during pregnancy?
15. Did you seek the advice of a traditional healer or traditional birth attendant before, during, and/or after giving birth?
    a. If so, what kind of advice were you given?
    b. If not, why did you choose to avoid traditional birth attendants/healers?
16. Did you face any complications during your pregnancy?
    a. What kind of complications did you face?
    b. Did you seek help when you faced these complications and if so where?
17. Do you know any women who have died during childbirth?
18. What kind of support do you receive from your husband during pregnancy?
19. Do you use any form of family planning such as condom use, birth control pill, or other methods?
    a. If so, where do you receive this treatment? Who advised you to use such treatment? Why do you use this form of family planning?
    b. If not, why do you avoid family planning?

Appendix II: Question Guide for Traditional Birth Attendants SSI

1. How many years of experience do you have as a traditional health practitioner?
2. How did you learn about traditional birthing practices? Who trained you? When? Where?
3. What services do you provide to your clients?
4. What is the cost of these services?
5. How many women do help deliver per month?
6. At what point do pregnant women start coming to see you? What kind of advice do you give to prepare the mother for birth?
7. Where do the women deliver and what tools do you use?
8. What position are the women placed in to deliver?
9. What do you do during each stage of the delivery?
10. What kind of support do you offer to clients?
11. What are some of the typical complications you see during delivery and how do you address them?
12. Do you do anything to prevent mother to child transmission of HIV?
13. What kind of services and advice do you provide after delivery?
14. Do women ever ask to take their placentas home?
15. What is the biggest challenge you face in helping a woman deliver?
16. What factors do you think contribute to the high maternal mortality rate in Uganda?
17. Do you encounter women who choose to deliver at home without your help or the help of a health worker?
18. What do you see as the main difference between traditional birthing services you offer and births conducted by midwives or by doctors in a health facility?
19. Have you ever received any formal training from conventional medical practitioners, an NGO, or the government?
    a. If not, would you be receptive to receiving training?
    b. If so, what did this training consist of and have you implemented any of the practices you learned?
20. Does the government know about your practice? Do you ever receive support or pressure from the government?
21. Do you ever encourage your clients to use family planning?

Appendix III: Question Guide for Traditional Birth Attendants FGD

1. How many years of experience do you have as a traditional birth attendant?
2. How did you originally learn about traditional birthing practices?
3. How many of you were formally trained?
    a. When were you trained?
    b. Who trained you?
    c. How long did the training last for?
4. What benefit have you received from this training?
5. What practices have you implemented from the training? Have you noticed any change in your ability to help women?
6. For those of you that have not been formally trained, would you like to receive training?
    a. Why do you want to be trained?
7. What do you see as the main difference between those who are trained and those who are not?
8. Some government officials say that traditional birth attendants are killing women. How would you respond to such accusations?
9. Besides delivery, what other services do you offer to your clients?
    a. What advice do you give them during pregnancy?
    b. What advice do you give them during delivery?
    c. What advice do you give them after delivery?
10. What are some of the typical complications you see during delivery and how do you address them?
11. Do you ever receive support from the local government?
12. Do you ever receive support from the health facilities?
13. What is your view of midwives?
14. Do you believe women receive good care in health facilities?
15. What is the biggest challenge you face?
16. Do you ever encounter women in the village who deliver at home without the help of a traditional birth attendant?
    a. Why do these women deliver at home?
17. What factors do you think contribute to the high maternal mortality rate in Uganda?
18. Are any of you passing on your knowledge to younger women?

Appendix IV: Question Guide for Experts, Health Workers, and Local Leaders

1. What do you see as the main health problems for women in this area?
2. Why do you think maternal mortality is so high in Uganda and in this area?
3. What cultural factors are contributing to this high mortality rate?
4. Who do women seek the most when they face complications before, during, and after pregnancy?
5. What is your opinion of traditional birth attendants?
    a. How do traditional birth practices compare to giving birth in a health facility?
    b. What are the cost/benefits of each?
6. Do you see traditional birth attendants as a good source of care for those who have barriers to accessing conventional care?
7. Are there instance when the traditional birth attendants refer patients to a clinic or hospital when they feel they are unable to deal with the situation?
8. Do you see potential and/or benefit in training traditional birth attendants with modern techniques?
9. What is the current government policy towards training and supporting traditional birth attendants and do you agree with this policy?
10. Why do you think so many women choose to give birth at home without the help of a traditional birth attendant or a health worker?
11. What kind of support do women receive from their husbands during pregnancy and is this support adequate?
12. How is family planning viewed by women in this area?
    a. Is it commonly used?
    b. What are some common misconceptions about family planning?
    c. How is this affecting the health of women?

