

**FACTORS INFLUENCING MOTHERS' CHOICE OF BIRTH ATTENDANTS IN  
BUNYALA SUB- COUNTY, KENYA**

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**Abstract**

It is estimated that one in every three hundred expectant women in Kenya dies from birth or pregnancy related causes. This crisis is largely attributed to the birth seeking services Kenyan women opt for among other factors. The implementation of free maternity services by the government since 2013 has not realized its ultimate goal since a number of mothers still prefer the services of Traditional Birth Attendants (TBAs). In Bunyala Sub-County of Busia, many deliveries still occur at home and without the assistance of trained/skilled birth attendants. This is in spite of fact that the World Health Organization and Kenyan Government outlawed the use of the TBAs on the assumption that they were partly to blame for high mortalities and morbidities of mothers and new born babies. This study sought to unveil the reasons behind the choice of birth attendance by expectant women in Bunyala Sub-County using descriptive cross-sectional survey design. The study established that a number of negative pregnancy outcomes were associated with the services of TBAs. 14% of the mothers sampled had suffered miscarriages, 13% of whom through the hands of TBAs; 6% had lost their newborn, 5.2% in the hands of TBAs. It was also revealed that sampled mothers had endured maternal deaths during childbirth as a result of hemorrhage, sepsis, pre-eclampsia, eclampsia, and obstructed labour. 84% of the mothers preferred on government facilities as their ideal antenatal care provider, citing availability of skilled staff, medicines and equipment. However, some mothers preferred services of TBAs due to their flexibility in terms of payments, accessibility at odd hours, and good relations (some are relatives). Others 21% for cultural reasons refrained from being attended to by male birth attendants in government health facilities, while others shy away for fear of the mandatory HIV testing done under the Prevention of Mother to Child Transmission (PMTCT) program. From these findings, this study proposes new thinking into these factors that are deemed inhibitive to use of government health facilities for birth attendance among mothers in the rural areas.

**Keywords:** Pregnancy; Skilled Birth Attendant; Government health facility, TBA.

## 1.0 INTRODUCTION

Approximately 1000 women die each day from pregnancy and childbirth related causes (WHO, 2010) worldwide. In addition, 99% of these maternal deaths occur in the developing world, with Sub-Saharan Africa accounting for over half of these deaths (Ibid). Conversely, according to World Health Organization (WHO), Sub-Saharan African region where the greatest number of maternal deaths occurred in 2015, there has been only modest progress-as just over 50% of births are attended by skilled health personnel (Ibid). Throughout history, traditional birth attendants have catered to the majority of deliveries in rural areas of developing countries. In the pre-colonial period in Africa, the health system of the local people depended on traditional medicine linked to the local indigenous religion.

One of the major barriers to seeking care for maternal complications is poor treatment, and often verbal and physical abuse, from providers at health facilities. This provider/patient relationship is paramount to ensure quality services and use of those services, especially in a developing country context (ibid). In Bangladesh, for instance, life is often shaped by “patron-client” relationships, and poor people’s ability to obtain quality health care is often linked to having a personal friend, relative or other advocate associated with the facility (Sculer, 2012).

The government of Kenya in an effort to salvage the situation abolished delivery fees in public hospitals and has been discouraging mothers from using traditional birth attendants. Although many mothers are taking advantage of the free delivery services in public hospitals, some mothers still prefer traditional birth attendants, citing poor services in public health facilities. Traditional birth attendants are of the opinion that they offer quality care and that their businesses are suffering because of the government’s interference.

The Kenya Demographic and Health Survey, 2008-2009 records that, overall, only 44% of births in Kenya are delivered under the supervision of a skilled birth attendant, well below the target of 90% of deliveries by 2015. Traditional birth attendants continue to assist with 28% of births, relatives and friends with 21%, and in 7% of births, mothers receive no assistance at all (Calverton and Maryland, 2010). Poor quality of care at health facilities is one of the most important barriers to care seeking for maternal health problems. Research has shown that perception of quality health care is an important predictor to seeking care, even in emergency situations. If clinical services are poor, women will not seek those services (Kanungo *et.al.*, 2010).

