

**Care-Seeking During Pregnancy, Delivery, and the Postpartum Period:
A Study in Homabay and Migori Districts, Kenya**



“God will help her, but not here at home.”
—Family member of woman with obstetric complications

Prepared by

Family Care International
September 2003

Acknowledgements

Family Care International and the Ministry of Health would like to thank the Bill and Melinda Gates Foundation for their financial support of the Skilled Care Initiative for which this qualitative, community-based study was conducted. In addition, we would like to thank Mona Moore and colleagues from The CHANGE Project who contributed to the development of research tools and methodologies, as well as data collection in Homabay District. Also critical to the success of this study has been the whole-hearted support from the District Health Management Teams of Homabay and Migori Districts, as well as the community members and health providers interviewed in the two districts.

The research was coordinated by Ms. Isabella Chege with assistance from Ms. Angeline Mutunga. Data analysis and the report on study findings were done by Ms. Ellen Brazier and Ms. Christine Ombaka, with assistance from Ms. Cynthia Meurling, Ms. Ann Thairu, and Ms. Beatrice Rachuonyo.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
I. INTRODUCTION	1
II. CONTEXT	3
A. National context	3
B. Overview of the study areas: Homabay and Migori Districts	4
III. METHODOLOGY AND DATA COLLECTION	6
A. Survey Objectives	6
B. Research Methodologies	6
C. Sample Design	7
D. Data Collection	8
E. Data Analysis	9
IV. RESEARCH FINDINGS	11
A. Antenatal Care	11
i. Facility-Based Antenatal Care	12
ii. Community-Based Antenatal Services	14
B. Care for Normal Childbirth	16
i. Family Discussions and Dialogue on Pregnancy and Childbirth	16
ii. Family Decision-Making on Place of Delivery	19
iii. Preparations During Pregnancy	20
iv. Attitudes Toward Delivery Care Provided by TBAs	22
v. Attitudes Towards Delivery Care at Health Facilities	24
C. Obstetric Complications and Problems	30
i. Awareness of Obstetric Complications and Warning Signs	31
ii. Preparation for Obstetric Emergencies	38
iii. Recognizing Signs of Obstetric Complications	39
iv. Deciding to Seek Emergency Care	41
v. Reaching Skilled Care	43
vi. Delays in Receiving Emergency Care at the Health Facility	45
D. Early Postpartum Care	48
i. Care Provided Immediately after Delivery	48
ii. Traditional Practices and Taboos during the Early Postpartum Period	49
iv. Use of Postpartum Care	51
E. Maternal Health Information and Communication Channels	52
i. Radio and Television	52
ii. Print Media	53
iii. Informal Gatherings and Social Groups	53
V. DISCUSSION	55

EXECUTIVE SUMMARY

According to the World Health Organization, one in every 36 women in Kenya will die from complications during pregnancy or childbirth. Estimates of maternal mortality range from 590 to 1,300 maternal deaths per 100,000 live births, with considerable variation among provinces and districts. Only 44% of all women receive skilled attendance during delivery, and the proportion of births attended by skilled health professionals has been falling in recent years.

Nyanza Province, in Western Kenya, suffers from some of the highest maternal mortality rates in the country. Estimates of maternal mortality range from 1,300 to 2,000 deaths per 100,000 live births, and almost one-quarter of all recorded maternal deaths in Kenya occur in Nyanza. Maternal health indicators are particularly poor in Homabay and Migori Districts, where only 39% and 23% of women, respectively, give birth in health facilities.

As part of a three-country effort to improve maternal health outcomes and raise the proportion of births attended by skilled personnel, Family Care International (FCI) and the Ministry of Health, with assistance from The CHANGE Project launched the Skilled Care Initiative in these two under-served districts in Nyanza Province in early 2001. The Project is a unique effort to reduce maternal death by focusing specifically on improving skilled care for all women during pregnancy, childbirth, and the postpartum period. Over five years, the project aims to increase skilled attendance during childbirth by at least ten percent, through a three-tiered action plan which involves:

- Developing strong national policies, program, and guidelines in support of skilled care;
- Offering high-quality and accessible essential obstetric care services in all levels of health facilities, especially those closest to where women live and
- Encouraging communities to plan for and use routine and emergency maternal health services.

Designing effective interventions that inspire and motivate women and their families to adopt new behaviours regarding skilled care requires an in-depth understanding of their current beliefs, values, attitudes and practices. To this end, FCI conducted extensive qualitative research with community members in Homabay and Migori Districts to gather detailed information on their experiences and opinions regarding the quality, availability, and utilisation of maternal health services in their community. The study targeted women, male partners, female elders, delivery attendants, and influential community members. Participants were selected from all administrative divisions within each district. The study was implemented and coordinated by Family Care International in collaboration with the Ministry of Health between December 2002 and March 2003.

In the study, most community members identified health facilities as the best place for delivery. Many study participants, including several TBAs, described facility-based providers as better trained and equipped to treat various diseases and health problems and to manage complications. They equated hospital care with professional care and safety, for both mother and infant. Nevertheless, the majority of women interviewed had delivered at home, and they had not even sought facility-based care unless a complication arose.

While study participants almost universally agreed that hospitals were the best source of medical care during delivery, they also identified a range of factors that limit women's use of skilled care during pregnancy, delivery, and the postpartum period. These factors included:

- **Perceptions about capacity of health facilities:** Community members expressed strong reservations about the quality of care available. They commented that health facilities often lack

competent staff, as well as the necessary equipment, supplies and medicines. Study participants also commented on staffing shortages at local facilities and observed that it can be difficult to locate a skilled attendant at the health facility when one needs information and treatment. They added that there are usually too few skilled attendants to provide effective services, especially when women present with complications.

- **Concerns about the attitudes of health workers towards community members:** While some study participants described positive interactions with facility-based health staff, many characterised facility-based providers as negligent at best, and as emotionally and physically abusive at worst. Others complained of outright neglect, describing health staff as inattentive and unconcerned about women's progress with labour or their discomfort. Community members also perceived facility-based staff as judgmental and discriminatory, commenting that women who are well-dressed receive good care, whereas those who appear less affluent are shamed and criticised.
- **Perceptions about the costs of facility-based delivery care:** Most study participants perceived the cost of facility-based delivery care as a serious obstacle for women during labour. Participants estimated that normal delivery at health facilities cost anywhere between Ksh. 300 and Ksh. 1,000. While these costs are not significantly higher than the average fees charged by TBAs, community respondents argued nonetheless that it was difficult to save the necessary funds in advance. In addition, they complained that they are required to provide a range of costly supplies and drugs, over and above the fees for services.

Although there is a waiver system in place to ensure that the poor can access hospital services, community members were not aware of this safety net, and most believed that people without the required funds would be turned away from the health facility.

- **Inaccessibility of facility-based delivery care:** Community members cited distance to health facilities and lack of transportation as major barriers to use of skilled care. Most community members described the hospital as being very far away, and they spoke of travelling long distances—usually on foot—to reach a facility. The problems of distance and transport appeared to play a major role in determining where a woman would deliver. Many study respondents indicated that while they would prefer to deliver at a health facility, they did not even consider this a realistic option.
- **Lack of planning and preparation for delivery:** For most women in Homabay and Migori, reaching a health facility during labour requires that the family plan and prepare in advance—i.e. they know what facility to go to for care, have sufficient funds on hand, and have appropriate means of transport available. Despite the fact that the duration of pregnancy provides considerable time for planning and preparation, community members indicated that few people make an advance decision or plan to deliver at a facility and that most wait until labour begins to decide where the birth will take place.

One major factor contributing to the lack of advanced planning is the unpredictability of labour. Since it is impossible to know what day or what time of day labour will begin, community members find it difficult to make any preparation. In view of the difficulty of planning for unpredictable events, many community members perceive pregnancy outcomes as predetermined by God. Others commented that the time of day that labour begins determines their decisions about place of delivery, indicating that in communities where there is no transport available at night, the last-minute “decision” to deliver at home or with a TBA may simply be a reflection of the fact that there is no alternative.

Overall, while community members expressed a preference for using facility-based delivery care,

they described a range of both real and perceived barriers that discourage them from seeking care and which decrease their sense of self-efficacy—i.e. their perception that they can have any influence over maternal health outcomes.

In view of the barriers described by community members, there is an urgent need for a range of interventions to address the critical gaps at health facilities that both discourage women from seeking and prevent women from receiving high-quality maternity care. Essential interventions include:

- Addressing gaps in equipment, supplies, and essential drugs for maternity care at health facilities.
- Training providers in clinical and interpersonal skills and addressing attitudinal barriers that result in poor treatment of community members.
- Addressing financial barriers that limit women's access to services and essential drugs and supplies needed for obstetric care.

In addition to informing communities of improvements being made at health facilities, there is an urgent need for behaviour change interventions that will heighten community members' sense of self-efficacy and control over their lives and motivate them to take concrete actions to ensure positive maternal health outcomes. Specifically, women, families, and communities should be encouraged and assisted to identify facilities where delivery care is available, to forecast and save for the costs of normal delivery care, to know what modes of transport can be used during the day or night, and to establish community resources—i.e. emergency loans, transport, and communications—in case complications arise.

I. INTRODUCTION

Maternal mortality remains an urgent problem in developing countries around the world. Each year, out of an estimated 120 million pregnancies that occur worldwide:

- More than half a million women die from the complications of pregnancy and childbirth.
- More than 50 million women suffer from a serious pregnancy-related illness or disability.
- At least 1.2 million newborn infants die from complications during delivery.

Most of these deaths and disabilities could be prevented if women had access to skilled care during childbirth— i.e. providers with the skills, equipment, supplies, and support needed to conduct normal deliveries, recognise complications, and manage or refer such cases as appropriate. Worldwide, skilled attendance at birth has been identified as one of the most important interventions to reduce maternal mortality. In fact, attendance by skilled personnel throughout pregnancy, childbirth, and the postpartum period has been found to be strongly associated with reductions in maternal mortality—much more so than other interventions, such as antenatal care, or socio-economic factors, such as education or income levels.* As a result, skilled attendance at delivery has been identified as a key indicator for the achievement of the Millennium Development Goals adopted by the United Nations in September 2000.

With this in mind, Family Care International (FCI) launched the Skilled Care Initiative—a multi-faceted, five-year project designed to increase the number of women who receive skilled care before, during, and after childbirth. The project, which started in mid-2000 and is being implemented in four rural, underserved districts in Burkina Faso, Tanzania, and Kenya, focuses specifically on skilled care as a strategy for reducing maternal mortality and morbidity. In Kenya, the Skilled Care Initiative is being implemented in Homabay and Migori Districts, in Nyanza Province.

The skilled care approach recognises the central role of the provider—the skilled attendant—but also emphasizes the critical importance of the environment in which the provider works. In order for skilled attendants to actually provide skilled care, the enabling environment must include a supportive policy and regulatory framework, adequate infrastructure, transportation, and referral networks, as well as sufficient supplies of maternity drugs and consumables. In addition to improving the quality and availability of maternity care, the Skilled Care Initiative also aims to effect change from the national level to the individual; from policies that make skilled care a priority, to behaviour-change strategies

Skilled Care Defined*

The term skilled care or attendance refers to the *process* by which a pregnant woman and her infant are provided with adequate care during pregnancy, labour, birth and the postpartum and immediate newborn periods; whether the place of delivery is the home, health centre, or hospital. In order for this process to take place, the attendant must have the necessary skills **and** must be supported by an enabling environment at various levels of the health system. This includes a supportive policy and regulatory framework; adequate supplies, equipment, and infrastructure; and an efficient and effective system of communication and transport.

Skilled care includes care for women with life-threatening complications, but is not limited to that care. The skilled care approach is based on the premise that **all** women are entitled to good quality care during childbirth. It assumes that such care can prevent some complications (e.g. through hygienic practices and active management of the third stage of labour); increase the likelihood of immediate and appropriate treatment when complications do develop; and encourage prompt, timely referral as necessary.

* *Skilled Care During Childbirth: Information Booklet*, Safe Motherhood Inter-Agency Group, 2002.

* A skilled attendant is a health provider who is trained in midwifery skills, who possesses the knowledge and a defined set of cognitive and practical skills that enable the attendant to provide safe and effective health care during childbirth to women and their infants in the home, health centre, and in hospital settings. This definition does not include traditional birth attendants, trained or untrained.

that encourage women and their families to plan for, and use, maternal health services. Specifically, the project objective is to increase rates of skilled attendance during childbirth by at least ten percent over the life of the five-year project.

Designing effective interventions that inspire and motivate women and their families to adopt new behaviours requires an in-depth understanding of their current beliefs, values, attitudes and practices. Therefore, FCI conducted extensive qualitative research with community members in Homabay and Migori Districts to gather detailed information on their experiences and opinions regarding the quality, availability, and utilisation of maternal health services in their community. This report reviews the findings of the qualitative community survey in Homabay and Migori Districts and discusses key implications for the design of behaviour change strategies to increase use of skilled care before, during and after delivery.

II. CONTEXT

A. National Context

With a surface area of 584,000 square kilometres, Kenya is the second largest country in East Africa. Located directly along the equator, it is bordered on the east by the Indian Ocean and Somalia; on the north by Ethiopia and Sudan; on the west by Uganda and Lake Victoria; and on the south by Tanzania. Kenya is administratively divided into eight provinces with each province subdivided into districts, with its capital in Nairobi.

Kenya's economy is relatively diverse, with agriculture accounting for 24% of GDP, tourism 19%, and industry 18%.¹ Its per capita income is approximately US\$340 per annum.² Between 1990 and 1999, economic growth averaged about 2%.³

In 2001, Kenya's population was an estimated 30.7 million with a growth rate of 2% per annum and a total fertility rate of 4.3.⁴ Children under the age of 15 constitute approximately 43.5% of the population while females accounted for 49.9% of the population at the end of 2001.⁵ Kenya has a crude birth rate of 35 live births per 1,000 population and a crude death rate of 14 per 1,000 population. The infant mortality rate is 78 per 1,000 live births. Life expectancy at birth was 57.4 years in 1987, but had fallen to 45.5 years in 2002—due in part to the HIV/AIDS epidemic.⁶

Maternal mortality is a particularly serious problem in Kenya. A woman in Kenya has a one in 36 chance of dying from pregnancy-related causes, compared to her counterpart in Europe, who faces a one in 4,000 chance. Estimates of maternal mortality range from 590 to 1,300 maternal deaths per 100,000 live births, with considerable variation from province to province, and even more between districts. Some districts claim rates of up to three times the national average. For every woman who dies of pregnancy-related complications, many more suffer reproductive morbidity: severe injuries, infections, and disabilities resulting from pregnancy and childbirth. The Kenyan Ministry of Health estimates that in addition to the 4,300 maternal deaths that occur each year in Kenya, more than 500,000 women experience physical injuries during pregnancy and childbirth; as many as 194,000 of these cases are life-threatening.⁷

Early marriage is common for women in Kenya, which heightens their risks of poor maternal health outcomes. Women under age 20 are physiologically more prone to pregnancy- and delivery-related complications. Thus, it is of concern that 57% of Kenyan women are married by age 20 and that use of contraception is low. The 1998 Kenya Demographic and Health Survey (KDHS) showed that only 23.6% of Kenyan women aged 15–49 (married and unmarried) use a modern contraceptive method.

The 1998 KDHS indicates that the state of women's health in Kenya has been deteriorating over the past decade. The national rate of skilled attendance at delivery declined from 50% in 1989 to 44% in 1998. The same survey indicates that only 42% of births occur in health facilities, with considerable variation in different parts of the country: three-quarters of births in Nairobi are facility-based, compared to only one-quarter in the Western Province. In Nyanza, an estimated 38% of deliveries take place in a health care facility.

Although antenatal attendance in Kenya is high, at 93% in 1993 and 92% in 1998 – a large number of these visits (at least 40%) occurred after the sixth month of pregnancy, making it difficult to carry out some of the potentially most effective interventions of antenatal care (e.g. identification and treatment of anaemia, tetanus toxoid immunisation, and detection of hypertensive disorders of

pregnancy).⁸ In addition, various assessments have shown that the quality of care is extremely poor due to personnel shortages, lack of equipment and supplies, and the attitudes of service providers. The Ministry of Health is now training health workers in focused ANC to improve the quality of services and to strengthen providers' skills in counselling clients and encouraging them to deliver in a health facility.

Kenya is one of many sub-Saharan countries adversely affected by the HIV/AIDS pandemic. At the end of 2001, the nationwide prevalence of HIV/AIDS was 15.6%, which means that approximately 2,500,000 Kenyans are living with the virus. Pregnancy aggravates the health status of HIV-positive women making them less capable of coping with complications during pregnancy and delivery due to opportunist infections, malaria, and anaemia.

Women's low social status and lack of empowerment in Kenya is reflected in numerous social indicators, including unemployment and education. While women account for 46% of the total labour force in Kenya, the unemployment rate for women is more than double that of men (28.4% for women, 13% for men).⁹ There are significant gender disparities in education; girls constitute only 37% of the total number of university students in Kenya¹⁰ and 27% of women age six and older have never received any formal education compared with only 16.5% of men. The illiteracy rate among girls age 15-24 is nearly triple that of boys in the same age group (31.5% for girls, 12.5% for boys).¹¹

This lack of education and the disparity between genders is alarming to women's health advocates because women's empowerment has a direct effect on reproductive health status. Access to income and decision-making power enable women to recognize potential complications and to seek care. There is a strong correlation between female education, health status and use of maternal health services (and place of delivery in particular; 77% of Kenyan women with no education deliver at home without skilled attendance, as compared to only 28% of women with, at minimum, some secondary education).¹² Gender equity and women's control over their own lives are thus important issues in helping women practice healthy behaviours.

B. Overview of the Study Areas: Homabay and Migori Districts

Homabay and Migori are two of the 12 administrative districts that form Nyanza Province in Western Kenya. Homabay District is bordered by Migori District to the south; Rachuonyo District to the north; Kisii District to the east; and Suba District to the west. Migori District is bordered by Homabay and Kisii Central Districts to the north; Gucha and Trans Mara Districts to the east; Kuria and Trans Mara Districts and the Republic of Tanzania to the south; and Suba District and Lake Victoria to the west.

Homabay is the smaller of the two districts with a total area of 1,160 square kilometres. Its population was estimated to be 312,885 in 2002, of which 164,621 are female. Forty-seven percent of the population is below the age of 15, while 23% is between 15 and 25. The average population density for Homabay District is 270 persons per square kilometre.¹³ Migori District is twice the size of Homabay, with a total area of 2,505 square kilometres (of which 475 square kilometres cover a portion of Lake Victoria). Migori District's population is estimated to be 565,080 of whom 293,863 are female. Forty-six percent of the population is below the age of 15 while 24% is between 15 and 25. The average population density for Migori District is 280 persons per square kilometre. The infant mortality rate in Migori is 137 per 1,000 live births.¹⁴

A network of seasonal roads serves both Homabay and Migori Districts. Two major roadways in Migori are the Migori-Kisii Road, which links the district with Tanzania, and the Migori-Muhuru Road, which connects Muhuru's important fishing industry with the rest of the district. The overall

infrastructure in Homabay District is slightly less developed than in Migori District. Approximately 1,882 households have electricity connections in Homabay District compared to 7,000 households in Migori District. Few households in either district have telephone connections, and most of these are concentrated in urban centres. Cellular telephone networks are being set up, making it possible to reach some rural health centres.

There is a fairly good network of health facilities in the two districts. Migori District has an extensive network of private and mission-run facilities, including three such hospitals. However, the Migori District Hospital functions primarily as a health centre because its infrastructure has not been upgraded since the district was carved out of the former South Nyanza District in 1992. As a result, cases requiring surgical intervention must be referred to nearby St Joseph (Ombo) Hospital, or to Homabay District Hospital or Nyanza Provincial General Hospital.

Poverty is widespread in both districts. An estimated 77% of Homabay's population and 59% of Migori District's population are living in poverty. Agriculture is the mainstay of the economy for both districts, with most residents involved in crop cultivation, fishing, and livestock rearing. The main cash crops cultivated in Homabay are cotton, pineapple, sugarcane, and tobacco, while Migori's primary cash crops are sugar cane and tobacco. Subsistence crops for both districts include maize, sorghum, beans, and cassava. The main livestock reared in the districts are poultry, Zebu cattle, sheep, and goats¹⁵. There are several agro-based industries in Migori District, including the South Nyanza Sugar Factory (SONY), the Prinsal Fish Processing Company, British American Tobacco, and Mastermind Tobacco Companies.

In both districts, the majority of the population are Luo, with other ethnic groups representing less than 20% of the population.¹⁶ Although Christianity was introduced to the area in the early 1900s and the majority of the population are Christian (Catholic, Seventh Day Adventist, Anglican Church of Kenya, Pentecostal, etc.), traditional beliefs and practices remain strong in this part of Kenya. For example, the practice of polygamy remains widespread, and almost half of households are polygamous.¹⁷

The Luo are a patrilineal and patrilocal group, and women's social status is low. Women tend to marry early and move to the residence of their husbands' family. Although senior co-wives are generally accorded higher status and decision-making power than junior wives, they are subordinate to their husband and mother-in-law. Wife inheritance is practiced, heightening risks of HIV infection. Violence against women is also thought to be common, although there is little reliable data on the subject.