Appendix V: Document of Consent

My name is Ashley Armstrong and I am currently studying development and public health in Uganda through the School for International Training (SIT). I am from the United States and study international affairs at the University of Colorado. Thank you very much for taking time and allowing me to interview you.

The intent of this research is to understand the impact of traditional birth attendants and traditional cultural beliefs on maternal health in Uganda. This district will be selected as a representative sample of the greater Uganda. The research is strictly for academic purposes. The information gained in all the interviews will not be used for any purposes other than the intended research projects. The end product of this research will be a research paper presented to SIT and an honors thesis presented at the University of Colorado.

Some of the questions asked during the interview may be uncomfortable to answer. At any time during the interview, you can choose to stop the interview or choose to not answer a certain question. This interview provides no direct benefit to you as a participant other than the ability to have your voice expressed in a research report.

A number and/or alternative name will be assigned to you to maintain full confidentiality. Out of respect for you and your privacy, please sign below if I have permission to use the information you have provided in the writing of my research report and thesis. A copy of this research will be available at the School for International Training office located at Plot 18, Kanjoka Street, Kamwokya, and to you upon request

Do you give permission to use all of the information provided during the interview for research

_____Yes
_____No

If no, what should be omitted from the final report?

Name ____

Signature____

Date____

Contact Information ___________________________________

Signature of interviewer____

Date____

Appendix VI: List of Interviews

Women

Number	Village	Age	Education	# of Children
Mother 1	Nyakasa	47	S2	6
Mother 2	Nyakasa	32	P2	4
Mother 3	Nyakasa	30	P5	3
Mother 4	Nyakasa	65	P2	9
Mother 5	Nyakasa	22	P2	2
Mother 6	Rwakishakizi	38	S2	4
Mother 7	Nyakasa	48	S2	8
Mother 8	Nyakasa	34	P7	4
Mother 9	Rwakishakizi 1	51	P2	6
Mother10	Rwakishakizi 1	22	P7	1
Mother 11	Rwakishakizi 2	38	P6	7
Mother 12	Rwakishakizi 2	45	P2	8
Mother 13	Kagasha	26	P7	5
Mother 14	Kagasha	32	P4	5
Mother 15	Kagasha	27	P3	3
Mother 16	Kagasha	30	P4	3
Mother 17	Kagasha	25	0	5
Mother 18	Mpambazi	32	P2	5
Mother 19	Kambaba	24	P7	3
Mother 20	Karambi	19	P6	1
Mother 21	Kambaba	24	P7	3
Mother 22	Kicwamba	20	P7	2
Mother 23	Nyarubungo	23	None	3
Mother 24	Nyarubungo	32	P3	4
Mother 25	Nyarubungo	26	P7	3
Mother 26	Nyarubungo	30	P2	7
Mother 27	Nyarubungo	28	S4	2
Mother 28	Nyakabungo	28	S2	3
Mother 29	Nyakabungo	28	P7	2
Mother 30	Nyakabungo	44	S4	6

Mother 31	Nyakabungo	40	None	7
Mother 32	Nyakabungo	25	S4	1
Mother 33	Kibingo	36	P5	4
Mother 34	Kibingo	29	P6	5
Mother 35	Kibingo	42	P6	2
Mother 36	Kibingo	31	S2	4
Mother 37	Kibingo	25	P7	2
Mother 38	Mitsyamo	28	S3	6
Mother 39	Mitsyamo	32	P7	5
Mother 40	Mitsyamo	25	P7	2
Mother 41	Mitsyamo	32	P5	4
Mother 42	Mitsyamo	40	P6	6
Mother 43	Kagando	40	P2	6
Mother 44	Kagando	25	P6	3
Mother 45	Kagando	25	S4	2
Mother 46	Kagando	23	P6	1
Mother 47	Kagando	50	P5	8
Mother 48	Nyamiyaga	38	P6	5
Mother 49	Nyamiyaga	24	S2	3
Mother 50	Nyamiyaga	50	S4	4
Mother 51	Nyamiyaga	35	S3	4
Mother 52	Nyamiyaga	45	P6	7

