UNIVERSITY OF MALAWI

College of Medicine

The Examination of Traditional Birth Attendant Practices and Their Role in Maternal Health Services in Mwandama Village Cluster

By

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CERTIFICATE OF APPROVAL

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DECLARATION

I, Aparna Kumar, hereby declare that this thesis is my original work and has not been presented for any other awards at the University of Malawi or any other University.

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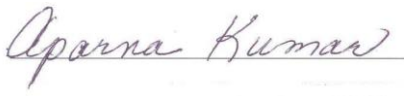
Signature 

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Reproductive Health at the College of Medicine and Dr. George Kafulafula of Queen Elizabeth Central Hospital Department of Obstetrics and Gynecology.

ABSTRACT

Background :The question of whether or not to involve Traditional Birth Attendants (TBAs) in maternal mortality reduction has been a reemerging theme during this time frame. Very little conclusive evidence has been found that supports the training of TBAs as a key strategy in MMR reduction.

Study Objective :The objective of this study was to understand what roles TBAs play at the community level and why.

Study Methods : The methods used were focus group discussions, key informant interviews, and in-depth interviews.

Findings : Overall, the study showed that TBAs, both trained and untrained, played a significant role in women's reproductive health care, particularly in pregnancy and delivery. However, women acknowledged that they would go to the health center if not for barriers of transport, lack of finances, and lack of politeness of the staff. In addition, the community, including TBAs, is not yet properly sensitized on the new role of TBAs. On the other hand, policy makers and DHOs have yet to properly define their role and take adequate steps towards the implementation of this new role at both the community and district level.

Conclusion : The study therefore concludes that, in the interim, it is necessary to engage TBAs to work hand in hand with health centers and refer as appropriate based on the facility's capability to deal with additional cases.

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ABBREVIATIONS AND ACRONYMS

ANC: Antenatal Care

ARV: Anti-Retroviral Treatments

BEmOC: Basic Emergency Obstetric Care

CEmOC: Comprehensive Emergency Obstetric Care

CHAM: Christian Health Association of Malawi

DHO: District Health Office

DNO: District Nurse Officer

EmOC: Emergency Obstetric Care

EHO: Environmental Health Officer

FGD: Focus Group Discussion

HSA: Health Surveillance Assistant

IDI: In-Depth Interview

IEC: Information, Education, and Communication

KII: Key Informant Interview

MCH: Maternal and Child Health

MDGs: Millennium Development Goals

MDHS: Malawi Demographic and Health Survey

MMR: Maternal Mortality Ratio

MOH: Ministry of Health

MVP: Millennium Villages Project

OR: Odds Ratio

PHC: Primary Health Care

PMTCT: Prevention of Mother to Child Transmission

PPH: Post-Partum Hemorrhage

RH: Reproductive Health

RHC: Reproductive Health Committees

RHU: Reproductive Health Unit

SP: Sulfadoxine-Pyremethamine

STI: Sexually Transmitted Infections

SWAp: Sector Wide Approach

TBA: Traditional Birth Attendant

TTBA: Trained Traditional Birth Attendant

UNICEF: United Nations Children's Fund

UNFPA: United Nations Population Fund

UTBA: Untrained Traditional Birth Attendant

VCT: Voluntary Counseling and Testing

VHC: Village Health Committee

WHO: World Health Organization

CHAPTER 1. INTRODUCTION:

1.1 Background:

The maternal mortality ratio (MMR) in Malawi is one of the highest in the world, standing at 984 per 100,000 live births. Addressing the tenacious MMR in Malawi is a great challenge, which requires the collaboration of community, government, and private actors. One of the main indicators in assessing and improving maternal health is the presence of a skilled attendant at birth. In this context, it is important to define skilled attendance, examine the prevalence of skilled attendance at birth, and to assess potential reasons that there is a gap in skilled attendance at birth. By assessing the access barriers, it becomes possible to provide services that are better able to reach the women who need them most in terms of antenatal care, labour and delivery, and post-delivery care for the mother and the neonate.

1.2 Statement of the Problem:

In the modern health care sector, traditional birth attendants (TBAs) are not seen as skilled birth attendants. According to the WHO, TBAs can be defined as "traditional, independent (of the modern health system), non-formally trained and community-based providers of care during pregnancy, childbirth, and the postnatal period (WHO, 2004)." Traditional practitioners such as TBAs are often favoured by women in the community to perform deliveries because of socio-cultural factors such as: exhibiting respect to the client, their fluency in local languages (Chichewa and others), a general mistrust of the national health care system, and TBAs' relative status position in the community (White

Ribbon, 2004). In a study seeking to understand underutilization of Nigerian health centres, it was noted that, among women who frequented TBAs (50% of surveyed women), while a small proportion of the women chose to attend the TBA because of proximity (6%), a larger percentage noted long waiting periods at the health facilities (18%). An even more important factor for women preferring TBAs was their husbands' and family members' preference (33%) and most importantly, the ability to have a close, traditional, and private relationship with the TBA (42%) (Odusoga et al., 2006).

Based on an analysis of demographic and health indicators across the developing world, it is estimated that TBAs assist at approximately 24% of births, which, when combined with others such as relatives and unnamed attendants, accounts for 43% of assistance at births (Sibley and Sipe 2004). In the past, traditional birth attendants (TBAs) have been engaged to assist in decreasing maternal and neonatal mortality, however, the failure to provide substantial and concrete evidence of training benefits have led to mixed attitudes towards investment in programs that train TBAs (Sibley and Sipe, 2006). According to the MDHS 2004, the trend towards TBA use is most apparent in rural areas, distanced from the care of doctors and midwives. It notes that while 28.9% of live births are assisted by TBAs in rural areas, only 8.4% of births are assisted by TBAs in urban areas (NSO, 2005).

Among respondents to the MDHS 2004, only 57% of births occurred in a health care facility, a minute change from 55% of both the 2000 and 2004 MDHS. In Zomba district, TBAs assisted at delivery for 19.7% of births and nationwide for 26.2% of live

births. Most importantly, according to the MDHS, the role of TBAs in birth attendance has increased from 23% to 26% from 2000 to 2004 (NSO, 2005). Hence, despite an increase in efforts to move women to health facilities and skilled personnel attendance, the utilization of TBAs has remained stagnant.

1.3 Literature Review:

1.3.1 Historical Background:

Historically, TBAs have been trained since the 1800s in the U.K. and from 1952 onwards, UNICEF has been providing delivery kits to TBAs. From 1978 with the Alma Ata Declaration, the WHO has also approved of training TBAs to be integrated into primary health care services (Sibley and Sipe, 2006). Sibley and Sipe (2006) even approximate that nearly 85% of developing countries engage in training of TBAs. This is a large number, even though their role has shifted from integration with the modern sector as promoted by the WHO in 1992, to the present, where they are seen to be a link to skilled birth attendance.

In developing countries, two main tenets of decreasing maternal mortality exist. The first was developed by the WHO in the 1950s and the 1960s, emphasizing the need for mothers' education, ANCs, and family planning. The second main tenet was formed in the 1970s with the training of TBAs. But, at the core of these important elements was also the availability and access to emergency obstetric care. From this, the push to train TBAs was based on the fact that there were not enough health care professionals to handle maternity cases, neither at the present nor in the future, and there were not enough

facilities to handle all cases that could potentially present to the hospital. This process was formalized by the WHO, including ANC and risk approaches, and TBAs were trained until the middle of the 1980s. Eventually, the effectiveness in training TBAs was questioned in terms of neonatal morbidities and other areas. It was concluded that ultimately, it was essential to have access to EmOC with or without TBA training (De Brouwere et al., 1998). A full review demonstrating TBA effectiveness is included in Appendix VII.

1.3.2 Skilled Attendance and the Human Resources Crisis:

In contemporary Malawi, there is much talk of the human resources crisis. In such a setting, the potential for utilizing TBAs, even if in a relegated position is paramount. In this way, understanding their current practices, their future roles, their effectiveness, and women's barriers to accessing the modern sector are critical. This untapped community resource could be beneficial in this time of staff shortage. As Dr. David Silver (2001) notes, "One of the greatest unused resources for a community's health care development is the community itself. Communication provides a means through which to tap this invaluable, commonly overlooked resource." Finally, TBAs are a resource that has intermittently been seen as bad or good. But, the core of the issue is that, by failing to train them in prevention skills, early recognition, and management of complications, there could be more harm than good done in the interim. Walraven and Weeks (1999) argue that identifying and training these birth attendants with some midwifery skills should be a priority until the longer solution of training more midwives can be achieved.

In this context, the actual role of the TBA juxtaposed to the modern conception of a skilled attendant in functional terms should be considered.

Although it is commonly accepted that TBAs cannot provide the same services as nurse-midwives, based on their lack of resources and access to health facilities, it is often still necessary to work with them in a meaningful way. Sibley and Sipe (2006) address this issue, commenting that, in places where a large proportion of births take place at the TBA, it is possible and effective to engage TBAs in key evidence-based interventions and first-aid for complications as an immediate strategy.

1.3.3 TBA Practices:

In addition to the expected antenatal care, labour and delivery, and postpartum care, it is also valuable to identify the other practices in which TBAs engage to understand how their role could be repositioned if necessary and in what areas they are most equipped to be of complementary assistance to the modern sector. In a Nigerian study, it was suggested that while women typically come to TBAs for pregnancy, delivery, and reproductive related activities, they also frequented the TBA for infertility, STIs, barrenness, for circumcisions, and abortion. Understanding their full activities could help shift their role in the community to those practices which can be safely conducted in their setting with minimal supervision (Izugbara and Ukwayi, n.d.).

1.3.4 Factors Contributing to Seeking TBA Care:

A number of studies within Malawi, in the region, and globally, cite a number of reasons for seeking TBA care. These include: cost, proximity, lack of trust in nurses and doctors, history with the TBA, affordability, accessibility, reliability, privacy, and desire for sincere attention (Izugbara and Ukwayi, n.d.). Another important consideration is that users do not see a risk in using the TBA's facilities, that is, they are not necessarily aware of the advantages of delivering within the health facility. In terms of ANC, the majority of women in Malawi do attend, according to the MDHS 2004. This fact is confirmed in the study by Van den Broek et al., which found that even when women lived 5km or more away from the health centre, the majority attended ANC (Cullinan et al., 2003). Sometimes TBAs do not offer this service or women attend the ANC, but then deliver at home or with the TBA. This is important because how women can be reached through ANC and encouraged to deliver in a facility could be a key intervention in addition to understanding how ANC can be incorporated to include elements of safe delivery that empowers the mother to make a decision in how care is administered, even by the TBA.

