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# Factors That Contribute to the Low Uptake of Skilled Care During Delivery in Malindi, Kenya

Alexandra Carter  
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Factors That Contribute to the Low  
Uptake of Skilled Care During Delivery  
in Malindi, Kenya

Alexandra Carter  
Jamal Omar and Odoch Pido  
Dr. Mohammed Karama

Kenya: Health and Development  
Spring 2010

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**Abstract :**

*In Kenya, maternal mortality ratios remain high and the number of births attended by skilled health attendants hovers at just 44%. Using both qualitative and quantitative data, a study was conducted to determine the uptake of antenatal care and skilled attendance in Malindi District and to explore factors that contribute to the low use of maternal health services during delivery. It was found that after the first antenatal visit attendance to health facilities begins to decline ending in low rates of births attended by skilled care and that socio-cultural and economic factors play a larger role than access alone in women's health-seeking behavior during childbirth. A pervasive lack of birth preparedness and the view that health facilities are for the treatment of complications added yet another barrier to the uptake of skilled care. We conclude that the eradication of TBAs is not a realistic measure in the context of poverty and traditional practices.*

## **I . Background :**

Maternal mortality proves to be one of the greatest health divisions between developed and un-developed countries. A shocking 99% of all maternal deaths are estimated to occur in the developing world. By far the greatest burden of this tragedy is felt by African countries, which account for 40% of the globe's total pregnancy related mortality (UNFPA, 2010: 1). Kenya ranks among the top of the list with huge regional disparities and rates as high as 1,300 per 100,000 in some areas (KDHS, 2003: 22). What cannot be seen through mere statistics are the devastating effects on Kenyan communities in which the death of a parent can lead to the breakdown of family units and a crucial loss of income for already impoverished households.

Realizing the urgency of the problem, the improvement of maternal health was named Millennium Development Goal (MDG) 5 by the United Nations (UN) in 2000. Along with all member states, Kenya signed on to target a three quarter reduction in the number of maternal deaths by the year 2015 (UN, 2008: 1-2). Two indicators were set to monitor the progress toward achieving MDG 5. The first is the maternal mortality ratio (MMR), or the number of maternal deaths per 100,000 live births. The second is the proportion of births attended by skilled health personnel. The World Health Organization (WHO) defines a skilled birth attendant as, "an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate

postnatal period...”(WHO, 2004: 1). Many now agree that skilled attendance during delivery is the single most important factor in the fight against maternal mortality and morbidity. The World Bank claims that all countries where skilled attendance is higher than 80% have MMRs less than 200, and the WHO points to the development of professional midwifery during the 20<sup>th</sup> century as the cause for the dramatic declines in maternal deaths within industrialized countries (Van Lerberghe & De Brouwere, 2001: 79).

Yet, in many parts of the developing world the majority of births are still conducted at home with family members or with a traditional birth attendant (TBA). A TBA is broadly defined as a midwife with no formal training, but in Kenya TBAs or *wakunga*, as they are locally known, are valued members of their communities, bestowed with traditional knowledge and entrusted to care for both the mother and child throughout the pregnancy and birth. In the past, the global public health community and Kenyan government has supported the training of TBAs to encourage safe and hygienic deliveries and to improve the recognition of danger signs for referral to formal health facilities. The advent of the International Safe Motherhood Initiative in 1987, along with a shift toward community-based interventions, brought the training of TBAs to the forefront, and for many years TBAs were viewed as a key part of mortality reduction strategies (Starrs, 2006: 85).

The tides have turned once again in public health policy and previous TBA proponents including WHO, UNFPA, and the Kenyan Ministry of Health now claim that there is little to no evidence that efforts to train TBAs have resulted in less maternal deaths. The Kenya government has presently phased-out TBA trainings in favor of a

singular focus on “skilled” care during delivery and improved access to emergency obstetric services. There appears to be no consensus among current literature on the effectiveness of TBA trainings for bringing down MMR, primarily because a correlation is extremely difficult to measure. Some studies show that trainings do little to reduce postpartum infection and may increase delays in referrals, (Goodburn et al. 2000, Eades 1993), while some point to high knowledge retention among TBAs and declines in morbidity indicators (Ray& Salihu, 2004). Still others view the encouragement of institutional delivery to be a remnant of British imperialism and part of an effort to “modernize” or “civilize” childbirth (Thomas, 2003: 53). Regardless of the motives or their effects on MMR, it is clear that TBAs remain a highly utilized tool throughout the world and that the removal of training programs has done little to deter Kenyan women from seeking their care during delivery.

Despite Kenya’s rhetorical commitments to women’s health, the most recent figures from the Kenya Demographic and Health Survey (KDHS) indicate that the number of women dying due to pregnancy related complications has actually increased from 414 to approximately 560 per 100,000 live births. Further, while 9 out of 10 mothers have had at least one antenatal visit, only 44% of women receive assistance from a health professional during delivery (KNBS, 2009: 1). In rural areas, such as the *Mijikenda* and *Swahili* villages of Malindi District, the number of births attended by skilled health workers is estimated to be even less than the national average. In 2009, Malindi District aimed to have 7,199 women deliver with a skilled attendant out of an estimated population of 13,145 pregnant women. The outcome was a meager 2,977 births attended by skilled care (C1HP2). The rift between high attendance of antenatal clinics



and the low uptake of formal services during delivery has left many health workers and policy makers perplexed and reaching for solutions. In resource-poor settings, like much of Malindi District, the allocation of limited resources must be prioritized to ensure the maximum possible benefits to the population. Therefore, it is imperative to understand the factors that contribute to women's health-seeking behavior during delivery before policy interventions aimed at behavior change are enacted.

The following study seeks to first identify the uptake of skilled care during delivery from three separate communities within Malindi district: Malindi Town, Marikebuni, and Mambrui. Secondly, and more importantly, it seeks to determine the greatest factors contributing to a woman's choice of where and with whom to give birth in an effort to inform interested policy makers and healthcare providers. It is assumed that lack of access to health facilities in rural areas is the major barrier to the uptake of skilled care. Although distance and transportation certainly play a part, especially in Marikebuni, we will see that socio-cultural and economic factors play an equally large role in the decision between institutional delivery and homebirth. These results indicate that a narrow focus on skilled attendance and conventional care may not be realistic for all areas of the country. Without an understanding of the social determinants of health and without consulting the target population directly, effective policy interventions in Malindi District will prove to be very difficult.

## **II. Setting:**

The research for this study focused on three locations within Malindi District—the urban capital of Malindi Town, and the two more rural settings of Marikebuni, and

Mambrui. Situated in the Coastal Province, Malindi District borders Kilifi District to the South, Tana River District to the Northwest and the Indian Ocean to the East (see figure 1). The district is divided into 3 divisions, 16 locations, and broken down further to various sub-locations and individual villages. Poverty levels in the district are high, with approximately 66.7% of the population living in poverty compared to 56% nationally (CRF, 2007:1). This is due in part to squatter settlements without land deeds, poor agricultural returns, and a decline in the major industry of tourism (Malindi, 2005: 10).

Malindi Town represents the largest and most densely populated urban area, displaying an interesting mix of Muslim-Swahili culture and Italian tourists during the high season. Surrounding Malindi to the North are various other locations including Mambrui and Marikebuni, both smaller and drastically more rural than Malindi. The majority of Mambrui's residents identify as Swahili-Muslims and small-scale vendors and farmers while Marikebuni is comprised of mostly Mijikenda- Giriama peoples working as subsistence farmers. In both Muslim and Giriama culture, polygamy is a common and acceptable practice and family planning is rarely used. In a setting with high birth rates and low-incomes, understanding health-seeking behavior during childbirth is particularly important.

Public healthcare is provided by the Malindi District Hospital, and the Mambrui and Marikebuni dispensaries, all of which offer antenatal and delivery services. The Malindi hospital acts as a referral facility for the district and accepts complicated pregnancies from the dispensaries, which do not have the capacity to perform caesarian sections. Even with these facilities readily available to most, health personnel continue to record low uptake of institutional deliveries in the district and it is estimated that only

32% of women in the Coast Province give birth in health facilities (Cotter, 2006: 467).

### **III. Methodology:**

Both quantitative and qualitative data were collected to achieve the objectives of the study and the research was conducted in three separate communities to allow for comparison between urban and rural settings. To determine the current uptake of maternal health services, the attendance of antenatal clinics and the number of institutional deliveries conducted between March 2009 and March 2010 was taken from the official records of Malindi District Hospital, Marikebuni Dispensary, and Mambrui Dispensary. Health personnel in each of the settings also confirmed population estimates, maternal mortality figures, and targets for skilled attendance. To investigate the factors that contribute to the low uptake of skilled care during delivery, a more qualitative approach was used. The study sample was stratified into four groups to gain a broader perspective and to elicit more information: 1.) women who had given birth and women seeking antenatal care, 2.) TBAs, 3.) conventional health workers, and 4.) husbands. I was also able to speak with a few key informants including personnel from the District Medical Office and a village elder. Semi-structured interviews with sets of predetermined questions for each group were used to speak to a total of 53 women, 8 TBAs, and 8 conventional health workers and a group discussion was conducted with 8 men (see appendix 1.). Living with local families in the research sites also allowed for the observation of 2 home deliveries attended by a TBA and 1 hospital delivery. The data

was then combined to create recommendations for policy interventions to increase the uptake of skilled attendance and reduce maternal mortality in Malindi District.