Experts, Health Workers, and Local Leaders

Title	Organization	Location
Professor Bantebya Kyomuhendo	Makerere University	Kampala
Dean	Mbarara University of Science and Technology (MUST)	Mbarara District
Chairperson	Local Council 3	Nyakayojo sub-county
Nursing Assistant	Health Center II	Kicwamba
Secretary for Social Services	Local Council	Nyakayojo sub-county
Senior Clinic Officer	Nyakayojo HC III	Nyakayojo sub-county
District Health Officer	Local Government	Mbarara District

Registered Nurse	Health Center II	Rwakishakizi
Vice Chairperson	Local Council 1	Nyakasa
Chairperson	Local Council 1	Kagasha
Chairperson	Local Council 1	Nyarubungo
Woman Counselor	Local Council	Nyarubungo
Chairperson	Local Council 1	Kibingo
Chairperson	Local Council 1	Nyamiyaga
Representative	World Health Organization	Kampala
Representative	Ministry of Health	Kampala

Appendix VII: List of Focus Group Discussions

FGD held in Nyarubungo on November 9, 2010

Number	Village	Trained?	Average number of babies delivered per month
TBA 1	Kashojwa	Yes	7
TBA 2	Mitsyamo	Yes	3
TBA 3	Nyarubungo	Yes	5
TBA 4	Nshungyezi	Yes	4
TBA 5	Kishenyi	Yes	0
TBA 6	Nyakasa	Yes	6
TBA 7	Macuro	No	3
TBA 8	Kibaya	No	3
TBA 9	Rucele	No	4
TBA 10	Kibirizi	No	3
TBA 11	Kibona	No	6

FGD held in Kicwamba on November 11, 2010

Number	Village	Trained?	Average number of babies delivered per month
TBA 1	Mutukura I	Yes	8
TBA 2	Mutukura I	Yes	3
TBA 3	Keishazi	No	4
TBA 4	Kantanda I	No	3
TBA 5	Kantanda I	Yes	6
TBA 6	Mutukura I	Yes	3
TBA 7	Mutukura I	No	4
TBA 8	Kantanda I	No	4
TBA 9	Kantanda II	No	5
TBA 10	Kambaba	Yes	3
TBA 11	Kambaba	Yes	7
TBA 12	Kantanda II	Yes	3
TBA 13	Mutukura	No	2
TBA 14	Kicwamba	No	3
TBA 15	Kashozi	Yes	6

Appendix VIII: Select Interview Transcripts

Interview with Mother 11 from Rwakishakizi 2

How old are you? 38

How many years of schooling? P 6

How old were you at the birth of your first child? Doesn't remember

How many children do you have? 7. All alive

How many were born at a health center or hospital? 1. Born from Mbarara Hospital. Travelled there by vehicle. Accompanied by my grandmother and husband. Brought with her a mattress, basin, jerry can, plates, cups, and babies clothes, and her own clothes.

Why did you choose Mbarara Hospital? "It was nearer. I was staying in Mbarara town in Namitanga so there were no traditional birth attendants there and I had to go to the hospital"

Do you believe women receive good care in hospitals? "Yes. In case of complications, you easily get help"

How many children born with the help of a TBA? 1 child.

Why did you choose to use a TBA? "It was my first born child"

Did you feel you received good care from the TBA? "Yes because she helped me in every way she could"

Do you think all TBAs give good care to their clients? "Some do, but in case of complications they send their clients to the hospital"

Was the women who attended to you trained? "Yes she was trained with the hospital"

How many of your children were born at home? 5 born at home

Who helped you deliver? "One child, my friend helped me and the other four, I did it on my own"

Why did she choose to deliver alone? "I used to stay at home and deliver on my own. I would not mind, but when time for delivering would come, I would deliver on my own and cut the umbilical cord myself without even my husband's presence."

Are women who deliver at home stronger than women who deliver at a health center? "It depends because for me I was brave. Even for the child whom I delivered from the hospital, I delivered him myself. They only came to cut the umbilical cord because I was in a room where

there was another woman delivering so they paid attention to the other one and ignored me. So they would try to chase me out of the room and when the moment came I pushed my baby and they realized that I had already given birth and they only came to cut the umbilical cord so from that moment I developed hatred for delivering from the hospital because I had done it on my own."

What was it like delivering by yourself? "It is all the same because when I went to the hospital and saw there was no care given to me I decided to deliver from home so when the labor pains come I just go to my bed, but I do not start pushing. When the right moment comes, I feel the baby coming and I start pushing."