Even though the majority of hospitals with maternity in Malawi have a waiting ward, many women still choose not to stay because of the unpredictability of time in how long they would wait. They also cite that costs for food, transport, and the requisite family member or guardian to assist them due to shortage of staff are hindrances in waiting at the hospital (Figa-Talamanca, 1996). In addition to practical issues TBA care might be favoured for its flexibility and the possibility of companionship in labour. According to a study in Zambia concerning pregnant women and their needs, both emotional and

physical, at least three or four women in addition to the TBA were present during labour in the home. Yet, this experience was not replicable in the hospital setting because of strict policies on numbers of companions (Diwan et al., 2003). In addition, reassuring practices of women should also be considered in terms of services such as cultural practices of TBAs like protection from witchcraft and stabilization of pregnancy to avoid referral to the hospital (Ahlberg et al., 2005). It should equally be acknowledged that TBAs also conduct harmful practices, for example, the use of herbal medicines that induce strong contractions. Although the specific herbs used in Malawi were not named in TBA studies reviewed, those used in South Africa were derivatives of *Agapanthus africanus* and found to have a similar effect as oxytocin. Herbs described in Malawi also had this effect (Diwan et al., 2003).

Women's education levels also play a part in where they decide to deliver. In a study in Malawi, one of the largest studies in a rural community in Sub-Saharan Africa, it was shown that, as women's education levels increased they were less likely to deliver at the TBA or with a family attendant and were more likely to deliver at the health centre with a skilled attendant. Increased education also resulted in fewer pregnancies and later onset for childbearing than women with less education (Cullinan et al., 2003). The links between education and health for women are significant when looked at in terms of the MDGs.

1.3.5 Future Activities for TBAs:

According to the WHO plan for skilled attendance, there is, in fact, a role for TBAs. They are able to engage in a variety of activities: to assist in the birth plan with the woman and the community, to arrange transport, to provide social and emotional support for the woman, to refer when danger signs are recognized, to sensitize the community on national strategies for skilled birth, and to assist in preparation for home births and for neonatal care (WHO 2000). It is clear that TBAs have a cultural and social role that cannot always be equated to that of a nurse-midwife. Thus, in planning future activities, it is also significant to imagine other ways in which TBAs can be utilized, rather than merely in facilitating labour. For example, in the Zambian study, it is implied that TBAs could play a critical role in social support at ANCs as well as provide labour companionship in hospitals (Diwan et al., 2003). This is a role that is not supportable at the moment given the current hospital policies on companions as well as the human resource capacity of nurse-midwives but is perhaps feasible with the involvement of other health care workers, such as TBAs.

Maybe the most likely method of TBA involvement is to keep them at the community level and to engage them in community health committees such as VHCs. Integrating TBAs as a part of Primary Health Care (PHC) falls in line with the noted principles by the WHO and UNICEF, stating that PHC should be accommodated to the lifestyles of those it serves as well as initiated by health workers close to the client's home and also to use untapped community resources to provide primary health care for all (Silver, 2001). In Zomba district, reproductive health committees (RHCs) are being initiated by TBAs in

order to educate mothers on family planning, keeping healthy during pregnancy, STIs, HIV/AIDS, as well as anaemia and malaria. Therefore, this shift in role to include TBAs more in health education is possible, particularly as they have a strong role in the community.

1.4 Justification of the Study:

In this context, understanding why women prefer TBA care to skilled attendance in Malawi is an unexplored topic. Indeed, research exists regarding the effectiveness of training TBAs, previous government collaborations with TBAs, and the role that they should be playing in maternal and child health (MCH). But, few studies have examined client perspectives on TBAs, TBA perspectives on the health care system, and key government and non-governmental health workers' views on the role of TBAs within the national MCH strategy. At present, the 2005 Road Map to Safe Motherhood states that TBAs should be excluded for skilled birth attendant classification and should not perform deliveries. Still, the issue remains of how to transition them to other roles without funding for such a transition in the Road Map Budget (MOH, 2005).

CHAPTER 2. OBJECTIVES:

2.1 Broad Objectives:

Through primary and secondary sources, this research seeks to test the hypothesis that there are both cultural and community based barriers to formal health service usage in Mwandama, which in addition to TBA status and position, tend to favour TBA usage despite the shift in policy to reposition the role of TBAs by the Ministry of Health. The main objective of this study is to pinpoint the specific barriers to accessing formal health care by seeking to understand the services provided by TBAs around Zomba, their role within the community and links to the formal health sector, and the ways in which they disseminate information and deliver care with regards to maternal health care in Mwandama in order to understand both possible interventions and current best practices.

2.2 Specific Objectives:

The specific objectives of the study are to:

1) Identify the specific types of care that TBAs deliver and how it is delivered.

2) Designate the social and cultural role of TBAs at the community level and how this relates to current maternal and child health services.

3) Assess the level of interaction of TBAs with the modern sector.

4) Place TBAs within the context of current national policy to assess how it shapes TBA practices, integration, and level of training.

CHAPTER 3. STUDY METHODS

3.1 Type of Research Study:

This study was undertaken by request of the Millennium Villages Project (MVP) at Columbia University, an effort in 10 countries in sub-Saharan Africa that aims to provide rigorous proof of concept for integrated, community-based, low-cost interventions to meet the MDGs and end extreme poverty in rural Africa. This qualitative research study was a preliminary assessment for the MVP to: understand the new roles of TBAs in relation to the communities in which they are working; assess current policy at the district and national level towards TBAs; and inform future policies that the project can employ with regards to integrating or shifting away from TBAs' involvement in MCH services. Qualitative research methods were employed via focus group discussions (FGDs), in-depth interviews (IDIs), and key informant interviews (KII).

3.2 Study Place:

Mwandama Millennium Village Cluster is located in the Southern Region of Zomba District (15^0 29 .5' S, 35^0 11.' E), to the Eastern part of the Upper Shire River. The main village, Mwandama, is in Group Village Headman Kutambala, Traditional Authority Mlumbe. The area is 24 km from the town of Zomba, between 900 – 1200 m above sea level. Mwandama is one of 7 villages with which the MVP is working. The seven villages are: Gara, Katete, Lindjizi, Mayera, Mwandama, Nambande, and Nswaswa.

3.3 Study Population:

The Mwandama cluster of seven villages combined have a total of 35,000 inhabitants, with each village holding a population of approximately 5,000 inhabitants and 1,000 households. The villages are ethnically a mix of *Chewa*, *Lomwe*, *Yao*, and *Ngoni* ethnic groups, with *Chichewa* as the main language spoken.

3.4 Study Period:

This study took place from October 1, 2007-December 1, 2007. A literature search and preliminary policy interviews were undertaken in October 2007. Key informant interviews were conducted from October 30, 2007 to November 3, 2007. In-depth interviews and focus group discussions were undertaken from November 6, 2007 to November 10, 2007.

3.5 Sample Size:

The target population was women of the reproductive ages from 15-49, comprising focus groups of no more than 12 women. From the seven villages in the Mwandama cluster, three sites were selected based on geographical distribution: Lindjizi, Nambande, and Thondwe. At each of the three sites, one focus group was undertaken in addition to one or two in depth interviews with clients on the following day. One MVP health facilitator invited 10-12 women to participate in the FGD at each site, chosen from approximately 100 women per site by senior women in the village. One TBA was interviewed at

Nambande.[i] One TBA was also interviewed in the catchment area of St. Luke's Mission Hospital, in order to gain perspective on the CHAM facilities.

3.6 Data Collection:

Three community nurses from the MVP conducted the focus groups and in-depth interviews. They were trained by Aparna Kumar and were assisted by Mrs. Veronica Maluwa, nurse-midwife. The MVP community nurses also participated in a focus group during training, of which their comments are included in final analysis. Because of time constraints, each nurse conducted one focus group at the separate sites with Mrs. Maluwa and Aparna Kumar present at 2 of the 3 client FGDs. They also conducted the in-depth interviews at their respective sites in pairs with Mrs. Maluwa present at 5 of the 7 IDIs with clients and both IDIs with TBAs. Clients' and TBAs' interviews were semi-structured and utilized a sample set of questions (Appendix III and IV) and FGDs utilized a discussion guide (Appendix V). All FGD and interview participants were read an oral consent form before proceeding to record the session (Appendix VI).

Key informant interviews were undertaken with critical service providers in Zomba district as well as with policy implementers in Blantyre. Interviewees included: Mrs. Karen Navicha, nurse-midwife at Thondwe health centre; Mrs. Everes Kabanda, nurse-midwife at Namikango Maternity Clinic; Mrs. Elizabeth Chowa, Matron at St. Luke's Hospital; Mrs. Elida Nkoloma Banda, TBA Coordinator at the DHO; Mrs. Bisika, DNO at the DHO; Dr. Frank Taulo, Director of the Centre for Reproductive Health; and Dr.

[i] Three TBAs joined the focus group at Thondwe, but were not interviewed because they did not identify themselves as TBAs until after the focus groups.

George Kafulafula, Head of the Department of Obstetrics and Gynaecology at Queen Elizabeth Central Hospital. The interviews were semi-structured and guided by a separate sample set of questions for staff and for policy implementers (Appendix I and II). All data collection tools are included in Appendices I-VI. Translations to Chichewa were conducted and all those that needed translation are included in their English form as an Appendix a and in their Chichewa form as an Appendix b.

3.7 Data Management:

All focus group discussions and each of the 9 in-depth interviews (7 clients and 2 TBAs) was conducted by one interviewer and one note-taker. Notes were summarized and collected. All sessions were recorded and transcribed verbatim the following week. Transcription, notes, and tapes contributed to the content based analysis, which were conducted and coded by hand. All IDIs were recorded and transcribed verbatim the following week. All IDIs were analyzed based on thematic analysis of notes, summaries created by the interviewer, and verbatim transcriptions.

KIIs were conducted in English, taped, and transcribed verbatim. Two were omitted due to the nature of the interview, where the interviewer and the interviewee were moving locations during the interview period. They were hand analyzed by theme.

3.8 Study Limitations:

The scope of this project was limited in terms of time, finances, and geographical distribution. Because of time constraints and other work commitments by the MVP nurses, the qualitative analysis possible was limited to three focus groups rather than a full seven, for each of the cluster villages. A larger scale project of the villages could have been conducted if additional finances had been available to hire staff. As the three villages sampled were within Zomba, the results are not nationally generalizable.

In addition, measurement bias was an issue due to these constraints. Using different nurses for each FGD and IDI introduced variation in the ways that each group or interview was conducted. To standardize the groups, a colleague with understanding of the district and the subject was enlisted to ensure that the proper questions were being asked and appropriate probing techniques utilized.

Finally, because the study site was a project village, participants might have skewed information to please us. For this reason, one TBA was interviewed outside of the project area. There also might have been selection bias in choosing women that frequently participated in surveys or were more visible in the community.

3.9 Ethical Considerations:

Because this study kept personal information anonymous, it did not require ethical review by COMREC or Columbia University's Institutional Review Board (IRB). The proposal underwent final review by the MVP head research coordinator in New York, Cheryl Palm as well as the MVP research coordinator in Malawi, Rebbie Harawa.