Being an outsider not fluent in the local languages and conducting many of my interviews in health facilities may have skewed the data or caused some to withhold personal information. However, I tried to counteract these disadvantages as much as possible through the employment of female translators from the communities and the use of home visits whenever possible. I also attempted to speak to the same number of TBAs and health care providers and to ask an equal number of questions about traditional practices and conventional care in each interview so as to remove a bias toward either field. Informants also noted that it is customary for a woman to return to her mother's home to deliver so statistics regarding the uptake of skilled attendance may not be completely accurate in all settings.

#### **IV. Results:**

The following results largely reiterate what previous studies have found in other parts of Kenya and identify predictable barriers to the uptake of skilled care due to poverty and rural circumstances. However there are some findings to take specific note of including the decline in attendance after the first antenatal visit, the “problem oriented mentality” regarding childbirth and the traditional medical practices of the Swahili and Giriama peoples. The data adds yet another voice to the call for public health policy based on local knowledge and needs.

##### **A. Uptake of ANC vs. Delivery Services:**

The trend presented in national figures showing high uptake of antenatal care (ANC) and low uptake of skilled delivery services held mostly true in the findings from Malindi District. Out of 53 women interviewed only 3 admitted to never having visited an antenatal clinic during any of their pregnancies and women continually referred to antenatal care as “a must for all pregnant women.” Conversely, only 22 of those same women had ever given birth in the hospital, many of which were first pregnancies or complicated deliveries followed later by home births. What is most interesting is that there appears to also be a steady drop-off in the number of antenatal visits completed, ending in significantly lower attendance of the final antenatal visit, and subsequently, a lower attendance rate during delivery.

### **1. New ANC Clients vs. Fourth Visits**

The minimum number of antenatal visits compulsory for low risk pregnancies in public facilities is four appointments. Alarming, the number of women who complete their fourth visit from the three research communities appears to be less than half the number of the new clients seeking ANC in the same time period. Malindi District Hospital saw 3,315 new antenatal clients in the year between March 2009 and March 2010 and yet recorded only 1,162 women to have completed the fourth visit (see graph 1). During the same time span, Marikebuni Dispensary saw 451 new clients and a mere 60 women for their fourth visit (see graph 2) and Mambrui had 508 new clients and just 120 completed their fourth visits (see graph 3). Unfortunately none of the health facilities kept consistent records of second and third visit attendance, but for the month of May 2009 the District hospital showed a decline in attendance for each subsequent visit beginning with 224 new clients, 138 second visits completed, 94 third visits completed,

and 71 fourth visits completed. Furthermore, only 15 out of the 53 women interviewed acknowledged having finished or a plan to finish four or more visits to an antenatal clinic. When questioned about the process of ANC informants explained that the earlier on in the pregnancy a woman begins the more visits to the clinic she will make. Therefore, if a mother starts attending in her seventh or eighth month she may only make one or two visits rather than consolidating four visits into a shorter time-span. Women beginning ANC late in their pregnancies could be one reason for the dramatic difference between the number of new clients and the number of women who complete their fourth visit.

## **2. Skilled Attendance Uptake vs. ANC Uptake**

The records from the three facilities also confirmed the comparatively low uptake of delivery services in relation to the uptake of antenatal care. The one outlier was Malindi District Hospital, which appeared to have similar numbers of women beginning antenatal care and delivering with skilled care from month to month (see graph 4). This can be partially attributed to the fact that the hospital serves the entire district and therefore absorbs some deliveries from women who may have sought antenatal care elsewhere. From an estimated population of 368, 838 for the entire district, 3,315 women had at least one antenatal visit to the hospital clinic between March 2009 and March 2010 and 3,188 women gave birth in the hospital. Even more dramatically, in Marikebuni 451 women sought antenatal care in the dispensary out of a population of 21, 992 and just 89 deliveries were conducted within the year (see graph 5). In the same time period, Mambrui records showed 508 women had made at least one antenatal visit from a population of 17,000 and yet only 134 women had delivered in the dispensary (see graph 6). Women informants spoke to similar patterns of deferral from skilled attendance, and

although over 90% of the total women interviewed had attended antenatal clinics, 58.5% admitted to having given birth in their homes after antenatal care. Healthcare providers commented,

“They are ready to go for antenatal, but not to give birth” (C1HP3).

“There’s nothing to inhibit them [women] from coming to the hospital, but it is the antenatal clinic that is important to them” (C3HP1).

### **3. ANC for Safe Delivery**

The reasons behind the marked drop-off in uptake within antenatal services and between antenatal and delivery services were not fully explored in this study, but may be partially explained by the barriers to hospital delivery discussed later. One possible explanation mentioned by more than one informant is the use of antenatal care as an insurance policy against later complications during delivery. Woman interviewed while waiting for antenatal appointments said they had come,

“To find if there was a problem so there would be no problem during delivery” (C1WA6).

“Maybe a problem will occur during delivery so I have to come to prevent the problem.” (C2WA13).

Additionally, all 8 of the wakunga interviewed said they encourage all their clients to attend the clinic before they assist women to give birth at home. One mkunga even asserted, “it’s a must” (C1M4). The danger in using antenatal care as a preventative measure against future complications or as a green light for home delivery, is that the majority of maternal deaths occur from conditions such as sepsis and hemorrhage, which

are not detectable before delivery (WHO, 2004: 3). Overall, attendance of ANC appears to have little success in encouraging women to use skilled care during delivery.

## **B. Barriers to Uptake of Skilled Care:**

### **1. Problems vs. Prevention**

By far the greatest common factor between the four groups interviewed and among the individuals themselves was what we'll name the "problem oriented mentality" surrounding the uptake of skilled attendance. Contrary to the concept of antenatal care as a preventative step during pregnancy, institutional delivery is thought to be a service only utilized when complications arise. When asked about the motivations behind birth location, 58.5% of women noted their decision of where to give birth to be dictated by the existence or lack of "problems" before or during delivery. Homebirth was overwhelmingly the preferred option when difficulties did not occur to impede a safe delivery. Over and over again women repeated the same sentiments saying,

"If there are no problems you can give birth at home but if there is a problem people go to the hospital" (C2W8).

"If there's a problem like the baby is being born feet first they know how to deal with it, in the hospital" (C1W5).

"Maybe today I'm not feeling bad so I won't go to the hospital, but if I feel bad I'll go (C1W8)".

The wakunga from the district seemed to hold a similar mentality when it came to referral to health services. When asked what they did in the case of an emergency most



responded that they were able to treat minor issues at home through traditional methods, but for major complications like heavy bleeding they would bring women to the hospital.

“If there’s a big problem I refer to the dispensary but I know how to help with things like a piece of the placenta remaining inside” (C2M1).

The men of Marikebuni again echoed this thought process acknowledging that when a problem arose during delivery the decision of where the baby would be born was deferred to the husband. Otherwise hospital births were for problems and not for normal deliveries, which could be conducted successfully at home.

Health care providers spoke about this mentality with great disdain. They linked the resistance to seek prevention through skilled attendance with another phenomenon, defined in a similar study from Homa Bay District, as a scarcity in “birth preparedness” (Moore et al., 2002: 23). Planning in advance for delivery was revealed to be an unfamiliar concept to most and even a cultural taboo in some settings. One health worker explained the lack of preparation to be the result of beliefs in “birth as a spontaneous process” (C2HP2). When pregnant women were asked where they planned to deliver many answered that it depended on the circumstances because one could never be sure when or where labor would begin. Many Muslims and Christians alike claimed that where the baby was to be delivered was “God’s plan,” and not their own.

“You can’t know the day or date when they will give birth” (C2B1).

“You have to give birth at home if the labor pains begin at home” (C1W6).

Husbands shed light on rationales for inadequate preparation explaining that in both Giriama and Swahili culture it is considered bad luck to prepare for a baby before its birth. Too much preparation, they claimed, could result in a complication such as a stillbirth. It was found that children in both Marikebuni and Malindi are traditionally not given names prior to delivery and to guess the sex of the child or to give a gift is considered to be equally harmful. The highest level of preparation described by women who chose homebirth was the purchase of birthing supplies, such as a razor to cut the umbilical cord, a few weeks before delivery. The few women who proclaimed to always electing skilled care mentioned preparations, such as setting aside money each month and routine check-ups, to be a part of their normal routine during pregnancy.