Do you ever face any challenges with delivering at home? "No I have never felt any challenges. Even the placenta comes immediately after the baby is born"

What do you do with the placenta afterwards? "I throw it in the latrine"

Can you elaborate on what happened when you went to the hospital? "When I went to the hospital I delivered on my own. After cutting the umbilical cord, shortly I was told to go back home. So I asked myself, why hadn't I remained at home to deliver on my own because I realized there was no difference between delivering at home and here at the hospital."

Do you seek ANC? Yes at Mbarara hospital.

Why do you choose to go to Mbarara hospital for ANC? "I go to the hospital because I want to know how my pregnancy is developing so when they tell me there is no complication, I feel brave that I can give birth on my own at home" Would go around 4 times for ANC.

Did you use herbs during pregnancy? Yes. To keep the baby healthy "the old women would bring them for me"

Did you seek the advice of a TBA before, during, or after pregnancy? No

Did you ever face any complications? No

How does your husband support you? "He used to take good care of me. When I wanted to go to the hospital he would escort me. He even gives me some money for transport to come back home"

Do you use family planning? "I used it and failed so I stopped using it. I developed over-bleeding and also sometimes I would get blood clotting, such that sometimes I would feel some severe pain. Then I was even admitted in the hospital because of this complication"

How many children do you want? "These are enough for me"

How are you going to prevent having more? "I've not yet found the solution, but I have to be careful, especially my husband tries to ensure that I do not get pregnant" (didn't go in-depth, maybe because her children were nearby).

Interview with TBA from Nyakabungo

How many years of experience do you have as a TBA? "I learned from my grandmother, especially by observing how she would help mothers deliver"

When were you trained? Has been trained for 8 years. "I was trained by the CBHC (Community Basic Health Care) group in Nyamitanga. They only helped us pass through the training, but didn't give us any money. And sometimes we have programs by inviting doctors or nurses who know about delivery and they give us some refresher courses" CBHC is an NGO. The training lasted for 3 years. "We had a schedule like the school-going children" 3 months with a holiday then 3 more months, then holiday, then 3 more months so about 9 months out of a year.

Who did you learn from before you were trained? "At home I used to see my grandmothers help women to deliver"

Some government officials say that TBAs are killing women, how would you respond to such accusations? "They are talking about these untrained traditional birth attendants who are still using the old delivery methods"

On average how many women do you help deliver per month? 3-4, but it all depends

What is the cost of these services? 10,000

Do you also give ANC? Yes

Do you ever refer patients to the hospital? "Yes. I refer especially those with complications like those with the baby in a wrong position, those mothers who have delivered many children, and those who have diseases like HIV. I refer those to the hospital so that their babies do not contract HIV"

What is the biggest challenge you face? "Most of the time the mother comes to deliver without baby clothes, with no money for transport, and no money to pay me this fee of 10,000"

What is the biggest benefit you have received from training? "We were taught how to help a mother deliver, to also determine complications like the umbilical cord being the first to come and how to deal with it, to also know the right time for the mother to deliver such as when to start pushing, and we were also trained to identify the information on their medical records"

Are you passing on your practice to anyone? "Yes, especially my children who observe what I do and some of my friends"

What factors contribute to the high maternal mortality rate in Uganda? “Most women don’t go for antenatal to know how their pregnancies are. Some women do not go for check ups of STDs so when they don’t get this treatment it might lead to the death of the baby or the mother. Most of them are also poor and their families cannot afford to support these mothers”

Where are the majority of these women dying? “Sometimes they die from the hospital. This is because when they get pregnant they fail to go for antenatal and check-ups so by the time of delivery, they go to hospitals without this information. Some women also die from the village, but most of them die from the hospital”

What advice do you give a mother to help her prepare for birth? “To prepare the mama kit, to go for check up for any illnesses, to use the drugs prescribed by the doctors”

What is your view of midwives and doctors in the hospital? “They do not believe in us”

Has this made collaboration difficult? “Yes. When we take the patients with a referral letter, in case of a complication they blame us when they themselves might not have been able to deal with the complication”

Do you ever receive support from the health facilities? NO

There is a lack of communication between the doctors and the TBAs. In case of some complications, she may call the doctor for advice, but he refuses to give the advice and insists on taking the patient to the hospital.

Interview with District Health Officer

“The major challenge is maternal mortality is still high. The challenge actually are system problems and there are community problems and what I would call individual problems, individual perception”

“Maternal mortality and morbidity are unacceptably high for various recourses, of which we partly know. Women dying from bleeding before, during, and after labor, infection, hypertension diseases such as preclampsia, obstructed labor.”