CHAPTER 4. RESULTS:

4.1 Age, Parity, and Geographical Location:

The majority of the women who participated in focus groups and in-depth interviews were of the reproductive age. There were several women who fell outside of this range. The IDIs had older women because we sought to interview more senior women in the village. Women (clients) ranged in age from 15-65 with a mean age of 33 years and a median age of 28 years. Parity ranged from 1 to 12 with a mean parity of 5 children and a median parity of 4 children. Women hailed from the following administrative villages within the seven cluster villages: Hendere, Kunsiya, Kutambala, Malika, Mkawa, Mwamadi, Nambande, Ndolera, Potani, and Sitima. The two TBAs interviewed were from Mkawa and Malosa (non-project site). One TBA interviewed at Mkawa was 45 years of age and one TBA interviewed at St. Luke's Mission Hospital in Malosa was approximately 65 years of age.

4.2 Accepted Definitions of TBAs:

TBAs in the focus group discussion as well as the in-depth interviews were referred to as *azambas* in the community. This is also the name used by the TBAs, or rather *azambas*, themselves. Women also, at times, referred to the TBAs as the "village doctor" who assisted women with their births. A surprising notion that was commonly repeated in FGDs and IDIs was that TBAs and health facility staff saw each other as colleagues and thus were able to work together. Often times, TBAs, although preferred, were not as valued or respected as the health care workers.

4.3 Social and Cultural Roles of TBAs:

From the focus group discussions, several roles of TBAs at the community level emerged. TBAs were often in close contact with the chief and visitors were sometimes referred to her. In addition, TBAs are generally older women who "care" about younger women in the community. They also take care of those women that are not able to pay for delivery and are therefore also seen as benevolent members of the community. The *azambas* are additionally able to address the spiritual issues that women may have. For cases of witchcraft, for example, only the TBA can address this problem. One client in Mwandama stated, "There are some problems/complications that can only be addressed by the TBA especially those involving witchcraft (*Pali zithu zina zimene azamba amatha pamene achipatala sangazithe ngati pamene munthu walozedwa ngati munthu wamagwidwa*)."

However, the MVP community nurses do not describe TBAs so positively. With respect to the role that the spiritual world plays in TBA practice, it was clarified,

> "Mostly, if the woman dies at the TBA it means they have even identified the cause of that death. They will say that maybe that patient has had some extramarital relations and then it's the spirits that are haunting her. Or they will say it was the husband that was not doing well. Or maybe during pregnancy, she was not observing other rituals. So instead of the baby coming out, it has stopped somewhere. So because they have those reasons, the TBA is safe. And these reasons are convincing even to the guardians. Sometimes, they will leave the patient there and go to the man. They will ask him, 'Just mention if you have had

some extramarital relations so that we can go and appease the spirits.' Sometimes they will do that. And I don't know, sometimes when they do that, then they refer to the hospital and she delivers, things go well. It's because of the spirits then. I don't know what happens, but it's because of that trust between the TBA and the people." - **Nurse-Midwife**

In terms of using local drugs, one community nurse, recognized that,

"They are part and parcel of the health component. Only that they lack skills as well as training. Culturally, they stick to norms and superstitions as pointed out. And cultural beliefs, they are also there. Each, they stick to local drugs. No matter how much you try to teach them these are very dangerous and toxic. But to them, culturally they think that they have that paranoia that this is good, they will still take that. And, they think that local drugs can induce labour or facilitate quick delivery. And if this does not work, always they will pinpoint that oh, this one has been bewitched maybe by other relatives. Or maybe the husband was promiscuous that's why the woman has died. Or they have lost the baby. Not because of the complications that she has. The blame is not with the TBA in this case whereas the blame is with the nurse." -**Community Nurse**

4.4 TBA Costs and Services:

Costs for services provided by TBAs identified by women and TBAs varied significantly from distinct geographical locations, between villages in the cluster as well as within the district. In instances where a woman is unable to pay, she was able to give any sort of in-

kind contribution such as flour, maize, a chicken, or a *chitenje.* One TBA also noted that if women don't have the money or anything to give, she still accepts them as, "It's like I am doing charity work (*Ayi chifukwa ndimakhala ngati ndagwira ntchito yaulere*)." In Table 1 below, the services mentioned by the TBAs and clients are noted.

Table I. TBA Formal Services and Costs:

SERVICE	PRICE	LOCATION	AFFILIATION
Delivery	50 Kwacha	Nambande	MVP
Delivery	100 Kwacha	Nambande	MVP
Delivery	200 Kwacha	Mwandama	MVP
Delivery	350 Kwacha	Thondwe	MVP
Delivery (Subject to Client Case)	150-500 Kwacha[ii]	Sitima and Ndolera (Near Thondwe)	MVP
Initial Visit	50 Kwacha	Malosa	St. Luke's
Delivery	100 Kwacha	Malosa	St. Luke's
Full Service (Initial Visit, Delivery, and Postnatal Check-up)	600 Kwacha	Mayinga (near Thondwe health centre)	MVP

Primarily, TBAs handled deliveries only, with very little ANC, postnatal care, or follow up mentioned. One client from Thondwe commented on the type of delivery care that TBAs provide:

> "They have antenatal services. They can tell if the child is in the proper position or if they are twins. They also give medicine for easy delivery. They can also check if you have a lot of water and they help you 'get off' the excess water using their hands (*Amayeza sikelo, ngati mwana wakhala bwino komanso ngati ali mapasa, amapereka mankhwala othandiza kubereka mosavuta. Munthu amatha*

[ii] Some of this variation results from the sex of the child. A male child is an expensive delivery.

kukuona kuti uli ndi madzi ambiri ndipo amakuthandiza 'kutulusa madzi' pokupitsa zanja)."[iii]

Although TBAs do not conduct ANC services like at the health centre, from conversation it was gathered that they do check the position of the foetus by palpation, refer women if the foetus is in a bad position, and check the overall health of the woman although this process was nondescript.[iv] One TBA noted that during a first visit,

> "I tell them to lie down and I check them 'here' (pressing stomach). When the child is not in the right position I can feel it and I tell the mother to go to the health centre (or hospital) to be checked by a medical doctor, because I know it will be a difficult or complicated delivery (*Amagona, akagona basi kuwagwiragwira umu, kapena mwana uja akapanga chonchi timamuona kuti sanagone bwino pitani kuchipatala. Kaye wakhala timamuoza kuti mwana uja akukhala tsiku lake timvutika naye, timatumisa kuchipatala kuti apite akamuone doctor wamkulu*)."

Although postpartum care is not administered by all TBAs, most, even if untrained, refer women to go to the health centre for immunizations for the baby after six weeks. In terms of care of the neonate, they simply apply spirit or traditional medicines to the umbilicus and then tell the women to buy Vaseline (Blue Seal) to apply to the area[v]

Many *azambas* also assist women by preparing food, helping the women to bathe, administering any medications, either traditional or modern, and by cleaning the mother

[iii] In this quote, 'excess water' refers to a difficult delivery or obstructed labor. If you have a long/difficult delivery, the TBA can help you make it go faster or can help you fix the obstruction.
[iv] In the past, TBAs were trained to do a full examination of the woman from head to toe (check breasts, check for anemia, observe leg veins, check fundal height, gestation, palpate presentation, and use fetal scope). Some older TBAs still retain this equipment and perform these procedures.
[v] This is partly a result of community health education on ANC and the under 5 clinic.

and the baby after delivery. Although some TBAs did mention other services such as STI treatment (men and women), counselling on HIV/AIDS, and family planning (men and women), prices were not disclosed for these services. Family planning services in the terms of the *azambas* also included treatments for sexual dysfunction, infertility, and unwanted pregnancies (abortion). TBAs were also found to give local herbal and modern treatments for anaemia, malaria, and to hasten delivery.[vi] Descriptions of the services and treatments are noted below in Table II.

Table II. Non-Delivery Related TBA Services:

ADDITIONAL SERVICES:	**TYPE OF TREATMENT:**
Anaemia Treatment	Give local herbal concoction like porridge; the women come and take a cup and drink out of a communal bucket
HIV/AIDS Counselling	Referral to the health centre for PMTCT if pregnant or for VCT and ARVs if not
Family Planning	Give local concoctions for infertility and contraception
STI Treatment	Administer local herbal treatments as well as referral to the health centre
Health Education	Give talks to individuals on hygiene, nutrition, and about going to health centre
Post Partum Care	If there are retained products, a woman sits on one of the three stones used on the burner fire and tries to expel the products.[vii] If the woman has tears, the TBA applies local medicines to the tears. If she is bleeding she is given local medicines, given a concoction for anaemia, and the woman is retained for 1-2 days. For any other issues, she is referred to the health centre.

Since presently, Thondwe health centre, the nearest health centre to the cluster villages does not have maternity clinic, it was important to also survey Namikango Maternity

[vi] *Mwanampepo*

[vii] This was the only postpartum technique for retained products described in the study although others such as manual removal are known to be performed by TBAs in the community.

Clinic. For distinct services around delivery, the prices are described in Table III. In addition to these paid services, Namikango also offers free: ANC, Under 5 clinics, STI treatment, family planning, and PMTCT.[viii]

Table III. Namikango Maternity Clinic Services and Costs:

SERVICE	PRICE	LOCATION	AFFILIATION
Three days admission and delivery	350 Kwacha	Thondwe	Namikango Maternity Clinic
Care Hire for Facility Transport	700 Kwacha	Thondwe	Namikango Maternity Clinic
Three days admission and delivery for those who did not attend ANC	500 Kwacha	Thondwe	Namikango Maternity Clinic
Three days admission, delivery, and bed	800 Kwacha	Thondwe	Namikango Maternity Clinic
Perineum Suturing	150 Kwacha	Thondwe	Namikango Maternity Clinic

4.5 Issues and Complications in Labour, Delivery, and the Postpartum Period:

[viii] No service provider agreement currently exists with the MOH and Namikango Maternity Clinic to create free delivery care for pregnant women although this is currently being negotiated by the MVP and DHO.

Repeatedly, during FGDs, women noted common complications during pregnancy, labour, postpartum and even with the baby. The most frequent mentions are shown in Table IV.

Table IV. Common Complications Noted by Women:

DURING PREGNANCY	**DURING LABOR**	**AFTER LABOR**	**BABY**
• Loss of Blood • Weakness • Terrible Stomach Pains • High Blood Pressure	• Tears • Bleeding • Breech Presentation • Dehydration • Need for an operation	• Retained Products • Frequent bouts of malaria • Paralysis in the legs • Not enough water and blood in bodies	• Premature baby can't be cared for in the home • Pneumonia • Asphyxia

Women also addressed the fact that, often times, complications occur because the TBA is not properly trained and she does not have a suitable environment for delivery. The personal anecdotes included below highlight this fact.