The mindset that hospitals are for complicated deliveries alone, together with the ideas that births cannot be predicted or planned, present significant barriers to the uptake of skilled care. More importantly, they may also lead to delays in critical treatment when obstetric problems do occur and, in serious cases, lead to infant or maternal death. Birth preparedness is a key component in skilled attendance advocacy noted in the national Community Reproductive Health Package. Promoted throughout the district, the model encourages saving for medical fees and identifying an assistant prior to birth (CRHP, 2009: 22). Thus far, the model seems not to have been accepted by the general public, especially within Marikebuni where rates of homebirth were the highest.

## **2. Costs**

Investigating economic factors and their effects on decision-making became a two-part process. To begin the actual costs of services during delivery were recorded from the healthcare facilities and from the wakunga themselves. Secondly the perceived

costs of care and their effects on uptake were discussed with women. Out of 53 women 52.8% claimed high costs to be a barrier to skilled care. Women were asked what they would do to help increase attendance to the hospital and dispensaries, and the most commonly sighted action in all three communities was to reduce costs. Surprisingly, although Malindi is considered the most affluent of the three regions, the highest percentage of women who noted costs as a problem came from Malindi. Potentially, wealthier mothers may be choosing private options and were not considered in the study, or perhaps the responses reflect the variation in costs for services between the hospital and the dispensaries.

The Malindi District Hospital officially charges ksh.700 for a normal delivery, and ksh.4000 for a caesarian section. Extra costs include ksh.200 for an episiotomy and ksh.150 per day for a recovery bed. Fee waivers are available, but a patient must be retained in the ward for at least two weeks to prove their inability to pay; an unappealing and sometimes impossible task. Conversations with healthcare providers revealed that advertised fees are often misleading, because the district hospitals are currently suffering from financial problems and are forced to deal with a chronic lack of resources. Tools supposedly covered by the fees, like gloves and umbilical cord clamps, are in such short supply that family members are forced to buy them elsewhere, adding to the costs. In the most serious scenarios, shortages of anesthesia to perform caesarian sections or episiotomy repair required patients to sustain extra costs of up to ksh.850 or endure the procedure using a weaker painkiller (C1HP1).

In contrast, all community dispensaries' maternal health services are rendered free minus a one-time payment of ksh.20 for registration. However, informants from the

communities told a similar story of extra expenses, and attributed them to health workers “borrowing money” or “charging un-receipted fees” after delivery (C2B1).

“They say it’s free but the nurse asks for something, sometimes ksh.300 maybe even ksh.1000” (C2B1).

Whether or not these under the table charges hold merit, the belief in extra costs alone may create the perception that hospital delivery is too expensive for the average person. When asked what the cost to deliver in the dispensary was in Marikebuni and Mambrui women most often answered that they didn’t know. Others gave estimates as high as ksh.3000 just to deliver. On the other hand, wakunga in the more rural areas of Marikebuni and Mambrui charged an average ksh.700 for delivery, a price that was well known by community members. A few of the wakunga even performed deliveries for free, accepting animals and *kangas* as compensation. All confirmed their clients could pay them slowly and agreed that producing large amounts of cash at one time was a problem for most families.

“Most women think that if they give birth in the hospital the bill will be too large and they won’t be able to pay” (C1WA5).

“I use a mkunga because it’s cheaper.” (C2W4).

The perceived inability to pay healthcare costs held huge weight in the decision of where and with whom to give birth. In areas with high poverty levels and little salaried work available, economic factors understandably play a large role in health-seeking behavior. Better communication by the health facilities to advertise free delivery services and better government and staff accountability to uphold the minimal registration fees may begin to correct misperceptions of high costs.

### 3. Distance and Transport

Intricately connected to financial constraints, the barrier of distance and lack of transportation applied most directly to Marikebuni as the most rural of the three locations. All the interviewees were asked to describe the mode of transportation they would use to get to the nearest healthcare facility and how long it would take them to arrive. For the most part, women from Marikebuni said they needed to walk to the dispensary, sometimes taking up to three hours one-way to arrive. The average time to reach health centers using various methods of transportation was calculated from women's responses. In Marikebuni the average time to arrive was 65 minutes, in comparison to 32 minutes in Malindi and 27 minutes in Mambrui<sup>1</sup>. Further, 44.8% of women interviewed from Marikebuni identified distance from health centers or lack of transportation as a barrier to their uptake of skilled care.

“The biggest problem is lack of transport. If you try to get to the hospital you might have to give birth on the way” (C2WA2).

The impossibility of walking for hours or taking the only readily available transport, a motorbike, during labor left many women in Marikebuni with no other option but homebirth. In Malindi and Mambrui the expense of taking personal transport (or the lack there of) necessitated by laboring in the night also kept many from seeking institutional delivery. A significant number of women claimed that if affordable and accessible transport existed they would choose to attend a health facility rather than give birth at home.

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<sup>1</sup> Most informants from Mambrui were interviewed in the neighborhoods close to the dispensary, which may have distorted this estimate.

#### **4. Fear**

The word “fear” came up in many contexts but was most frequently used when describing fear of operations and fear of hospital staff as barriers to uptake.

##### **i. Fear of Operations**

Concern over caesarian sections and episiotomy was communicated through the language, “the fear of cutting.” Mention of “cutting” as a deterrent to conventional care arose in multiple interviews and women admitted their fears that they would be operated on even for a minor problem if they attended the hospital. One woman who had given birth to her only child in the hospital through caesarian section said she feared returning to the hospital because the operation was extremely painful and that she planned to give birth to her next child at home if possible. Another woman lamented that her mother had given birth in the hospital and died after receiving a caesarian section. Rumors of maternal death after surgery spread quickly in small communities, and even second-hand knowledge can have an effect on a woman’s decision making in the future. All 8 of the wakunga interviewed stated, “fear of operations” as the main barrier to conventional care. Male respondents further explained the hesitancy to undergo operations and their own reservations surrounding the practice.

“Some of our ladies feel they’re going to have an operation for a minor problem. That’s why they prefer to give birth at home.”

“We believe that women who have operations stop having sex with their husbands earlier”

“When they deliver in hospitals we take a long time to play sex with them” (C2B1).

As previously noted, a man reserves the final right to decide where his wife will give birth in an emergency situation. If a man's sexual activity enters into his decision-making equation, which it likely does, husbands may be less likely to recommend or assist their wives to go to the hospital.

## **ii. Fear of Health Personnel**

The second great fear encompasses both the treatment of clients by hospital staff and the gender of the healthcare provider. More than one informant detailed outright physical abuse by health workers. Perceptions of "harsh" medical staff lead many to choose the comfort of their own homes for childbirth rather than opt for a skilled attendant.

"Many women are afraid because of the way the doctors treat you. They beat you. When you are in pain they slap you. Some are cruel and can even leave your child to die" (C1W5).

"If you follow the instructions that the nurse gives you're fine, but if she says one thing and you do another you will quarrel with the nurse and she'll end up beating you" (C1WA3).

"I saw the women next to me crying and the doctor hit her on the face to be quiet. In the home you can cry and say where it hurts" (C3W3).

The same respondent who witnessed the abuse of a fellow mother in the hospital admitted that she had never returned and had given birth to her last two children in the home. One bad experience, and more importantly one bad experience shared with the community, can have a lasting and reverberating effect on the uptake of skilled care throughout a household and region.

The gender and age of health workers also played a role in their acceptability as birth attendants. The thought of giving birth with a male attendant

was embarrassing to some women and just plain unacceptable to others. This presents a significant problem for Marikebuni Dispensary where the only trained attendants are two male nurses.

“I’m shy of the doctor, many women are shy of male doctors” (C2WA7).

“The delivery at the hospital might be conducted by a man and you may have to stay in the hospital bed alone for more than two hours” (C2W10).

The topic of gender dominated the male group discussion and the general consensus among husbands was that delivery by a man is culturally offensive. Not only are men not supposed to conduct deliveries, in Giriama culture men and children are also not supposed to occupy the same physical space as the mother. A man traditionally sleeps elsewhere for four to five days when a woman in his family gives birth in the home. The male respondents agreed that the role of the husband during his wife’s pregnancy is to provide for her financially and that is the end of his involvement.

“We men can’t know the women’s secrets.”

“Men are not allowed to be near the woman giving birth. It’s a taboo” (C2B1).

In addition, girls and childless women are discouraged from attending births. One mkunga actually noted that women prefer to have men over unmarried women attendants in the hospital because the women “are lazy and less caring,” while the men are more sympathetic.



The young girls have not experienced labor pains. They don't know the secrets. They won't be sympathetic because they don't understand. They might spread rumors that so and so is a coward" (C2B1).

The barrier of "girls" employed as birth attendants in Kenya dates back to the Colonial period when Britain sought to train unmarried women as professional midwives. The efforts to encourage the use of conventional care were met with little success, similar to the government's current policies, due to the disregard for local practices (Thomas, 2003: 52-78).