### Problem Statement

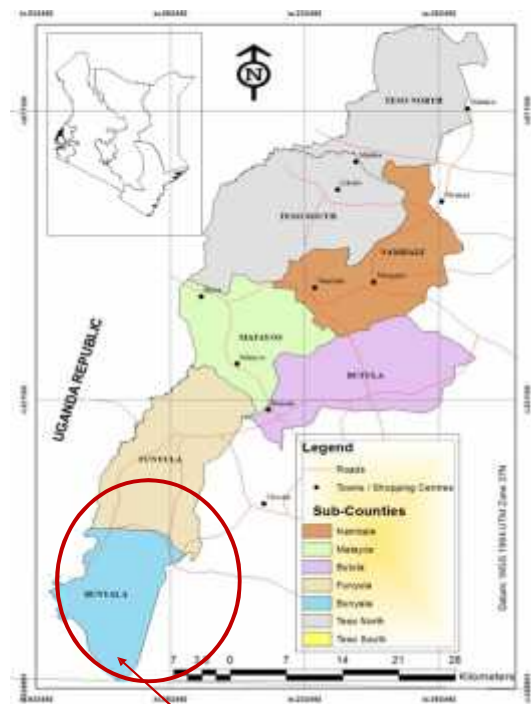
Despite the overarching aim of addressing the health needs through several comprehensive programs by government, health outcomes in rural Kenya has remained poor. High maternal mortality ratio in Kenya is linked to low utilization of skilled care, with only 47% of expectant mothers completing the recommended 4 antenatal care visits and 44% receiving skilled care at delivery (UNFPA, 2014). Individual healthcare-seeking pattern in a community is determined by complex interrelationships between socio-economic and physical environment along with individual characteristics and behaviors (WHO, 2014). Many women do not seek skilled care due to cost of service, the

distance to the health facility, and quality of care thereby bringing about a low coverage (Esen and Sappor, 2013). There are other factors besides the cost of maternity that tend to affect the choice of birth seeking behavior of women. Such factors include distance from the facility, attitude of personnel, cost of transport, number of children of the expectant mother, cultural practices and economic status. The contribution of these factors to the decision of the expectant mother is not known. That is a problem that this study aims to address; to provide the information that will help the health planners put in place specific interventions to encourage more expectant women to seek out trained birth attendants at the public health facilities, thereby bringing down the Maternal Mortality Rate (MMR). Traditional Birth Attendants (TBAs) practice several risky methods including external cephalic version (ECV) without knowing the contraindications; lack of antenatal referral when patients are anemic or suffering from antepartum hemorrhage; lack of referrals for prolonged labor; lack of sterility and asepsis; poor handling of the cord; and use of poorly chosen instruments during delivery. The delay of referrals gives hospitals only a minimal chance of saving both mother and child. The Busia County Integrated Development plan 2013-2018, shows maternal mortality rate at 307/100,000. It further indicates that the proportion of women delivering at health facilities is 25%. There is need to understand the influence of free maternity services on birth attendance behavior of women in Bunyala Sub- County.