> "No, it (environment at the TBA's home) is not suitable and people are complaining. There was this girl who went to a TBA to deliver and after failing to give birth the whole night, she was taken to the health centre (Thondwe) but she was very weak. At the health centre they put her on a drip and referred her to Zomba central hospital. She gave birth there but after going through a lot at the TBA (*Malo amene amachilitsira sioyenera kuti munthu angachireko, anthu ambiri amakhala akundadaula. Ndiponso tsikana wina wake anapita kumeneko koma zinalephereka atachezera usiku wonse, atapita kuchipatala anafikira ma*

drip atafooka. Atapita ku health centre (Thondwe) anamupitisa ku chipatala chachikulu ku Zomba, anachira koma atavutika. Nyumbanso yochilira imakhala pafupi ndi nyumba zina zimene sizikhala bwino, nyumba inakumatha kuchitika maliro uko akubereketsa.)" **-Client**

Another client reported,

"No, the environment is not conducive. They do deliveries before due time. I once went there and I experienced some problems. After giving birth I was in a coma for a week and was sick for six months (*Malo ake amakhala osayenera, amatichilitsa nthawi isanakwane. Monga ngati ineyo ndinavulala mpaka ndinadwala kwa three months ndipo ndinakomoka kwa one week*.)" **-Client**

4.6 Client Attitudes towards TBAs and the Health Facilities:

A major theme elicited in both FGDs and IDIs was the change that training made on the practices of TBAs, both negative and positive. Clients noted that trained TBAs sometimes had "attitude" or were "rude" because they became arrogant after training. Others noted that TBAs who were trained were more hygienic and practiced in a way more similar to the health centre. One TBA near Malosa noted her changes in practice.

"I should tell you the truth; in the past I used to give them (traditional medicines) to hasten the delivery because I was not well trained. But nowadays I don't do that because when I went for training we were told that when the woman is ready we would be able to tell…We (also) used to give herbs to clean the umbilical cord wound but now we give out spirit. We tell them (the women) not to use herbs

(Ndinene chilungamo, kale timawapatsa pasanakhale achipatala. Ngati si tinali muumbuli. Timapulula masamba aja ndikupondaponda kukumupatsa munthu uja ndikuchira. Koma masiku ano nanga si tinapita kumaphunziro anatiuza kuti munthu mukamuona kuti nthawi yake yakwana)." -**TBA**

Knowledge among women and TBAs regarding referral to the health centre was widespread. The reasons for not going to the health centre were common among all participating women as were the reasons for going to the TBA. Yet, women still acknowledged why they should go to the health centre for particular reasons. These are listed in Table V.

Table V. Reasons for Going or Not Going to a Health Facility:

REASONS FOR NOT GOING TO THE HEALTH FACILITY	**REASONS FOR GOING TO THE HEALTH FACILITY**
No Guardian/Escort	Wait for the appropriate time to deliver; often deliver too soon at the TBA
Distance	Have blood for those with excessive bleeding
No Supplies	Staff are able to deal with complications
Waiting Time	Have supplies like gloves, drip, and clean facilities
Rude Nurses	Women are able to stay after delivery
Late Onset Delivery	Can treat other issues as well such as STIs, HIV/AIDS

4.7 Client Assessment of TBA Needs:

Women in both the FGDs and IDIs identified areas where TBAs required support and additional supplies. When asked what type of support that TBAs should be given, they noted that they should be supplied with the following from the health centre: iron tablets (for blood loss), malaria drugs, gloves, beds, and an ambulance for complications. Most clients also agreed that if the health centre were simply closer, they would attend. A client in Lindjizi commented, "We would like to have a health centre nearby so that we should not rely on TBAs (*Timafunanso titakhala ndi chipatala pafupi kuti tizithamangira kumeneko tisiyane ndi za azambazo*)."

Women also agreed that because TBAs are the first point of contact they often try to complete a procedure before referring to the health centre. It was unanimously agreed that most women frequent TBAs or deliver at home. As such, they believed that TBAs should receive training so that they can improve their practices, receive supplies, and improve their working environment as well as be involved in health education if possible.

4.8 Health Workers Contact and Perceptions of TBAs:

At both Thondwe health centre and Namikango maternity clinic, it was generalized that tricky cases were brought to the health centre, which were then referred to the Central Hospital. At Namikango Clinic, Matron Kabanda, recounted, "In 2003, we had one woman where the baby was a breech and the head was just hanging on the perineum. The baby was dead and we had to refer to Zomba Central Hospital." Both facilities reported that very few cases were seen from the TBA and concluded that most women come to the health centre for ANC and proceed to deliver at Zomba Central Hospital.

At Thondwe and Namikango, it was thought that TBAs should deliver only normal cases and refer anything complicated to the hospital. The matron at Namikango noted that because of distances, it was impossible to say TBAs could not deliver, but that TBAs should be supervised by nurses and brought into the health facility for training and observation of hygienic practices. At Thondwe, the staff was in contact with 3 TBAs who were supervised by and reported directly to HSAs, which they supported. The head nurse also agreed that TBAs should be trained in modern methods, PMTCT, and referral. She said that for ANC, the TBA could escort the patient and ANC could be observed so that the TBA might be able to do a better job.

4.9 New Role of TBAs:

In order to better gauge the implementation of the new national policy phasing out TBAs it was important to clarify how this was happening at both the district and national levels.

4.9.1 District Perceptions:

According to the DNO and TBA Coordinator, the new policy on TBAs is they should no longer deliver, but rather serve as a link between the community and the health system. The DHO recognizes that TBAs will continue to exist but that eventually they will be phased out. In Zomba District, the TBA Coordinator estimated that there are 80 TBAs that were trained in the past. Although no new TBAs have been trained since 2005, the formerly trained TBAs (TTBAs) are receiving refresher courses on a yearly basis as well as receiving small supplies such as spirits and gloves to maintain hygienic practices. At

present, the DNO admitted that there is no proposed alternative activity for TBAs other than engaging in newly formed reproductive health committees (RHCs) to share their expertise on women's health care. Newly formed RHCs will be involved for community teaching, involving TBAs, on: PMTCT, STI prevention and treatment, VCT, kangaroo care, nutrition, care during pregnancy, care of the newborn, and the importance of under 5 clinics and immunizations for the child. Still, at the moment, the community as well as all TBAs both TTBAs and untrained TBAs (UTBAs) are not aware of the policy nor is the health system ready to address increased demands at all health facilities for a potentially large number of delivering women.

According to the TBA Coordinator at the DHO, one TBA in Thondwe completes approximately 70 deliveries per month alone.[ix] Regarding the dilemma of implementation of national policy to stop deliveries, the TBA coordinator advises that the formation of RHCs (such as the newly formed RHC in Thondwe) will allow TBAs to be accountable to village structures, with national policy implemented by the chief. Still, TBA deliveries are very common in Thondwe, according to the TBA Coordinator, as she notes that at least 50% of women who come to ANCs do not deliver at the facility.

Regarding the gap between policy and practice, the DNO comments,

> "The puzzle is really not fitting well yet. We are telling the TBAs to stop, but we are not very ready in our health facilities. Government is trying. We are teaching nurses new skills; we are trying as much as possible to bring in more equipment.

[ix] The most prominent TBA in Thondwe was Mai Machile, who was supervised by the Environmental Health Officer (EHO) at Thondwe, Mr. Bandawe, who supervises all the HSAs.

> If you go to our facilities you are finding that yes, we have shortages, but not as much. But the human resources factor is really not in place yet. Our structures are not in place yet. We are intensifying our IEC messages to gear towards the TBAs referring to us, but then we are still not very ready. So still we have a percentage of patients that are delivering in the community. So they will not be delivering at the TBA. They will not be at the facility. They are delivering at home. Is that safe? Won't that be worse than the TBA? That is a question we are asking ourselves and we haven't got the answers yet." -**DNO**

When asked about remote areas, the DNO noted that schemes of relief nurses and additional health facilities were the best way to address this rather than permanent staff or continuing to train the TBAs. Hence, at the district level, it is clear that the training of TBAs in any fashion other than as a link and as a blanket reproductive health educator is no longer going to exist. At the same time, because of lack of resources, the adequate provisions are not in place yet for their extinction. In the interim, the DNO is suggesting intensified IEC, male involvement, community involvement, going against cultural taboos to create a birth plan, and provision of adequate transport.

4.9.2 National Perceptions:

> "Saving women's lives is not cheap. But, in our actions, we want to say that saving women's lives is cheap. The truth is that to save women from dying from

pregnancy related complications, it costs money. It is not cheap. There is no cheap way to save mother's lives. A magic bullet cannot come through."

-**Policy Maker #1**

On a national level, most agree, both within the MOH and outside of it, that the new role of TBAs should be accepted and implemented on a district level. For a long time, the MOH had contesting voices in the debate on whether or not to train TBAs, but now the MOH unanimously agrees that TBAs are not to be trained. Given this assertion, one policy maker pointed out that TBAs should not be a part of the formal health care system, therefore it doesn't make sense to continue refreshing them; in fact this is wasting precious resources that could be put towards saving women's lives.

According to policy maker #1, the only acceptable activities that should be conducted with TBAs involve research, but not a specific program to involve TBAs. Thus, the only way that TBAs can be utilized is as a point of evaluation or research, and to be involved in transport allocation. They can organize transport for the woman to reach the health centre and surveillance can be undertaken in this respect. But, even the policy maker was able to acknowledge that although it is necessary to do away with TBAs, the proper facilities are not yet there to make this a reality. In this situation, it is recommended that community mobilization be the key to success and that women should be empowered to know their options for delivery as well as the policy of who should be delivering them in accordance with the national policy. By empowering women, demand will be decreased, thus decreasing the need for TBAs, who respond to demand for their services.

But, there are still others who feel that TBAs will not go away and to run away from them at a preliminary stage could be even more harmful to women who depend upon their care. Another policy maker, on the other side of the fence, claims that TBAs cannot be eliminated because of lack of health care facilities; in remote areas, TBAs flourish.

> "With what we have on the ground, when you are trying to get rid of something you should have an alternative and a system. As people might have negative views, they should actually assess to see why we are having TBAs in the first place. This is because we have so many gaps in the system. The system that we have has so many gaps, particularly for women in the RH group, especially when pregnant. The facilities are not there and if they are, there are no supplies or staff. If all these things were in place, we are looking at something different." -**Policy Maker #2**

Other barriers to accessing the health care system mentioned by the policy maker included: lack of health care personnel that stay in remote areas, lack of supplies and personnel in existing facilities, and difficult access to transport. The TBA in this setting, although not ideal as the TBA home is a compromising environment for women to deliver, is an existing alternative. For these reasons, policy maker #2 believes, that their situation must still be addressed in some way that can be consistent with national policy. There is no stopping TBAs without proper alternatives, incentives, and additional skilled attendants provided by the government.

CHAPTER 5. DISCUSSION:

Through the literature review as well as findings from the FGDs, IDIs, and KIIs, it has become apparent that not only has TBA training not proven effective, but it is also no longer a policy that the Republic of Malawi Ministry of Health embraces. Since the

change of policy in 2005, there has been a considerable amount of debate on how to proceed in terms of the existing structures at the district level that work with TBAs. At present, this involves the RHU via the TBA Coordinator as well as the RH coordinator or DNO. It is clear that TBAs are still being involved, but to what extent this is happening in Zomba district was clarified through this study, particularly in relation to the MVP cluster villages.