## **5. Traditional Practices**

When asked outright about what prevented women from attending healthcare facilities, traditional practices rarely came into the picture. However, when the question was posed as the motivations behind employing TBAs, women continuously pointed to the wakunga's traditional knowledge and healing abilities, particularly in regard to massage. While utilization of wakunga and traditional medicine was highest in Marikebuni, all categories of respondents were able to name important cultural practices that could not be performed in the hospital. The majority of healthcare providers do not look favorably upon wakunga, but TBAs prove to be conducting more deliveries than health facilities in some communities and providing services highly valued by their clients. From 53 women, 31 acknowledged consulting an mkunga before or during delivery. Women frequently voiced their preference for wakunga in their testimonies.

"I like the mkunga because if the baby comes up or pains she knows how to help by giving massage and she also lives nearby" (C2W1).

They know how to help pregnant women and they know how to position the baby and give massage” (C2W2).

“She conducts the delivery well. If the baby is in the wrong position the mkunga does massage to re-position it (C2W3).

The mkunga can massage you when it pains, but in the hospital they say ‘close your mouth’ (C3W2)

### **i. Massage**

Pre and post-natal massage was the most commonly cited practice by all the categories of informants and seemed to transcend geographic, religious, and socio-economic differences. Even women who had given birth in health facilities confessed to hiring an mkunga for massage to aid in the delivery process and to relieve pains. Through observation of prenatal massage and discussions with wakunga, the procedure and its perceived importance began to take shape.

To begin, coconut oil (or sometimes *sim sim oil* in Swahili culture) is smoothed over the mother’s abdomen. The area of the womb is kneaded and massaged in circular motions, feeling for the head of the baby and “the way” of the birth canal. All the wakunga claimed that if the baby is felt to be in the wrong position, (for example breach or feet first) they are able to correct its placement through massage. For premature labor pains or backaches, massage was also the go-to treatment. After birth, massage to “remove the waste” coupled with other practices such as tying a kanga around the mother’s stomach and lighting incense under the birthing bed, were shown to be similarly important.

Signs posted in the District Hospital warn against the dangers of abdominal massage and health personnel voiced similar concerns regarding the practice. One health

professional claimed that massage is harmful for both the mother and child. He said the hospital sees many mothers with ruptured placentas or placental separation from the uterine wall connected with massage, which can sometimes result in heavy blood loss or the necessary removal of the entire uterus.

“They go to the wakunga for the pain because they assume something is wrong with the baby and many end up losing their babies in the end” (C1HP1).

## **ii. Hot Water**

Another practice of significant cultural importance is the use of hot water after delivery. When women first mentioned that the health facilities “had no hot water,” it was assumed they meant for disinfectant purposes. However, interviews with wakunga and husbands later showed hot water to have a much deeper purpose. Wakunga said hot water was used along with massage for the removal of the after-birth and retained “waste” as well as for the prevention of certain diseases that afflict women after delivery.

“After birth the mother washes with hot water for pain and to remove blood clots. If the mother touches fresh water or rain without using hot water first we believe she will swell” (C2W2).

Men again linked the importance of hot water to the maintenance of their sex lives. When asked whether there was a difference in sexual performance after a woman gave birth at home or in the hospital men responded that the use of hot water at home ensured friction by re-tightening the vagina after birth.

“We don’t sew, the hot water does the job of retaining the friction.”

“We call her mother to bathe her in very hot water to make her ready for use again” (C2B1).

### iii. Herbal Medicine

From all the women interviewed, 32% acknowledged using herbal remedies during their pregnancies. The two most common types were drinks made from boiling either the roots or the leaves of a plant. These *dawa*, or medicines, were taken to treat pain and to assist during delivery, and could be prepared at home or by a TBA. There also seemed to be a cultural divide between the preferred brew. Giriama women overwhelmingly favored the use of roots<sup>2</sup> for pain relief and Swahili-Muslims were more likely to note mixtures of leaves meant to quicken labor and ease delivery. Several different names for the plants and drinks were presented and many of the *wakunga* did not want to divulge exactly what the *dawa* contained. One Swahili *mkunga* named the leaves of the *nukavundo* plant and another referenced *mkulasiku* as the name for the herbal drink taken during delivery for muscle contractions. Some Swahilis also spoke of taking a mixture of ground *zamda* seeds and honey directly after delivery. Any woman who identified as Christian adamantly denied ever using traditional medicine.

Healthcare providers constantly questioned these mysterious “concoctions.” They sometimes suspected women who came with complications of having used herbal medicine, but said that women never admitted to taking it, possibly due to the fear of reprimand. One health worker said he believed the last women who died from pregnancy-related causes in the hospital had taken traditional herbs. Her uterus would not contract after delivery, despite multiple injections, and she had bled to death. Herbs that ease muscle contractions during delivery may have been to blame, but further research is

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<sup>2</sup> The name of the plant could not be identified but was said to grow locally.

needed to investigate the compounds and their possible harmful or beneficial effects. The secrecy surrounding traditional medicine makes it especially hard to target through public health education. Names and recipes are largely left unspoken and the compounding fear of “harsh” consequences leaves a wide gap in knowledge among health workers.

Additional practices of interest mentioned less frequently included:

- Burning the shell of baobab tree seeds to apply to a baby’s umbilical cord to stop the bleeding.
- Amulets worn on the wrists and necks of mothers and children containing *dawa* or inscriptions from the Koran.
- *Mapingani*- a woman sits over the smoke of this burning mixture of leaves and stems after delivery to “dry things out.”
- *Kupakwanda*- made by burning incense and tracking the smoke with a small metal ornament used by Swahilis for the application of eye-makeup. The soot is then wiped across the baby’s eyes and forehead (sometimes in a pattern or over the eyebrows) to obscure the child’s face against evil eyes, genies, owls, and other dangerous spirits.

Homebirth is considered a cultural practice in its own right. Older women spoke of days when no one talked about hospital birth and women’s affairs were left up to women. Just as customs of language, cultivation, and food preparation were passed from generation to generation so to was the tradition of homebirth.

“It’s a tradition. It is what they know to give birth at home” (C1W8).

“They [women] feel safer in the home, a long time ago they used to give birth at home and they just grew up knowing that way” (C2W7).

Working to change an innate piece of Coastal Kenyan culture is by far the most challenging and delicate of all the barriers presented in this research. Policy makers must

work side by side with their target populations and include aspects of local culture in their approaches if acceptable interventions are ever to be made.

## **V. Conclusion:**

The previous research identifies multiple and inter-connected factors contributing to the low uptake of skilled care in Malindi District. Overall, ANC attendance in Malindi Town, Marikebuni, and Mambrui was found to be high, and yet the completion of ANC regimens and the number of deliveries in health facilities were comparatively low. Motivations for homebirth and factors discouraging institutional delivery were established through women's own words to conclude that a lack of birth preparedness, high costs (real or perceived), lack of transport to health facilities, the fear of operations and medical personnel and the traditional practices of the area, presented the greatest obstacles to the uptake of skilled attendance. The most urgent need for further assessment and intervention was seen in Marikebuni where the highest number of women gave birth in their homes and barriers of distance, transport, and traditional beliefs were felt most acutely. The findings lend support for a national concentration on rural areas, like Marikebuni, where small expenditures to increase access to care have the potential to make a huge difference in the health-seeking behavior of women and their families.

That said, the results also tell us that while mobilization of resources is important, utilization of those services requires their acceptability and affordability. Wim Van Lerberghe and Vincent De Brouwere assert that, "if countries of comparable wealth or poverty have different maternal mortality ratios, this may well have to do not only with

the availability of health services, but also how services relate to their clients” (De Brouwere & Van Lerberghe, 2001: 3). As we have seen, the ability of Malindi District’s maternal services to relate to their clients is quite poor. Mistreatment, the crossing of cultural boundaries, and misperceptions of costs and procedures all impede the use of accessible facilities. Furthermore, deeply entrenched poverty makes economic barriers take precedent over all other factors. Regardless of mentality toward conventional medicine or proximity to health facilities, the inability to pay medical fees will continue to force women to find alternatives.

Taking all these aspects into consideration, a singular focus on increasing the availability of skilled birth attendants in Kenya does not appear to be a practical strategy at this time. Phasing out TBA trainings has not made wakunga disappear or become any less popular. The shift appears only to have widened the divide between traditional and conventional medicine and between those who choose homebirth and those who choose institutional delivery. Traditional practices are neither behaviors to be “dealt with” through government interventions nor beliefs that can be easily changed through the dissemination of “correct information.” Policies targeting increases in skilled attendance must work with the local cultures to create incentives for women, not struggle against them while striving towards their goals.

## **VI. Recommendations:**

With so much new knowledge, the central question remains. What now? Ideally, a movement toward better education for girls, poverty reduction, and improvements to public health facilities and community outreach programs would do the job of improving

MMR in Kenya. Realistically, the country continues to be constrained by poverty along with a fractured and inefficient public health system. As a result, pointed policy measures must be made to prioritize the greatest needs of citizens and create realistic cost-effective interventions. Malindi District can begin by addressing the specific barriers analyzed by the previous research.