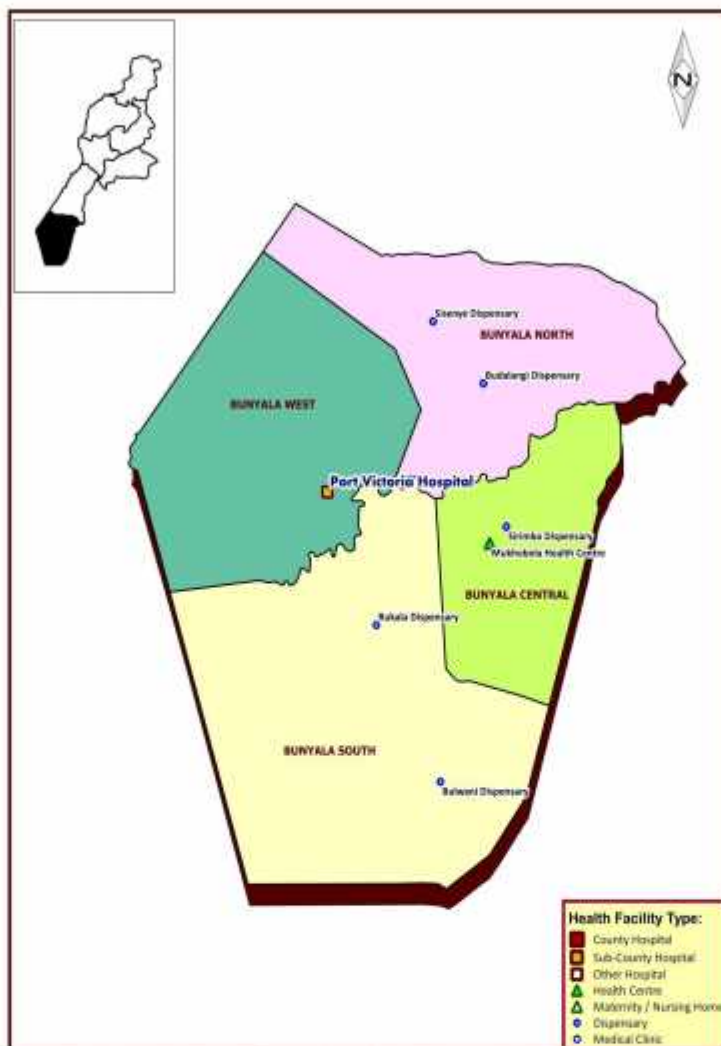
## 2.0 METHODOLOGY

### 2.1 Study Area

Bunyala Sub-County covers an area of about 185 km<sup>2</sup> of which 112 km<sup>2</sup> is arable land with its headquarters in Budalangi division. Its locations include Bunyala Central, Bunyala South (to the South of river Nzoia), Bunyala East, Bunyala North and Bunyala West to the Northern side of river Nzoia (GOK, 2009).



**Figure 2.1: Map of Bunyala Sub-County, Busia County, Kenya**  
**Source: Researcher 2016**



**Figure 2.1: Map of Health Facility Distribution in Bunyala Sub-County, Busia County, Kenya**

Source: USAID, 2015

### Research Design

Descriptive cross sectional survey research design was used and it involved fact-finding and formulation of principles of knowledge of the study objective. The study population also included Key Informants who were drawn from among the public health facility maternity service providers.

### Demographic and Socio-Economic Characteristics

Bunyala Sub-County is inhabited by a sub tribe of the Luhyia ethnic group known as the Banyala and has a population of about 66,723 people comprising 31,718 males and 35,005

females, with an average household size of six people. Early marriage of girls is one of the issues found in this community. These households have small farms of about 2.4 acres on which they live, grow crops and keep livestock (Kenya National Bureau of Statistics, 2010). The indigenous people are traditionally subsistence farmers (agricultural and livestock), and fishermen, being that the sub county is bordered by Lake Victoria. The poverty index in the sub county is high; Bunyala central, for example, has an index of 63% according to the 1999 census (District Statistics Office). Bunyala as a Sub-County purposively selected for the study because it has historically recorded one of the highest maternal mortality rates in the country (GOK, 2010).

### Government Health Facilities in the Sub-County

Bunyala Sub-County has one Level 4 Hospital at its far end (Port Victoria Hospital, one level 3 health centre (Mukhobola Health Centre), and five Level 2 Dispensaries in Budalangi, Rukani, Sisenye, Sirimba and Bulwani. These are spread out in the five locations of Bunyala Sub-County. The main health centre in each location formed the central point from which ten (10) enumerators spread out to collect the data in the surrounding villages. There are also a number of private facilities, but given the high poverty level, majority of residents cannot afford the fees charged. (GOK, 2013).

### Study Population

The study's main unit of observation was the household where a woman was pregnant or had given birth in the last four years (2013), and the unit of analysis was the woman herself. The study population also included Key Informants who were drawn from among the public health facility maternity service providers, Traditional Birth Attendants and Community Health workers affiliated to the health centres. These key informants primarily provided insights into the trend of birth seeking behavior of the women in the study area, from the time they were declared free of charge by the current government and for the period prior. The informants also provided information on the maternity services available in Bunyala Sub County.