III. METHODOLOGY AND DATA COLLECTION

A. Survey Objectives

As noted above, FCI's five-year Skilled Care Initiative is aimed at increasing women's use of skilled care before, during, and after childbirth. Specifically, the project's objective is to increase the use of skilled care by at least 10% through complementary activities designed to strengthen the quality and availability of maternity services and to promote the use of skilled care by women in the community.

To guide project activities aimed at motivating women and their families to use skilled care, a community-based study was carried out in Homabay and Migori Districts to collect detailed information on factors that influence women's use or non-use of facility-based maternity services. The specific objectives of the qualitative study were:

- To document the current levels of awareness and attitudes about obstetric and newborn complications and emergencies among pregnant women, male partners, female elders, community leaders, and modern and traditional care providers;
- To identify factors that contribute to the current patterns of care-seeking behaviour among pregnant women and factors influencing use of care, with particular focus on obstetric emergencies;
- To investigate factors that influence preferences and decision-making for choice of childbirth location and birth attendant; and
- To identify preferred sources of pregnancy-related information and advice, channels of communication, and communication preferences of women, men, female elders, and community leaders.

B. Research Methodologies

The research methodologies used for the study were in-depth interviews and focus group discussions with key categories of respondents—women and their husbands, female elders, skilled attendants, traditional birth attendants, and community leaders.

Detailed interview and focus group discussion guides were initially developed in English and translated into Dholuo. These guides focused on the following general themes:

- **Preparations for delivery:** Preparations that women and families currently make for childbirth and new baby (including use of antenatal care, saving money, and traditional preparations); and identifying the roles of various family members in decision-making and preparations for childbirth.
- **Care during delivery:** Preferences and practices related to childbirth and delivery attendance, and perceptions of quality of care available from skilled and traditional birth attendants.
- **Care during obstetric emergencies:** Knowledge about obstetric complications and perceptions about their seriousness, underlying causes, and appropriate treatment. Interviews and discussions with women and families with recent experience with obstetric complications further explored their attitudes and practices related to preparing for obstetric emergencies and their processes for deciding to seek care and reaching a facility when complications arose.
- **Early postpartum care:** Practices during the immediate postpartum period and attitudes related to seeking facility-based check-ups during this period.

- **Social support networks and information sources:** Information sources relied upon by various categories of respondents for information about pregnancy and childbirth and the existence of community structures or networks that can reduce barriers to use of skilled care.

Prior to the study, the interview guides were pre-tested through a two-day field test in neighbouring Rachuonyo District, which is adjacent to Homabay District. Modifications were made to the survey instruments based on the pre-test experience (see Annex 1 for English version of final questionnaires).

C. Sample Design

As noted above, the study targeted women, male partners, female elders, delivery attendants, and influential community members. Selection criteria for these informants included:

- **Women of reproductive age** from three age groups (under 20 years old, 20-35, and over 35) who had a normal delivery within the six months prior to the study were selected for in-depth interviews and focus group discussions.
- **Elder female family influentials**, such as mothers, mothers-in-law, and co-wives who had a family member (e.g. daughter, daughter-in-law, co-wife, etc.) who had delivered within the previous six months were selected for in-depth interviews and focus group discussions.
- **Husbands/male partners** of women who had delivered within the past six months were interviewed through in-depth interviews and focus group discussions.
- **Women who experienced complications and their families.** Women who had experienced a serious complication during delivery or the early postpartum period within the previous six months were interviewed individually or through a group interview involving family members. In cases where the obstetric complication resulted in a maternal death, family members were interviewed.
- **Skilled attendants** (enrolled nurse-midwives, midwives, and doctors) were selected for in-depth interviews. Providers at various levels of the health system (hospital, health centre, and dispensary) were included in the study.
- **Traditional birth attendants** who had assisted deliveries within the past six months were selected for in-depth interviews and focus group discussions.
- **Community leaders and influentials**, including provincial administrators (chiefs and other senior civil servants), political leaders, and religious leaders were selected for group interviews. Community leaders and elders were the only respondent groups without any recent and personal involvement in childbirth. Their participation in this study was used to gain the general community perspective on maternal health practices, constraints (resource and transport availability, geographical terrain) and possible solutions—information vital for the design and development of future interventions.

To ensure a diverse and representative sample in the two districts, respondents were selected from all divisions within each district: Asego, Ndhiwa, Nyarongi, Rangwe, and Riana in Homabay District, and Awendo, Karungu, Muhuru, Nyatike, Rongo, Suba East, Suba West, and Uriri in Migori District. In selecting sampled communities and informants, attention was paid to the following characteristics:

- **Distance from health facilities:** Proximity to health facilities is a key variable for whether women seek and/or receive both normal and emergency obstetric care. Therefore, within each category of respondents, efforts were made to include individuals and groups who were “**near**” (within 1 km) facilities that offer comprehensive essential obstetric care (CEOC) or basic obstetric care (BEOC); “**far**” from such facilities (5 to 10km); and “**very far**” (i.e. more than 10km).

- **Age:** As noted above women of different age ranges were selected (under 20 years old, 20-35 years, over 35 years old) because age and prior experience with pregnancy and childbirth may have strong influences on care-seeking decisions and behaviours.

D. Data Collection

The study was implemented and coordinated by Family Care International in collaboration with the Ministry of Health and the CHANGE Project[†] between December 2001 and March 2002.

A team of 22 research assistants were recruited from local communities in the two study districts. The research assistants had a minimum of a Form IV level education, as well as good interpersonal skills, and the ability to communicate fluently in English and Dholuo. In addition, all research assistants had experienced giving birth or, in the case of male assistants, had had a female partner who had experienced pregnancy and childbirth.

In an effort to minimise class and education differentials (i.e. social distance) between the interviewers and community members, the study coordinators recruited research assistants who had no prior experience conducting qualitative research or training in social science. In view of their minimal research background, an intensive six-day training was conducted for the research assistants to familiarize them with key issues related to safe motherhood and FCI's Skilled Care Initiative, to help them develop interviewing skills, and to ensure that they fully understood the interview guides they would be using. Role plays and a two-day pre-test in neighbouring Rachuonyo District were used to give the research assistants practical experience using the tools and to prepare them for the actual fieldwork.

Interviews were carried out in Homabay District over a ten-day period in mid-December 2001. Research assistants were paired in teams to conduct interviews, with one person being responsible for leading the interview and the other responsible for taking notes and managing recording equipment. All interviews were recorded.

Interviews were generally conducted at the respondent's home or within the family compound. Skilled attendants were interviewed in health facilities, and focus group discussions were held in community centres, churches, schools, or outdoors. Although the research team originally planned to identify cases of obstetric complications through a review of health facility records, tracking these particular individuals proved difficult because health records did not contain clients' addresses. Therefore, recent obstetric complications were identified through inquiries to TBAs and community leaders—individuals who generally could direct the research team to women/families that had recently experienced complications of interest.

[†] The CHANGE Project (Academy for Educational Development/The Manoff Group) is a USAID-funded initiative to identify, develop, and apply behaviour change tools and approaches to improve behaviours related to maternal health, child health and nutrition. In view of the two institutions mutual interest in promoting behaviour change in the area of maternal health, FCI and CHANGE collaborated in developing the initial set of research instruments and in field testing them in Homabay District. Based on the initial data collection experience, FCI then revised the tools and continued the survey in Migori District.

Following the completion of interviews in Homabay, taped interviews were transcribed into Dholuo and translated into English so that the quality and depth of data gathered could be reviewed. In addition, the transcribed transcripts illuminated specific areas of the research instruments that were problematic for interviewers and interviewees alike. Based on a review of the Homabay data, the interview guides were revised a second time, and a two-day refresher training was conducted for the 20 best-performing research assistants. Drawing on specific examples from the first round of interviews in Homabay, the refresher training provided an opportunity to clarify for the research assistants key concepts of interest (e.g. terms such as birth preparedness, early postpartum care, etc.), and to further strengthen the team's skills in probing during interviews. Following the refresher training, data collection was carried out in Migori District over a two-week period (March 14 – 25, 2002).

Table 1. Number and type of interviews conducted in Homabay and Migori District

INTERVIEW SOURCE (category of informant)	FGD/GROUP INTERVIEWS	IN-DEPTH INTERVIEWS
Women of reproductive age	10	27
Elder female family influentials	2	10
Husbands/Male partners	6	11
Traditional birth attendants	12	12
Complications narratives [‡]	16	15
Skilled attendants/Facilities	0	18
Community leaders	14	0
Total No. Interviews	60	93

In the two districts, a total of 153 interviews were conducted, including 93 in-depth interviews and 60 focus group discussions or group interviews (see Table 1). In total, 90 interviews were conducted in Homabay District and 63 interviews were performed in Migori.[§]

E. Data Analysis

To facilitate data analysis, a detailed thematic codebook was developed by the research team. All interviews were coded independently, double-checked, and then typed. This method facilitated comparisons between and among types of interviews for particular themes. It also enabled the research team to make qualitative comparisons, comparing volumes of texts coded by a particular theme or sub-themes.

Data analysis focused on the following themes: antenatal care, preparations for delivery and family decision-making; care during delivery; complications during late pregnancy, labour/delivery, and early postpartum period; care-seeking logistics and costs; the availability of emergency obstetric care; early postpartum care; barriers to service delivery; and information channels. These themes were considered important because they give essential insights for improving, expanding, or adapting maternity services and making them more accessible and acceptable to the communities under study.

[‡] The 31 complications narratives conducted (16 group interviews and 15 in-depth interviews) concerned 23 obstetric complications.

[§] A smaller number of respondents was sampled in Migori District because the research coordinators concluded that a smaller sample was sufficient, and additional interviews were generally reinforcing data already collected, rather than adding new perspectives and insights.

One challenge encountered in data analysis was the fact that research assistants did not consistently collect background data on respondents (e.g. age, parity, education, ethnicity, religion, distance to a health facility, etc.) during the initial data collection phase in Homabay District. While this issue was addressed during the refresher training for research assistants and corrected in the subsequent data collection phase in Migori District, it made it difficult to draw conclusions about how the behaviours of various respondent categories may be influenced by their age, socio-economic status, parity and other factors.

IV. RESEARCH FINDINGS

A. Antenatal Care

Relative to national antenatal coverage rates in Kenya (estimated at 92%), use of antenatal care is low in Homabay and Migori Districts, estimated at 69% and 60%, respectively.¹⁸ Many women first seek antenatal care during late pregnancy, and almost half have only one visit during the antenatal period.¹⁹

The study revealed that most women in the two districts seek care from both facility- and community-based providers during the antenatal period. One male partner in Homabay explained: “We have native and modern drugs. We have to be ready with treatment on both sides.” It appeared that only a minority of women receive antenatal care exclusively from skilled attendants (such as doctors, midwives, nurses, and clinicians) at district hospitals, health centres, dispensaries, or private clinics.

Most study participants viewed women’s general health status as poor, and associated this with higher risks of complications during pregnancy and delivery. While respondents generally believed that pregnancy is not a disease, they also said that expectant mothers need constant monitoring and evaluation in order to identify and address health problems that could interfere with the pregnancy or result in suffering or death. The respondents stated that using a mix of formal health providers and traditional providers (e.g. TBAs and herbalists) was the best way to access an arsenal of complementary medical and herbal treatments that were perceived as being most powerful and effective in preventing complications.

Conversely, a few study participants asserted that pregnancy and childbirth do not require any special care or attention, or that women’s health and well-being during this period are entirely up to God. Even among women who had previously experienced pregnancy complications (and to a large extent their partners), some assumed that future deliveries would be normal, and they therefore did not seek hospital-based antenatal care.

Aside from care-seeking, most study participants cited various precautionary measures that pregnant woman should take to ensure better overall health. Directives on eating well, reducing workloads, and avoiding sexual relations were widespread in the communities.

“A pregnant woman should avoid tedious work like carrying heavy load and digging. About the baby who is about to be born, she should not have sexual intercourse with the husband. She should eat well. Eat oranges and other fruits.” (Woman, Migori)

While study participants asserted that women should not overwork themselves during pregnancy, they observed that in practice, most women continue to work in the fields, carry water, collect firewood, etc. throughout their pregnancies, and many only stop performing these tasks when labour begins. Study participants also cited cases of women who continued working even after the onset of labour. As one woman commented about her mother: “She works up to the last minute and after a short while you hear the baby crying as if she was in the bedroom.” Another woman in Homabay recounted: “But the woman continued doing her work and went to fetch vegetables. She was now not wearing her [under]pant. The water or amniotic fluid was drizzling. We tried to take her to hospital, but she just continued working, lamenting that mine is this way. She was still courageous.”

i. Facility-Based Antenatal Care

Study participants cited a range of reasons for attending facility-based antenatal care. Some women initially seek formal antenatal care to determine whether they are pregnant, or whether their missed menstrual period may have been caused by something else, such as a serious illness or excessive emotional strain. Another motivator to seek care is “morning sickness,” especially if nausea and vomiting are severe.

Knowing when a woman is due to deliver is also considered important, and there was general consensus that attending antenatal care at the health facility will enable the woman to know the probable date of delivery and in turn, prepare adequately for the arrival of the baby. As a woman in Homabay commented:

“ANC is good, because you are told when you will deliver then this makes you to prepare. It gives you time for proper preparations of delivery (*inyisi chieng ma inyuolie gi chien ma ibiro nyuole kasto miyi iikori, ibet gi thuolo mar ikruok maber*).” (Woman with obstetric complications)

Many study participants expressed considerable faith in the ability of facility-based staff to provide care during pregnancy, and they recognised the importance of a number of antenatal care functions, including health workers’ ability to detect and manage complications, treat endemic diseases such as malaria and sexually transmitted infections (STIs), and provide confidential counselling and testing for HIV. Vaccinations and injections were perceived as particularly important elements of care.

“The hospital can give you particular medicines or inject you with a particular injection that will relieve your body and make you feel much better.” (Woman with obstetric complications, Homabay)

“It helps you know how you are with your pregnancy. When you are going to the clinic at the right time, if you are sick, you can be attended to, any abnormality can be detected, the blood capacity in the body can be measured, if less you can be issued with drugs for you to improve and also be advised on nutrition. You are told these things at the clinic.” (Woman with obstetric complications, Migori)

Most study participants also recognized that facility-based antenatal care providers could detect a range of pregnancy-related problems, including breech birth and malpresentation (frequently referred to as “when the baby is lying dangerously across the uterus”), anaemia, and threatened miscarriage, as well as malaria and STIs. Finding out “how the baby is lying in the womb” appeared to be one of the strongest motivators for women to attend antenatal care.

Obtaining a Mother’s Card (antenatal card) was also cited as a reason to attend facility-based antenatal care. The Mother’s Card is seen by some as a “ticket” to skilled care during delivery because without it, women who present for delivery care or for treatment for obstetric complications may be turned away from the facility or subjected to scolding and abuse by facility-based staff. Generally, more TBAs mentioned the importance of getting an antenatal card than did other categories of respondents, and a few TBAs noted that they ask women to obtain an antenatal card before seeking their services so that they can be sure that the woman is unlikely to have any complication.

“Most of them go to the hospital after three months of their conception because nowadays there are problems (*sani piny rach*) during delivery. After they have got their ANC card they come to us.” (TBA, Migori)

“When a woman comes to me for care (to be examined) I tell her: ‘No, I don’t examine women. Go to hospital and come to me with ANC card’ to be sure she doesn’t have any problems. So I examine her but I tell her that on her delivery day, she goes to a facility. I also tell her to keep going for her ANC.” (TBA, Migori)

Women with a history of miscarriage/pregnancy loss were reportedly more likely to seek antenatal care, and skilled attendants in both districts observed that these women come as soon as they recognize they are pregnant.

“If she has been having problems before, she will start going to hospital early. I mean immediately she detects that she is pregnant. It depends the way they are getting money and the problems she has been having.” (Skilled attendant, Migori)

“She will attend antenatal care immediately she senses that she is pregnant again. She will start preparing for antenatal care without wasting time because she does not want to lose that child as she been doing again and again.” (Skilled attendant, Homabay)

In contrast, the study suggested that women who have previously had normal or “easy” deliveries are less motivated to attend antenatal care because they feel “safe” and are confident that everything will be fine. As reported by skilled attendants and elderly female family informants, these women generally do not go to hospital at all or attend antenatal clinic very late—sometimes in their last trimester of pregnancy or when labour begins.

“They feel safe enough and do not want to bother with those services because they feel they are just ok.” (Female elder, Homabay)

While most study participants appeared to value facility-based antenatal care, women do not regularly attend services, and the timing and frequency of antenatal visits appear to be sporadic and irregular. Community members cited a range of barriers that limit women’s use of facility-based antenatal care, including distance, lack of transportation, and the costs involved (both financial expenditures on services and prescribed drugs, and opportunity costs). Cost appeared to be the most serious barrier, and the fees for treatment of problems such as malaria and STIs were perceived as exorbitant by the communities surveyed.

“It is only that it is expensive. We have money problem. Money makes them a bit sluggish in their reaction.” (Partner, Homabay)

“My wife can use both skilled attendants and TBA. Only money keeps women away from getting skilled care. In total, it’s money.” (Partner, Migori)

Financial support from husbands appeared to play an important role in attending antenatal care. One woman in Migori reported that she and her husband had saved funds specifically for attending antenatal care, which allowed her to access services more regularly than many women.

In addition to financial barriers, cultural, psychological, and work-related factors may discourage regular use of antenatal care. Many study respondents (Female elders, women, partners, community leaders, and TBAs) cited “laxity”—namely carelessness, laziness, fatigue, and fatalistic attitudes as a reason why women do not seek medical care. It was noted that women’s heavy domestic workload, combined with their poor overall health and the challenges of getting to a facility where services are provided, cause pregnant women to feel too exhausted to seek antenatal care at appropriate junctures, even when they are experiencing problems. Study participants noted that some women

simply resign themselves to fate and console themselves with their religious faith: “with pregnancy, God alone will take care.”

ii. Community-Based Antenatal Services

As noted above, most women perceived antenatal care services available from facility- and community-based providers to be complementary, and they generally sought both types of care. As one female elder in Homabay commented, “Duality can persuade her to go to hospital and take traditional medicine.” Similarly, a skilled attendant, acknowledging women’s use of both types of care, reported that she generally tried to encourage women to use facility-based care by presenting it complementary to TBAs’ services.

“During pregnancy, these women go to TBAs to get traditional treatment of some diseases. They say TBAs are good in this and that. So we just let them go to TBAs but we try to encourage them to come to hospital as well. We tell them this because there is no way TBAs can predict these diseases, it is important that all pregnant mothers come to the hospital for early detection of problems before it is too late.” (Skilled attendant, Migori)

Study participants—particularly skilled attendants and a few TBAs—observed that the symptoms or problems women experience during pregnancy usually determined what type of provider they go to for care and advice. For example, women were generally more likely to seek facility-based care if they experienced unexplained bleeding, severe pain, haemorrhage or spontaneous abortion, pelvic inflammatory disease, or anaemia. In contrast, if a woman believed she was suffering from witchcraft or certain problems understood locally as infections called *rariw* or *ojiwo* (see Section IV. Obstetric Complications), she was more likely to seek a traditional healer, such as a TBA, because facility-based staff are perceived as unable to treat such problems. In other words, skilled caregivers were perceived to be better equipped and trained to provide specialized treatment for problems perceived as medical in nature, whereas community-based providers were perceived as having unique expertise in managing problems that fall outside the realm of western medicine.

“I had severe lower abdominal pains. When you go to the hospital, you are examined and the cause of the pain is never diagnosed. At times they think that it is the placenta that is causing the pain (*jachien emaremo*). In the long run, they tell you they cannot manage that condition and this makes a person to decide and go to a traditional treatment (*thieth kanyaluo*).” (Woman with obstetric complications, Migori)

Some community members perceived TBAs as capable of detecting and managing certain medical problems during pregnancy, such as breech presentation or a baby “lying dangerously across” the uterus. They described TBAs massaging or manipulating the uterus to “to make it soft” so that the baby can turn into the normal position and be delivered safely. This was felt to be an effective way to avert obstructed labour or breech presentation, which may result in uterine rupture or other complications.