Part of tackling the “problem oriented mentality” will be time. Hopefully as younger generations become more accustomed to giving birth in health facilities it will become a more acceptable place for normal deliveries. To expedite the process and encourage birth preparedness, the concept of due dates and personalized birth plans could be introduced during antenatal care. The birth plan should also include monthly saving targets for emergency services and transport. While predicting births could create some cultural tension, the idea could be worded as a “family plan” only to be shared between close relatives and care providers.

To deal with economic barriers and issues of distance and transport, the government would do well to seek outside funding, especially from eager Italian donors in the district, to make more tangible upgrades. For example, the purchase of ambulances for each of the dispensaries and more comfortable maternity wards could be taken on by a non-governmental organization or faith-based group. These types of aesthetic improvements are appealing because the changes are easily seen and advertised for more funding. The government’s own expenditures should focus on ensuring adequate resources for their public facilities (such as gloves and anesthesia), subsidizing delivery costs in the district hospitals, and creating staff quarters in rural locations so that health worker travel doesn’t exacerbate the issue of distance.



When dealing with fear and traditional practices communication is key. Explanation of all medical procedures, especially surgical procedures, and the ability to ask questions are a patient's right. Physical abuse is unacceptable in all settings and superiors must hold health workers accountable for their actions. Perhaps better pay for medical staff or the promotion of a medical officer to oversee worker's behavior would also cause attitudes among staff to change.

During the shift toward skilled attendance there must be a transitional step to facilitate this change smoothly and include as many mothers as possible in the healthcare equation. All signs point to the TBA as that interim link. Most applicable for rural areas, a short-term TBA training program could be reinstated in Malindi District to educate a small number of already active wakunga from each community. By training only a few women, stronger ties can be made between the health facilities and the TBAs to encourage referral and more frequent evaluations and refresher courses can be undertaken. The closest health facility should provide safe birthing tools to women who insist on home birth, and allow the TBA to assist in referred hospital deliveries to lend support to the patient and potentially retain some of her lost income from referral. The TBA might also act as a community health worker dedicated to women's health, aided by cultural knowledge to navigate sensitive issues like reproduction and family planning. Whatever the strategies employed, it is most important that socio- economic factors are taken into consideration and that services are rendered acceptable as well as accessible.

## **VII. Recommendations for Further Research:**

My first recommendation would be for a Kenyan woman to attempt to conduct similar research. Despite my efforts, women were wary of my intentions and therefore far less open than they might have been with someone from a similar background. As hard as I strived to compensate for being an outsider, I understood that I missed a lot in translation and that I probably overlooked many things due to my own cultural lens. For students wanting to conduct research on similar subjects, I would recommend focusing on just two communities to compare and contrast more easily and to allow for adequate time for in-depth investigations. I also think that an ISP focused entirely on the male role in childbearing could prove to be extremely interesting. Some of the most informative testimonies throughout my research ending up coming from men.

## **Appendix A.**

### **Glossary**

ANC- Antenatal Care

Dawa- Swahili word for “drug” or “medication.”

Episiotomy- cuts made during delivery to widen the vaginal opening

Kangas- traditional colored fabrics used for a variety of purposes

Kupakwanda- soot applied on a baby’s eyes and forehead to obscure the face in protection against evil eyes, genies, owls, and negative forces.

Ksh- Kenyan shillings

Mapingani- the smoke from a mixture of leaves and stems placed under a mother to help stop excessive bleeding.

MDGs- Millennium Development Goals

Mijikenda- Nine coastal ethnic groups including the Giriama tribe

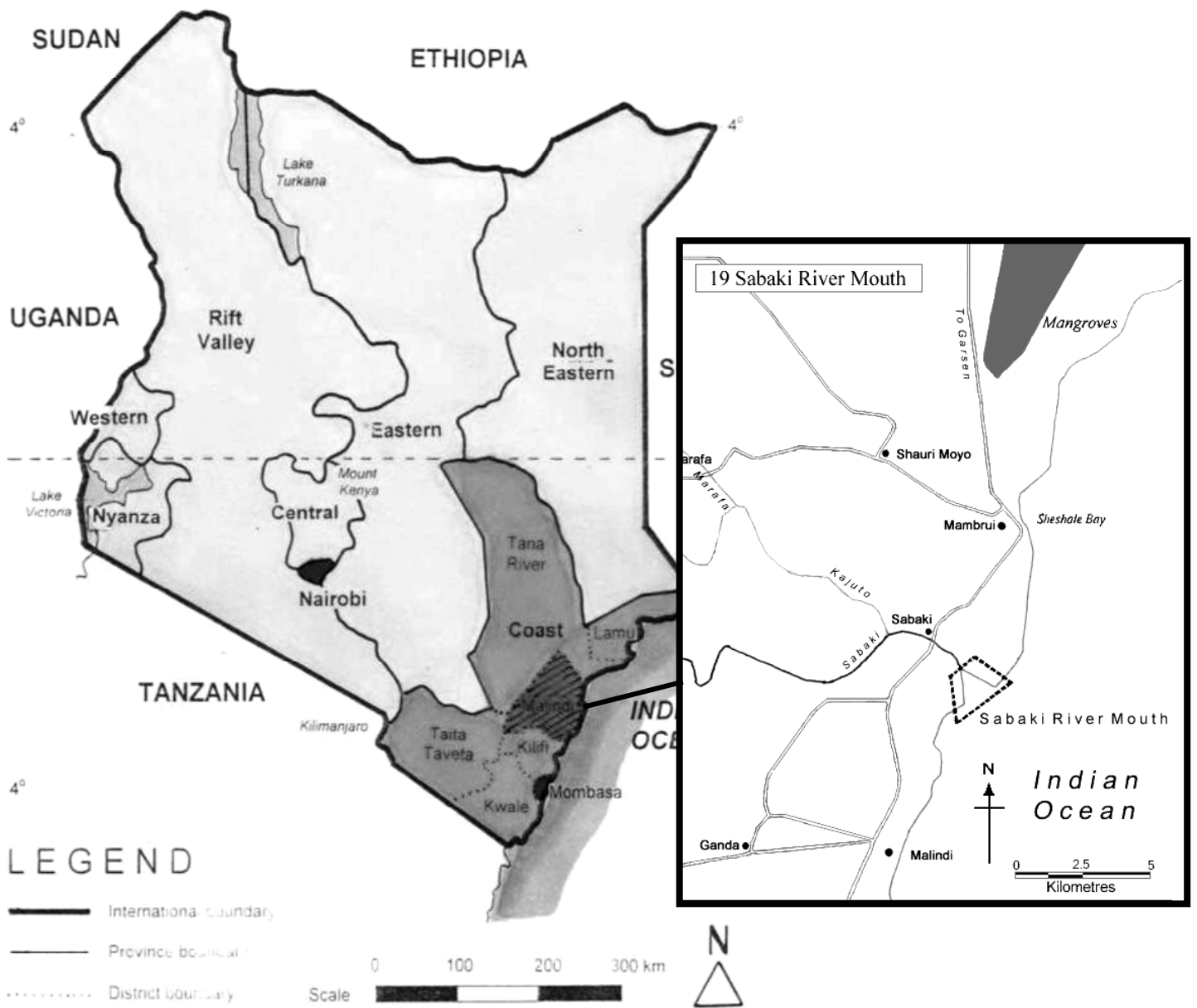
Mkulasiku- herbal drink made from the leaves of tree used to quicken labor and reduce pain.

Mkunga- Swahili word for a traditional midwife (sing.)

TBA- Traditional Birth Attendant

Wakunga- Swahili word for traditional midwives (pl.)