5.1 Age, Parity, and Location:

Through collection of ages, parity, and geographical location, it was observed that while women who delivered at the TBA ranged in age, the TBAs tended to be older women in the community. Perhaps if younger women could be targeted for interventions, then eventually, the older women will be phased out if younger relatives are not trained. Concurrently, it is also important for women to be informed that TBAs charge for their services while health care facilities do not. While women are responsible for transport, perhaps in a cost-benefit analysis performed, it could be shown that transport could amount to the same price as the TBA would charge. Since women acknowledge that the health centre is better to deliver at than the TBA, they should simply be urged, against cultural taboos, to make an appropriate birth plan, and to involve men to assist them in arranging transport, particularly through RHCs.

5.2 Social and Cultural Role of TBAs:

Most importantly, it was seen that TBAs play a significant role in women's lives, both in a social and cultural relationship. They are able to cater to the community beliefs of

witchcraft and spiritual ailments, which are not accessible to the community at the health centre. In this regard, what the TBA offers are community specific services in areas that have not yet been properly sensitized on RH issues. In this context, it is very important that TBAs themselves become sensitized as well as women and men through the RHCs and that, such beliefs can be altered, while at the same time allowing the communities to maintain their cultural integrity. That is to say, for example, the TBA might be able to treat a woman for family planning needs, but she should still refer her to the health centre for modern methods as well. This scale of community mobilization of RHCs and sensitization on modern methods of family planning, STI care, ANC, delivery, and postpartum care could be embraced in scale up plans for the MVP.[x]

In a study in rural Malawi to determine the factors on the individual, community, and health facility level that influence choice for place of delivery, it was noted that suboptimal care, cultural factors, and lack of available services were major issues. They confirm several issues that are common themes thought to affect women's choice in delivery location. In the first place, while many women attend ANC, not all of these women deliver at the health facility. Also, they noted that women feel that the nurses and health staff give them very little time, that there is a socio-economic and cultural gap between the health worker and the client, and that there is little privacy. In addition, health workers relationships with TBAs were not conducive to linking the community, exemplified by the opinion of the health worker that she was better than the TBA and TBAs telling stories of rude treatment at the health centre. Skewed perceptions of

[x] One family planning technique, for example, encourages women to tie a medicated string around her waist, which prevents her from getting pregnant. While this practice could be respected as it is not doing harm to the woman, the TBA who provides such a treatment, should also refer the woman to the health center.

danger, decision making power, and traditional roles of mother and pregnancy were factors in choice of delivery (Chimango et al n.d.). These factors for seeking TBA care are important in determining how TBAs are positioned relative to the modern sector and how the traditional sector should be affiliated with the modern sector as women make conscious decisions to choose between one and the other.

In the traditional sector, the element of hierarchy based on age, status, and community standing rather than level of training alone should be addressed as a distinct element of choice in seeking care compared to the modern sector. Older women in the community, which many TBAs are, are often not only seen as birth attendants but also as advisors. Birth is seen as a "woman's thing," so therefore older women might be consulted before making a decision, which the woman should then follow. This might result in delays at the TBA's home or the woman's home until it is too late (Cham et al., 2005). The full role of the TBA should be recognized and should also be identified as a form of knowledge and training that is not necessarily equitable to the modern sector. Mathole, Lindmark, and Ahlberg (2005) address the multiple roles of TBAs in their qualitative study as multifaceted, including: counsellors, teachers, peers, midwives, and community leaders. Such roles should be understood better.

5.3 Complications in Pregnancy:

Most women were able to understand what complications might arise in pregnancy, labour, and delivery and when they should go to the health centre. But, in conversations, women saw these symptoms as commonplace and simply things that occurred within the

community. There was a feeling of helplessness as participation of men was necessary to access health facilities. The primary reasons for not going to the health centre were distance and lack of transport, consistent with current literature. It was mentioned that nurses were rude and unfriendly even at times and women were forced to wait long amounts of time at the health facility for no service or no supplies. But, the main reasons for not attending ANC or delivering in the health facility appear to be the sheer lack of facilities and lack of women's decision-making power.

5.4 TBA and Health Centre Relationships:

In terms of relations with the health centre on the part of TBAs, a direct conclusion cannot be drawn. Interviews with health centre staff tended to demonstrate that TBAs had very minimal contact with the health facility staff. In fact, health staff was often under the impression that most women indeed were delivering at the hospital. Yet, this was not the case when community level discussions as well as conversations with the TBAs were analyzed. It was clear was that TBAs had a negative sentiment towards the health facility. They noted that if they brought a client, they could be yelled at by the nurses for the problems they had caused.[xi] They also agreed that the government used to provide them with supplies and training, but for unknown reasons, this had stopped. Furthermore, while HSAs used to come to check their records and the nurse at the health centre used to supervise them, this no longer happened. Clearly, sensitization on the new TBA policy via the RHCs has not yet happened, either with the women or with TBAs.

[xi] TBAs are known to cause "problems" at the health center because each health center tracks the number of complications and referred cases to Zomba Central Hospital per month. The higher the proportion of referrals the worse job the health center would appear to be doing in the eyes of the district.

5.5 Current and Future Roles of TBAs:

Still, although women or TBAs are not aware of the new roles of TBAs, they are very aware of the barriers to access as what the community would need to have good health care for RH needs. Women even suggested that a new health centre should be built nearby. At the same time, they argue that TBAs should be given supplies so that for emergencies, where women cannot get to the health centre, they can at least deliver in a safe and clean environment.

Whatever the strategy pursued the issue of loss of income to the TBA can be major. Therefore, providing feasible alternatives to the TBAs for the loss of their clients must be given attention and practical solutions should be put into place such as money given to the TBA for referral at the district hospital level in Malawi (Chalo et ., 2005). In Pakistan, the government is reimbursing TBAs in terms of fees for referral as well. They also allow the TBA to remain with the woman upon referral to the facility, focusing on the role of the TBA as a companion in labour for the woman (Fatmi et al., 2005). As noted, the effectiveness of TBA training is debatable, but, in order to meet the MDGs, some argue that in places where the MMR is high and TBA use is high, TBAs should be engaged to promote reproductive health, encourage referral and urgent care for emergencies, and to assist with surveillance activities in addition to RHC activities (Costello et al., 2004).

Both district and national policy are at a crossroads in light of these challenges. At the district level, national policy is being implemented to the best extent. But, the facilities

are not there to make a smooth transition to skilled attendance only (MOH, 2006). And furthermore, the DHO recognizes that if it is saying no to TBAs, then they are promoting births at home in remote areas where access to health facilities might simply be out of the question. According to one national policy maker, there is little difference between delivering at home and delivering at the TBA, but evidence of this at the district level has not been shown. In addition, at the national level, there are conflicting views on how the policy should be implemented. Another policy maker noted that although the ideas are there for health care reform, the facilities are not available in the current setup. Therefore, to say that TBAs should be done away with is unrealistic in the near future and to ban them for practical purposes would be to commit mothers to more unsafe births. Hence, the underlying message is that the elimination of TBAs on a national scale to be replaced with skilled attendants is necessary, however, not feasible for the next few years until more human and technical resources are available. Until then, women should not be suffering with unclear policies and failure to provide alternative delivery locations.

CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS:

6.1 Conclusions

In this study, it was sought to gain further knowledge on the barriers that women encounter in accessing maternal health care services and their reasons for choosing to attend TBAs in Zomba district. Since Malawi is no longer training TBAs, it is important

for any new strategies to factor into account the recommended policy of the government to essentially ensure skilled attendance at birth as a means of decreasing the MMR. Particularly with regards to the study population through the MVP cluster, it is significant to understand the challenges that women face in an area that has no maternity clinic to date. Many women are located in remote areas, such as Lindjizi and Nambande, over 20 km away from the main road and over 40 km from Zomba Central Hospital. The sheer distance and difficulty of the terrain to cross, particularly in the rainy season, are significant barriers that women face in delivering at Zomba Central. In addition, in some of the villages, there is not even a TBA and women are simply delivering at home. Further research is required to compare home births to TBA births and use the data to support new policies.

The attitudes of health workers and the poor relationship between TBAs in the cluster and the health facility are alarming. Some investigation is also required in this area to see how to best broker a relationship between TBAs and the health system, as the ultimate goal in the redefinition of TBA roles is to engage them as a key liaison between the two. Assessing appropriate supervision of TBAs is also a critical issue.

Finally, the overwhelming need for additional health facilities in remote locations is urgent. But it is not only the facility, rather also the personnel. Given the ravages of HIV in the health care sector, it is important to recruit and train healthy health care staff that are able to handle the anticipated increased demands for pregnancy-related services and deliveries that should come with a shift a way from TBAs. How to create these resources

is still a challenge and is a goal for the future. Handling the human resources and facilities crisis in the interim requires community collaboration in transport, creation of a birth plan for women, TBA involvement in RHCs, and male involvement; awareness of national policy and its effect at the community level; and keeping those TBAs that are still practicing safe and attentive to the needs of the women in the community. However, over time, the role of the TBA should shift to a community educator, focused on reproductive health issues. And eventually, the trainees of TBAs (daughters and granddaughters) should be encouraged to pursue higher education as enrolled nurses in order to use the local expertise and fuse the positive elements of the community with the modern health care sector. The MVP, as a pioneer in the achievement of the MDGs in unison, should take the matter of TBA training and integration into account as a strategic intervention in decreasing the maternal mortality ratio by its target deadlines.

6.2 Recommendations

In light of the literature review and study evidence, although they are internationally and nationally being phased out, TBAs still have an important role to play at the community level. At present, based on the discussions and experiences of women clarified in this

study, several recommendations can be considered for the MVP cluster in line with current government policy towards TBAs.

***Recommendation #1*: Identify TTBAs through the DHO and the TBA Coordinator**

In order to work with those remaining in the community that are TTBAs, it is important to identify them through the TBA Coordinator and have a community meeting with them in the village cluster area to be clear on the new government policy and how this should affect their work, the work that the MVP cluster is doing to create future facilities, and how MVP would like to work with the TTBAs from now on. TTBAs should continue to be refreshed and provided with necessary supplies in accordance with district activities.

***Recommendation #2*: Identify and engage TBAs (both UTBAs and TTBAs) through community health facilitators**

All TBAs, regardless of status should be sought through the assistance of the community health facilitators. Those that are UTBAs, although they should not be trained, can be urged to participate in RH activities, while the TTBAs continue to have government links. Finding the TBAs is important as they should be aware that they are not "illegal," and so that their work does not go underground and becomes more dangerous.

***Recommendation #3*: Explore routes of supervision for TBAs at the community level (Involve nurse-midwives, HSAs, and other auxiliary health workers in training)**

It is apparent that TBAs have some level of supervision although minimal at the moment. This is undertaken by HSAs, who do not have expertise in care of the pregnant woman.

Opportunities should be explored by the MVP at Thondwe for increased supervision by MVP community nurses, midwives at the health centre, or other additional staff that might be able to assess the record keeping, practices, and needs of TBAs.