“Yes, they come to me when they are pregnant because they usually have some problems with the lower abdominal pains (*piny ich maremo*). So they call me and I come to massage the tummy to make the uterus soft (*loso mifukogi obed mayom*) and change the baby's position.” (TBA, Migori)

“Yes, TBAs can change the position of the baby and better still there are some TBAs who can know the position of the baby by doing a check-up on the mother. Some TBAs even if they are trained have some natural healing powers.” (Female elder, Migori)

Almost all community members perceived TBAs' herbal medicines as important during pregnancy, and many perceived their "pot medicines" (herbs boiled in a pot) to be essential for maternal health and well-being. As one male partner commented, "There are herbs given according to the stages of pregnancy." Similarly, a woman asserted, "It is required that women take traditional herbs." Some herbal medicines are licked, others are drunk, and still others are used during massage, especially when breech pregnancy is suspected. Most community members appeared to perceive these "pot medicines" as effective in managing infections, such as STIs, *rariw*, and *ojiwo*, as well as foetal malpresentation. In addition, they were perceived as effective in helping women feel better during pregnancy, and addressing their overall poor health.

"TBAs? I go to them because sometimes I feel my thigh is heavy and cannot even walk. When I feel the foetus is very heavy in my stomach, when I go to the TBAs, they give an herbal medicine. Touch the position of the baby. If not good, then, the baby is repositioned correctly. After taking herbal medicine, I normally get a change. I go to the clinic and to the TBA." (Woman with obstetric complications, Homabay)

"Good things which make women use TBAs are the herbs which we provide to make them feel lighter. Some women become heavy when pregnant, so these herbs make them to be lighter." (Community elder, Homabay)

TBAs, herbalists, and healers are also consulted to ward off witchcraft and evil spirits, which are thought to cause "troublesome" pregnancies. Typically, these community-based providers offer charms and other herbal medicines to protect women from malicious spells. Using "Luo medicine" (*yadh nyaluo* or *yadh agulu*), providers are able to treat complications and also ward off any evil spirits (*yamo maricho*) believed to be lurking in the air intending to "destroy" the pregnancy or "hurt" the mother. Expectant mothers are warned to be careful with the food they eat in other peoples' houses or the way they mingle with others as this may expose them to ill-intentioned people who want to bewitch them.

Not only are TBAs valued for their "pot medicines," but they are also perceived as an important source of advice and counselling during pregnancy. Much of their counselling on self care during pregnancy is similar to that provided by facility-based staff, aimed at encouraging women to reduce their workload, avoid physical strain and injury, and eat a balanced and nutritious diet.

"When they are pregnant, they are advised to eat balanced diet so that during delivery they can remain with enough blood and also the baby feeds well in the womb. What women should do are very many. We tell them not to carry heavy loads on their head because this pulls the womb down (*ywayo ofuko piny*)." (TBA, Homabay)

"If a person does not eat well she will grow thin. And if she does not eat the right food, she will grow thinner and also have problems with delivery. She will give birth to a premature child (*bogno*)." (TBA, Migori)

Study participants indicated that TBAs also help identify other factors that may contribute to miscarriage, premature delivery, or suffering, and they advise women about relationships and stress. For example, TBAs offer advice to women about their relationships with their husbands, urging them to avoid sexual intercourse during pregnancy, but at the same time encouraging the couple to be close, intimate, and harmonious. TBAs caution women against stress and anxiety, arguing that they prevent proper circulation of blood and cause the body to function poorly. TBAs were also reported to give advice and treatment to male partners who are ready to come forward for treatment of STIs.

As with facility-based providers, women's visits to TBAs and other community-based providers for antenatal care are irregular and sporadic. Generally, it appeared that women visit TBAs whenever they feel the need for consultation, treatment, a re-supply of herbal remedies, or an update on the progress of the pregnancy. Study participants described TBAs as friendly, patient, caring, and supportive, indicating that their relationship is generally warm, comfortable, and easy. Women appeared to appreciate TBAs' willingness to listen and talk with their clients in a friendly and supportive way—in stark contrast with facility-based providers who were frequently described as harsh, cruel, abusive, and impatient.

B. Care for Normal Childbirth

The majority of women in the districts surveyed deliver outside health facilities. Most of the deliveries that take place in the community occur at home and are attended by family members or a TBA, or at the house of a TBA.

The study explored a range of factors that influence women's preferences and practices related to delivery care, including the extent of dialogue and discussion within the household about pregnancy and delivery, decision-making patterns, and attitudes and practices related to preparing for delivery. In addition, the study explored community members' perceptions about the quality of delivery care offered by both community-based providers and the formal health system.

As described below, the study findings reveal an interesting paradox about women's care-seeking behaviours during pregnancy and childbirth. On the one hand, almost all community members value the compassionate care provided by TBAs, yet at the same time, most perceive health facilities as providing superior clinical care and being vastly better equipped to manage unexpected complications. Despite the fact that most study participants identified health facilities as the place of choice for delivery, the majority delivered with a TBA in the community, and did not even seek facility-based care unless complications arose.

i. Family Discussions and Dialogue on Pregnancy and Childbirth

Interviews with various categories of respondents indicated that in most households, pregnancy and childbirth are matters that can be freely discussed. One woman in Homabay commented: "With me I am free with every one of them [family members], there is no difficulty." Similarly, a female elder commented that women talk to "those who are closer to her, for example, the husband, or the grandmother [mother-in-law] and even grandfather [father-in-law] in case the husband is not in. She could also tell the co-wife and neighbours."

Most respondents suggested that these matters are discussed primarily between the pregnant woman and her partner. One woman noted, "Of course the person you can be free to discuss these matters is mainly your husband." Several husbands confirmed that discussions about pregnancy and delivery-related plans generally involve only the couple. One husband commented: "I'm the only one who talked to her as the husband." Another in Migori said: "Other family members, they did not say anything.... I am the only one who asked her where she wanted to deliver."

A few respondents perceived pregnancy and childbirth as private and personal—matters that should only be shared or discussed with close family members. For example, one Homabay woman commented that she would only discuss such matters with her husband or sisters with whom she was close, and that she would not engage friends or others in such discussions. "These are sensitive matters, and they should not just be spoken with anybody."

Although many respondents argued that pregnancy and childbirth are topics that married women can freely discuss, several study participants suggested that younger women, particularly unmarried adolescents, are unable to talk about these issues. Participants described adolescent girls as ashamed and embarrassed about premarital pregnancy, and a few commented that an adolescent girl is never free to discuss pregnancy with anyone except her mother, who serves as caretaker, counsellor, and sympathizer in this sensitive matter. It was noted that within the Luo culture, pre-marital pregnancy is considered a disgrace, and a pregnant adolescent may be banished from her home and sent to live with extended family members, such as an aunt or grandmother. Alternatively, the girl may be married off to an old man because she has disgraced the family.

Interviews with younger women in the study (i.e. women aged 20 to 25) generally corroborated the statements made by older respondents. Some of the younger women reported that they had had little information about pregnancy and what to expect during labour/delivery, and most indicated that they did not ask anyone for more information about these matters. In addition, some of these women appeared very uncomfortable discussing maternal health issues with interviewers. On the other hand, however, the one female adolescent participating in the study reported that she had discussed her pregnancy directly with her father.

Among the respondents who reported discussing pregnancy and childbirth, it appeared that these discussions generally centre on money and place of delivery:

“We discussed with my husband to help me better in terms of money because private hospitals are expensive. Thus it solely depends on how much you have. So I asked my husband how far he had gone with preparations, and he told me that if I'm ready for delivery, I just go to the hospital.” (Woman, Migori)

“I am telling you that we talked of financial issues most of the time during my pregnancy. I used to be sick and therefore there are some of the matters we talked about. So we could find how I could be treated.” (Woman, Migori)

“Yes, around here we discuss, but since this area is far from the hospital, we normally decide that she delivers in the house, the hospital being far from us.” (Partner, Migori)

Several female elders saw the mother-in-law as playing an important role in encouraging household discussion and dialogue on matters related to pregnancy, primarily to share their experience and knowledge on such matters. One female elder observed: “It is advice. You can converse, you can teach others.” Similarly, another commented:

“Before birth, all women, daughters-in-law included, should be advised by elder mothers who would tell them while we were of your age, we used to do this and that. One should allow questions from the young and while answering, one should say that while we were your age, we used to do this and that.” (Homabay)

At the same time, many female elders reported that their advice was not always valued or followed by the younger generation.

While most respondents reported that they talked about pregnancy and childbirth with family members, a few reported that these matters are not discussed. Of these study participants, a small number reported that taboos or traditional beliefs restricted such discussions, noting that discussing and announcing pregnancy could invite misfortune, putting the health and life of the woman and her baby at risk.

“Since giving birth is seen by Luos as a matter of life and death, and discussing about it is also seen as a taboo, we normally leave it to God. Everything is left to God's will. That is why it is difficult to discuss about it with another person.” (Partner, Migori)

“Yes, there can be [taboos] and this differs from family to family. They fear that I may talk about this, and that and somebody may do something bad about it.” (Woman, Migori)

“All these you must discuss with your wife and not any other person because you may end up being in trouble. You must just discuss with your wife to find out where she would like to deliver her baby.” (Partner, Migori)

Other respondents asserted that there were not any taboos or restrictions on discussing matters related to pregnancy or childbirth, but that they simply found these topics difficult to talk about.

“You cannot talk about delivery. The way we are talking now, it is an inward thought, you may think of it bearing in mind your income. You cannot discuss about clinics with people or friends but anyway, you may tell your friends although it is not easy to talk about. That's my feeling.” (Partner, Migori)

“I was just uncomfortable talking about these issues. What I knew was, that when time comes God will help me, and I can go to the hospital. Or I can just rush to the local TBA in this area who has been assisting me. Generally I did not talk about it. There was nothing bad, I just couldn't talk about it.” (Woman, Migori)

Another barrier to communication and discussion cited by study participants was lack of interest or openness on the part of either the woman or her husband. Some women, TBAs, and male partners described men as unconcerned or uncaring, implying that men should be more involved in discussions and decision-making related to childbirth, but generally fail to take responsibility.

“Some husbands do not care about the health of their pregnant women well because they think it is not their responsibility.” (TBA, Migori)

“There isn't much men can do, some men don't care about knowing where their wives are going to deliver while others would like to know (*dwaro ngeyo*) or make preparations for her delivery (*losone plan*).” (Woman, Migori)

In contrast, many men argued that women are often reluctant to discuss such matters, even with their husbands. These men expressed high levels of interest and concern about pregnancy, but noted that sometimes women are unwilling to inform their husbands that they are pregnant. They observed that it was important for a husband to sit down and question his wife thoroughly so that he could know how she was feeling and what problems she was having.

“We asked them about what is happening. This normally takes place if a wife is constantly vomiting every morning but does not want to say what is happening.” (Partner, Homabay)

“How do men find out? Only when the women tell them. You wish you knew more for this is a woman you live with. You should know how she is. What is troubling her.” (Partner, Homabay)

“You should ask her more questions because if you don't she can tell you shallowly, without details.” (Partner, Homabay)

“You would have to take time with her to explain to you how she is feeling, for she knows herself best.” (Partner, Migori)

ii. Family Decision-Making on Place of Delivery

Study respondents offered mixed and conflicting views about who, within the family, is the chief decision-maker about care during pregnancy and childbirth. Some study participants—women and TBAs, as well as men—asserted that men are the primary decision-makers. “If it’s a married woman, then it’s the husband because he is the head of the house,” said one TBA in Migori. Similarly, another argued, “It is the husband to decide which hospital to take his wife for delivery.”

Others suggested, however, that husbands rarely make unilateral decisions about such matters. Instead, these decisions tend to involve the woman herself or the mother-in-law. Among men who considered themselves to be the decision-maker on such matters, most acknowledged the importance of consulting or involving their wives in these decisions. “Yes you must consult with the patient herself,” said one male partner in Migori. Another commented, “The husband has the authority over his wife. Even his mother or father should not get involved in challenging the decisions unless he has allowed them.” Yet he went on to explain that even if his wife made a decision on her own to deliver at the hospital, without her family knowing, she would be free to do so, and “that cannot be a problem. You are actually grateful.” Similarly, a woman in Migori commented, “You may refuse to go where your husband decides, depending on how you are. For example, he may decide to take you to a TBA, and then you refuse and tell him that ‘I am going to the hospital. If not I will just deliver here in the house.’ Then he will give in and take you to the hospital.”

A few study participants indicated that it is the mother-in-law who plays the predominant role in decision-making about childbirth. As noted above, female elders saw themselves as an important source of advice and information on matters related to pregnancy and childbirth, and they generally advise younger women on self-care during pregnancy and provide herbal treatment for illnesses during this period. A number of study participants argued that the mother-in-law “rules” the house, including the houses of her married sons. “She is highly respected, and her word is law,” stressed a TBA in Homabay. Participants described the mother-in-law as “powerful,” “influential,” and to a certain degree “domineering”. Referred to as grandmother (*dani*), she was described by some as controlling her son's household and overruling him and his wife in matters of pregnancy and childbirth.

“[My wife] told me to take her where she should deliver, but my mother told me to go and call the TBA.” (Partner, Migori)

“I went to the clinic in Shirati where I was advised to go and deliver in the hospital when I’m due. My husband agreed with that idea... and he told me to go to the hospital when I’m due for delivery. It was my mother-in-law who decided that I should just deliver at home... My mother-in-law said that there was no need for me to go to the hospital. She urged me to be patient and wait for labour and deliver at home.” (Woman, Migori)

In contrast, some study participants identified the woman herself as the main decision-maker. “I normally decide on my own whether to go to a TBA, whether to deliver here in the house, or whether to go to hospital. Other family members rarely discuss the issue,” reported one woman in Migori. Similarly, a male partner in Homabay commented, “I don’t decide for my wife what to do if she is pregnant. She knows herself what to do.” Another in Migori said simply, “I asked her, and she told me that she will go and deliver in the hospital.”

While the majority of community respondents reported that pregnancy and childbirth could be discussed, many also indicated they do not make any decisions about where the delivery will take place. One of the primary reasons for not making such decisions appeared to be the fact that the

onset of labour is unpredictable. Some respondents argued that it was impossible or futile to make advanced decisions about something that could not be accurately forecast.

“I was just comfortable [discussing these issues], but I didn’t know when I would deliver.” (Woman, Migori)

“Decisions about birth are made when labour begins, when you are just about to give birth, or even after you have given.” (Woman, Homabay)

“The decisions are made when you have started your labour pains during birth.” (Woman, Homabay)

“No, we didn’t participate in any decision-making. This is because as I told you that it is the will of God where a woman could deliver. I am saying this because labour is unpredicted, it could start a woman any time even in the middle of the night. So when it suddenly starts at any time you will just go to a nearby place to get help. For example a nearby TBA. Like me when it started I went to get some herbs from my mother. It was night time, and she didn’t know what was happening so I decided just to go [to the TBA] and when I reached there I delivered there.” (Woman, Migori)

“Labour may start at night and you cannot carry her on your head (*Dang igange nyaganglo ganglo e wiyi*) to hospital, so you say that even if it is death let her just die here (*kotho ka to otho athoya*) although we earlier on decided she will deliver in a hospital.” (Partner, Migori)

For these individuals it appeared that the time of day when labour began was the crucial factor that shaped their decisions about place of delivery. If labour began at night, then a TBA would attend to the woman since there was no way to reach a health facility. Conversely, if labour began during the day, facility-based care might be sought. As one female elder in Homabay explained, “The birth may come at a good time, like early in the morning, and all day the people will think of taking her to the hospital.” In view of the difficulty of planning for unpredictable events, many community members perceive pregnancy outcomes as predetermined by God, and therefore not matters for individuals to decide.

“No, my husband just left everything in the hands of God. So we decided that if it was God’s will to deliver in TBAs place it would be that place. If it was the hospital it would be the hospital. So we left everything in the hands of God.” (Woman, Migori)

iii. Preparations During Pregnancy

Most study participants viewed preparations for childbirth and delivery to consist of either saving money or purchasing items for the baby, such as clothing, towels, blankets, soap, napkins (diapers), cotton wool, etc. Generally, a large number of respondents—men, women, female elders, and TBAs alike—mentioned the importance of putting money aside, arguing that it was mainly the responsibility of the husband who would either set aside money if he had a salary or request an advance from his employer. Alternatively, he would buy or sell goods in order to ensure that the family had either an asset or cash on hand at the time of delivery.

“Money is required, and the husband is required to provide money.” (TBA, Homabay)

“Any special preparation for birth? Yes, this is obvious because we want to secure the life of the mother and unborn child. You must keep money ready.” (Partner, Homabay)

“Prepare by saving money for any eventuality.” (Partner, Homabay)

“Anything can happen so one should have small savings.” (Partner, Homabay)

“Prepare here means money because at all stages money is important.” (Female elder, Homabay)

“The only thing you can do is keep the money so that even if a delivery comes with a complication, you can be easily helped.” (Woman, Migori)

While most study participants asserted that it was the husband’s responsibility to save money, several women noted that they put aside money themselves, or that they engaged in income-generating activities (selling agricultural produce, livestock, etc.) in order to ensure that they had funds on hand at delivery.

“I can also save money in the account for emergency. My husband would also save some, but does not tell me because that is his obligation.” (Woman, Homabay)

“I keep on going out to places like Kisii and Rongo to purchase bananas, pineapples that I used to sell. I did not just sit down now that I am pregnant.” (Woman, Migori)

“I made sure I had money in hand because I wasn't sure of how I would deliver because the pregnancy had been a problem to me for a long time.” (Woman, Migori)

“I usually prepare beans so that when my time nears for birth, I can sell them and they can help me go to the hospital at the onset of labour.” (Woman, Homabay)

Interestingly, a few study participants appeared to view advance savings as resources not to be used for covering delivery costs, but rather to pay for items for the baby once it is born. One woman in Migori commented, “I had saved. It’s rare for one not to have money, but not that I kept the amount to use during childbirth. Really the amount helped me after delivery.” Similarly, another said, “There are other things of mine which I prepare for sale to enable me to make any purchases.”

While most mentioned savings as an important preparation for birth, many viewed other preparations, such as buying a layette and purchasing other items for the baby, to be problematic. The primary reason given by men and women alike was that you cannot prepare for something that is unpredictable, unknown, or determined by God. “You cannot prepare for something you have not seen,” argued one woman in Homabay. Another woman in Migori commented: “It is only after you have delivered is when you can buy baby layette. But when I have not delivered, there is nothing that I buy.”

Some older respondents also believed that it was inadvisable to purchase items for the baby before it is born. They commented that if towels, napkins and other baby things are purchased in advance, the family will not know what to do with the items if the baby dies at birth. In addition, some saw such preparations as inviting misfortune.

“It just cultural beliefs, most people don't want to outgrow these old beliefs, so maybe in their families they believe so and so has been killing my children or that it brings bad omen. Because when you have prepared things and when you go to hospital the baby dies you will not know what to do with the things you have bought. Some people will take all they have prepared and bury the child with them. So they don't like doing it in advance. They'd rather buy when they have already seen the baby.” (Skilled attendant, Migori)

“The clan does not accept the preparation because of superstition.” (Woman, Homabay)

“When one is pregnant, the only arrangement you can make is to have money. You cannot buy clothes that the baby will put on.” (Woman, Migori)

“Some say they don’t prepare because they can’t tell whether you could have a dead or living baby at childbirth.” (Woman, Homabay)

Despite the fact that purchasing items for the baby before it is born is generally seen as inadvisable in the communities surveyed, staff at local health facilities indicated that their counselling on birth preparedness is primarily focused on preparing items for the baby, rather than saving money or developing a plan for reaching a health facility when labour begins. Skilled attendants described advising women to sew clothes and blankets for the baby, and to purchase various items, such as soap and basins for bathing the infant, napkins, soft towels, etc. Relatively few skilled attendants reported advising women to purchase items needed during delivery, such as gloves or cotton wool, and almost none mentioned counselling women on saving money. Thus, it appeared that while health providers try to assist women in preparing for delivery, their counselling efforts currently focus on preparations that are not culturally acceptable in the surrounding communities.

iv. Attitudes Toward Delivery Care Provided by TBAs

In Homabay and Migori, TBAs were described by most community members as indispensable promoters of maternal and child health, and were fondly referred to as “my midwife” (*nyamrecha*). Study participants appreciated TBAs for the fact that their services are affordable, friendly, and easily accessible. Many respondents described TBAs as dedicated and committed to helping expectant mothers, and one female elder in Homabay referred to them as “lovers of mankind.”

“Women like TBAs because they don’t bite them, cheap and social.” (Skilled attendant, Homabay)

“A TBA can sympathise with you so you pay a small fee, and the difference you pay later.” (Woman, Homabay)

“They can sympathise with you so that you pay less.” (Female elder, Migori)

“Oh we should not be parted with the TBAs because they are doing a great job.... What helps them is that they are dedicated to their duties.” (Community elder, Homabay)

One male partner in Homabay described TBAs as “of the community, by the community, for the community,”—a key factor that makes them accessible. There are no transport costs to women who use their services. In addition, their fees are relatively low—on average Ksh. 300 to Ksh. 700 for delivery**—and some TBAs either offer services free of charge, accept in-kind payments, or are willing to “deliver now and pay later”. TBAs can also be called upon for assistance in the middle of the night. A few study participants, however, reported that TBAs can charge much higher fees—as high as Ksh. 1,000 to 2,000, which far exceeds the amount charged at health facilities for normal delivery.†† These respondents commented that some TBAs charge more for using herbs, and that they sometimes exploit women who come to them.