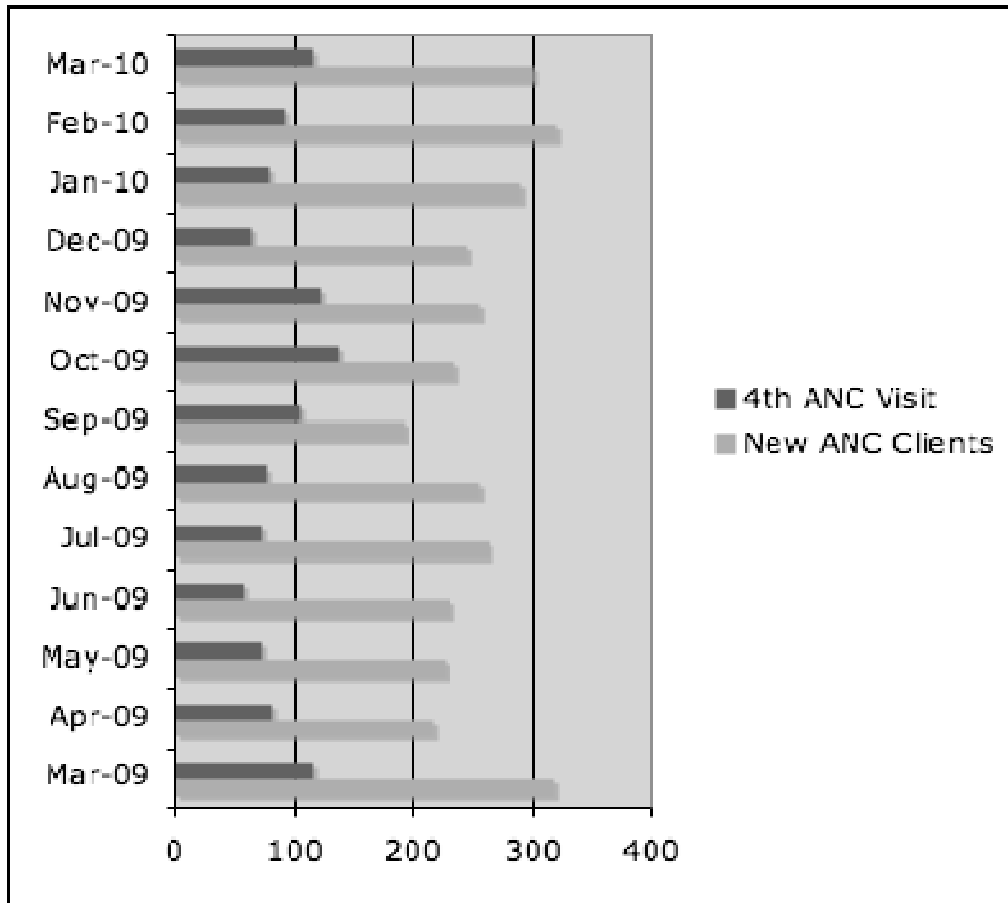
## Appendix B.



[http://www.sabakirivercampandcottage.com/IBA\\_map.gif](http://www.sabakirivercampandcottage.com/IBA_map.gif)  
<http://www.malindikenya.com/images/kenya-district-malindi.jpg>

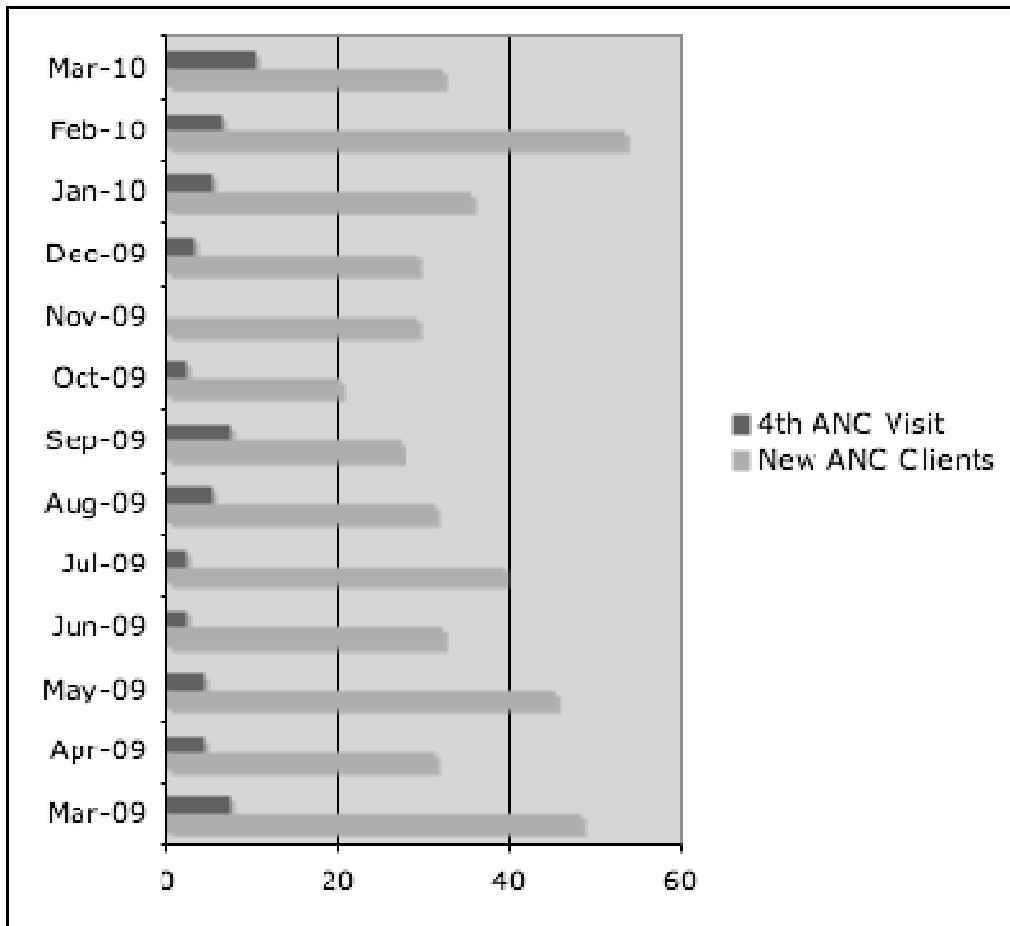
### Appendix C.

Graph 1.



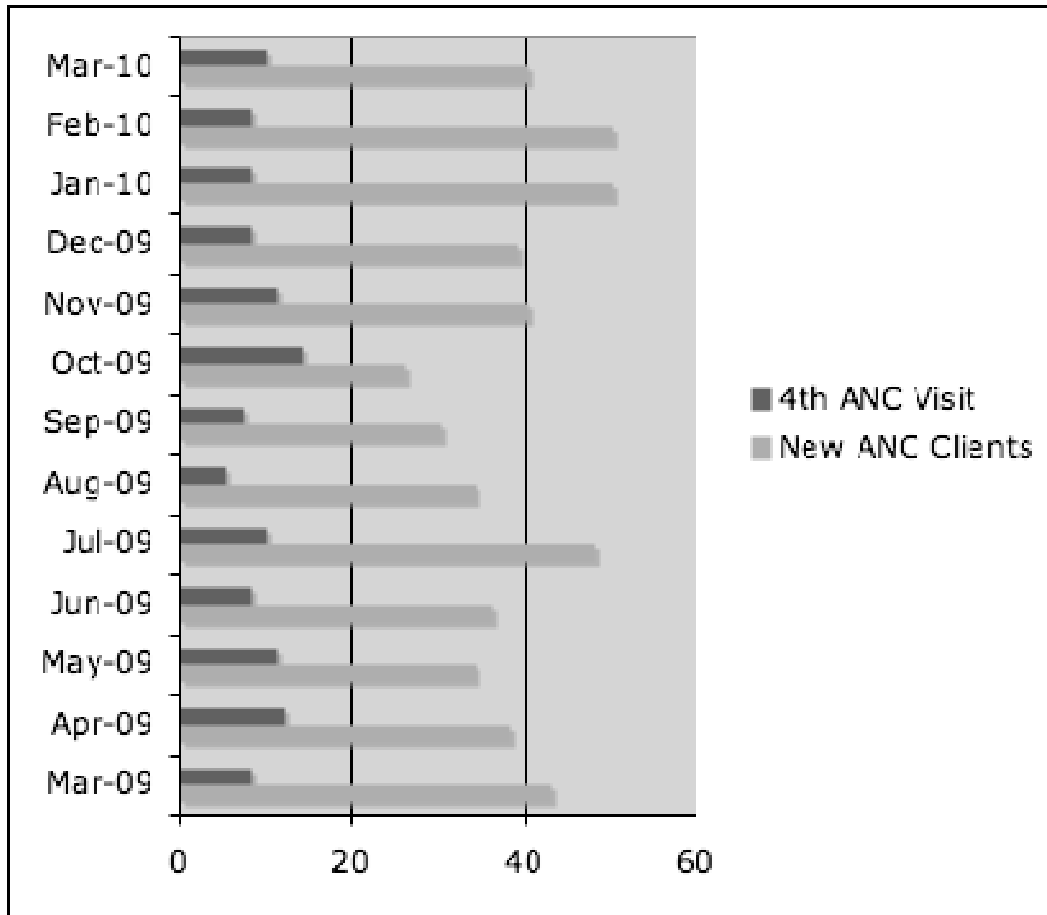
Malindi District Hospital ANC Records

Graph 2.