Recommendation #4: Promptly create RHCs for SRH issue orientation to the community

It is important that TBAs begin to take on their new role as soon as possible so that resources are not squandered, but also so that they begin to take steps in the right direction. Hence, MVP health coordinators should speed the formation of the RHCs near Thondwe health centre.

Recommendation #5: Involve community in supervision of TBAs and support to acquire transport

One of the major barriers faced by women was lack of transport to the health facility. In this regard, TBAs can be responsible for arranging transport for women to the health facility through the RHCs, established by the MVP health coordinators. The key component to this strategy is that men must be involved as they hold decision making power as well as resources for transport in the community.

Recommendation #6: Conduct an intensive IEC campaign on the new policy and new roles of TBAs in conjunction with District

As noted by the DNO, IEC is one of the priorities of the District Office at the moment in terms of TBAs. Therefore, it is important that all actors, from the health facilities to the

community are aware of the new TBA policy so that they can be supportive of the new roles that TBAs are supposed to take and to cater referral and transport issues to each catchment area. IEC should be initiated by the MVP community mobilization team.

***Recommendation #7*: Construct new health facilities with maternity as soon as possible**

As noted by the women in FGDs and IDIs, they would go to the health facilities if they could. Hence, it is important that new facilities are constructed in accessible areas. In the village cluster, bricks were seen for a clinic in Nswaswa (between Katete, Lindjizi, and Mwandama) and this was promising. It would be important that the health director ensure that maternity services are available in this area, at Thondwe, and that the service agreement with Namikango move forward and that the community is notified.

***Recommendation #8*: Recruit midwives to remote areas**

Although it may not be feasible immediately, increasing staff at health facilities in the cluster is necessary. Even at Thondwe, where there are 2 nurses and 1 clinical officer, the bare minimum for a health centre, it could be feasible for the MVP to add one community nurse to supervise MCH and RH activities at the community level and to address the newly built maternity ward.[xii] As seen in the DHO scheme, if it is not possible to attract full time staff to the health posts in rural areas, relief nurse-midwives could be recruited for monthly or bimonthly outreach, particularly in those areas that do not even have access to a TBA such as Lindjizi.

[xii] At the time of interviews, one nurse at Thondwe health center was on sick leave.

<u>Recommendation #9</u>: Assess and improve staff attitudes at the health centres by staff evaluation and recruitment as necessary

As noted, even when staff is adequate, because of sick leave and overwhelming work for 1 nurse, staff attitudes can be poor. Improving these attitudes requires the support of health facilitators as well as community representatives to address the concerns of the women to the health centre. MVP should consider adding staff or conducting workshops on dealing with a large workload.

<u>Recommendation #10</u>: Generate further research in areas where there is no TBA

Further research should be undertaken in areas where women commonly deliver at home with a family member attending or no attendant. Some policy makers note that the difference between home delivery and TBA attendance is marginal in terms of the number of maternal deaths. However, more research by the MVP at the community level using verbal autopsies and other methods of tracking maternal deaths could help elucidate this point. In addition, this research could help assess where potential interventions make the most sense, in communities with TBAs or those without TBAs.

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APPENDICES

APPENDIX I: KEY INTERVIEW GUIDE FOR STAFF:

1. What programs do you have that touch on TBA care of the reproductive age woman?
2. How do you identify TBAs?

3. What is your relationship with TBAs?
4. Do you provide supplies, training, or clinic space for TBAs?
5. Is it a problem to identify and then contact TBAs or are they open in the community? Why or why not?
6. How many TBAs do you believe are in your catchment area?
    a. How many are you currently working with?
7. Why do you believe that women frequent TBAs?
8. What is the TBA's role in the community?
9. Do TBAs work in areas other than deliveries?
    a. Other ailments
    b. Other age groups
    c. Family planning
10. Have you worked with TBAs in the past?
    a. In what capacity?
    b. How long did the project last?
    c. How was it funded?
    d. How long were TBAs engaged?
        i. Was it a brief training (i.e. 2 weeks or a sustained effort)?
11. Have you initiated community mobilization with TBAs?
    a. Do they also work with HSAs, nurses, or the local health centre?
12. Do you believe that TBAs should treat complications?
13. Do TBAs in your area currently treat complications?
    a. Why or why not?
    b. What consequence does this imply?
14. If they are not treating complications, then how should they be engaged?
15. If you no longer work with them…
    a. Why has the project ended?
    b. What negative products came out of the program?
    c. What positive products came out of the program?
    d. What effects has the end of the program had on the community?
16. What types of problems have you encountered with TBAs in the past whether if you have chosen to work with them or not?
17. In what areas do TBAs require the most training or support?
18. With what advice do you inform your policies and programs working with TBAs? (e.g. Government or consultation)
19. What would be an ideal situation for working with TBAs in your programs?
20. If not currently using them, would you be able to integrate them at present?
    a. How?
    b. Why or why not?

APPENDIX 2: KEY INTERVIEW GUIDE FOR POLICY IMPLEMENTORS:

1. Is there a national strategy for working with TBAs?
    a. When was it developed?
    b. When was it last updated?
2. If not a strategy, what other policies are in place that affect TBAs?

3. Do you know the national strategy for TBAs?
    a. Is there a manual or reference?
    b. How is it promoted?
4. How has the national strategy changed over the past 10 years?
    a. Why has this occurred?
    b. How has it played out at the District level and at the community level?
5. How has the government worked with TBAs in the past?
    a. Was there a national strategy?
    b. Was there a district level strategy?
6. How are they presently working with them?
    a. Is there currently a national strategy?
    b. Is it implemented through the Districts and TBA coordinators or in collaboration with NGOs?
7. What successes or failures have been seen with TBA programs?
8. Why has the government lessened/heightened the level of training for TBAs at present?
9. What stance are NGOs taking in TBA training?
    a. What NGOs are involved specifically?
    b. What initiatives are the NGOs involved with?
        i. Newborn Health
        ii. Maternal Health
        iii. Other
10. In what sectors are TBAs being involved?
    a. Maternal Health
    b. Newborn Health
    c. Child Health
    d. Family Planning
    e. Others

APPENDIX 3: IN-DEPTH INTERVIEW GUIDE FOR CLIENTS (ENGLISH):

1. Do you visit a TBA? Do you know a TBA? Are they in the village?
2. Are there others that work with the TBA that might not be trained as a TBA?
    a. Do they do home deliveries?
    b. What makes them similar or dissimilar to a TBA?
3. Do most women prefer delivery at the TBA? Why or why not?
    a. Do they have relatives present?
    b. Is the environment familiar or conducive to birthing?
    c. Is it the most well-known location to deliver?

    d. Is there an established relationship with the TBA?
4. How many TBAs do you believe exist in your TA or catchment area?
5. What does the TBA do? What services does the TBA offer?
6. How does this differ from antenatal care at the health centre?
7. What services does the health centre offer for pregnant women?
8. How well does the TBA know how to deal with complications (name of few)?
    a. Pre-Eclampsia/Eclampsia
    b. Anaemia
    c. Breech
    d. Fistula
    e. Ectopic pregnancy
    f. Twins (or Multiple Births)
9. Does a TBA have similar services to the health centre?
10. Does the TBA give any treatments after delivery?
11. Does the TBA offer follow up post delivery?
12. Is there a shelter for the delivery area of the TBAs?
13. What is the distance of the TBA?
14. Distance of the health centre with ANC?
15. Do you know the TBA?
16. How would you rate the treatment (scale) of the TBA?
17. How would you rate the treatment at the health centre?
18. Is there transportation to the nearest health centre?
19. Does the TBA have transportation to the nearest health centre?
20. Do you know other women who deliver at the TBA?
21. How is the TBA trained?
    a. Is it family run?
    b. Is it a formal training?
    c. Is she knowledgeable when you have problems or ask many questions about your health?
    d. Is she trained to deal with HIV/AIDS patients?
    e. Does she treat for STIs?
    f. Does she deliver family planning services?
    g. Does she deliver post-natal treatment?
    h. Is she trained in any other procedures?
        i. Which ones?
22. Do you believe the TBA is just as well trained as the staff at the health centre?

APPENDIX 4: IN-DEPTH INTERVIEW GUIDE FOR CLIENTS (CHICHEWA):

1. Kodi azamba (TBA) ndi ndani? Alipo m'mudzi mwanu? Ndipo munayamba mwafuna chithandizo kwa azamba?
2. Kodi mukuziwa anthu omwe amagwira ntchito ngati azamba pamena asaphunzitsidwe za uzamba?
    a. Amachiritsira kunyumba?
    b. Anthu amenewa amafanana ndi kusiyana bwanji ndi azamba oti anachita maphunziro a uzamba?

3. Kodi azimayi ambiri amakonda kuchitiritsidwa ndi azamba? Chifukwa chani? Ngati sakonda ndi chifukwa chani?
    a. Kodi abale amuzimai wodwala amakhalapo akamachiritsidwa ndi azamba?
    b. Kodi malo amakhala oyenera kuti munthu angachilire (angabereke) wopanda vuto?
    c. Ndi malo oziwika bwino kuti azimai odwala amachilirako?
    d. Pamakhala ubale otani pakati pa mzimai wodwala ndi mzamba?
4. Mukudziwa azamba angati mdera lanu?
5. Kodi ntchito ya azamba ndi chani?
6. Kodi chithandizo cha azamba chimasiyana bwanji ndi chithandizo chimene m'zimai wodwala angalandile ku chipatala (health center)?
7. Ndi chithandizo chotani chimene m'zimai wodwala amalandila ku chitapala?
8. Kodi azamba amaziwa bwino chimene angapange patakhala zovuta (complications) kwa m'zimai woyembekezera? Ntchulani zina mwazimene mzamba ngapange patakhala zovuta ngati izi:
    a. Pre-Eclampsia/Eclampsia
    b. Anemia (Kuperewera kwa magazi)
    c. Breech
    d. Fistula
    e. Ectopic pregnancy
    f. Twins (or Multiple Births) (Mapatsa)
9. Kodi chithandizo cha azamba chimafanana ndi chithandizo cha kuchipatala?
10. Kodi azamba amapereke chithandizo cha mankhwala m'zimai akachira (akabereka)?
11. Kodi mzamba amapitiriza kupereka chinthandizo kwa m'zimai mwana akabadwa?
12. Kodi azamba amakhala ndi nyumba yochiritsiramo?
13. Kodi mumayenda mtunda wautali bwanji kuti mupeze mzamba?
14. Nanga pali mtundu otalika bwanji pakati pa health center ndi ANC?
15. Mukumuziwa mzamba?
16. Kodi maganizo anu ndi otani pa ntchito ya azamba? Mukukhutira kapena simukhutira ndi ntchito ya azamba?
17. Nanga mumakhutira ndi chithandizo chimene mumalandila ku chipatala (health center)?
18. Kodi mumakhala ndi transport popita ku chipatala (health centre) chimene muli nacho pafupi?
19. Nanga mzamba amakhala ndi transport yoti angamutengere odwala ku chipatala chapafupi?
20. Kodi mukuziwa azimai woti anachiritsidwa (anabereka) ndi chithandizo cha azamba?
21. Kodi mzamba amaphunzitsidwa bwanji?
    a. Amaphunzitsidwa ndi makolo kapena achibale?
    b. Amalandira maphunziro ovumerezeka (formal training)?
    c. Kodi amakuthandizani bwino mukakhala ndi vuto kapena mukamafunsa mafunso?

d. Kodi anaphunzitsidwa momwe angasamalire anthu omwe ali ndi kachirombo ka HIV/AIDS?
e. Kodi amachiritsa matenda opatsirana pogonana (STIs)?
f. Kodi amapereka upungu wa kulera (family planning)?
g. Kodi amapereka chithandizo cha 'post-natal'.
h. Ndi nchito zina ziti zimene azamba amagwira?