In their appraisals of the care provided by TBAs, most study participants voiced particular appreciation of TBAs’ kind and compassionate care, which they contrasted starkly with that provided by facility-based providers.

** Approximately US\$4.00 to \$9.00.

†† Approximately US\$13.00 – 24.00.

“The TBA is so kind and loving and knows them on personal level, addresses them with their names, reassures them not to worry all through. At hospital, nobody knows you. They are reminded that those people there they are not the one who impregnated her, at times they are slapped and that is why some women prefer TBAs.” (Female elder, Homabay)

“Women prefer to giving birth at the TBAs because they are not mistreated. Because you don't need transport. They deliver you at home, and you are not mishandled like they do in hospitals.” (Partner, Homabay)

“Giving birth at home is easier because you will get a good TBA who will take good care of you unlike the hospital where this is rare. TBAs are cheaper than hospitals.” (Female elder, Homabay)

Community respondents described various aspects of TBAs' care during delivery that they considered important. TBAs are seen as gentle, supportive, and emotionally reassuring. As a woman in Homabay described, “They touch your stomach and ask you how you are feeling.” Others described TBAs making tea, massaging the woman's back, and even taking her children to be cared for by neighbours during delivery. Women also commented that TBAs talk with their clients in a friendly way, listen to them attentively, and intimately know their clients' histories. In addition, they noted that TBAs interact positively with worried husbands and family members.

One TBA described her approach to caring for women during delivery:

“I'll make her feel comfortable by encouraging her to have no fear. Encourage her not to cry. ... I'll encourage her to feel free and faithful. ... When she is about to deliver, I'll comfort her and advise her with loving/soothing words and make her lie properly. ... I'll soothe her so that she may not have a tear.” (Migori)

While almost all study participants valued the interpersonal aspects of TBAs' care, considerably fewer perceived them as providing the best medical care during delivery. Those who did, however, perceived TBAs as having extensive expertise in conducting deliveries and a range of powerful herbal remedies (“pot medicines”) for managing various complications. For example, some respondents commented that TBAs make delivery easy and fast through their use of herbs, as well as pilsner or alcohol, which help the baby “slide” out of the uterus. Others said that the TBAs' “pot medicines” helped cure the newborn of any infections. As a female elder in Migori explained, “If she drinks herbs, then, she will deliver a baby that is not infected (*ka dende ok opudhore*).” These community members voiced strong faith in TBAs' capacity to manage major obstetric complications, such as haemorrhage, anaemia, hypertension, obstructed labour, retained placenta, and other serious conditions that are thought to affect women during pregnancy and delivery.

“If you deliver with a TBA and the problem starts i.e. bleeding starts, she knows her herbs, which she will go for and the bleeding stops. But if you deliver in your own house and bleeding starts, someone will call the TBA to bring her herbs so as to stop the bleeding.” (Woman, Homabay)

“Yes, she can change the position of the baby, and better still there are some TBAs who can know the position of the baby by doing a check-up on the mother. Some TBAs even if they are trained have natural healing powers.” (Woman, Homabay)

“Obstructed labour is caused by a disease. The baby was not descending down, but the labor pains were quite strong and speedy. So the TBA can assist.” (Woman with obstetric complications, Homabay)

Most respondents, however, were more qualified in their appraisals of TBAs' skills and knowledge. As one religious leader commented, "TBAs are not bad and there are some ailments that they can treat, but this does not necessarily mean that we place them high above skilled care attendants." Various categories of respondents challenged TBAs' competence more stridently, referring to them as "quacks" and maintaining that TBAs contribute to women's problems during childbirth and delivery. As a female elder in Migori explained, "different TBAs can give you different interpretations to one single problem while at the health facility you never get any other interpretation apart from one." Similarly, a female elder in Homabay asserted, "Some are difficult and do not necessarily respond promptly to women's emergencies because they want to use their herbs first." TBAs' traditional "pot medicines" used to treat diseases or prepare and "tighten" the uterus ("so the baby won't fall out") were regarded by some study participants as either ineffective or poisonous.

These study participants also complained about TBAs' unhygienic practices during deliveries. Several respondents, including a TBA, maintained that some TBAs use dirty and unsafe equipment that can cause infection. They described harmful practices, such as using sisal string to cut the umbilical cord, pushing herbs in the vagina to speed up delivery, massaging the uterus or injecting the client with unknown substances.

"They cut the umbilical cord using sisal (*tuoro*) or they cut using sugarcane peel (*opila niang*) and the baby can get tetanus." (TBA, Migori)

"TBAs... well, TBAs don't have that general cleanliness that a woman needs. They use the tools more than once." (Partner, Homabay)

"TBAs, they are dirty, like the cleanliness was not observed, in fact I could not even eat her food because it was not hygienically prepared." (Woman, Homabay)

Skilled attendants categorically condemned TBAs, asserting that they cause life-threatening situations with their use of herbs, their inability to recognise complications, and their tendency to delay women from seeking skilled care at facilities.

"They do delay mothers because... they say 'Keep on going. You will be alright. You will be alright.' So I think what they do is they delay the mothers so much for maybe they will not understand this is a complication which is arising." (Skilled attendant, Homabay)

"The TBAs don't refer but even if they try to refer they only refer at the last minute. The patient ends up dying. They don't know. They wait a long time to wait for the baby to come out. They wait until death or until the family takes action themselves." (Skilled attendant, Homabay)

"Someone may go to deliver, but the delivery comes with a complication (*nyuolne obiro marach*) baby coming with hands or legs first. So if she had gone to a TBA, she cannot be helped." (Skilled attendant, Migori)

v. Attitudes Towards Delivery Care at Health Facilities

Although the majority of women use TBAs for delivery care, most study participants identified the hospital and skilled attendants as their preferred source of delivery care. As noted above, the majority of community members expressed strong appreciation for the interpersonal and compassionate dimensions of TBAs' care. At the same time, however, they expressed a preference for hospital delivery care, primarily because unexpected complications could be better managed. Many participants, including several TBAs, recognized facility-based providers as more highly

trained and equipped to treat various diseases and health problems and to manage complications. They equated hospital care with professional care and safety, for both mother and infant.

“Because the hospital knows and test diseases that affect women, and the doctor knows about them. The client is assessed, and the doctor is qualified.” (Female elder, Migori)

“Doctors are ready with their gadgets for such problems.” (Female elder, Homabay)

“One will be assisted no matter how complicated the birth. When there is no other way, they provide operations.” (TBA, Homabay)

“You never know. Delivery with complications one may get anywhere. Being in hospital is far much better. When you get bleeding problem you get injections, and if poor appetite, you get vitamin injections. So in my view the hospital is better.” (Female elder, Homabay)

“The goodness in hospital is because she’s vaccinated immediately she delivered. The baby is examined immediately. If she has less blood, she is added. In case she needs any help she gets it then and there.” (TBA, Homabay)

“In the hospital, if you have less blood, you will be added more blood. If the person has less body fluids, she will be added, and if you develop any other disease, it will be managed.” (Female elder, Homabay)

A few study respondents suggested that delivering in a hospital not only meant better care by providers, but it also resulted in better treatment and love from family members. They observed that people may bring clothes or other things for the newborn when a woman delivers in the hospital.

“In my home, we prefer hospital because of the care, but also because when you go to the hospital to deliver you are brought new things for the baby, whereas in the home you are asked to use old napkins (diapers) that you used on your other babies. So the love showed when you deliver in the hospital is higher than when at home.” (Woman, Homabay)

“What I can see in giving birth in hospital is when a woman gives birth there, they are taken care of very well. Even they can get things like towels and other things for baby. They can dress the baby nicely, so the hospital is better, and in cleanliness also the hospital is better.” (Community elder, Homabay)

While study participants almost universally agreed that hospitals were the best source of medical care during delivery, they also identified a range of factors that prevent women from using facility-based delivery care—barriers at facility and community levels that are grounded in both reality and inaccurate perceptions.

a. Perceptions about the capacity of the health system:

Study participants expressed strong reservations about the quality of care available, noting that facilities often lack competent staff, as well as the necessary equipment, supplies, and medicines.

“They don’t have tools.” (Woman with obstetric complications, Migori)

“No general cleanliness.” (Partner, Homabay)

Additionally, participants observed that it can be difficult to locate a skilled attendant at the health facility when one needs information and treatment. They added that there are usually too few skilled attendants to provide effective services, especially when women present with complications.

b. Concerns about the attitudes of and treatment by facility-based staff

While some study participants described positive interactions with facility-based health staff, many characterised them as neglectful at best, and at worst as emotionally and physically abusive. These respondents described nurses/midwives as cruel, impatient, unsympathetic, and insulting, and several commented that nurses tell maternity patients that their discomfort is “self-inflicted” (i.e. that women inflict pregnancy upon themselves). For many, such treatment, or reports of such treatment, served as a strong deterrent against seeking skilled care during delivery.

“Sometimes I sit with women and hear how they discuss; there is a particular female nurse in Migori that is very rough to women. Female nurses keep on telling them that they were not present when they were having the pregnancy.” (Partner, Migori)

“At times the language used by the health workers is not good. I witnessed a case in which one of them told the woman, ‘I was not there when you were getting pregnant.’ Such words are not kind.... The shyness comes from the insults they overhear the nurses tell other patients.” (Community leader, Homabay)

“And also there are times when women cannot access those health facilities even if they are near, because of the attitude of the skilled care providers towards them. This has been necessitated by the kind of speech directed at the patients like insults would drive away women to those who treat them with dignity and respect. Such treatment makes mothers fearful of seeking care at health facilities.” (Community elder, Migori)

“Nurses are very rude and mistreat people [...] nurses give substandard treatment at the hospital while the TBA handles you soothingly.” (Woman, Homabay)

“The nurse talked to me in a bad way.” (Woman with obstetric complications, Homabay)

“[Female skilled attendants] are normally cruel.... They nag patients.” (Woman, Homabay)

Consistent with their comments on important elements of care provided by TBAs, some women noted that facility-based staff did not always bother to explain their conditions clearly and honestly. There was a widespread feeling among study participants that dialogue between providers and clients is vital, and treatment options should be presented in a clear and transparent manner. Many study participants observed, however, that skilled attendants did not provide clients with sufficient information.

“I think that if I was given a check-up, and told the truth, I am sure that I would have a safe/normal delivery. Even if they checked me and told me that my delivery has complications then I would be aware and prepare.” (Women with obstetric complications, Migori)

“They didn’t tell me anything, they just scolded ‘that why come to the hospital early.’” (Woman with obstetric complications, Migori)

Among those who had recently experienced complications (23 women/families), almost none had received any explanation by staff about what caused the problem. Even when the complication resulted in the death of the woman or the baby, families were simply given condolences without any

information, and in one case, they were only scolded for not bringing the woman to the facility for treatment sooner.

Many study participants also asserted that facility-based staff were judgmental and discriminatory and provided better care to women who are well dressed, while criticising and shaming those who are less affluent.

“Nurses are choosy on whom to attend to first and who to see later.” (Partner, Homabay)

“Women face frustrations from a clinic, if a woman or her child is not well dressed.” (Partner, Homabay)

“[Women] fear clinic due to [providers’] nasty words that bring shame — ‘Why don’t you space your births? What type of innerwear are you wearing? And what type of husband do you have?’” (Partner, Homabay)

“When a woman is pregnant, she is usually impatient and when she does not receive good care at the hospital, she becomes embarrassed and so turns to using a TBA who will treat her well. ... There are some women who can’t even afford maternity dresses and so they should not discriminate against such women.” (Community elder, Homabay)

“Doctors also despise patients instead of helping them. So they (women) fear going to hospital because of abuses so it’s better to have a TBA.” (Community elder, Homabay)

“The district attendants really harass us, and in fact we fear them, those of us who go to the hospital. ... Not all health workers are good. Some of them are ‘extra rude.’ Some just see you and make a conclusion immediately that this one is illiterate and uninformed. You will really wonder and this can even make you not go back to that particular hospital.” (Woman, Migori)

In addition to verbal abuse, a few community members alleged that health workers physically abuse women:

“Some women also say that they fear going to the hospital because they are normally beaten.” (Community elder, Migori)

“She (nurse) may also rough you up. ... Some female nurses rough you up to an extent that you can tell her to let you deliver alone. You are in pain and all she does is give you harsh and rude approach. That is why I don’t go to the hospital to deliver because I am not used to somebody who roughs me up. That is why I like somebody who would handle me with care because at that moment you are in pain you need somebody to soothe you, not one who roughs you.” (Woman, Migori)

Interestingly, while many respondents singled out female nurses as particularly abusive, some described male attendants as kinder and more sympathetic.

“You know that a skilled attendant is like your God once you’ve stepped into the hospital. The way he welcomes and talks to you will even ease the pain you are feeling.” (Community elder, Homabay)

“The one who delivered me was a student nurse. He followed all the instructions, and he was very committed. After delivery I was tired, he brought water and poured on my back and bathed me from the back.” (Woman, Homabay)

Another theme that emerged in respondents' descriptions of their interactions with formal sector health workers is outright neglect. Community members described health staff as inattentive and unconcerned about women's progress with labour or discomfort.

"You just call [for the nurse] until you get tired and then you finally deliver by yourself and die. I have even witnessed it myself." (Female elder, Homabay)

"Sometimes she is neglected by medical staff and this has happened so many times. The midwives will dump her in the labour ward and while they are still on their own stories and women will deliver there with no assistance, and this is negligence." (Partner, Homabay)

"I was not given good care in the hospital. I was in a terrible state. I delivered alone. When I was calling, no one responded." (Woman, Homabay)

"[My daughter] was in great pain but these skilled attendants were just laughing and nobody saw that what was happening could bring about the baby's death and also the mother's death. When I at least found a chance to enter the labour ward, I found water coming out of her and the baby had come out and was dead. I went and called a nurse, and asked if that situation could be helped, because the baby was still attached to her. We tried removing the baby so that we could at least save the life of the mother who was really crying and pleading with me to help her, but I could not help because I was not trained to do such things.... But what really hurt me was the fact that they were watching and just laughing." (Community elder, Homabay)

Some of the health providers appeared to be aware of how they were perceived by community members, and one Migori nurse admitted that her actions are sometimes misunderstood by patients saying "sometimes.... someone comes when they are dirty, you try to advise and then she feels you are abusing." Another described leaving a patient in labour under the care of the facility watchman, not recognising the fact that a complication could arise during her absence.

"If she is still far, I give her a bed and tell her to rest. If she is still far, then I go to my house, and continue doing other things. If a woman is almost delivering, then the watchman will call me, and I will come and conduct the delivery." (Skilled attendant, Migori)

Another nurse in Migori acknowledged that facility-based delivery care does not address community members' preferences. She commented that women in the area prefer to deliver sitting or squatting down, but that facility-based providers insist that they deliver lying back. In addition, she observed that staff at the facility are unable to provide warm water for bathing the woman or the newborn after delivery, acknowledging that this is seen as very important by women in the surrounding communities. "So when the baby is almost born, some people are already there boiling water, which we don't do here. And when the baby is born like this, the cord is cut and the *nyamrerwa* (TBA) is going to bathe the baby in warm water and wrap it well."

c. Perceptions about the costs of facility-based delivery care

In addition to quality of care issues, study participants perceived the costs of facility-based care and the difficulty of reaching a health facility as serious barriers for women in the community. Participants estimated that normal delivery at health facilities cost anywhere between Ksh. 300 and Ksh. 1,000. While these costs are not significantly higher than the average fees charged by TBAs, community respondents argued nonetheless that it was difficult to save the necessary funds in advance, especially as it was impossible to predict what type of delivery—normal or complicated—one would have.

“It is a big difference because if one delivers normally she will leave the hospital after two days, but if one is taken to the theatre, she will not take less than ten days. They charge Ksh. 300 per day. So a person who finishes two days will pay Ksh. 600. A person who takes eleven days minus medication will pay Ksh. 3,300 so the range is big following the type of delivery one receives.” (Partner, Migori)

While a few study participants commented that delivery charges at government health facilities are low, others perceived services as extremely expensive, noting that a woman must not only pay for the cost of care, but is usually required to provide a range of supplies and drugs.

“Most women around here have the problem of not having enough money to go to the hospital. For example, when a woman wants to deliver at Ombo Hospital (a private hospital), she may not manage the high cost. The district hospital is equally a problem because you have to buy a lot of things so as to be attended to, yet the woman may not have the money to buy these things.” (Woman, Migori)

“TBAs are cheap compared to hospitals where demands are mountainous.” (Partner, Homabay)

“Some see that it is expensive to go to the district hospital because you have bought the things that are needed. And so when the others ask you about how much you spent at the district hospital, they get discouraged and go to the TBA instead.” (Woman, Homabay)

Although there is a waiver system in place to ensure that the poor can access hospital services, few community members appeared to be aware of this safety net, and many asserted that women are turned away from facilities if they lack the funds to pay for services.

“If you don't have money, you cannot be attended to. They will not help you at all (*ka pesa onge kaka di konyi onge*).” (Woman, Migori)

“So money is the real problem. I witnessed where a woman was sent back and was not delivered because she didn't have money. She delivered on her way in a nearby primary school, and the child ended up dying.” (Woman, Homabay)

Other participants in both study areas asserted that women who lack adequate funds for services are given treatment, but are treated poorly by health staff. In addition, they may be detained in the hospital until they are able to settle their bills. As a male partner in Migori explained: “Here we live below poverty line. We have problems that if your wife is sick, if the staff at the hospital don't have mercy on her, she will end up staying in the hospital until you get money to pay.”

Families without the needed funds generally raise the money by collecting donations from friends or neighbours through the *harambee* spirit of co-operation (*golo pesa kanyakla*) that exists in small communities; by selling agricultural produce or domestic animals such as cows and goats; by participating in “merry-go-rounds” (i.e. a savings group); or by borrowing money from friends and relatives.

d. Inaccessibility of delivery care

Community members cited distance to health facilities and lack of transportation as a major barrier to use of skilled care by women in the study areas. Many communities described the hospital as being very far away and spoke of travelling long distances—usually on foot—to reach a facility. Because few transport options are available—or affordable—they noted that it could take six hours to reach a health facility from some parts of the two districts. If a woman has to be referred to the provincial hospital (Nyanza PGH), the journey can take a full day.

Most families said they were too poor to hire vehicles or obtain quick transport to the health facilities. In addition, there simply may be no transport available for hire. In many communities, the only vehicular modes of transport are slow and unreliable public transport, such as *matatus*. The daily *matatu* often leaves at dawn and does not return until late in the evening. Thus, if a woman misses it, she will have to wait until the following day to go to hospital. In the words of one elderly female: “If you are left by this *matatu*, then you cannot be helped even if you have the heart to help. It is too far and also very late. You just lose hope.” Even if a *matatu* is available, it may not take the woman directly to the hospital. In many cases, the woman has to get off at a particular bus stop to connect to the hospital via other means.

The other primary mode of transport available are bicycle taxis, known locally known as *ngware* or *bodaboda*. However, the terrain in the two districts is rough and hilly, and roads—and in some places footpaths—may become impassable in the rainy season. In some situations, a woman may be transported to the health facility in a wheelbarrow, pushed by relatives or neighbours if she cannot walk.

“It depends on where she is being taken. You know when one is sick, one has to be pushed while seated on a bicycle. Maybe to Awendo Health Centre that would take 2 hours or to Nyabondo Dispensary. This would take an hour because it is hilly.” (Migori)

The problems of distance and transport play a major role in determining where a woman will deliver. Many study respondents indicated that while they would prefer to deliver at a health facility, they did not even consider this a realistic option. As one woman explained:

“We only go to the TBAs because they are nearer to us, and they keep us very close that you may not think of going to the hospital. But actually, we should be going for skilled care. Sometimes it is the distance between home and the hospital that discourages.” (Woman, Homabay)

The timing of the onset of labour, combined with distance to health facilities, also appears to play a crucial role in determining where women deliver their babies. As noted earlier, many study participants reported that decisions about where delivery will take place are only made when labour begins. In fact, as mentioned above, it appears that the time of day when labour begins is a crucially important determinant of women’s place of delivery.

“Sometimes labour starts at night, and the TBAs are near, so the clients are taken to them.... TBAs are closer to the pregnant mothers in the village than the health facility.” (TBA, Homabay)

“When the baby is unexpected, only alternative is TBA.” (Partner, Homabay)

“Like this area of ours, we have women problems and the roads are bad. Instead of taking a pregnant woman in labour to hospital at night, it is impossible.” (TBA, Homabay)

In short, the “decision” to deliver at home or with a TBA may simply be a reflection of the fact that there is no alternative in many of these communities.

C. Obstetric Complications and Problems

When obstetric complications occur, women’s ability to get prompt appropriate care depends on a variety of factors: the ability of household decision-makers to recognise the complication and decide to seek care, the time involved in reaching a facility where appropriate care is provided, and the responsiveness of service providers at the facility, as well as the ready availability of the required drugs and supplies needed for treatment.