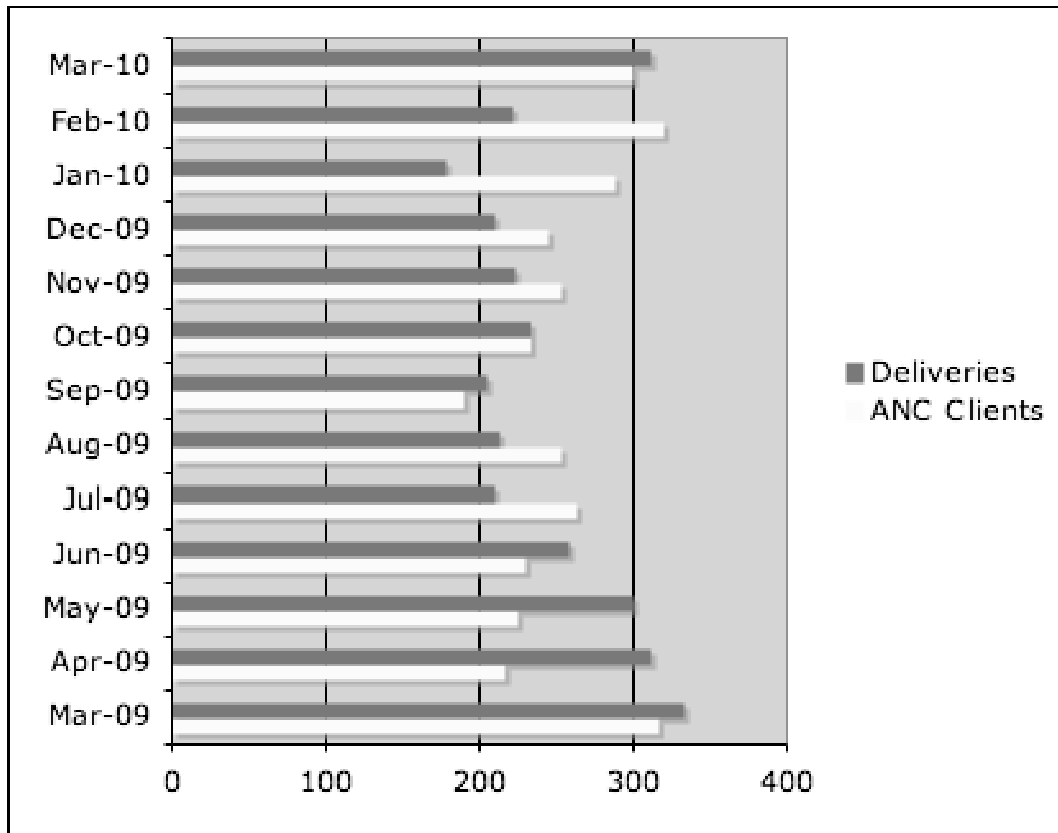
Marikebuni Dispensary ANC Records

Graph 3.



Mambui Dispensary ANC Records- March 2009-2010

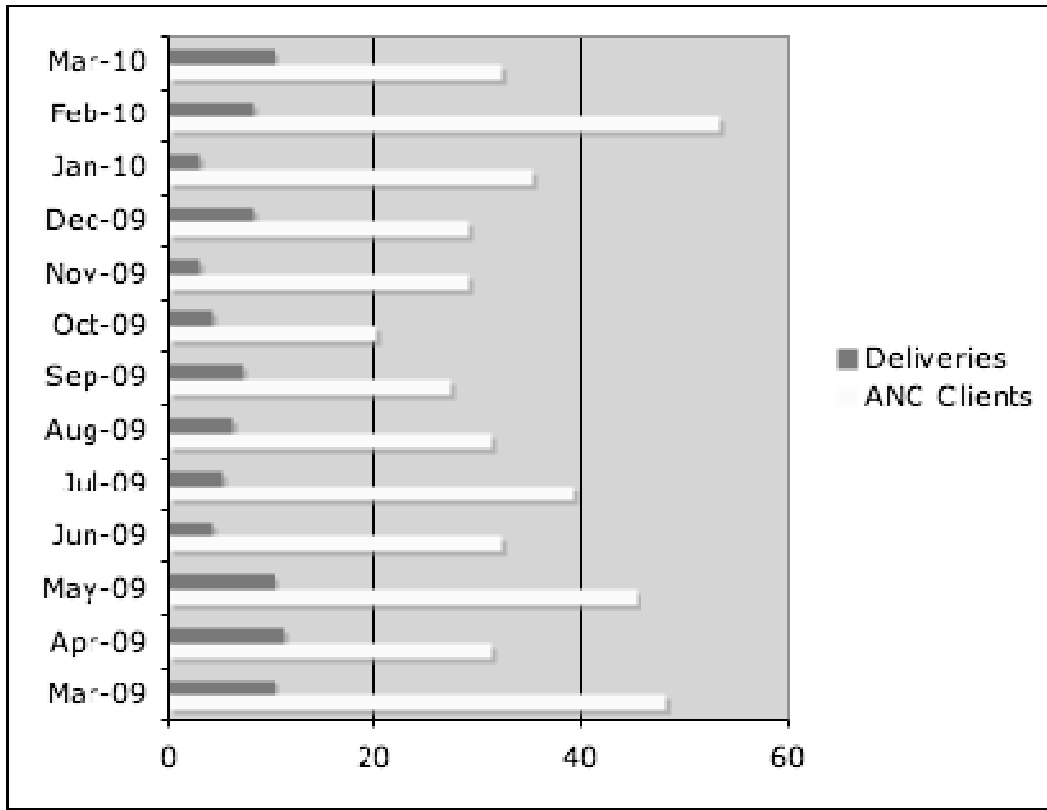
Graph 4.



Malindi District Hospital Delivery Records- March 2009-2010

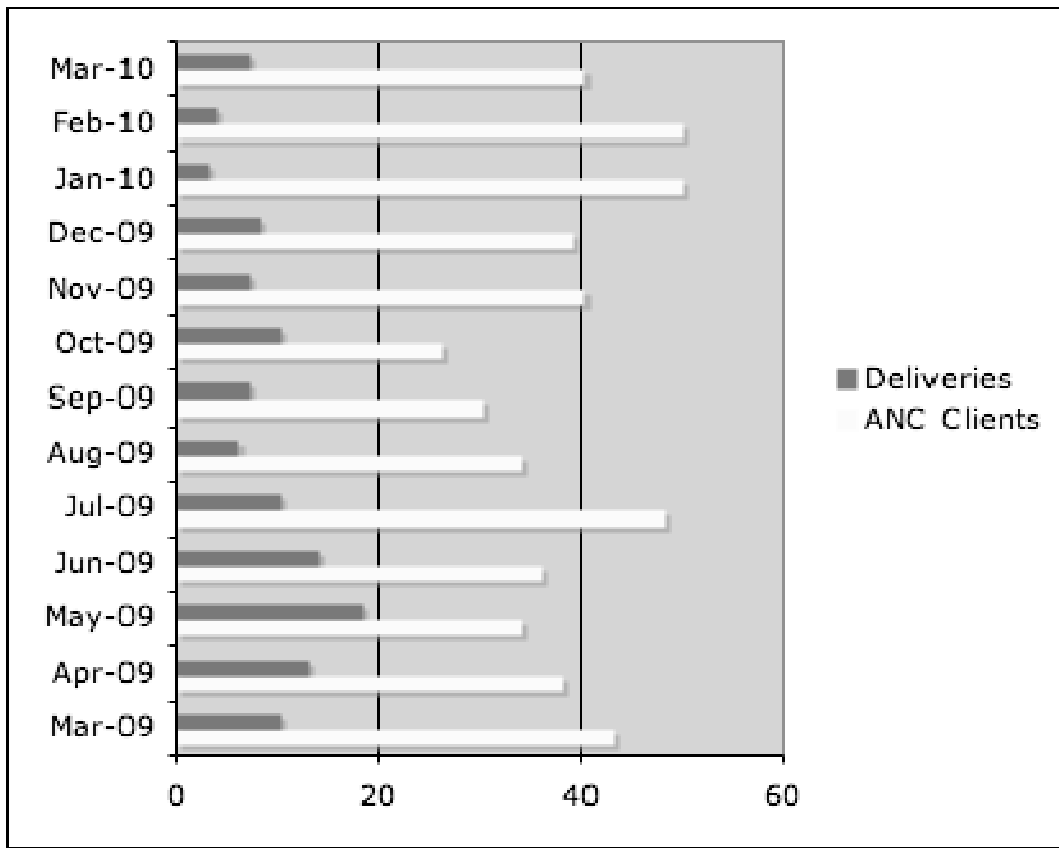
Graph 5.





Marikebuni Dispensary Delivery Records- March 2009-2010

Graph 6.



Mambrai Dispensary Delivery Records- March 2009-2010

**Appendix D.**

**Interview Questions:**

1.) Expectant Mothers and Women Who Have Given Birth:

1. Where did you deliver your last baby? Did you deliver all your children in the same place?
2. Given the choice, where would you want to give birth to your next baby? Why?
3. What kind of transportation would you use to get to the nearest health facility?
4. What is the cost of this transportation?
5. How long does it take you to get to the closest maternal health facility?
6. Have you ever visited an antenatal clinic?
7. Do you consult a traditional birth attendant (*mkunga*) during or after pregnancy?
8. How much does it cost to hire an *mkunga* in this area? I
9. How much does it cost to give birth in the hospital or dispensary?
10. Do you use any type of traditional medicine?
11. What encourages you or women you know to give birth at home?
12. What makes some women hesitant to go to the hospital/clinic?
13. What do you do if a problem arises during labor?
14. If you worked for the hospital or dispensary what would you do to encourage more women to come to the hospital to give birth?
15. Where did your mother and sisters (if you have them) give birth?