22. Kodi mukuona ngati azamba ndiophunzira za umoyo ngati anthu amene akugwira ntchito ku chitapala (health center)?

APPENDIX 5: IN-DEPTH INTERVIEW GUIDE FOR TBAS (ENGLISH):

1. What types of services do you offer?
    a. Please give a comprehensive list
2. Do you charge for your services?
    a. What is your fee structure?
3. Do you do antenatal checkups?
4. Do you have postnatal care?
    a. For the mother?

    b. For the baby?
5. Do you provide STI treatment and counseling for HIV/AIDS?
6. Do you give family planning methods?
7. Do you keep records of births and patients?
    a. How do you keep track?
    b. If not literate, is it pictorial?
    c. Could you please show us the records? (No personal information noted)
8. Approximately how many clients do you have?
    a. Per week?
    b. Per month?
    c. Per year?
9. How many live births have you delivered this week, month, and year?
    a. How many neonatal deaths have you had?
        i. Per week?
        ii. Per month?
        iii. Per year?
    b. How many maternal deaths have you had?
        i. Per week?
        ii. Per month?
        iii. Per year?
10. What do you believe are the major causes of death?
    a. Neonatal
    b. Maternal
11. What facilities do you offer (see if possible)?
12. What equipment do you have?
    a. Clean Water
    b. Clean blades/Scissors
    c. Placenta pit
    d. Clean cloths
    e. Dry, warm floor
    f. Mats
    g. Basin
    h. Gloves
13. How do you deal with emergencies (probe)?
    a. Do you predict them?
        i. Hemorrhage
        ii. Obstructed Labour
        iii. Pregnancy Induced Hypertensive Disorders (Eclampsia/Pre-Eclampsia)
        iv. Puerperal sepsis/infection
        v. Complications of unsafe abortion

    b. How do you address the following:
        i. Bleeding and/or bleeding/convulsions
        ii. High fever with or without abdominal pain
        iii. Labour longer than 12 hours

iv. Placenta does not come out within 30 minutes of birth
v. Skilled attendant

14. Do you work with the health center at present? If not, would you like to?
    a. Why or why not?
15. Have you worked with the health center in the past?
    a. Why/why not?
16. Do you have transport to the nearest health facility?
    a. Would there be a delay in seeking care if there is no transport or a delay in seeking care for other reasons?
17. What types of training would you like to receive?
    a. Antenatal care
    b. STI/HIV
    c. Family Planning
    d. Delivery
    e. Postnatal
    f. Infant care
    g. Immunizations and modern drug use
    h. Nutritional counseling for the mother and infant (including breastfeeding advice)
    i. Other
18. Do you feel that you need to collaborate with the government or receive additional supplies or training from them?
19. Have you registered with the government?
    a. Have you ever undergone training with the government?
20. Do you believe that women prefer your services and why?

APPENDIX 6: IN-DEPTH INTERVIEW GUIDE FOR TBAS (CHICHEWA):

1. Kodi mumapereka chithandizo chotani?
    a. Ntchulani zinthu zimene mumapanga?
2. Kodi munthu amene wafuna chithandizo chanu mumamulipiritsa?
    a. Ngati amalipira, zimakhala ndalama zingati?
3. Kodi mumamuyang'anira m'zimai wodwala asamachire (antenatal checkups)?
4. Nanga mumaperekabe chithandizo m'zimai akachira?
    a. Kwa mai?

    b. Kwa mwana?
5. Kodi mumapereke chithandizo kwa anthu ameme akudwala matenda opatsirana pogonana (STI) ndi upungu wa HIV/AIDS?
6. Kodi mumapereka chithandizo cha njira zolera (family planning methods)?
7. Kodi mumasunga kaundula (records) wa azimai odwala ndi ana obadwa?
    a. Mumapanga bwanji kuti muziwe mmene odwala akupezera akabwerera kunyumba?
    b. Ngati simulemba, mumajambula zinthuzi (pictures)?
    c. Tingaone nawo kaundula (records) wanu?
8. Ndi anthu angati amene mukuwathandiza:
    a. Pa sabata?
    b. Pa mwezi?
    c. Pa chaka?
9. Kodi mumachititsa anthu angati pa sabata, mwezi ndi pa chaka?
    a. Kodi mumakhala ndima ‘neonatal deaths’ angati:
        i. Pa sabata?
        ii. Pa mwezi?
        iii. Pa chaka?
    b. Kodi mumakhala ndima ‘maternal deaths’ angati:
        i. Pa sabata?
        ii. Pa mwezi?
        iii. Pa chaka?
10. Kodi mukuona ngati chimapangitsa zovuta (imfa) ndi chani?
    a. Neonatal
    b. Maternal
11. Mumapereka chithandizo chotani?
12. Kodi mumagwiritsa ntchito zipangizo zotani?
    a. Madzi aukhondo
    b. Razor (blades) ndi scissors zaukhondo (zosuka bwino.)
    c. Zenje lotayamu zinyalala ndi zinthu zina (Placenta pit).
    d. Nsalu zaukhondo (zoyera).
    e. Pansi (floor) yabwino.
    f. Mati. (Mats)
    g. Beseni (Basin)
    h. Magulovu zovala mmanja (Gloves).
13. Kodi mumapanga bwanji mukakumana ndi vuto lazizizi?
    a. Mumatha kudziwa mwansanga za zovuta izi:
        i. Hemorrhage
        ii. Obstructed Labour
        iii. Pregnancy Induced Hypertensive Disorders (Eclampsia/Pre-Eclampsia)
        iv. Puerperal sepsis/infection
        v. Complications of unsafe abortion

    b. Mumapanga bwanji mukakumana ndi zovuta izi:
        i. Kutaya magazi (bleeding)?

ii. Fever yaikulu ndi kupweteka m'mimba.
iii. Leba (labour) yopitirila maola khumi ndi awiri (12 hours).
iv. Placenta does not come out within 30 minutes of birth
v. Skilled attendant

14. Mumagwira ntchito muthandizana ndi akuchipatala (health center)? Ngati simugwira, mungakonde kugwira nawo?
    a. Nenani zifukwa zimene mungakondere kapena simungakondere kugwira ndi akuchipatala?
15. Munagwirapo ntchito ndi achipatala mumbuyo?
    a. Nenani zifukwa zimene munagwirira kapena simunagwirire ntchito ndi anthu achipatala?
16. Kodi muli ndi transport yopitilila kuchipatala chapafupi?
    a. Kodi ndi zifukwa ziti zimene zingakupangitseni kuti musapeze thandizo la anthu a chipatala msanga?
17. Kodi mungakonde mutalandila maphunziro ati:
    a. Antenatal care
    b. STI/HIV
    c. Kulera (Family Planning)
    d. Kubereka/kuchira (Delivery)
    e. Postnatal
    f. Kusamala mwana (Infant care)
    g. Katemera (Immunizations and modern drug use)
    h. Upungu wa zakudya za magulu atatu (Nutritional counseling for the mother and infant (including breastfeeding advice)
    i. Zina zoonjezera (Other)
18. Mukuona ngati mukuyenera kugwira ntchito ndi boma kapena kulandila chithandizo cha zipangizo ndi maphunziro kuchokera ku boma?
19. Kodi munalembetsa (register) ndi boma?
    a. Kodi boma linayamba lakupatsani maphunziro?
20. Kodi mukuona ngati azimai amakonda kulandila chithandizo chanu? Chifukwa chain?

APPENDIX 7: FOCUS GROUP GUIDE FOR CLIENTS (ENGLISH):

This is part of a study to learn more about how we can help women be healthier in pregnancy and childbirth. We want to ask you about TBAs and how they can help keep women healthy in your community.

Theme 1: Birth Preparedness and Skilled Attendance at Birth

Notes for Facilitator

Key Ideas to Explore:

- TBAs concept of how to prepare for birth (Probe: What TBAs do, could this be better, and how?)
- Difference between TBA care and skilled attendance
- Barriers to birth preparation and skilled attendance

Guiding Questions:

- How does the TBA usually help women and families prepare for birth?
- Do TBAs help conduct antenatal clinics?
- What type of care do they offer for the pregnant women?
- Does the TBA help families understand complications that can arise in pregnancy and how to prepare for this? (i.e., transport to a near facility)
- Where do women generally give birth and why?
- If women prefer the TBA, why? (This is a key point so probe for specifics)
- What is good about giving birth at the TBA?
- What is good about giving birth at a health facility?
- Who attends births at a health facility?
- What type of care does the person at the health facility deliver?
- Do TBAs interact with the health facility and other health workers? How so?

Theme 2: Emergency Obstetric Care and Postpartum Care:

Notes for Facilitator

Key Ideas to Explore:

- TBA understanding of EmOC and its importance
- Gauging if TBAs tend to treat or refer patient
- Understanding why delays occur in seeking EmOC

Guiding Questions:

- What types of problems do women have during and after birth?
- How does the TBA help with these problems?
- What types of delays do not allow women to go somewhere else for such problems?
- Do women leave immediately after birth or are they monitored by the TBA?
- Does the TBA offer other services after birth?
- Does the TBA help the woman get other help if there are problems after birth

Theme 3: Role of TBAs:

Notes for Facilitator

Key Ideas to Explore

- Why women prefer TBAs?
- What is their role at the community level?
- How can they be linked to the health facilities?

Guiding Questions:

- Why do many women prefer the care of the TBA (Probe here for specifics)?
- What does she do differently in general from the health facility?
- Do TBAs have connections to the health facility?
- Would you like them to have connections to the health facility?
- How does the health facility view the TBA?
- Are TBAs engaged in health education (family planning, primary health care, and other ailments)?
- What do TBAs need to be better at their work?
- Are they better at one aspect of delivery than the health centre?
- Are there some roles that the TBA could play and others that the health centre could play?
- Are they useful in linking the health centre to the community?
- Would this be an acceptable role to them?
- What are the main difficulties in changing the roles of the TBAs (Probe: Income, lose status)?
- Are there more than one TBA in your community?
- Does the chief know who they are?
- Are they in any committees in the community (i.e. VHC)?
- Do the TBAs work with men

APPENDIX 8: FOCUS GROUP GUIDE FOR CLIENTS (CHICHEWA):

This is part of a study to learn more about how we can help women be healthier in pregnancy and childbirth. We want to ask you about TBAs and how they can help keep women healthy in your community.