To explore patterns in decision-making and care-seeking related to obstetric complications, study participants were asked about their knowledge and awareness of obstetric complications, as well as the roles of various family members in deciding when and where a woman with complications should be taken. Study participants were also asked about their experiences in receiving care for obstetric complications at health facilities in the two districts.

Generally, community members appeared to be aware of obstetric complications and considered pregnancy a time of poor health and vulnerability to health problems. Interestingly, however, this awareness did not translate into quick action when complications arose. Overall, it appeared that numerous delays occur when deciding to seek care, reaching care, and obtaining care at a health facility.

i. Awareness of Obstetric Complications and Warning Signs

Almost all participants in the study appeared to know of at least one woman who had died of pregnancy- or delivery-related complications, and they perceived obstetric complications as an increasing problem in their communities. They reported that the number of miscarriages and stillborn births were getting “higher and higher,” and that maternal deaths had “almost doubled” judging by the more “frequent deaths and burials” occurring in the community.

The majority of study participants were aware of various obstetric complications and offered explanations of these complications and their causes in local terms, or according to the beliefs and practices of the Luo people. In both districts, haemorrhage or excessive bleeding during pregnancy, delivery, and postpartum was mentioned more frequently than others causes and identified as the leading cause of maternal death. Obstructed labour and ruptured uterus, retained placenta, and abortion (or miscarriage) were also mentioned, as were medical problems aggravated by pregnancy, such as anaemia or malaria. Further, participants cited a range of socio-economic and gender issues that contributed to poor overall health, and linked these to maternal complications.

Despite widespread general awareness of obstetric complications, participants' knowledge about these health problems was limited. Community respondents revealed a variety of misperceptions and about the causes of obstetric complications. In addition, it was evident that they have difficulty recognizing complications when they occur.

a. Haemorrhage (*ligewo*)

Haemorrhage, described as “furious bleeding,” was identified by respondents in the two districts as the main cause of maternal morbidity and mortality. In addition to causing maternal death, study participants identified loss of the child and anaemia as other possible sequelae of haemorrhage. More than half of the participants interviewed indicated that they knew women who had died from it.

“According to me, bleeding is serious because it can cause death.” (Woman, Homabay)

“Around here, women normally encounter excessive bleeding during birth. It has killed two women here. One of them being my wife, and another was my neighbour's wife.” (Partner, Migori)

Various factors were identified as contributing to haemorrhage or bleeding. Most commonly, study participants talked about such bleeding being caused by a cut vein or artery.

“Sudden death can be due to cut vein which can lead to fatal bleeding if the woman is not rushed to the hospital.” (Community elder, Homabay)

“The problem is the vein can cut and they can bleed.” (TBA, Homabay)

“The vein can cut during delivery when you are in hospital and when you return home, you can bleed furiously.” (Female elder, Homabay)

Participants also attributed haemorrhage to the poor general health status of pregnant women (“sickly and weak”) as well as their heavy domestic work and activities such as carrying heavy objects and bending during pregnancy.

“Generally, the cause is hard work. Here is a lady who has been labouring the whole time, embarking on another hard work after labour. The vein must give way (*ligewo cha chodi*).” (Female elder, Homabay)

“Some women bleed a lot because their uterus is weak.” (Female elder, Migori)

Some participants, especially in Homabay, also thought that bleeding could sometimes be caused by “charms” or witchcraft.

b. Prolonged and Obstructed Labour/ Breech Birth (*Nyathi onindo marach*)

Prolonged and obstructed labour (when “the baby refuses to come out”) was perceived by most participants as a threat to life and a major cause of maternal death and stillbirth. Malpresentation and “malpositioning”—when the foetus is perceived to lie “dangerously” across the uterus, or the child is born with “its arm or legs coming out first”—were also consistently mentioned as a serious concern and risk during pregnancy. Malpresentation was perceived as causing severe bleeding during delivery, and several study participants reported knowing women who had died because of breech positioning.

“When labour is prolonged, then a woman may get tired, become breathless and then fail to push the baby during delivery. Subsequently, she dies.” (TBA, Homabay)

Reflecting their concern and awareness of the risks of obstructed and prolonged labour, the majority of respondents in both districts cited checking the position of the baby as one of the primary purposes of antenatal care visits with either skilled providers or TBAs. As a TBA in Homabay explained, “Yes, when a woman is pregnant, she should attend the clinic and should be given medicine. She should also have someone to examine her always to know the position of the baby. This can be dangerous if she does not take care. The doctor can do this to find out better.”

TBAs described signs of obstructed labour as pains in the lower abdomen, malaria-like symptoms, fever and weak joints, and oedema of face and legs. They also noted that a woman may develop backaches that are “so hot,” causing bleeding. They attributed these symptoms to the baby either “lying across” or “standing” in the uterus. Participants noted that a woman with obstructed labour can go on for two to three days, but that the condition was extremely dangerous and generally required emergency services at the hospital. They observed that if a woman labours for several days at home, she should be taken to the hospital on the third day so that the baby “can be pulled by metal bars (*odhi yua nyathi gi chuma*)” or delivered through Caesarean section.

Among those who indicated that formal medical care should be sought for obstructed labour, several respondents expressed concerns about Caesarean section operations, indicating that they perceived C-sections as dangerous and associated operative deliveries with serious side effects. Participants commonly associated the operation with infections or “wounds that don't heal” and infertility. As a woman in Homabay commented, “[For] me to be taken for Caesarean section recently, but I don't

feel it's over. It is something so dangerous that when delivery comes, you can consider it a death case.”

Although many study participants recognised that a woman with prolonged or obstructed labour needs urgent medical attention from the hospital to prevent ruptured uterus and stillbirth, various categories of respondents—women, female elders, community leaders, and TBAs themselves—expressed confidence in the ability of TBAs to massage the uterus or use herbs to reposition the baby.

“The TBA, there is a special leaf they give the mother to grasp in her fingers. Then she touches the presenting part of this child, and the child will just return to the right position.” (Community elder, Homabay)

“For breech, we give herbs and after palpations, the foetus changes position to normal.” (TBA, Homabay)

There appeared to be some awareness in the communities surveyed that early pregnancy puts younger women at greater risk of obstetric complications because the body is not fully developed. Early childbirth is perceived as riskier because younger women have not completed their growth and have less information and access to antenatal, delivery, and postpartum care than older married women. Female elders in particular argued that a woman under age 18 is likely to miscarry or suffer obstructed labour because her pelvis is still underdeveloped and too small to allow the passage of a child during delivery. As a female elder in Homabay explained, “Her uterus is weak, and she cannot carry the baby safely.” Other older study participants explicitly opposed early marriage arguing that it is risky.

In addition to cephalopelvic disproportion and malpresentation, study participants cited several other health conditions—*rariw* and *jatelo*—which they believed to contribute to obstructed labour and difficult deliveries.

Rariw was described as a pre-existing problem that should be managed during pregnancy to reduce potential complications during and after delivery. *Rariw* tends to be associated with STIs, and the signs and symptoms of *rariw* were described as pain on urination, pain in the back and lower abdomen, profuse white discharge (*rochere*) from the vagina, and itching (*iguonyri*). Some of the consequences associated with *rariw* are similar to those of STIs, including: miscarriage (because they “heat up” the uterus and expel the fetus); ectopic pregnancy (“when the baby grows in the wrong bag”); chronic pelvic pain; and recurrent bouts of upper reproductive tract infection. One TBA indicated that a woman suffering from *rariw* is likely to deliver a blind baby with disabilities.

Interestingly, however, a large proportion of study participants also associated *rariw* with obstructed labour, haemorrhage, and pains during delivery.

“*Rariw* is what blocks the baby from coming out during delivery. *Rariw* squeezes the baby, it comes out first with some water before labour. It comes with some blood and may cause excessive bleeding before and when labour starts, the woman is already tired, and anaemic. It is just this *rariw* disease that prevents hundreds women from giving birth. We have studied it and knows it well.” (Female elder, Migori)

“*Rariw* prevents the baby from coming out. That is usually so difficult that she had to get herbs before the baby can come out, the hospital drugs help too but the local drugs act much quicker.” (TBA, Homabay)

“*Rariw* this is a very great pain that cuts across the woman's womb. It becomes an obstruction that the baby cannot come.” (Woman, Homabay)

While TBAs are perceived as capable of successfully treating these conditions with herbs, facility-based health providers were said to only be able to treat *rariw* by performing a Caesarean section.

“Something cuts across the lower abdomen that prevents you from walking. At the hospital, they operate you. It is the TBA who gives herbs, and you hear a noise coming from your abdomen turr, like worms (*njoha*).” (Female elder, Homabay)

“*Rariw* can’t treat at hospitals. They took her for operation instead.” (Partner, Homabay)

“Most women do not go to health facilities because treatment of *rariw* is not there. Only TBAs can cure.” (Woman, Homabay)

“There is this disease known by TBAs called *rariw*. The placenta becomes too big. It blocks the lower part of the womb and displaces the baby upwards. The small clinics cannot detect what blocks the progress of this delivery, so a woman goes to a church leader to pray for her.” (Community elder, Homabay)

Another cause of difficult labour and stillbirth—particularly among young women—cited by study participants is severe abdominal pain and *jatelo*. This abdominal pain was thought to stem from complications inside the uterus or from engaging in heavy domestic work. Participants described that the pain may become so acute that it causes abdominal spasms that make the woman miscarry or bleed profusely. In other cases, the pain may become chronic, causing the foetus to “lie horizontally in the womb.” Lower abdominal pain was also said to be so severe that it could remove the baby from the placenta while the baby is still inside the womb. The placenta would then “rush out” before the baby to block the passage where the baby should be passing through, “refusing” to let the baby out. It is for this reason that the placenta is called “the first one” (*jatelo*) since it comes out first from the uterus before the baby.

“When a woman wants to deliver, the placenta blocks the baby from coming out. She feels like delivering but she can’t.” (Female elder, Homabay)

“I was about to deliver. I had a sharp severe pains on the upper part of my chest just below my breast. It came from abdominal pains I have been having slowly. It is a pain which we normally refer to as *jatelo*. This is what I experienced.” (Woman with obstetric complications, Migori)

c. Retained Placenta

Retained placenta or the afterbirth “refusing to come out completely” was cited by a various participants—women, elderly females, male partners, and TBAs as a serious problem—one that requires immediate action.

“After a woman has given birth, it takes a certain duration of time before the placenta comes out, but if it exceeds this time, then the woman should be rushed to the hospital or she will die.” (Community elder, Homabay)

“Some people say that some pieces of placenta remain (*wino ochot odong*). When this happens, she can only get assistance from the hospital.” (Female elder, Homabay)

“Sometimes after delivery, the placenta can refuse to come out which will force you to take her to the district hospital. That is where she can get help.” (TBA, Homabay)

A few respondents—mainly male partners and TBAs—reported that TBAs have the skills and herbs

needed to manage retained placenta.

“The afterbirth can be stuck there, make childbirth complicated. That is the serious one. One of my wives had and the herbs helped. Usually we give traditional herbs and then the placenta expels in two to three minutes.” (Partner, Homabay)

d. Anaemia (*remo orumo*)

Anaemia was widely perceived as a common problem that negatively affects women during pregnancy, childbirth, and the postpartum period. Participants explained that “when blood is too little in the body,” a woman's life is at risk. Although anaemia was perceived as a health problem that can occur outside of pregnancy, it was viewed as a condition that led to obstetric complications, including “breathlessness,” yellow complexion, lack of strength needed to deliver, and an increased feeling of general sickness.

“Breathlessness. The woman cannot push (*mucho rumo*).” (Community elder, Homabay)

Most study participants associated anaemia with poor eating habits. Many respondents commented that a pregnant woman who eats unbalanced diet or has poor eating habits is likely to suffer from anaemia and fatal consequences of dietary deficiencies, such as increased risk of miscarriage, premature delivery, and low birth weight. They emphasised the importance of eating well during pregnancy “to gather strength” for the impending delivery and to prevent nutritional deficiencies that may “spoil” the pregnancy. They also commented on the body's need for vitamins, minerals, and proteins, and identified a range of “healthy” foods, including fruits, beans, pawpaw, vegetables, and fish, which are thought to increase blood supply.

Other foods were identified as unhealthy for an expectant woman. These included bananas, cereal, tubers, and other starchy staples that were thought to fatten the baby too much, leading to obstructed labour. Some of these foods were also thought to “lower a woman's blood level,” depress her appetite or increase her need for certain nutrients. Eating soil and stones (*pica*) was also cited as unhealthy, and a practice that leads to worms.

Coupled with poor nutrition, overwork and exhaustion were also associated with anaemia. Many study participants noted that women continue with a burdensome workload during pregnancy, working long hours on farms, collecting water and firewood, and carrying heavy goods.

“A pregnant mother works without rest or without regard to her health. The time of labour finds her with less blood followed by breathlessness. She cannot push.” (Community elder, Homabay)

Women's heavy workload was also thought to cause other obstetric complications. Participants noted that it was dangerous for expectant women to carry heavy loads on their heads or their backs because this could “pull down the pregnancy,” causing haemorrhage, miscarriage, or stillbirth. While most participants acknowledged that women work too hard during pregnancy, many observed that this was a dangerous practice that should be avoided.

“Overworking can also make someone develop a complication in future. My home area Gwasi can be a good example. A woman can be made to do a lot of farming which make her develop complications in future.” (Woman, Migori)

“Yes, when a woman is has been pregnant for a long time, she should not go to the river shamba because she will develop backache. She should not go to the river to fetch water. She should not bend so much when washing but she should be allowed to cook. Otherwise, she may bleed to death.” (TBA, Migori)

e. Pregnancy-Induced Hypertension and Oedema

Almost none of the community members interviewed explicitly identified pregnancy-induced hypertension or eclampsia as an obstetric complication. However, a few study participants did describe a range of symptoms that are similar to those associated with hypertensive disorders of pregnancy—namely severe headaches, dizziness, and swollen legs—problems that were generally attributed to poor diet and overwork during pregnancy. None of the study participants described fits or convulsions, except in the context of malaria.

f. Sepsis (*adhonde*)

Other than skilled attendants, relatively few community members appeared to be aware of sepsis. Only a small number of community leaders, TBAs, and elderly female informants mentioned that unsanitary delivery with TBAs or cutting the umbilical cord with dirty instruments or unhygienic sisal strings could cause infection. In addition, a few skilled attendants and TBAs commented that many women resume sexual relations soon after delivery, and they associated this with increased risks of sepsis.

While many other study participants mentioned infection as a maternal health problem, they mainly appeared to be referring to STIs or other illnesses, such as malaria, rather than septicaemia. Similarly, a large number of study participants mentioned abdominal pains after delivery, however, these pains often seemed to be associated with STIs or other problems, such as *ojiwo* that are perceived as best managed by TBAs using “pot medicines” and massage.

“There’s *ojiwo* (pains after delivery) so you have to massage her to reduce the pains. It’s very common in women, and they cannot eat when in pain. Even when it is a normal delivery, *ojiwo* is really a problem.” (TBA, Homabay)

g. Severe backache (*Nyatong’ tong*)

Various study participants mentioned a serious postpartum complication called *nyatong’ tong*. Most participants who mentioned *nyatong’ tong* described it as a severe backache or collapsed vertebra. These respondents perceived *nyatong’ tong* as caused by too much heavy work after delivery, and considered it a life-threatening condition that required immediate assistance at the hospital.

“There is this problem which women normally experience after birth, about one week after delivery. It is called ‘*nyatong’ tong*.’ It is a sudden pain that attacks the women at the back and immobilises them completely. When a mother develops this condition and is not rushed to the hospital immediately, she will die. This condition can only last a maximum of two and half days with a woman if not treated. Severe headache and a severe lower abdominal pain that the woman will not even stand straight also accompany it.” (Community leaders, Migori)

“I think backache is the worst of all because it is always accompanied by a condition known as ‘*nyatong’ tong*’.... It is some sharp pain that just strikes your lower back and twists it, and it makes you dizzy. You can even faint. This problem may come about if you engage yourself in hard jobs immediately after delivery.” (Women, Migori).

“It is a sharp pain cutting across the back. It can even kill. The pain will throw you down because you still have no strength.” (Woman, Migori)

h. Other Perceived Causes of Obstetric Complications

Several other factors—malaria, STIs/HIV/AIDS, domestic violence, and dysmenorrhea—were perceived by study participants as closely linked to obstetric complications.

Malaria — High fever caused by malaria was viewed as a cause of maternal complications, and participants associated malaria with severe anaemia and a series of other obstetric problems, such as miscarriage, haemorrhage, premature birth, obstructed labour or stillbirth. Malaria was commonly associated with fatigue, headaches, dizziness, swelling of the legs, vomiting, and convulsions.

Babies born to “sickly” mothers or women with malaria and other diseases were also considered very likely to be born small, weak, and vulnerable to other infections. Participants frequently referred to these infants as *bogno* or premature children.

“She should be told to deliver in hospital because what kills women after delivery in this part of the country is malaria. Women harbour malaria only to resurface after birth. Even the unborn child is born with malaria. This could lead to death and she could be born premature (*bogno*).” (TBA, Homabay)

Domestic abuse — Marital problems were said to have a strong bearing on the outcome of the pregnancy, and that, no matter how physically healthy a woman might look, if she is emotionally disturbed, she is likely to experience haemorrhage and hypertension. Some study participants commented that emotional strains could cause a woman to eat poorly and therefore lose energy needed for pushing the baby during delivery.

While relatively few study participants commented on domestic violence and abuse (physical and emotional), those who did mention these issues cited them as a cause of obstetric complications. These respondents observed that some women are physically assaulted by their spouses, and that others suffer emotional abuse, including financial neglect, mistreatment, and abandonment by partners, who sometimes work far from home. Participants associated this abuse and neglect with depression, mental anguish, and high blood pressure.

“Their husbands beat them or mistreat them emotionally. Sometimes, they deny you money. They finish all the money for food because they drink it all. When you are worried and pregnant, you can even lose weight and deliver premature or have an underweight child (*bogno*).” (Woman, Homabay)

Similarly, a skilled attendant in Migori observed: “Some men beat their wives who are pregnant. This is not good. It is a time to make peace, but we see that some men don't obey this.” This provider stressed that violence can cause miscarriage, and noted that she had seen many women come to her with miscarriage having been beaten by their husbands during a domestic quarrel. She also attributed cases of hypertension and related complications to emotional abuse, financial neglect, rejection, mistreatment, abandonment, and unhappiness in marriage.

HIV/AIDS and other STIs — Nationally, HIV/AIDS is an increasingly significant, albeit indirect, cause of maternal death, and Nyanza Province is an area of extremely high prevalence (estimated at 24%). Interestingly, however, relatively few study participants mentioned HIV/AIDS as a cause of obstetric complications or poor maternal health outcomes. Only a few skilled attendants, a traditional birth attendant and a female elder mentioned the disease in connection with problems during pregnancy and childbirth.

In contrast, a large number of study participants mentioned STIs, and some types of respondents—a few women, TBAs, and community elders—appeared aware of the link between STIs and stillbirth

or visual problems in the newborn.

Dysmenorrhea (*Segete*) — Some participants noted that young women who suffer from severe discomfort or intermittent, sharp, cramping pains associated with menstruation (dysmenorrhea) are more likely to experience obstetric complications when they become pregnant. Called *segete*, this pain was described as so severe that it could either make conception difficult, or cause a miscarriage once pregnancy occurs.

“*Segete* and *mbala* can expel the pregnancy.” (TBA, Homabay)

“The girl can suffer from *segete*. It can make you become childless. It affects young girls mainly.” (Female elder, Migori)

“Some problems are brought by children. You find that a daughter may elope when she is still young, get married to a child like her who may not have any income or knowledge about marriage. If she gets pregnant, she may experience some problems. Giving birth can be a problem to her. Most of them still have *segete*.” (Woman, Homabay)

ii. Preparation for Obstetric Emergencies

While general awareness of obstetric complications and their seriousness was high, and most study participants noted the importance of saving funds in case of emergencies, it appeared that few people actually make advance preparations in case such complications arise. Among the 23 women/families who had experienced an obstetric complication, only three had actually put aside funds in advance, indicating that despite widespread awareness of the need to have funds on hand, many families do not save any money for delivery.

Community members asserted that poverty is the primary reason that families do not make these preparations. Many study participants said that while they had wanted to prepare for an emergency, they were too poor to put any money aside because they needed everything for food and other necessities.

“You need money for everything food, clothing, fees and all that so you cannot save anything for emergencies.” (TBA, Migori)

“I did not have money to allow me prepare. There was nowhere I could get what to prepare. Whatever small I got, I was using in feeding my children who are many, then I left everything unto the Lord so that He could see where to place me.” (Woman with obstetric complications, Migori)

Another reason commonly cited for not planning or preparing for emergencies was that it was impossible to know if a problem would occur and that one could not plan for an unknown event. As a woman in Homabay commented, “But how do you prepare for the unknown?”