**Table 2.1: Study Population**

Study Population Unit	Study Population
1. Post-natal/expectant mothers	More than 10,000
2. Key Informants	5
• Sub county medical officers in charge of	20 the health centres
• Community Health Workers	15
• Traditional Birth Attendants	

**Source: Field Data 2016**

The estimated population (N) of mothers in the sub county is more than 10,000, from the inception of the free maternity services, and the period just prior to the initiative. The Fisher *et al.* (2003) formula for sample size determination where the population (N) is known to be greater than 10,000 is applicable and was used to calculate and arrive at the sample size of 384 mothers. The formula is:

$$n = \frac{2}{d^2} \text{ Fisher } et al. (2003)$$

## RESULTS

The main objective of this study was to establish the factors influencing mothers' choice birth attendants in Bunyala Sub-county in Busia, Kenya. This section provides a summary of the socio demographic characteristics of the mothers in the study and further proceeds to discuss the patterns in pregnancy outcomes, in relation to the maternity care service providers. Details of reasons why mothers prefer the options seeking services of the skilled birth attendants and that of the TBAs are discussed and from which recommendations are drawn.

### **Socio Demographic Characteristics of the Mothers in the Study**

Regarding the socio demographics of the respondents, the study established that, as close to a fifth of the study sample 19% were below the age of 18years, while only 1% were above 41 years. Under the prevailing circumstances, this study would proffer the argument that the decision- making processes are likely to be strongly set, with the younger ones having a third party making a decision regarding where they will give birth, and the older ones probably gravitating toward TBAs. Indeed 31% had been married while still minors, and 29% of them had given first birth while still children themselves. As a result, 36% of the mothers had 3-5 children at the time of the survey. 11% had a total of more than 5 living children, 31% were pregnant at the time of the interview, and for 51% of the sample, 2 of the children were aged below 5 years (a vulnerable age group in terms of health and nutritional needs). For 63% of the mothers, their youngest children were under 2 years old. The underage and over 40 years old mothers are medically grouped as being at high risk of pregnancy complications, and therefore requiring specialized obstetric services. 83% of mothers in the study were married, with 22% being found in the vulnerable set up of polygamy. The study found that 80% of the mothers had never gone beyond primary school level, despite education being an important determinant of health seeking behavior. Regarding the trends in birth-attendance seeking behavior, 72% of the mothers were found to patronize the government health services, 3% had given birth at home unassisted, and 5% had sought out the services of Traditional Birth Attendants. 9% had attended private health facilities and 11% were yet to give birth for the first time.

### **Adverse Pregnancy Outcomes from Different Service Providers**

The study sought to establish patterns in adverse pregnancy outcomes, in relation to the maternity care service providers. This was done under the assumption that the adverse outcomes will be one of the factors affecting the decision of mothers to opt for the safest provider, in a bid to avoid the adverse outcome. The discussion of these results is informed by the Precaution Adoption Process (PAP) Model, one of the Explanatory Behaviour change theories which seek to describe the reasons why a problem exists. The PAM attempts to explain how a person comes to decisions to take action and how he or she translates that decision into action. For the current study, the PAP model was adopted to explain how mothers arrive at choice of birth attendance, whether TBA or facility-based. All the results are also discussed against the backdrop of literature reviewed.

### **Respondent Has Ever Had a Miscarriage**

The study found that 14% (54) of the mothers in the study had ever suffered a miscarriage. This is a relatively high percentage with regard to an adverse pregnancy outcome. Also 14% (54) mothers that suffered the miscarriages, 13% (7) had been in the hands of a

Traditional Birth Attendant. Most likely the pregnancies had been complicated and the TBA did not know when to refer, or had not wanted to lose the client. The adverse outcome at the hands of TBAs has most likely led more and more mothers to turn to facility-based maternity services.

### **3.2.2 Respondent's Newborn has ever Died**

Similarly, 6% (23) of the mothers in the study had ever lost a newborn, and of these, 5.2% (20) had been at the hands of traditional birth attendants. The study notes that this adverse outcome of relatively high neonatal mortality linked to the inadequate services offered by the TBAs could be a contributing factor to the decision of increasing numbers of mothers turning to the free government maternity services.