Morbidity is caused by “reproductive system injuries and infections, long prolonged pain and disability”

Issues in the “system in that the facilities for one to have a safe motherhood period are limited in terms of accessibility and affordability and quantity in terms of supplies and logistics”

Community problems and individual problems: “perceptions of the health center and knowledge of the available services and the traditions and beliefs impact also on the health of the pregnant mothers. Longest reached tradition is the TBAs. Community problems related with social,

cultural, and economic issues" and if women are planning for pregnancies. Self efficacy: "People think that pregnancy is a natural phenomenon and they take care of themselves as has been done before and whatever happens is God's decision"

"When you go to TBAs of course, you know quite well the policy on TBAs has changed. We are no longer stressing so much their usefulness because of the dangers they can cause to pregnant mothers. About 20% of pregnancies result into complications and 80% have normal delivery. These TBAs are not able to recognize early and during labor risks and conditions and refer them, that is if they believe in referring. They lack the skills. The policy now with TBAs is that they may cause more harm that good not withstanding that only about 45-50% of pregnant mothers that deliver under skilled hands in Mbarara district, the other percentage goes elsewhere including to TBAs and by themselves"

"TBAs are old women although there are a few young men who have had this tradition of delivering pregnant mothers over time and have learned it from their predecessors and they take up the skill. So many of them are not trainable in a sense of imparting new knowledge and practice in safe motherhood paradigms. There are very few young women who are taking up the practice with improved education, development, and cultural transformation" You find that with time and more education TBAs will fall out of use.

"We need to put in more resources as far as maternal mortality is concerned and try to advocate more and educate and sensitize those women, but things are changing, the demand is increasing towards modern ways of delivering"

Many women in the future are likely to seek modern services in the future, but the challenges are still there and we need to put in more resources in terms of maternal health services. Also need more education and sensitization. Things are changing and the demand is increasing towards modern ways of delivering mothers.

"There are comparative advantages. The TBAs in most cases are near to the community, accessible all the time, they communicate better, and their services are seemingly less costly than the ones we have, they have lived near the women and heard their needs. Some of them actually take up practices such as giving herbs and positions of delivery. There is face to face closer communication with the TBAs. But however, people are realizing that when complications arise, TBAs don't do much. And that tendency of TBAs not knowing their limits of when to refer women"

Self efficacy – "belief that everything is pre-determined by God. Even if I don't go to a health center or a TBA I will deliver, after all delivery is a natural phenomenon and has been done like that before and we know scientifically that 80% of deliveries, the child will come out itself so there is that belief that it is pre-determined by god. Of course there are also some who have socio-economic issues, they are not prepared for birth with the tools, transportation, some of

them might not have attended antenatal, so they fear health units, so there are many factors actually"

"Cultural factors are reducing but some factors are that some women think that if they had an assisted delivery, not delivering by themselves it shows that a woman is tough and can control the conditions surrounding pregnancy". Sort of "self-esteem or self-importance that you are tough, strong, courageous"

"When labor starts some of the women actually hide. They don't tell a relative, husband, or neighbor to prove that they have the upper hand on the situation, a sort of feeling that alone they can do it"

Support from husbands: "The support is limited if there is any. A few of them take their women for antenatal services and when labor starts they accompany them to the health units. A few provide these ladies with things to use during and after labor such as mama kits, clothes for the expected child. A few also give them moral support, but the majority don't do much. They feel it is the responsibility of the lady." Very few men come to antenatal services. "Perhaps the services are not men-friendly"

Government policy: "We used to train and orient TBAs with support from various development partners. We put in a lot of resources around 1997-2000Used to train and orient TBAs with support from various development partners. We put in a lot of resources around 1997-2000. We also gave a few things like gloves, a clean surface, and we asked them to report to us. We supervised them. It is not only the policy of Uganda, it is this region coming from the World Health Organization. We cannot do away with them, but lets not put a lot of emphasis on them. Sooner or later they will be eradicated. We cannot do away with them abruptly, but lets downplay their role. We know that for some years to come they will be there"

Younger women are not willing to take up the practice and so women are increasingly seeking services from the skilled and trained attendants.

Government decided to change its policy, "in spite of the resources we sank into the TBAs training, orientation, and facilitating, maternal mortality and morbidity is not reducing. Look at the MDGs, are we getting any better? It was a cost benefit analysis and a cost-effective analysis of the TBA system"

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