“No one can know the type of problem she is going to get or not. Anyone can get any problem at any time. It comes unexpectedly and is never planned for. (*chandruok ok chiki, opore*).” (Community leader, Homabay)

“Giving birth is just like an accident. An accident can occur at any time. You can't tell when it is coming.” (Woman, Homabay)

“There was no preparations except they took me to the TBA because we didn't know whether I could deliver normally or with complications.” (Woman with obstetric complications, Migori)

In view of the unpredictability of labour and of obstetric complications, as well as the difficulty of preparing for unpredictable events, many study participants asserted that pregnancy outcomes are pre-determined or “controlled” by God. Their attitudes were fatalistic; they did not perceive themselves as having the power to influence health outcomes, and therefore did not feel that there was any reason to prepare or plan. In Migori, a woman explained, “I left all unto God, for you may think that you are going to deliver but you will not.” Another woman in Migori commented, “No, there is nothing I could prepare. This is because you don’t know the plans of God, so you cannot predict by doing your own preparations.”

As is common in many other settings, taboos and superstitious beliefs also discourage women and their families from preparing for emergencies. Many study participants—young and old alike—viewed preparations for obstetric emergencies as a “bad omen,” an action that could actually create problems for the expectant woman. As a community elder in Homabay explained, “They just say that God is planning for them. Like preparation, they say they can’t even buy things and put them ready for this child. They believe that if you buy these things early, maybe something can happen. The child can even die.”

The strong faith in TBAs and their herbal medicine may also contribute to limited planning, given that many of the women interviewed expressed confidence in the ability of TBAs to treat complications that may arise. In addition, since complications are often attributed to witchcraft, “bad luck,” and taboos, some study participants indicated that TBAs and herbalists were actually better suited to provide care.

iii. Recognizing Signs of Obstetric Complications

While most study participants were aware of a range of obstetric complications and their seriousness, discussions with community members revealed that women and their families have trouble recognising complications when they occur. Several study participants—mainly women with complications, elderly women, TBAs, and skilled attendants—noted that it is difficult for women to distinguish between normal labour pains and pains that signalled complications.

“When I left home, I had abdominal pains I didn’t know it was labour pains or what.” (Woman with obstetric complications, Migori)

“When it started, it was like labour pains, very sharp at once (*muochnochakore dichiel maliŋ*). Then it stopped (*oling a linga*) for a long time and I slept thinking that it will go away.” (Woman, Migori)

Not only are women and their families unable to distinguish complicated from normal labour, but it also appeared that many women were reluctant to share their concerns, even with family members. Several study participants noted that women conceal the fact that they are in labour or that there is a problem.

“They keep the problem to themselves and suffer in silence for hours until the situation gets out of hand.” (Female elder, Migori)

“I do not know of any restriction (taboo) but am the one who never told them that I had a problem. Although I was bleeding (*iya ne chuer*) and my people were just looking at me.” (Woman, Migori)

“They can’t even tell you they are pregnant. She is quiet all the time and can’t talk. She is like a sick woman. So you can’t know what is happening to her even if you want to help her. It is just fear, I think.”

(Female elder, Migori)

A few study participants reported that within Luo culture, women are supposed to be stoic and strong. As a woman in Migori explained, “One should not cry tears while in labour. You are just allowed to make noise but no tears.” Similarly, a skilled provider commented, “Generally people believe that when you go into labour, you really have to show that you are strong. So maybe she is just labouring here, but she doesn’t want people to know that she is in labour. So she is just quiet, and eventually, when she says it, it is maybe at night and it is already too late.”

Other study participants attributed women’s tendency to conceal obstetric problems to “shyness,” and said that younger women—i.e. unmarried women and women pregnant for the first time—were especially reluctant to disclose information. Some explained this “shyness” of respondents as caused by “ignorance” or by concerns about how they would be treated by facility-based staff. Other study participants said that it was “laziness” that prevented women from seeking care at health facilities.

“Sometimes they are ashamed to go to skilled attendants, if it is their first pregnancy.” (Partner, Homabay)

“Most young women with pre-marital pregnancies fear declaring they are expectant and tend also to decline to seek hospital-based services due to stigma traditionally associated with such pregnancies. They keep quiet and die with the problem in their hearts.” (Female elder, Migori)

Religious beliefs in the communities surveyed may also contribute to reluctance to disclose health problems. Several respondents mentioned the presence of religious groups that discourage their members from seeking medical treatment. As one male partner in Homabay commented: “There are some churches that do not believe in going to hospital. They say church is enough.” Similarly, a religious leader in Homabay explained, “Some religious leaders teach their followers that going to clinic is a sin. And that going to the clinic means you don’t trust the protection of God. Even swallowing of drugs.”

Given long distances to the health facilities and the lack of ready transport in most communities, the inability to recognize complications and women’s reluctance to disclose the fact that they are in labour or that they think they are experiencing a complication can have serious implications for their ability to get help. As one mother-in-law commented:

“There is one who will not even tell you that she has abdominal pains, but she will surprise you in the evening when the sun has set. Another may inform you that, Mother, today I am not doing so well.... I usually tell them that if you are not doing so well, could I take you to the hospital now? The one who reports to me late in the evening, I usually get them to a TBA.” (Female elder, Homabay)

TBAs also play an important role in recognising obstetric complications. Most families resort first to community-based providers for delivery care, and when the delivery does not appear to be progressing normally, families often seek a more skilled TBA than the person who was originally assisting the delivery. As one woman commented. “It is only when the TBAs are defeated that they go to the hospital.”

In many home deliveries the TBA may be the only person who is positioned to assess whether or not the woman is experiencing a complication. Several study participants commented on taboos that restrict either the mother-in-law or the husband from being present during delivery. As the mother-in-law of a woman who died from an obstetric complication explained, “because as a mother-in-law, if you enter where your daughter-in-law is giving birth, you will slow the process, [and] the baby cannot come out fast. Any person who is a mother-in-law is not allowed to enter.” Similarly, a TBA in Migori District commented, “There are those who should not see the woman because if they see

her, the delivery will delay.... If the husband or mother-in-law sees the wife delivering, the delivery may take longer time than usual. She cannot deliver in good time.”

Study participants shared mixed and conflicting views on whether or not TBAs appropriately identify cases that are too complicated for them to manage alone. Some described their experiences with TBAs who were well aware of their own limitations and who promptly recognised complications that they could not manage. As one Migori woman who had experienced obstructed labour commented, “It was the TBA who first recognized and decided that I would not deliver at home, as the baby was stuck and not moving down at all.”

In contrast, respondents in many categories offered less positive appraisals of TBAs, identifying them as a source of major delay in women receiving skilled care. A Homabay woman with obstetric complications lamented: “The TBA who was called is the one who brought us delay.” Some family members and skilled attendants had similar perspectives:

“If baby is too big, TBA will just say woman cannot push properly until it is too late and the baby might even die.” (Partner, Homabay)

“If there could have been no delay right from home to the hospital I hope that the baby could not have died. The TBA also wasted most of her time doing nothing.” (Mother of woman with obstetric complications, Homabay)

“The TBAs don’t refer, but even if they try to refer, they only refer at the last minute and the patient ends up dying. They don’t know. They wait for a long time for the baby to come out. They wait until death or until the family takes action themselves.” (Skilled attendant, Homabay)

“TBAs can’t recognize emergency until it’s late.” (Skilled attendant, Homabay)

Most study participants, including TBAs themselves, indicated that TBAs have some incentives not to refer cases, noting that the provider does not get paid if she/he does not actually conduct the delivery. While no one accused TBAs of delaying women in the hopes of financial gain, it was noted nonetheless that TBAs have a conflict of interest when it comes to referring women to health facilities.

iv. Deciding to Seek Emergency Care

Not only is recognition of complications challenging, but it also appeared that household decision-making on matters related to health care involves various family members, as well as the TBA if one has been called to assist with the delivery. As a result, the decision to seek care when obstetric complications arise may involve negotiation and debate, rather than simply the issuance of a decision by one person.

Most study participants identified husbands/male partners and mothers-in-law as the main decision-makers on health-related issues, however, co-wives and other family members, such as fathers-in-law and brothers-in-law were also identified as potential decision-makers in case of the husband or mother-in-law being absent.

“The woman cannot. She is sick, so husband or mother-in-law.” (Partner, Homabay)

“I decide or co-wife can.” (Partner, Homabay)

“Woman is slow in action. Have weak senses and in many cases it is the husband who pushes them to go

to hospital.” (Partner, Homabay)

“If the husband is around, she will first let him know, but in absence of mother-in-law who in return would report to father-in-law.” (Partner, Homabay)

Mothers-in-law appeared to play an equally important role as the male partner in decision-making, and a few study participants (women and male partners), indicated that the mother-in-law alone had determined where delivery should take place. One woman in Migori commented, “It was my mother-in-law who decided that I should just deliver at home.” Similarly, another woman in Migori who had experienced pregnancy complications commented that, in the absence of her husband, she had no authority nor financial ability to make arrangements in the case of emergency: “My husband wasn't there and so I could not do anything.” She further explained: “This is how we live in our community. Men decide because men are bestowed with that responsibility. He is the leader in the family.”

While men and mothers-in-law generally identified themselves as the primary decision-makers, many study respondents indicated that women are not powerless or uninvolved in decisions related to their own health. In fact, several husbands and female elders expressed frustration about wives or daughters-in-law who did not follow advice related to seeking care at a health facility. As one family member in Homabay observed: “But some women just say, ‘they will go to hospital, they will go to hospital,’ but they don't. They just postpone it all the time. They are just ignorant.” Similarly, female elders in Homabay commented:

“Daughter-in-law must do as I want as they are under my responsibility, but yes, it will depend on the lady's character.”

“Women of today are difficult. You can advise her but she does not want to take your advice.”

“When she's bigheaded. You advise her to get skilled care, but she can't obey.”

Some TBAs identified themselves as the primary decision-maker who determined that facility-based care should be sought, and many expressed frustration and disappointment with women who refused to seek the recommended care at the hospital. One TBA in Migori commented: “She did not go. Instead, she just went back home but not where I had referred her to.” Another said: “Sometimes she promises to go but just does not go. Some are so problematic, so when a complication comes, you tell her it is only the hospital, but if you don't go it is your problem because you will just sit in the pavement. You have talked and talked until you are defeated so she experiences problems through tough-headedness.”

Similarly, the husband of a woman who experienced prolonged labour reported that his wife was unwilling to go to the health facility as advised. He explained:

“When I told her about the hospital, she only asked me, ‘where are you taking me to, which hospital?’ Then I told her Homabay District Hospital. Then she said, ‘I am not going there.’ Then I repeated after her that ‘Is it the TBA that you want first?’, then she answered by saying ‘Yes’.... The saying [we have is] that you do to a sick person whatever she/he would like to be done for, and as she wanted to see the TBA first, we had no alternative but to take her there first.” (Male partner, Homabay)

Even after delivery (a stillbirth), when the woman developed severe pain and signs of infection, she continued to be reluctant to see facility-based care, preferring instead to seek help through a prayer group. As her husband explained, “Together with my brother we set for the hospital, but on reaching

the road, the patient told us that it is better to be taken to the prayer people. [...] She said she can go to the hospital later after prayers.”

Thus, even though husbands, mothers-in-law, or TBAs are perceived as the main decision-makers, some women refuse to comply with their advice, asserting their own preferences related to care seeking. It should be noted, however, that even though a number of respondents described instances in which the woman refused to follow advice from family members or TBAs that facility-based care be sought, none of the study participants mentioned cases in which women sought such care against the wishes of other family members. It appeared therefore that while some women are not able to insist upon their preferences for facility-based care, they nonetheless have some “veto power” in care-related decision-making. As a husband in Homabay commented: “Who decides? The husband, as he is the one to meet the cost, but in agreement with wife as she cannot be forced.”

Perhaps because such decisions generally involve consensus and agreement among various household members, decision-making can be slow. As a skilled attendant in Homabay explained: “The decision is like bargain. To decide what do we do. Can we try this one or this one? The decision-making can cause the delay.” Similarly, a TBA in Homabay described the importance of involving both husband and wife in discussions related to care in order to obtain support from both parties: “You as a TBA, you must talk to the woman when the husband is present. He can be problematic and does not listen. Just takes them for granted. You be humble and tell them the goodness of the hospital.”

v. Reaching Skilled Care

Even when families decide to seek help for obstetric complications, there are numerous delays in reaching a facility where skilled care is available. As noted earlier, the communities surveyed face long distances to health facilities. Coupled with extreme poverty, limited means of transport and poor roads, distance constitutes a serious obstacle to reaching facilities where skilled care is available.

Women and their families who had recently experienced obstetric emergencies described long delays in mobilising the funds and transport needed to reach a health facility. In order to raise funds, respondents described borrowing money from friends and relatives, often spending hours, and on occasion several days collecting enough money to transport the woman to the nearest hospital. High hospital fees also forced families to sell livestock and to make arrangements with the facility to pay later for their services.

“From here [home] to Homabay to Kisumu, going back for check-up, he sold all his cattle. ... It was 56,000 shillings [approximately US\$730].” (Woman with obstetric complications, Homabay)

“It was the distance to the hospital, it is far and we wanted to take her to Migori. The money also delayed a bit. It took one week before she went.” (Family member of woman with obstetric complications)

“She had been in labour pain for almost two days.” (Family member of woman with obstetric complications, Migori)

A few study participants mentioned neighbours or other community members as a source of assistance. For example, one woman in Migori commented that “People in the community join hands with the family members of the woman, and then she is taken to the hospital.” Similarly, a religious leader in Homabay said, “every church has a welfare. We hand over the money for rushing the mother to the hospital.”

Other respondents commented while there used to be a spirit of mutual help in communities, the sense of collective responsibility is generally absent today. As one female elder commented: “Other members of the village ... normally don’t help. Here in our village, mothers just die.” Similarly, a community leader observed:

“In the past, a woman belonged to the family. She was people’s and community property. The community knew the pregnancy was happening and was happy about it. At delivery people would assist.... There was no payment. People have adopted the ideas of no love for mankind.... Your neighbour may have a vehicle and if you can go to him, he will ask for 2,000 cash^{††} for him to help you, and he will not wait to be paid later.” (Community leader, Homabay)

Whether through pooled community funds or through the contributions of individuals in the community, securing funds appeared to be extremely time-consuming for families who had recently experienced obstetric complications, leading to considerable delays in reaching a facility where skilled care was available. One Homabay woman laboured for 37 hours before giving birth in the presence of a TBA, as family members sought to procure funds necessary for her to give birth in the hospital. By the time money was found, the woman had already given birth, but died soon afterwards.

Securing transport is another source of delay. While a few study respondents described cases where they were able to convince a neighbour or a visitor to the community to transport a woman who was experiencing complications, they acknowledged that such assistance was unusual. In Migori, for example, one family described giving a neighbouring vehicle owner sugar cane in lieu of payment to take the labouring woman to the hospital, but they noted that they had been fortunate, especially as the complication occurred at night. “The vehicle operators fear operating at odd hours and what was done for us was a favour.”

Most study respondents with recent experience of an obstetric complication described situations where there were simply no vehicles at all, even for hire. Therefore, reaching the health facility may require women in labour to walk long distances or to be transported on a bicycle or in a wheelbarrow since there are few vehicles. Many roads are impassable during the rainy season.

“Some people are coming from far.... and the only means of transport here is the bicycle, and that mama can’t sit on the bicycle.” (TBA, Homabay)

“The men will be called upon to carry the lady on the bicycle as we are far from the main road. The bicycle will take her to the health centre. When she is not able to sit, she will be carried on a bed or in a wheelbarrow to hospital.” (Female elder, Homabay)

“The biggest problem in this area is how to get a vehicle. You can take her on a bicycle to the main road where there are vehicles going to Migori or St Camillus [Hospitals]. But the vehicles are few so you can wait for a very long time.” (Woman, Migori)

Because the terrain is hilly and rocky, these forms of transport can be extremely slow. In addition, in stretches where the road is particularly poor, the labouring woman may have to get off the bicycle and walk as the cyclist pushes his bicycle until the road becomes more even. In such situations, a woman’s condition may well worsen or become excruciating while she is transported to the hospital.

“Worse still, it can happen in Rabongo where no roads exist, and the woman will be left to die because even if you carry her on a makeshift bed, it will just be hurting her.” (Community elder, Homabay)

^{††} Approximately US\$26.00

“Delays had to be there because she could not even walk faster. She walks for two minutes and then gets tired and stops, sits down and cries of pain. So it had to take a long time.” (In-law of woman with complications, Migori)

Even those living in communities served by public buses (*matatus*) reported transport difficulties since there may be only one bus each day, and usually these *matatus* will not start their journey unless they have enough passengers for the trip to be profitable. A woman with obstetric complications reported that it took nine hours for her to reach the hospital: “I walked to the bus stop and delayed there from 9 a.m.–6 p.m. before getting to Homabay District Hospital.” The family of a woman in Homabay described having to make her walk for an hour and a half in labour to reach a TBA, who then insisted that her prolonged labour was due to the fact that she was too “shy” to push. It was evening by the time the family decided to take the ailing woman to a health facility, so they slept at the TBAs awaiting a vehicle the next morning. “Looking for the car is what delayed us most,” lamented a family member. Once a vehicle was found the following day, the trip still took another hour and a half because of mechanical problems with the car.

In view of the difficulty reaching district hospitals, some women seek care at lower-level facilities that are closer, but which lack the capacity (trained staff, equipment, supplies, and drugs) to manage obstetric complications. Women who seek emergency care at these facilities are often simply referred onwards, however, and these referrals results in additional delays because dispensary and health centre staff have no means of communicating with higher-level facilities to request an ambulance. Families are therefore often forced to return home to raise additional funds and make new arrangements for transportation. A religious leader cited a case of a woman in his community who was “rushed to dispensary, which could not help her and referred her to Homabay Hospital, but only to die at Sofia Market before reaching the hospital. She died on the way.”

Similarly, family members in Migori described being turned away from several mid-level facilities when they sought help for a primiparous woman. “In the morning they decided to go to the health centre where she would start with since she was in pain, and that was the nearest [health facility]. Only that by bad luck, they were not allowed in.... They don’t deliver first-borns.” After being turned away from the health centre, the family then tried a private clinic where nurses were also unable to deliver the baby. “They had tried health centre, no success, Royal Clinic, no help, the prayer person which they took a whole night therefore the only option was Homabay Hospital. Because all these places had been tried but all in vain.”

In sum, even when complications are recognized and the decision to seek care is made, there are considerable delays in reaching a facility where skilled care is available. Because few families have sufficient cash savings on hand, considerable time is spent borrowing funds or selling assets to obtain money for transport and service delivery costs. Equally long delays are incurred in finding means of transport or in walking long distances to the nearest health facility, many of which are unable to provide the necessary care. As a result, reaching a facility where appropriate care is available can take hours and even days, and can cost women their lives.

vi. Delays in Receiving Emergency Care at the Health Facility

Most study participants identified health facilities as the best source of life-saving care when complications arise, and they generally perceived formal health providers as more skilled and knowledgeable than community-based providers. Nevertheless, community members described poor quality of care at health facilities and considerable delays in receiving care from facility-based staff. Of the 19 complicated obstetric cases where facility-based care was sought, 13 experienced lengthy delays before receiving care at the facility—delays that posed serious risks to the women and/or their

babies, given that long delays had already been incurred in reaching the facility where comprehensive essential obstetric care was available.

One of the primary causes of delay described by community members is lack of funds to pay for services or required supplies/medicines. Several respondents reported that they had been asked to pay for service fees prior to treatment, and that they were also asked to provide the requisite supplies (e.g. gloves, cotton wool, sutures) and drugs for treating the patient. Given that it is impossible to know what items or how much money will be needed until an examination has been performed, even when women had been admitted with complications, considerable delays occurred in providing treatment because families still had to find additional money to cover the costs. As the family of one woman in Migori explained, “Unfortunately, where the delay came in was that we had to buy a few things here and there, which were required.”

When blood transfusion is required, the family is also expected to produce a blood donor or to purchase blood from the blood bank. As a community leader in Hombay explained, “Nothing is for free nowadays. You are asked to produce hand gloves, and that’s money. Drugs, and that is more money. Cotton wool they ask for. Sometimes there is no blood if you don’t have money.... But if you do have, go to blood bank, and blood will be given.”

Community members asserted that families that do not have the required supplies and funds may be turned away and told to return when they have all the required items. As one TBA in Homabay observed, sending women away often means they never return. “Everything is money. She is maybe asked for money at hospital, and she goes home for money and fails to get it. They may not go back.” Similarly, a woman who was pregnant with twins and experienced obstructed labour was told by hospital staff that she needed a Caesarean section, which would cost 3,600 Ksh. When the family indicated that they only had 1,040 Ksh., staff said that they would “see what they would do.” No operation was performed, and they attempted to deliver the twins despite the fact that the first was coming out with legs first. The first twin was delivered in poor condition (died soon thereafter), and the second twin was a stillbirth. After delivery, the woman began haemorrhaging and needed a blood transfusion, however, when the husband’s blood proved incompatible, staff delayed a long time in allowing blood to be bought from the blood bank, and it was only because the husband had a friend working in the hospital laboratory that treatment was finally given.