### **3.3 Antenatal Caregiver at the time of the Neonatal Death**

Of the 6.0% (23) that have experienced a neonatal death, 5.8% (18) were reported to have been at the hands of Traditional Birth attendants, this can influence birth attendance choice. No mother would wish to have their new born die simply out of negligence arising from the way their pregnancy and labour experiences were handled. The observations made by this study agree with the assertions of Rashid (2001) that perceptions of quality health care are an important predictor to seeking care, even in emergency situations. It would therefore be unlikely for a mother in labour, knowing this fact, to run to the TBA for assistance in times of emergency.

### **Pregnancy-Related Maternal Deaths and Disability**

95% (366) of the mothers believe that more women die at the hands TBAs during childbirth; and another 55% (211) asserted they know a woman in the area that has suffered serious injury or disability due to complications during pregnancy or delivery, 38% (146) going on to confirm that the injured or disabled woman had been in the care of traditional birth attendants.

Based on the opinion on whether more women die at the hands of TBAs during childbirth, this study has established, that adverse pregnancy outcomes can be linked to the services of TBAs as opposed to government facilities, thereby giving strong grounds for the mothers to increasingly make decisions in favor of using the government antenatal care (ANC) services. According to 95% (366) of respondents, more women die at the hands of TBAs during childbirth, while 55% (211), reported they knew a woman in the area that had suffered serious injury or disability due to complications during pregnancy or delivery. The mothers seem to be aware of the causes of maternal and infant death, and to link them to the non facility birth attendance option. When asked to explain their answers to the most common cause of maternal death, mothers said that they die because the TBAs don't have enough skills to help them. The mothers cited poor services, delay in service, complications, too much bleeding, prolonged and premature labour, and poor handling while giving birth as the reasons behind infant and maternal deaths at the hands of TBAs. Focus Group Discussants also gave the risk factors that women face in delivering outside the health facilities as mainly being a lack of equipment to properly diagnose and address emergencies such as obstructed labour, and the risk of over bleeding.



### **3.5 Reasons behind Preference for Government Maternity Services in Bunyala Sub-County**

When asked about their most preferred birth attendance service provider, 84% (323) of the mothers in the study mentioned the government facility, while 5% (19) mentioned Traditional Birth Attendants. During their Focus Group Discussions, mothers explained that the government gives better services than TBAs because the staff are trained, have more experience, more equipment, and good monitoring of the pregnancy through the ANCs. They also pointed out that the government service is free, which was a great attraction for a number of them. Some of the mothers mentioned the availability of medicine was a strong selling point, while others complimented the government for handling complications well.

Mothers in Bunyala faced a number of issues before the maternity services became free. Community Health Extension Workers (CHEWs) in each of the clusters provided information on this during their individual interviews. In Bunyala North, the cost-sharing fees were reported to have been high, the mothers were forced to buy some items and the staff were very harsh. In Bunyala South, it was reported that here, too, the delivery fees had been very high, there was inaccessibility of health services in emergencies, and insufficient skilled manpower. In Bunyala East, the CHEW informed the study that majority of women could not meet the cost of antenatal services as they were required to buy some things such as cotton wool, gloves and a certain amount of payment for the delivery. In Bunyala West, it was said the attendants were abusive and the charges unaffordable, while in Bunyala Central, the mothers had been forced to pay a lot for maternity services as well as buy cotton and surgical gloves.

However, after the services became free in the government units, things became a bit better for the mothers. Giving birth is more affordable, even though in some places like Bunyala North clients still needs to pay for some items like cotton and gloves. More maternity health services have been availed such as wards to accommodate expectant mothers, and there has been some increase in the number of skilled manpower. In Bunyala East, apart from a lack of privacy in some facilities and abusive language of the attendants, the mothers go to the facilities to give birth, while in Bunyala West and Bunyala Central, the study learned that, because the service is affordable, more mothers are attending.

The study found that majority of mothers 82% (316) felt that government maternity services had improved since becoming free. Conversely, 9% (35) felt that the services had become worse since becoming free. 5% (19) felt they were the same as before, and 4% (15) had no opinion on the issue.