1.) Expectant Mothers- Antenatal Clinic:

1. Why did you decide to come for antenatal care?

2. How did you find out about the services and who advised you to come?
3. How many visits do you make to the clinic before giving birth?
4. Are you given education about safe delivery?
5. Are you planning to deliver at home or in the hospital? Why?
6. Where did you deliver your last baby? Did you deliver all your children in the same place?
7. How long does it take you to get to the hospital from your home and what mode of transportation do you use?
8. Do you ever consult with a *mkunga*?
9. Do you use any kind of traditional medicine before birth or during delivery?
10. What are some reasons that women prefer to give birth at home?
11. What do you do if a problem arises with your pregnancy and you're at home?
12. If you worked for the hospital or the dispensary what would you do to encourage more people to give birth in the hospital?
13. Where did your mother and sisters (if you have them) give birth?

2.) Traditional Birth Attendants:

1. How long have you been a midwife?
2. How many women have you assisted to give birth since you began?

3. How did you learn your midwifery skills? Have you received any kind of formal training?
4. What tools do you use during delivery?
5. What type of care is given to the mother before and after the birth?
6. How much do you charge for your services?
7. Why do you think women chose your services rather than go to the hospital or dispensary birthing clinic?
8. What do you think prevents women from attending a healthcare facility?
9. Do the women in your care visit an antenatal clinic before giving birth?
10. What do you do in the case of an emergency during delivery?
11. What are some signs of a complicated pregnancy or problems for the mother and baby before or during delivery?
12. If more women started using healthcare facilities would it have a negative effect on your income?

3.) Conventional Healthcare Providers:

1. What is the size of the population served by this facility?
2. How many women give birth here each year/ each month?

3. How many nurses and clinical officers are employed here?
4. How many nurses and clinical officers are male and how many are female?
5. How many women come each year/ each month for antenatal care?
6. What percentage of those women who attend the antenatal clinic actually return to deliver here?
7. Can you describe the process for antenatal care and whether walk-in deliveries are acceptable or if prior registry is encouraged?
8. How much does a normal delivery cost? What is the cost of a complicated delivery such as a caesarian section?
9. Do you perform episiotomies (incision to enlarge the vagina during labor)?
10. Do you have contact with TBAs in the area?
11. Does the facility provide training or resources for TBAs?
12. Why do you believe some women chose to give birth at home rather than in a health facility?
13. What is currently being done to encourage women to use skilled care during delivery?

#### 4) Male Group Discussion:

1. Where do you want your wives to deliver, and why?
2. If you have children, where has your wife given birth?
3. How can the husband best support his wife when she is about to deliver?

4. Is it acceptable for a man to assist a woman to give birth?
5. What do you think prevents women in your community from going to the dispensary to give birth?
6. Do you know any men who have talked about a difference in sex after birth depending on whether the woman gave birth at home or in the hospital?

## **Appendix E.**

### **Interview Information:**

#### Community Coding:

- C1- Malindi
- C2- Marikebuni
- C3- Mambrui

#### Respondent Coding:

- W- Woman
- WA- Woman Antenatal
- M- Mkunga

HP- Health Personnel

B- Male Group Discussion

- C1W1- Swahili, Muslim, 45 years, housewife, 6 children, 04/14/2010
- C1W2- Mkammba, Christian, 28 years, housewife, 3 children 04/14/2010
- C1W3- Giriama, Christian, age unknown, sells tobacco, 3 children 04/14/2010
- C1W4- Duruma, 40 years, street sweeper, 8 children 04/14/2010
- C1W5- Luo, Christian, 32 years, tailor, 4 children 04/14/2010
- C1W6- Maluya, Christian, 26 years, housewife 1 child 04/16/2010
- C1W7- Giriama, 27 years, fruit vendor, 7 children 04/16/ 2010
- C1W8- Giriama, 56 years, farmer, 6 children 04/16/2010
- C1W9- Swahili, Muslim, 20 years, housewife, 1 child 04/17/2010
- C1W10- Swahili, Muslim, 35 years, housewife, 2 children 04/17/2010
- C1WA1- Mtaita, Christian, 32 years, housewife, 3 children 04/12/2010
- C1WA2- Giriama, Christian, 19 years, tailor, 1st pregnancy 04/12/2010
- C1WA3- Swahili, Muslim, 18 years, housewife, 1<sup>st</sup> pregnancy 04/12/2010
- C1WA4- Giriama, Christian, 31 years, tailor, 2 children 04/12/2010
- C1WA5- Giriama, Christian, 28 years, office work, 1 child 04/12/2010
- C1WA6- Giriama, Christian, 28 years, housewife, 3 children 04/12/2010
- C1M1- Swahili, Muslim, trained 03/20/2010
- C1M2- Swahili, Muslim, untrained 03/20/2010
- C1M3- Swahili, Muslim, untrained 04/13/2010
- C1M4- Swahili, Muslim, trained 04/16/2010
- C1HP1- Medical Officer 04/13/2010
- C1HP2- Antenatal Nurse 04/12/2010
- C1HP3- Public Health Nurse 04/13/2010
- C2W1- Giriama, 18 years, housewife, 1<sup>st</sup> pregnancy 04/18/2010
- C2W2- Giriama, 29 years, housewife, 2 children 04/18/2010
- C2W3- Giriama, 32 years, housewife, 4 children 04/19/2010
- C2W4- Giriama, 22 years, housewife, 2 children 04/23/2010
- C2W5- Giriama, 20 years, housewife, 1<sup>st</sup> pregnancy 04/23/2010



C2W6- Giriama, 24 years, housewife, 3 children 04/23/2010  
C2W7- Mkauma, 38 years, housewife, 8 children 04/23/2010  
C2W8- Giriama, 20 years, housewife, 4 children 04/23/2010  
C2W9- Giriama, 20 years, housewife, 4 children 04/23/2010  
C2W10- Giriama, 30 years, housewife, 9 children 04/23/2010  
C2WA1- Giriama, age unknown, farmer, 4 children 04/20/2010  
C2WA2- Giriama, age unknown, sells charcoal, 9 children 04/20/2010  
C2WA3- Giriama, 25 years, housewife, 3 children 04/20/2010  
C2WA4- Giriama, 25 years, housewife, 1<sup>st</sup> children 04/20/2010  
C2WA5- Giriama, age unknown, housewife, 5 children 04/20/2010  
C2WA6- Giriama, 29 years, sells seedlings, 3 children 04/20/2010  
C2WA7- Giriama, 28 years, housewife, 3 children 04/23/2010  
C2WA8- Giriama, 23 years, housewife, 5 children 04/23/2010  
C2WA9- Giriama, 38 years, housewife, 6 children 04/23/2010  
C2WA10- Giriama, 18 years, housewife, 1<sup>st</sup> pregnancy 04/23/2010  
C2WA11- Giriama, 18 years, housewife, 1<sup>st</sup> pregnancy 04/23/2010  
C2WA12- Duruma, 18 years, housewife, 1<sup>st</sup> pregnancy 04/23/2010  
C2WA13- Giriama, 25 years, tailor, 4 children 04/23/2010  
C2WA14- Giriama, 20 years, housewife, 1 child 04/23/2010  
C2WA15- Giriama, 18 years, housewife, 1<sup>st</sup> pregnancy 04/23/2010  
C2WA16- Giriama, 20 years, housewife, 2 children 04/23/2010  
C2WA17- Giriama, 28 years, housewife, 5 children 04/23/2010  
C2WA18- Giriama, 30 years, sells cassava, 8 children 04/23/2010  
C2M1- Giriama, trained, 04/19/2010  
C2M2- Giriama, untrained 04/19/2010  
C2M3- Giriama, untrained 04/22/2010  
C2HP1- Professional Nurse 04/17/2010  
C2HP2- Professional Nurse 04/23/2010  
C2HP3- Community Health Worker 04/23/2010  
C2HP4- Nurse Intern 04/23/2010  
C2B1- 8 Giriama males- 4 Muslims 04/24/2010

C3W1- Giriama, 20 years, housewife, 1 child 04/27/2010  
C3W2- Giriama, 24 years, housewife, 1 child 04/24/2010  
C3W3- Swahili, 45 years, sells clothes, 3 children 04/24/2010  
C3WA1- Mkamba, 27 years, housewife, 2 children 04/25/2010  
C3WA2- Giriama, 20 years, housewife, 2 children 04/26/2010  
C3WA3- Swahili, 18 years, housewife, 1<sup>st</sup> pregnancy 04/26/2010  
C3WA4- Giriama, 29 years, housewife, 5 children 04/26/2010  
C3WA5- Giriama, Muslim, 22 years, housewife, 1 child 04/26/2010  
C3M1- Swahili, untrained 04/28/2010  
C3HP1- Professional Nurse 04/26/2010

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