Facility-based staff acknowledged delays in providing care to women who need emergency care, citing lack of equipment, supplies, and drugs as key obstacles to providing the required treatment. Several providers expressed frustration about having to require that patients bring various supplies and drugs, as well as the fact that they often are unable to provide the care women need. As one skilled attendant commented:

“Maybe they can reach here, and sometimes we don’t have the required equipment to use. Maybe we don’t have even gloves. Maybe you don’t have things. You are not in a position to handle that emergency because there are some that need theatre. There are some who needs infusion and we never infuse here. We don’t even have a theatre here, and there are some, which are so complicated that you need to take to the district hospital. Now you see, you are tied up. You are there at the medical centre, but you can’t help.... Sometimes nurses are being blamed for not doing the right thing, but we don’t have the right thing to use, and if those things are available it is you who do the work. But not to ask the mama, ‘Do you have gloves? Do you have the sutures? Do you have even the cotton wool?’ Because there are some who don’t know the price of this cotton wool. They don’t even know what sutures are, and you are asking that mama. These things should be available in the place so that we can use.” (Skilled attendant, Homabay)

Several respondents alleged having to bribe providers in order to obtain care. A husband commented: “*Kitu kidogo?* It is rampant at hospital.... They are reluctant if they realise you don’t

have money.” Similarly, a woman said, “You are asked first for cash because it is your money that will enable them to assist you.” A community leader in Homabay also commented that “if you do not bribe [the doctor], he can’t come fast enough.” Community leaders commented that working conditions for health staff are poor and contribute to low morale and motivation to provide care without bribes or incentives. As one community leader in Homabay observed: “Salary is not adequate for the doctors. Nurses’ working terms may not be good, so they also want to get extra money in their own way for them to meet their needs.”

Several community leaders observed that facility-based staff are increasingly splitting their time between government facilities and their own private clinics. As a result, providers are not at the hospital, even when they are on duty.

“You go to hospital, and you find doctor is not there, but in their private clinics, and it is working hours.... In the end, you find the patient has reached Homabay Hospital, but still she dies.” (Community leader, Homabay)

“The doctors have tendency that they will refuse to help you in the public hospital, but will likely ask you to visit private clinics for help.” (Community elder, Homabay)

Such absences only exacerbate the already-severe staffing shortages at health facilities. Several study participants observed that there are delays in receiving care at facilities simply because there are long queues and few providers on staff. Several women/families who had recently experienced complications reported that even when they reached a tertiary-level facility, appropriate staff was not available. Two women needing Caesarean sections reached Homabay District Hospital, but had to be referred onwards, either to Kisumu Provincial Hospital or to a mission hospital in Migori District because there was no doctor available. Both cases resulted in a stillbirth, and one also resulted in vesico-vaginal fistula. A woman in Migori District, who sought help at a mission hospital when she experienced retained placenta, was “kept waiting for three days and that is when the doctor came and removed the placenta.”

Not only are there shortages of staff at all levels of the health system, but available staff do not always have the knowledge and skills to promptly recognise complications and take appropriate steps. For example, nurses and a physician at one hospital initially told a woman that her foetus had died, and they then waited eight hours before performing a Caesarean section. In performing the operation, however, the baby was found to be alive, but it was in poor condition, and it then died two days later. In another case, a woman carrying twins presented at a hospital after delivering the first twin at home. After being admitted at 7 p.m., the woman was left alone, and the nurses went to sleep. At 1 a.m., experiencing severe pain and considerable foetal movement, the woman started calling for help. After about an hour, the nurses finally came, and “they squeezed my tummy [for about an hour] until the baby came out dead. But he was not supposed to die because when I called the nurse, the baby was moving very much.” Another instance of poor medical management included an adolescent girl with cephalopelvic disproportion who was taken to the labour ward for five hours before being taken for Caesarean section. The baby died immediately after birth, and the girl developed a fistula.

Community members also described staff as “sleepy” and “negligent,” noting that they do not respond promptly when patients require assistance, often leaving them to go through labour alone.

“What we didn’t like was only delay with the treatment because at times she would call the sisters [nurses] and they will not respond in time.” (Family member of woman with obstetric complications, Migori)

While most of the women/families surveyed experienced delays in reaching the tertiary-level

facility, the speed with which appropriate care was provided did appear to have a direct impact on delivery outcomes. Of the 19 complicated obstetric cases where facility-based care was sought, only six cases were reportedly treated promptly by staff at the facility. One of these cases involved removing a foetus that had died *in utero*, but all five of the other cases resulted in both a live birth and a live mother. In contrast, of the 13 cases where lengthy delays occurred before treatment was provided, three cases resulted in the death of the woman, four resulted in stillbirth, and three resulted in the birth of a live infant in poor condition (one died immediately, one died two days after birth, and the third was reported to be “mentally retarded”).

One factor that appeared to result in more prompt treatment by staff at tertiary-level facilities was whether or not another health worker or a TBA accompanied the woman experiencing complications. For example, one woman in Migori initially sought care at Rakworo Health Centre where staff determined that she needed to be referred to Ombo Hospital. She was taken in the Rakworo vehicle and accompanied by nurses, and when they arrived at Ombo, they “just entered express. When the nurses saw the nurses from Rakworo, they ran towards us and... they took her immediately.”

Similarly, several TBAs reported that they accompanied women to the health facility in order to assist her in obtaining the needed care from facility-based attendants. These TBAs suggested that they saw providing such support as part of their duty, and they appeared to take pride in their ability to negotiate the formal health system and obtain better care for their clients.

“Yes, TBA accompanies and tells the nurse that ‘she is my patient in the community so please assist her,’ and action is taken quickly.” (TBA, Homabay)

“You can accompany to facility and negotiate the charges for her because sometimes she doesn’t have the money, and if you are with her she doesn’t have to pay all what is expected.” (TBA, Homabay)

Confirming these statements, one Homabay woman commented that her TBA “carried everything that would be required and even if I could deliver on the way, she would have taken care. When we reached the hospital, I was received immediately, and they took good care of me.”

Overall, study participants indicated that delays in receiving appropriate care for obstetric complications continue even once a woman has reached a facility where such care should be available. Combined with the time involved in recognising complications, deciding to seek facility-based care and reaching appropriate health facilities, the delays in providing life-saving care constitute an additional risk to the health and lives of women in Homabay and Migori.

D. Early Postpartum Care

Study participants reported that the period immediately following birth is considered special. A recently delivered woman is called *manyuru* (new mother), and her baby is called *malaika* (angel). While community members reported that a variety of practices are usually observed to ensure the health of the new mother and infant, early postpartum care is rarely sought, and most respondents indicated that it was unnecessary if the woman herself feels well.

i. Care Provided Immediately after Delivery

Providers of delivery care—both skilled attendants and TBAs—described the care they provide to women in the hours immediately after delivery. TBAs reported that they usually examine the woman during the first hour after birth to make sure that the uterus is contracting well and that there is no heavy bleeding from retained placenta.

TBAs emphasised the importance of providing warm water for bathing, cleaning the perineum, and massaging the woman's body to prevent or minimize stomach or back pains such as *ojiwo*. They also mentioned providing *uji* or porridge, as well as herbal drinks or teas to prevent pain after delivery.

"They need warm water for birth. Massaging with warm water minimizes *ojiwo*." (TBA Homabay)

"I cook *uji*. You can give her some herbs to take home in a bottle immediately, and the pain finishes." (TBA, Homabay)

Some TBAs reported using herbal medicine to massage the baby, and stated that they counsel mothers about breastfeeding and the importance of taking the baby to the clinic.

Facility-based providers reported that women are generally discharged within 24 hours after a normal delivery, however, in this time they provide more comprehensive care and counselling. They reported cleaning the perineum, as well as providing advice and counselling on a range of subjects, such as keeping the perineal area clean, passing urine, changing pads/cloths, breastfeeding, care of the newborn/cord, signs of maternal and neonatal complications, diet/nutrition, family planning, and immunisations.

"You have to teach them about personal hygiene. Especially, first within these two weeks because that is the time when it is there is bleeding. They need to clean up themselves and also to observe the kind of lochia they have." (Skilled attendant, Homabay)

"Those who have been to theatre have catheters, which are checked daily. In facility, routine care means changing pads and reporting any abnormalities. Give advice. Normal births don't take more than 24 hours in a facility. Take good care of themselves at home. Women with lochia keep changing cloths when wet." (Skilled attendant, Homabay)

Most reported that they advise women to return after six weeks (42 days) for a postpartum check-up, family planning, and immunisations for the baby, however, a few recommended immediate postpartum care for women who deliver at home.

Some skilled attendants cited the risks during the immediate postpartum period and indicated that most maternal and neonatal deaths occur in this time because of inadequate care during pregnancy, poor hygiene during delivery, and exposure to cold (especially for the infant), though they do not see many cases.

ii. Traditional Practices and Taboos during the Early Postpartum Period

Community respondents described the early postpartum period as a time of weakness and vulnerability for the new mother and her baby. The new mother is supposed to be given good food and exempted from domestic work to enable her to recover strength and blood lost during delivery. New mothers are seen as particularly vulnerable to *nyatong' tong*^{§§} during the immediate postpartum period. Therefore husbands, mothers-in-law, and co-wives are expected to assist with household chores, such as shopping, cooking, collecting firewood and water for cooking, bathing, and washing, etc. As one male partner in Homabay commented: "After delivery, you as husband become responsible as there are now some things that women can't do. The husband will now do those." Similarly, a female elder observed, "Washing of napkins and infant clothing, and collecting of water should be done by elder women." Families with sufficient financial resources may even hire a

^{§§} As described in Section C on Obstetric Complications, *nyatong' tong* is a health problem that some community members described as a backache, and others described as severe headache. It is considered an extremely dangerous condition and life-threatening.

household helper (*japidi*) to look after the baby and undertake household chores while the new mother rests.

Approximately two weeks after delivery, visitors (family, friends, church members, neighbours, etc.) are allowed to welcome the newborn and to congratulate and thank the woman for “bringing this baby.” Visitors generally bring gifts, such as clothing for the new baby and food. Study participants described this being a time of celebration and considerable social support, even in communities where poverty is widespread. In contrast, however, some study participants observed that women lack adequate support during the early postpartum period. Citing poverty as a primary cause, they reported that some women do not get nutritious food or any reprieve from their domestic chores after delivery.

While most study participants reported that women should remain at home during the period after delivery, it appeared that there are no strict prohibitions on women’s movement during this time, and the length of time for rest and seclusion varies from family to family. Some community respondents indicated that a woman should remain at home for at least four days after delivery, while others reported that the period of seclusion lasted from two to six weeks.

Some study participants indicated that the period of seclusion is mainly to protect the newborn, rather than to ensure the mother’s health. For example, a group of female elders in Migori commented: “Yes, the woman can just leave the house. We are only concerned with the baby.” These and other respondents described the importance of protecting the baby from “evil spirits” or people who might try to bewitch the baby. A few community respondents observed that the length of time for protecting the baby depended on the sex of the baby, and they noted that early discharge after delivering in a hospital made it impossible to observe this traditional practice. As a male partner in Homabay commented: “You know when a woman gives birth according to Luo culture, there are number of days you are supposed to stay in the house before coming out—four days for a boy, and three days for a girl. But in hospital you only take one day for discharges.”

TBAs, female elders, and a few other study participants (e.g. women and skilled attendants) mentioned numerous taboos and restrictions related to sexual activity during the postpartum period. Various respondents reported that the newborn should not be touched or cared for by women who were sexually active, even their grandmothers. As one Homabay mother-in-law explained, “The reason why a granny can’t touch the baby is because she’s still in the homestead [meaning she’s still sexually active].” This female elder went on to explain that since her daughter-in-law had died after delivery, she herself had to stop sexual relations in order to take care of the baby. “Immediately I stopped sexual relationship, which was very difficult.”

While TBAs and female elders reported that traditionally women were supposed to abstain from sexual intercourse until three to six months following delivery, they reported that most husbands today fail to observe this practice. They explained that with Luo traditions of polygamy, a man is prohibited from having sexual relations with his other wives until he has had intercourse with the newly-delivered mother. As a result of this tradition, some women are pressured to have sex soon after delivery. As one female elder commented, “To say the truth, they don’t wait until three months elapse, but what I see some husbands do is that three weeks after delivery he crosses over the wife [they have sex just once]. This usually happens in a polygamous family, and this is the only way to allow other wives to have sexual intercourse with the husband. When he does this, he is now free to meet the other wives because these other wives cannot wait until three months pass.” A group of TBAs in Migori commented, “If a woman delivers and she is one wife (*dhako achiel*), it can take one month. But if it is polygamous [household], you would want it to be fast because something might happen, and your husband cannot have sex with other wives (*dichwo pod omoko*) so it can

take three to four days. After the first sex after delivery (*ing'ado imbo nyathi*), the husband is free to have sex with the other wives.”

Corroborating such statements, a health worker and TBA commented that they occasionally see women who have developed infections or started bleeding again because sexual relations were resumed too early after delivery.

iv. Use of Postpartum Care

Most community respondents—men and women alike—indicated that postpartum care is not widely sought, and they reported generally that it was not necessary for women who had normal deliveries or who were not experiencing health complications or problems after delivery. One male partner in Homabay commented that “women are never ill after delivery so why bother to take them to hospital?” Another said, “Why go to hospital if you are not sick? When you have delivered well you just go back and do your work because you are well.” Similarly, a female elder questioned why a woman would seek postpartum care if she was not experiencing a problem:

“Care after delivery? Ahhh. That they will not get. It's not even there. How would you get the care? You have already delivered and now in the home, and mother is fine and well. Your job now is to take the baby to the clinic. Who would examine you? You are not sick and you are examined? You delivered well. Who would examine you?”

While a few TBAs reported that they visit women in their homes in the days following delivery, most study participants indicated that women do not generally receive any check-ups after delivery. As a female elder in Homabay commented, “After delivery, everything ends. Not even the TBA comes. Similarly, a TBA confirmed, “Check-up? I don't check. No more dealing with her postpartum.”

Facility-based postpartum care is accurately perceived by community members as focused on newborn care, rather than on recently-delivered women. In addition, the overall quality of care is considered poor by community members and providers alike, which further discourages women from attending. As a skilled attendant in Homabay commented:

“What I can say is that you see, we still have a lot to do to improve the hospital deliveries and postpartum care, because as much as I know postpartum care has been very poor...because we don't care for postpartum [women], but we care for the children. We normally bring them for immunization but the postpartum [women] they are not normally thought of.” (Skilled Attendant, Homabay)

Facility-based postpartum care was also described by many study participants as inaccessible, because of distance and lack of funds to pay for transport and service fees, which are seen as high. Because of financial constraints, distance, and perceptions that postpartum care is primarily for newborn immunisations, even women who delivered in a health facility reported that they did not seek follow-up postpartum care unless they were experiencing a problem.

When complications occur during postpartum period, women seek care either from a TBA or from the hospital. For problems such as *ojiwo* and *nyatong' tong*, women generally seek herbal treatments or “pot medicines” from TBAs, rather than facility-based care. For other problems, however, facility-based care will be sought. As a male partner in Homabay described, “She tells her husband she stays with or any woman she stays with that she gave birth but she's not feeling well so that she can be taken to hospital.”

A few TBAs indicated that they considered facility-based staff better equipped to manage complications during the postpartum period. As TBAs in Homabay commented:

“If you have delivered well and something else has cropped in, what should one do? Take her to the hospital.... The best person to help her is a doctor. If a woman gets problems after birth she should go to the hospital.”

“Sometimes when you visit her she may report that she has abdominal pain, muscle ache. Some babies are too big during birth. You have to visit her and ask; if you find she is not well you look for a bicycle or family member to transport her to hospital for help.”

E. Maternal Health Information and Communication Channels

In addition to exploring community members’ knowledge, attitudes, and behaviours related to maternal health care, the study aimed at identifying information sources that women and men rely upon for information about maternal health issues.

While access to maternal health information varied among the target groups—particularly by gender—generally it appeared that community members rely on a variety of information sources ranging from mass media (radio, television, and print journalism) to community-level structures, such as public meetings and gatherings, known as *barazas*, as well as church gatherings, women’s groups, and other social and economic gatherings. Women indicated that they normally get information about childbirth from women’s groups and friends (e.g. from “being friendly in a group”). A few reported that they get information from community health workers, such as TBAs, when they go for antenatal care, or from hospital-based antenatal care providers.

Adolescent women appeared to be particularly disadvantaged in their access to information about pregnancy and childbirth because many are reluctant to seek antenatal care and are not reached by other communication channels. Almost all categories of respondents also mentioned that adolescents were particularly difficult to reach with information about maternal health and added that the few messages available did not reach or target youth as a specific audience. Some older participants stressed further that young people desperate for information rely on peers, many of whom are “just as ignorant.”

Mass media (radio, TV, newspapers, and magazines) were also sources of information for women, though printed materials, which are relatively expensive, were cited more frequently by men. Men also tended to obtain their information through *barazas*, market places, and entertainment places.

Generally, community respondents expressed considerable interest in maternal health issues, noting that they wanted more information on a number of topics, including: information on “how the baby is lying in the womb,” how pregnancy progresses, the birth process, duration of labour, complications in pregnancy and childbirth, childhood diseases, and the risks of delivering at home. Other reproductive health topics of interest cited by community members included HIV/AIDS, condom use, and family planning.

i. Radio and Television

Radio and television appeared to be the most strongly preferred sources of health information by both men and women. Not surprisingly, radio was cited as more accessible. “Radio is what we have here, not TV,” commented one male partner.

Men generally listen to the radio more often than women, perhaps because they have the purchasing power to buy radios and therefore control their use, or because they have more leisure time to listen

to it. When asked about their radio listening habits, male participants indicated that they listened to news broadcasts, which are aired at 1.00 p.m., 7.00 p.m., and 9.00 p.m. As one male partner in Migori commented, “These are the times when 'hot news' is broadcast and one can obtain comprehensive information about what is happening in the country, about women, and other people around the world.”

Women, young and old, were also said to be good listeners to various radio programs, however, it appeared that they listened primarily at night and that they mainly listened to local educational and religious programming, rather than national news broadcasts.

“During the day, we are busy so we listen at night, the doctors health education program, Dr Odhiambo of New Nyanza Hospital of Russia Kisumu, Dholuo broadcast station.” (Female elder, Homabay)

“I like the program called Neno by Christian Bible Study.” (Woman, Homabay)

Other programs cited included TV drama, sermons, Dholuo plays or drama, though participants said little about how often they listened, or the quality of information received.

Various study participants reported that they sometimes discuss the contents of a particular program with family members, friends, and other community members. In this manner, even those community members who did not access the information first-hand are able to absorb it during conversation.

“Yes, we discuss what we hear on radio a lot more so on these new diseases which we hear on the radio...and world news... people like discussing among themselves what they have heard on the radio.” (Female elder, Homabay)

ii. Print Media

Many study participants reported that they read print materials when they can access them, however, few mentioned specific materials, such as the *Daily Nation* or magazines on parenting. Community members also reported that they read simple publications, such as pamphlets, booklets, leaflets, and books on families, health, and on bringing up children whenever they could obtain them. As a woman in Homabay explained:

“I read once in a while. The book I like reading are *Bring Up A Child*, *Home at its Best*, and *Making of a Mother*. These are the books I like reading. I have bought them to read and when I finish, I repeat them. I read newspaper rarely because it's hard to get.” (Woman, Homabay)

iii. Informal Gatherings and Social Groups

Community-level groups and meetings were also cited as a significant source of information, especially for women. These included women's groups, chief's *barazas*, market gatherings, funerals, churches, and sporting arenas.

Women's groups: Many of the women surveyed reported belonging to a group of women who shared similar backgrounds or interests. These included pooled savings groups (“merry-go-rounds”), business groups, prayer groups, etc. These groups appear to serve as forums for educating members and raising their awareness about particular issues in the community, and for enabling them to improve their circumstances. Some of these groups promote economic empowerment of their members through joint business ventures and collect contributions from each group member to raise the required funds. Women reported that group members

encourage one another to seek medical care, and recommend particular providers for care. Of great significance is the fact that often they collect funds from members for emergencies, such as birthing complications, sickness, and death. Study participants indicated that such women's groups are very important, and one woman in Migori explained, "It is like a learning session."

Men's gatherings: Few men reported being members of small community-level groups, and they generally socialized at sporting arenas, marketplaces, and other places in the community where they relaxed, talked, and played games, such as *ajua*. Generally these gatherings were described as entertaining, rather than focused on mutual self-help, and it did not appear that they currently serve as a source of health-related information.