Regarding the ways the services at each facility have changed since maternity was declared free, the clinical officers confirmed that uptake has drastically increased, but that manpower resources are in short supply, though overcrowding is not really an issue in the health centres or even at sub county hospital.

The CHEWs in each area, when interviewed, described the various ways in which the health centres have been able to meet the ANC needs of mothers in their respective areas, and also mentioned some of the challenges faced by the skilled service provider. The study was informed by these key informants that, in Bunyala North, there is a serious lack of equipment. In Bunyala South, sometimes an ambulance is available from Port Victoria to help out in emergencies, and the health units have stretchers to help in carrying mothers in emergencies. Bunyala South centres have skilled manpower even though they may be few, and the laboratory facilities are good for urinalysis and testing for HIV under PMTCT initiative. In Bunyala East, the key informants informed the study that, when the health centres are well-equipped, they provide iron tablets and tetanus toxoid injections and insecticide treated nets for expectant women. The centres also advise mothers on the danger signs to look out for during pregnancy. The CHEWs also advise them to save funds for emergency transport and have individual birth plans and to implement them. The study was informed that, in Bunyala West, the ANC services are good. For example, the expectant woman's weight is monitored and iron tablets given for free. In Bunyala Central, they have well trained staff, the facility has equipment and some emergency services are available.



**Plate 1.1:** A CHW displaying the Pregnancy wheel normally used when visiting expectant mothers at home. **Source: (Field Data, 2016)**

The study established that the wheel is provided through a collaboration of the government of Kenya and AMPATH. The wheel details the actions to be taken by the mother, upon the advice of the CHEW, based on the stage of pregnancy.

### **Factors that Lead to some Mothers Opting for Traditional Birth Attendants in Bunyala Sub-County**

Despite the high proportion patronizing government services, as was earlier seen, a remnant of mothers in Bunyala Sub-County still seek out the services of TBAs. One of the reasons for this loyalty to the TBAs is the flexibility in payments. Traditional Birth Attendants, when interviewed, informed the study that their clients pay in kind through foodstuffs such as baking flour, sugar and live chickens. In some instances they pay up to KES 700/=. Focus Group Discussants revealed that the TBAs usually visit expectant mothers in their home in the hope of securing a client. Some mothers find it so convenient that they opt for her services rather than going to the facility.

CHEW Interviewees gave their individual opinions as to why some mothers still visit TBAs. In Bunyala North, the interviewee said it is because some of the mothers are related to the TBAs and are more comfortable with her, besides the payments being flexible and in kind, not necessarily in cash. The Community Health Extension Workers (CHEWs) in Bunyala South gave a similar explanation, that it is because some of the mothers are close relatives of the TBA thus they get the services free of charge. It was also asserted that, unlike in the health facilities, TBA's can be paid with cereals when funds are low. An important point raised by the CHEWs in Bunyala South is the inaccessibility of the government facilities during emergencies, such as an ambulance, leading some mothers to opt for the TBAs who are easy to access.

In Bunyala East, the study was informed that the TBAs seem to be friendlier, coaxing, gentle and even serve their clients with food. Basically the attitude of TBAs towards their clients is more conducive compared to the attendants in the government facilities. In Bunyala west, the study was told that the TBAs serve the client in a positive atmosphere, are more sympathetic and comforting than the facility attendants. In Bunyala Central, the sentiments were the same as the CHEW reported that some mothers say TBAs are cheap, friendly, and that their services are easily accessible at all hours. It was also said that some of the mothers claim they fear surgical tools that are used during hospital delivery. These are some of the pointers the study found to explain why some mothers remained adamant on free maternal health services offered by SBAs in government facilities. As such, they continued patronizing the TBA services.

Based on the comparative time taken waiting maternity services at the hospital and TBA's, as well as the distance from the maternity service provider, 33.3% (128) of mothers said it takes between 3 minutes to one hour to be attended to in the facility, and another 11% (42) said it takes more than one hour of waiting before being attended to. 79% (303) of the mothers said they did not know how long it takes before a TBA attends to the client. 15% mentioned it takes 10-30 minutes, and none of them mentioned having to wait for more than an hour. It can be assumed that since the TBA generally has fewer clients, and usually makes house calls, then the waiting time is shorter than at the hospital. It was also revealed that 56% (215) cited the government facility as being located far from their homes, compared to 49% (188) who cited the TBAs place as not being within walking distance from their places of residence. In line with these views, CHEWs when interviewed, also opined that some mothers prefer coming to TBA's instead of going to the Government's Health Unit because the distance to the government facility is too far and the hospital staffs keep them waiting for long hours.

**Table 3.1: Time Taken Waiting and Distance from the Facility**

Variable	Frequency	
<b>Percentage</b>		
<b>Time Mothers Spend Waiting For Services At The Government Health Unit</b>		
Less than 10 minutes	18	
5% Between 10 and 30 minutes	195	
51% Between 30 minutes and 1 Hour	121	
31% More than One Hour	43	
11% Don't Know	8	
<b>Average Waiting Time For Clients of TBA</b>		
Less than 10 minutes	4	1%
Between 10 and 30 Minutes	56	15%
Between 30 and 1hour	21	5%
I Don't Know	304	79%
<b>Total</b>	<b>385</b>	<b>100%</b>
<b>The Government Facility Is Far From Respondent's House</b>		
Yes	214	
56% No	171	
<b>Total</b>	<b>385</b>	
<b>TBA's Place Is Within Walking Distance Of Respondent's House</b>		
Yes	160	42%
No	192	49%
Not Applicable	33	9%
<b>Total</b>	<b>385</b>	<b>100%</b>

**Source:** Field Data, 2016

The fear and stigma associated with HIV testing at the Voluntary Counseling and Testing Centres found in the government hospitals is another reason mothers shy away. As the data displayed in Figure 5.7 shows, up to 40% (154) of mothers in the study confessed that fear of testing positive for HIV is a deterrent to going to the government facility for ANC services.

Medical staff reported that some of the mothers come for ANC when they are about to deliver, while others stay away because they are afraid of being tested for HIV since PMTCT makes it mandatory. It was reported that when mothers come in for labour, immediately she comes in the staff test her for HIV if she has not been coming for ANC. If she is found HIV positive she is given prophylaxis before she delivers, then after delivery the infant is given nevirapine. The study also learned that, through the interventions of Community Health Workers, HIV positive mothers are giving birth to HIV

negative babies, and that it has been a real struggle to fight against stigma. Some CHEWS said they even wanted to ask the TBAs to convince their clients to go to the facility because of the issue of HIV.

### Conclusions

It can be concluded that a number of negative pregnancy outcomes in Bunyala Sub-County are associated with the services of Traditional Birth Attendants, leading to more mothers patronizing the government services. 14% of the mothers in the study had ever suffered miscarriages, 13% of them at the hands of TBAs; 6% of the mothers lost a newborn, 5.2% having been at the hands of TBAs. Qualitative data revealed that mothers in Bunyala Sub-County had endured maternal deaths during childbirth as a result of hemorrhage, sepsis, pre eclampsia and eclampsia, and obstructed labour. All these arising from the risky practices of TBAs, such as a lack of antenatal referral; lack of sterility; poor handling of the cord; and use of poorly chosen instruments during delivery. It was also seen that 84% of the mothers in the study mentioned the government facility as their preferred antenatal care provider, 82% claiming that the services of government facilities, the study established that the mothers of Bunyala sub county generally prefer the government facilities over the TBAs primarily due to availability of skilled staff, medicines and equipment. However, it also came to light that some mothers prefer the TBAs because of flexibility of payments, payments in kind, accessibility at odd hours, the TBAs ability to communicate in the local vernacular, and their kind, empathetic disposition toward their clients. For others 21% , it was for cultural reasons, in order to avoid having male birth attendants found at the facilities. Yet others were seen to shy away from government facilities for fear of the mandatory HIV testing done under the PMTCT program.

Based on the objective to investigate the factors that influence mothers' choice of Birth attendants in Bunyala Sub-County, it can be concluded that the objective was fulfilled as the study listed several factors mentioned in the preceding sub section as being those that influence choice of birth attendance in the study area.

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