Chiefs' barazas: Chiefs and Assistant Chiefs are respected community leaders, and they were widely mentioned by study participants as important figures for promoting health-seeking behaviours and addressing issues related to women. In the past, they have often collaborated with the government to sensitise community members about harmful traditional practices and to mobilise community members to plant trees or participate in immunisation campaigns. For these reasons, participants—especially the elderly females—tended to see them as "the best people to provide health information." At the same time, some community members commented that these leaders have been known to intimidate community members.

Clan elders: Clan elders, who are respected because of their advanced age, were cited by most community members as important educators and sources of information. As one woman in Homabay explained, "The information can be given to the clan elder who will make the announcement to the adjacent homes and this information will be received by the mothers. It is just like immunisation. When, there is immunisation, the clan elder will always announce it. Therefore, in these two places, we will get information faster than the radio." Younger women expressed some reservations about these leaders, however, arguing that they are likely to promote old-fashioned ideas and traditional practices that are harmful to women's health.

Church leaders: Community members also identified churches as important channels for information and influence, since they have a lot of followers in their respective communities. Both men and women, young and old, saw them as powerful institutions. One skilled attendant and a number of elderly men and women described the church as well organized, running youth programs on sexuality, and sometimes broadcasting radio programs to educate men and women about sexuality, diseases, and ethical values related to the family. They thus have both the political will and administrative acumen to support community education efforts. It was also observed that many are involved in broadcasting educational radio programs and publishing educational magazines that are widely shared.

V. DISCUSSION & RECOMMENDATIONS

The study's findings reveal factors at the individual, family, community, and health facility level that either motivate or discourage use of skilled care during pregnancy, childbirth, and the postpartum period. In addition, the findings illuminate the need for focused behaviour change activities at each of these levels to reinforce and strengthen existing attitudes and perceptions that motivate use of skilled care, as well to help overcome the barriers and delays that are encountered in accessing this care.

A. Facility-level Interventions

Feedback from community members and facility-based providers highlighted a number of urgent problems at the health facility level that discourage women from using maternity care services and prevent women from receiving high-quality care. Although community members perceive facility-based care to be superior, they are acutely aware of health providers' negative and uncaring attitudes towards their clients. Facility-based providers were described as abusive, neglectful, and disrespectful, and their poor interpersonal skills constituted a barrier to use of care for some community members.

Contributing to and compounding the poor interpersonal dimensions of available maternity services are major gaps in equipment, supplies, and drugs. Most facilities lack the items needed to provide care to clients, and as a result, maternity patients are forced to supply their own drugs and supplies before receiving treatment. For some clients, these requirements result in life-threatening delays in receiving care.

Staff shortages and low morale among available staff also constitute major obstacles to the delivery of maternity services. At all levels of the health system, shortages of mid-level and higher-level cadres of health personnel result in serious gaps in the availability of essential obstetric care. Maternity clients at mid- and lower-level facilities find that there are no skilled attendants available, and even at the hospital level, clients reported waiting for hours or even days before a physician was available to provide care. Clients reported that they had to bribe providers before treatment would be offered, and described providers as slow and sluggish in responding to patient needs.

As a result of these factors, essential maternity services are not available at many health facilities in practice. Mid-level facilities that are short-staffed cannot provide maternity care on a 24-hour basis. Maternal postpartum care is also not routinely available.

In view of the study's findings, a range of interventions is needed at the facility level. These include:

1. **Address staffing, equipment, supply and other infrastructure gaps that constrain the provision of high-quality maternity services on 24-hour basis, and develop sustainable mechanisms to ensure supply chain.** To ensure that delivery services and essential obstetric care functions are available at the lowest levels of the health system that can safely provide this care, it is critical to address the chronic shortages of supplies, drugs, equipment, and staff that plague the health system overall. Efforts must be made to deploy and retain staff at mid- and lower-levels of the health system so that delivery services are available and accessible to women on a 24-hour basis. Ensuring that lower-level facilities, such as dispensaries, have the capacity to provide emergency delivery care to women who present in

the second stage of labour will do much to reduce the obstacles that women currently face in using skilled care.

Health facilities should also be equipped with radio call systems to enable them to request emergency transport from higher-level facilities and to obtain guidance on managing or stabilising emergency obstetric cases.

2. **Training of providers.** The study's findings suggest that providers at all levels need training in both clinical and interpersonal dimensions of care. It appears that even when clients with obstetric emergencies reached health facilities, providers had trouble providing prompt, effective treatment. Even for women who had been in labour for several days, there were long delays in conducting a Caesarean section, and in some cases vaginal deliveries were attempted when they were clearly contraindicated.

Facility-based providers not only need training in life-saving skills for managing obstetric complications, but they urgently need training in interpersonal communications and counselling skills, as well as other basic areas of maternal health, such as antenatal care, delivery care, and postpartum care. Providers of antenatal care need skills in counselling women on practical and culturally-appropriate preparations for delivery, as they are currently recommending preparations that are perceived as culturally inappropriate and which have little benefit in terms of encouraging women to access skilled care during delivery and obstetric emergencies.

At all levels, providers involved in conducting deliveries need training in the use of the partograph to ensure that they can effectively monitor the progress of labour, and promptly identify complications that require intervention and/or referral. This training should be provided to staff at all levels of the health system in order to ensure that women in established labour who seek delivery care at dispensaries can be cared for rather than turned away.

Postpartum care is another crucial area for training. Because these services are currently focused on the newborn, an important opportunity to monitor the health and well-being of the recently-delivered mother is being missed. Provider training should encourage staff to recommend early postpartum care (within two weeks of delivery) for all women, but especially for those who deliver at home. In addition, providers need skills and guidelines to reshape the content of postpartum care.

Finally, interpersonal and caring aspects of provider-client interactions are seriously deficient. Training efforts need to instil in facility-based staff the importance of caring and compassionate attitudes towards maternity clients. Providers should be encouraged to adopt simple actions that are highly valued by community members, such as addressing women by their names; reassuring them; treating them gently and respectfully; providing clear information about their condition; providing warm water for bathing; accommodating women's preferences related to delivery position; etc.

3. **Addressing financial barriers at health facilities.** The findings reveal that service delivery costs—i.e. the cost of services, required supplies and drugs, and bribes/incentives for service providers—constitute a serious obstacle to the receipt of care. For many patients, simply obtaining transport to the facility depletes their amassed savings or the contributions they have gathered from family and community members, yet upon arrival at the health facility they are confronted with additional expenses that they cannot meet. Some clients were turned

away because they lacked the required funds, and for others, appropriate treatment was delayed or withheld.

While a waiver system exists to ensure that patients are not denied essential treatment, it is not functioning well. Further, overall shortages of supplies and drugs at health facilities often make it impossible for providers to comply with the waiver system because they simply do not have the required items to provide treatment. While efforts to improve the functioning of logistics system are urgently needed, it is also essential that the factors that limit application of the waiver system for eligible maternity clients are explored. Measures should be taken to improve the functioning of waiver system in order to ensure that women without cash on hand can be treated promptly and respectfully.

Secondly, drug revolving funds and other emergency financing schemes should be explored as options to ensure that patients can receive prompt and high-quality care. Similarly, introducing systems that allow families to pay for services in instalments or to defer payment would also help make services more universally accessible.

Thirdly, mechanisms for detecting and disciplining staff who solicit bribes should be established. Signs should be posted in all health facilities to remind patients and providers alike of their rights and responsibilities.

B. Community-level Interventions

The study illuminates an urgent need for community-level structures that would facilitate access to skilled care during both normal deliveries and obstetric emergencies. Overall, the study revealed that when labour begins, families face daunting logistical barriers in reaching a facility where appropriate care is available. Without sufficient funds on hand or any means of transport available, skilled facility-based care is inaccessible, and most women simply deliver at home. If labour begins at night, home delivery is often the only option.

Many families begin to try to reach a health facility only when complications arise, and then considerable and life-threatening delays are incurred as they struggle to mobilise funds and transport. For some families, days pass as they try to reach an appropriate facility. In addition, many families do not know where to seek care, and expend valuable time, energy, and resources seeking care from facilities that are not equipped to provide assistance.

In view of the study's findings, there is an urgent need to work with community leaders to enable them to mobilise their communities to help ensure that women in labour and those with obstetric complications can quickly access the care they need. Specific areas for intervention include:

1. **Sensitising community leaders about safe motherhood.** Community leaders, including religious leaders, are uniquely positioned to mobilise community members around safe motherhood, and to help community members ensure a healthy outcome when obstetric complications occur. Community leaders should be oriented to safe motherhood and assisted in developing effective emergency preparedness plans so that women with obstetric complications and other health emergencies can be quickly transported to appropriate facilities. Community leaders should be informed of current efforts to improve the quality and availability of obstetric care, and should be involved in addressing infrastructural gaps at the facilities that serve them. Community leaders should also be kept abreast of the introduction of obstetric care services at various facilities so that they can provide relevant guidance to community members on where to go for care during routine delivery and for obstetric emergencies.

2. **Establishing community loan funds that families can access when emergency complications arise.** Accessing funds during an emergency results in critical delays in reaching life-saving care. Community leaders should be trained and equipped to sensitise community members about safe motherhood and foster the *harambee* spirit that exists in small communities. They should encourage community members and business persons alike to contribute to an emergency loan fund that could be used to ensure that pregnant women reach skilled care.
3. **Identifying vehicles that can be used to transport pregnant and delivering women to a health facility.** Community leaders should reach out to individuals with vehicular transport and try to establish arrangements with vehicle owners to provide transport during emergencies. In communities where no transport options exist, community leaders should explore the feasibility of establishing an emergency bicycle dispatch system to request assistance and transport from a nearby health facility.
4. **Establishing emergency communications systems.** As mobile telephone usage continues to expand, community leaders should work to identify individuals with communications equipment in order to set up emergency arrangements for contacting health facilities to request emergency transport for women in labour or experiencing complications.

C. Behaviour-Centred Communication Initiatives

Increasing the use of skilled care during pregnancy, childbirth, and the postpartum period requires broad-based efforts to encourage and motivate pregnant women and their families to use facility-based services. Utilisation of these services is currently low and extensive behaviour change efforts are needed to effect changes in communities' attitudes and practices. Communities generally perceive pregnancy and childbirth as risky, rather than risk-free, and are therefore receptive to messages related to risk reduction. While women's overall status is low, they tend to be involved in decision-making related to their own health. In addition, the study's findings reveal that families take extraordinary measures to try to reach skilled care when complications do arise.

Through focused information campaigns and counselling related to pregnancy, delivery, obstetric complications, and the postpartum period, women and their families can be equipped with the information they need to respond more quickly and effectively to the onset of labour and/or complications. In addition to informing communities of improvements being made at health facilities, there is an urgent need for behaviour change interventions that will heighten community members' sense of self-efficacy and control over their lives and motivate them to take concrete actions to ensure positive maternal health outcomes. Key issues to be addressed through behaviour change communications include:

1. **Pregnancy and antenatal care.** As noted above, pregnancy is perceived as a time of risk and uncertainty, and community members value the ability of formal health providers to monitor the growth and position of the foetus, and to provide drugs, nutritional supplements, and counselling on the expected due date and preparations for delivery. Messages about antenatal care and self-care during pregnancy should reinforce these perceptions and emphasise the superior capacity of facility-based staff to provide such care, as opposed to community-based providers such as TBAs.

In addition, as women's use of antenatal care is sporadic, messages should reinforce the importance of regular antenatal check-ups to ensure that the foetus is growing well and is properly positioned and to quickly detect any problems or complications. Given the high

value placed on TBAs in the surveyed communities—as well as women’s reliance on them for services that are perceived as complementary to those provided by the formal sector—it may be most strategic to acknowledge the services for which TBAs are consulted, but to emphasise that superior, modern care is available at health facilities.

Messages related to pregnancy should also reinforce the importance of good nutrition and reduced workload during pregnancy. Women should be encouraged to take extra precautions against malaria during pregnancy. Domestic violence should be discouraged through efforts to heighten awareness of the risks to mother and baby, and to women should be informed about where to seek help if they are being abused.

2. **Family dialogue and discussion about pregnancy and childbirth.** The findings suggest that while most people do not observe strict taboos on discussing pregnancy and childbirth, such discussions are difficult for most women and men. Acknowledging that these issues may be initially awkward to discuss, messages should encourage women and families to talk about saving funds for delivery, attending antenatal care, self-care during pregnancy, developing a plan for reaching a health facility when labour begins, etc., so that appropriate arrangements are made for delivery. Messages should emphasise that pregnancy involves two people and that it is their joint responsibility to ensure a healthy and safe outcome for mother and child. In addition, messages should reassure women and their families that discussing pregnancy and childbirth would not invite misfortune.

The study also illuminated the special challenges facing first-time mothers—married and unmarried. They appear to be particularly disadvantaged in their access to information about pregnancy and childbirth, and most hesitant in discussing such issues. Communications initiatives should heighten attention to their special information needs, and work to address their knowledge gaps about pregnancy and childbirth. Similarly, messages should encourage other family members to make special efforts to encourage younger women to ask questions and obtain the information they need.

3. **Preparations for and decision-making related to delivery.** Community members find it difficult to plan for an event that is difficult to predict, and some believe that preparations for delivery invite misfortune. Nevertheless, in view of the difficulty families face in reaching a facility where skilled care is available, it is critical to improve their ability to make advance preparations. Messages should emphasise that even though the onset of labour is unpredictable, the place of delivery should not be left to chance and that planning for emergencies prevents misfortune, rather than invites it. In encouraging families to discuss plans for delivery long before the due date, messages should emphasize that everyone in the family, especially the pregnant woman, has much to contribute to this discussion, and that care-related decisions should be made well in advance so that families are not scrambling to involve various members in the discussion when the woman is already in labour.

Birth preparedness messages should also offer concrete and culturally appropriate guidance on how families can prepare for delivery. For example, these messages can build upon community members’ awareness of the importance of saving money, but can offer more guidance by encouraging women and their families to save for specific expenses that can be anticipated and quantified—e.g. transport costs, service costs, supplies, etc. Such messages should inform community members that service delivery charges are equivalent to those charged by many TBAs, but that health facilities with skilled attendants can provide much better quality and safety.

Thirdly, birth preparedness messages should encourage families to identify means of transport, communication, and potential blood donors well in advance of the woman's due date in order to ensure that a woman can be quickly transported to a health facility during labour.

4. **Promoting the use of facility-based delivery care.** Poor quality of care and disrespectful treatment by facility-based providers constitute a strong disincentive for community members to use available services. This is especially so when community-based providers, such as TBAs, are perceived by most community members as extraordinarily caring and compassionate, albeit less skilled.

Messages to promote the use of facility-based care should reinforce community members' perceptions that skilled care is clinically superior. While acknowledging past quality of care problems, messages should inform community members of improvements in delivery care at nearby facilities, emphasising aspects of care that are particularly valued by community members: providers' capacity to detect and manage complications promptly, to prevent infections in the newborn, to provide appropriate medicines, vaccinations, etc. Messages should also inform community members of their rights to high-quality, respectful care and heighten awareness of emergency financing schemes that are put in place to make services more accessible.

Messages should also build upon existing community values to create positive associations with delivering in a health facility. For example, messages can draw upon the *harambee* spirit of cooperation to encourage communities to perceive saving the lives of women and their babies as a collective responsibility. Similarly, messages can reinforce the idea that caring for a woman—whether she is a wife, daughter, or daughter-in-law—means ensuring that she can deliver in a health facility where the best delivery care is available.

5. **Recognition and responsiveness to obstetric complications.** The findings showed that maternal health and obstetric complications are perceived as serious problems in Homabay and Migori. While the majority of study participants were aware of a range of obstetric complications, they had insufficient information to promptly recognise them or make effective decisions about what type of care should be sought.

Building upon community awareness of the risks associated with pregnancy and childbirth, communications initiatives should emphasise that facility-based providers have the knowledge, skills, and drugs to manage **all** obstetric complications, and that delivering outside a health facility heightens a woman's risk since life-threatening complications can arise suddenly and without warning. Acknowledging the difficulty of recognising complications, messages should emphasize that facility-based providers are able to accurately and definitively diagnose problems and determine appropriate treatment, in contrast to TBAs who may give varied explanations of the problem's cause and try a range of treatments before ultimately being defeated.

While it is difficult for community members to absorb technical information on obstetric complications, messages need to heighten the ability of women and their families to recognise serious complications (e.g. haemorrhage, obstructed labour, pregnancy-induced hypertension/eclampsia, and sepsis) and the urgency of quick action if they arise. Special efforts are needed to address community beliefs related to prolonged and obstructed labour, as participants in the study had difficulty recognising when labour had gone on too long, and often attributed the problem to *rariw* or to other non-medical factors (e.g. witchcraft, evil spirits, etc.) that fall within the realm of TBAs' expertise. In addition, community members

expressed concerns about Caesarean section delivery, and perceived it as a life-threatening—rather than life-saving—procedure.

Communications should also address cultural values that require women to be stoic and strong during labour, and lead women to conceal that they are in labour or experiencing complications. Messages targeted to women should emphasise that family members cannot help if they do not know what is going on, and that waiting silently can be life-threatening. In addition, messages should reinforce the fact that getting to the health facility requires advance preparation, and that informing family members early can ensure that they can find the needed transport, funds, etc.

Improving families' ability to promptly recognise and respond to obstetric complications requires addressing traditional beliefs and taboos that restrict certain family members, such as the husband or mother-in-law, from being present during labour. Messages need to address misperceptions that the presence of these family members will slow labour, and emphasize that having these individuals present can ensure that complications are recognised early, and that decisions about care are not left solely to the woman in labour and the TBA who wants to be paid for a delivery.

Lastly, messages need to create a sense of self-efficacy and urgency in responding to obstetric emergencies. Messages could reinforce concepts such as “God helps those who help themselves”, and “God will help, but not here [at home].” In view of the existence of religious sects that explicitly discourage the use of health services, messages need to provide reassurance that seeking medical care does not imply a lack of trust in God, but simply a commitment to securing the health and safety of loved family members. Messages should also encourage communities to take action regardless of what time of day complications occur. In addition, to encourage community members to provide immediate assistance, awareness should be heightened that every minute a woman somewhere is dying because of complications of pregnancy or childbirth, and thus every minute counts.

6. **Postpartum care.** Increasing the use of early postpartum care in the first two weeks after delivery requires substantial efforts to heighten awareness of the need for a check-up even if the new mother is feeling well. Messages should heighten awareness of complications that can arise during the postpartum period, and emphasise that a check-up by facility-based providers can ensure that such problems are detected early and managed promptly.

Messages should also reinforce the importance of reduced workload, good nutrition, and appropriate self-care after delivery. Family members should be encouraged to take on household chores to allow the new mother to rest. In addition, the resumption of sexual relations should be discouraged until bleeding has stopped and the perineum has healed.

Endnotes:

-
- ¹ World Bank. *Kenya Country Brief*. (<http://www.worldbank.org>)
 - ² World Bank *World Development Indicators Database*. 2002. (<http://www.worldbank.org>)
 - ³ World Bank. *Kenya Country Brief*. (<http://www.worldbank.org>)
 - ⁴ World Bank Group. *Country Profile Table*. (<http://www.worldbank.org>)
 - ⁵ UNDP. *Human Development Indicators*. 2002. (<http://www.undp.org>)
 - ⁶ World Bank. *Kenya Country Brief*. (<http://www.worldbank.org>)
 - ⁷ Kenya Ministry of Health. *A Question of Survival? Review of Safe Motherhood*. 1997.
 - ⁸ National Council for Population and Development, et al. *Kenya Demographic and Health Survey*. 1998.
 - ⁹ World Bank Group. *GenderStats, Labour Force Structure*. (<http://www.worldbank.org>)
 - ¹⁰ Schwarz, Ronald A. *The Health Sector in Kenya: Health Personnel, Facilities, Education and Training*. 1995.
 - ¹¹ World Bank Group. *GenderStats, Labour Force Structure*. (<http://www.worldbank.org>)
 - ¹² National Council for Population and Development, et al. *Kenya Demographic and Health Survey*. 1998.
 - ¹³ Kenya Ministry of Finance and Planning. *Homabay District Development Plan, 2002-2008: Effective Management for Sustainable Economic Growth and Poverty Reduction*.
 - ¹⁴ Kenya Ministry of Finance and Planning. *Migori District Development Plan, 2002-2008: Effective Management for Sustainable Economic Growth and Poverty Reduction*.
 - ¹⁵ Ibid.
 - ¹⁶ District Description Key Informant Interview. Homabay. 2001., District Description Key Informant Interview. Migori. 2001.
 - ¹⁷ Population Studies and Research Institute. *Kenya Maternal Mortality Baseline Survey, Vol. II*. University of Nairobi. 1996.
 - ¹⁸ District records. 2002.
 - ¹⁹ Family Care International. *Skilled Care in Homabay and Migori Districts, Kenya: A Baseline Assessment of the Quality, Availability, and Utilisation of Maternity Services*. 2003.