Theme 1: Birth Preparedness and Skilled Attendance at Birth

Notes for Facilitator

Mitu ya zokambirana:

- Kuziwa zambiri za uzamba (TBA). (Kodi azamba amatani, ntchito yawo ingapanginge mwadongosolo bwanji?)
- Kusiyana kwa chithandizo cha uzamba ndi chakuchipatala (skilled attendance).
- Zovuta zimene munthu angakumane nazo akukozekera kuchira (kubereka) ndi popeza chithandizo chabwino (skilled attendance).

Mafunso osogolela:

- Kodi azamba amathandiza bwanji azimai ndi banja lonse kukhozekera kubadwa kwa mwana?
- Kodi azamba akhala ndi antenatal clinics?
- Ndi chithandizo chotani chimene azamba amapereka kwa azimai oyembekezera?
- Kodi azamba amathandiza anthu kuti adziwe mavuto amene angakhalepo mai ali oyembekezera ndi mmene anakhozekere? (ngati transport yopita kuchitapatala).
- Kodi azimai ambiri amachilira (kuberekera) kuti? Chifukwa chain?
- Ngati azimai amakonda kwa azamba, chifukwa chain? (Ili ndi funso lofunika kwambiri).
- Kodi ubwino ochilira (kuberekera) kwa azamba ndi chain?
- Kodi ubwino ochilira (kuberekera) ku chipatala ndi chani?
- Ndindani amene amachilitsa azimai ku chipatala?
- Ndi chithandizo chotani chimene munthu wa chipatala amapereka?
- Kodi azamba amagwira ntchito muthandizana ndi achipatala? Amagwira nawo bwanji?

Theme 2: Emergency Obstetric Care and Postpartum Care:

Notes for Facilitator

Mitu ya zokambirana:

- Azamba amaziwa chani za EmOC ndi kufunikira kwake.
- Kuziwa ngati azamba amachiritsa kapena amapititsa matenda kuchipatala.
- Kuziwa chifukwa chani pamakhala kuchedwa pofuna EmOC.

Mafunso osogolela:

- Kodi azimai amakumana ndi mavuto otani ali oyembekezera komanso atachira (atabereka)?
- Nanga azamba amathandiza bwanji mzimai akakumana ndi mavuto amenewa?
- Kodi ndi zifukwa chiti zimapangitsa azimai kuti asapite kukapeza chithandizo malo ena akakumana ndi mavuto amenewa?
- Kodi azimai amachoka kwa azamba akangobereka kapena amakhala kwa nthawi kuti azamba awayang'anire?
- Kodi azamba amapereka zithandizo zina mwana akabadwa?
- Kodi azamba amathandiza mai kupeza chithandizo ngati pali zovuta mwana akabadwa?

Theme 3: Role of TBAs:

Notes for Facilitator

Mitu ya zokambirana.

- Kodi ndi chifukwa chani azimai amapita kukafuna chithandizo kwa azamba?
- Kodi azamba amathandiza bwanji m'madera?
- Kodi azamba angagwirizane bwanji ndi achipatala.

Mafunso osongolera:

- Kodi ndi chifukwa chani azimai ambiri amakonda thandizo la azamba?
- Kodi ntchito ya azamba imasiyana bwanji ndi ya achipatala?
- Kodi pali gwirizano uli onse pakati pa azamba ndi achipatala?
- Mungakonde patakhala gwirizano pakati pa azamba ndi achipatala?
- Kodi achipatala amawaona azamba ngati ndani?
- Kodi azamba amapereka maphunziro a zaumoyo kwa anthu?
- Kodi azamba angapititse bwanji patsogolo ntchitoyo yawo?
- Kodi azamba amatha kupereka zithandizo za umoyo zonse kapena amatha kusamalira azimai odwala basi?
- Kodi pali ntchito zoti azamba akhoza kupanga ndi zina zoti ndi achipatala amene akhathe kupanga?
- Kodi azamba amathandiza kubweretsa ubale pakati pa achipatala ndi anthu a m'mdera?
- Kodi ntchito imeneyi ndiyowayenela azamba?
- Kodi ndi zovuta ziti zimene zimapangitsa kuti ntchito ya azamba isasinthe ?
- Kodi muli ndi azamba angati mdera lanu?
- Nanga a mfumu a m'mudzi mwanu amaziwa kuti azamba ndi ati?
- Kodi azamba ali m'magulu (committees) a mdera lanu (ie VHC)?
- Nanga azamba amagwira ntchito ndi amuna?

APPENDIX 9: ORAL INFORMED CONSENT FORM (ENGLISH):

TBA Focus Group Oral Consent Information Sheet:

University of Malawi College of Medicine/Millennium Villages Project, Earth Institute, Columbia University

Master's of Public Health Thesis Research by Student Aparna Kumar

1. You are being asked to participate in a focus group in connection with the Department of Community Health at the University of Malawi, College of Medicine. This project

involves research but does not do any tests or trials on people. The study is being undertaken by student Aparna Kumar under the supervision of Dr. Linda Kalilani. You are being asked to participate because you are a woman living in the Mwandama village cluster between the ages of 15-49 years. You will be asked about issues relating to women's health and Traditional Birth Attendants (TBAs).

2. The focus group sessions will be recorded, transcribed, and made available to you after the research is completed. No names or other personal information will be noted in the report.

The study is being conducted to learn more about the practices of birthing, the role and services of TBAs, and the way that women and health care providers view TBAs. Past research on TBAs has shown that they can be partners in improving maternal health. In this study, we hope to show how TBAs can partner with current health services and what types of services they can provide around the village cluster.

The expected benefits of this study are that TBAs will be better understood. The study results, which will be shared with the Millennium Villages Project, will help the MVP to better determine the types of services needed by women.

3. As a participant of this study, you are only required to participate in one focus group for 1.5-2 hours one time only. There will be three simultaneous focus groups, in one of which you will participate. Each group will have between 10-12 women participating in the discussion. Participants are expected to actively participate in the group, voice any opinions they have regarding TBAs openly, and to encourage and respect the ideas of the other women participating in the group. This study will involve absolutely no experiments.

There are no anticipated risks to participation in this group interview. However, you can withdraw from it at any time without prejudice. The major risk of joining this group is sharing your opinion in front of other women. This group is completely confidential and no personal facts such as your name or household number will be noted. Your age, parity, and geographic location will be recorded to describe the study population. Any other information collected from participants in this study will be aggregated. Thus, your name will not appear in any report, publication or presentation resulting from this study.

You may not personally benefit from participation in the focus groups, however this research will be used to improve access to women's health care for all in your village.

4. If you have questions about the research project or procedures, you can contact Ms. Aparna Kumar at the 09 386 968.

This project has been reviewed by, and received ethics clearance through, the University of Malawi College of Medicine Research and Ethics Committee (COMREC). If you have questions about your rights as a participant in research, you can contact the COMREC and Professor Joseph Mfutso-Bengo at 09 957 805.

APPENDIX 10: ORAL INFORMED CONSENT INFORMATION SHEET (CHICHEWA):

TBA Focus Group Oral Consent Form:
University of Malawi College of Medicine/Millennium Villages Project, Earth Institute, Columbia University
Master's of Public Health Thesis Research by Student Aparna Kumar

1. Ngati m'modzi wa azimai a Mwandama village ndipo wa zaka pakati pa 15 ndi 49, mukupemphedwa kuti mutenge nawo mbali pa zokambirana za m'gulu mosogoleledwa

ndi Department of Community Health ya College of Medicine, University of Malawi. Ntchito iyi ndi yakafukufuku (research) ndipo munthu sakuyenera kuyezedwa. Kafukufukuyu akupangidwa ndi Aparna Kumar, amene ali wophunzira wa College of Medicine, mothandizidwa ndi Dr. Linda Kalilani. Mufunsidwa mafunso okhudza umoyo wa azimai ndi azamba (Traditional Birth Attendants)

2. Zokambirana za m'maguluzi zijabulidwa pa cassette, ndipo zikalembedwa komanso ali yense azakhala ndi mpata woona zokambiranazi kafukufuku akatha. Maina a anthu sazatchulidwa mu repoti (report).

Kafukufukuyu akupangidwa ndi cholinga chodziwa zambiri za mmene azimai amachilira akangala oyembekezera, za azamba (TBAs) ndi ntchito zawo, komanso mmene azimai ndi achipatala amawaonera azamba. Kafukufuku wa m'mbuyo anasonyeza kuti azamba akhoza kutenga mbali popititsa patsogolo umoyo wa azimai oyembekezera. Mukafukufuku wapanoyu tikufuna kusonyeza mmene azamba angagwirire ntchito ndi achipatala ndi chithandizo chimene angapereka m'madera.

Kafukufukuyu akuyembekeza kuthandiza anthu kuti aziwe zambiri za ntchito ya azamba. Zosatira za kafukufukuyu, zimene zizagwiritsidwenso ntchito ndi a Millennium Villages Projects (MVP), zizathandiza MVP kudziwa za zithandizo za umoyo zimene azimai akuyenera kulandila.

3. Ngati m'modzi wotenga nawo mbali pa zokambirana za m'maguluzi, mukuyenera kutenga nawo mbali mu gulu limodzi basi kwa maola sachepera limodzi ndi theka koma osapitilira awiri (1.5-2 hours). Pakhala magulu atatu ndipo munthu aliyense atenga ano mbali mu limodzi mwa maguluwa. Gulu lililonse likhala ndi azimai 10-12. Munthu aliyense ndi olimbikitsidwa kutenga nawo mbali yaikulu pazokambiranazi ndi kunena momasuka zimene akuziwa zokhuza azamba. Munthu aliyense akuyeneranso kulemekeza maganizo a wina.

Palibe mavuto amene munthu angakumane nawo potenga nawo mbali muzokambiranazi. Koma ali yense ali ndi ufulu wochoka m'gulu lake atafuna. Mwina vuto limene lingakhalepo ndi kugawana maganizo mumasuka pa gulu la azimai ena. Koma kamba koti maina a anthu sazalembedwa mu repoti (report) sizizaoneka kuti ananena ichi ndi uje zokambirana za magulu onse zikazaphatikidzidwa. Koma zaka ndi mudzi wa munthu zizalembedwa.

Ngakhale kafukufukuyu sangaphindulire munthu ali yense payekha, zotsatira zake zizathandiza kutukula umoyo wa azimai m'mudzi onse.

4. Ngati muli ndi mafunso aliwonse okhudza kafukufuku ameneyu, yankhulani ndi Aparna Kumar pa 09 386 968.

Kafukufukuyu akupangidwa ndi chilolezo cha University of Malawi College of Medicine Research and Ethics Committee (COMREC). Ngati muli ndi mafunso okhuza ufulu wanu

wotenga nawo mbali mu kafukufukuyu yakhulani ndi a COMREC ndi Professor Joseph Mfutso-Bengo pa 09 957 805.

APPENDIX 11: BACKGROUND INFORMATION ON TBA EFFECTIVENESS:

1. Quantitative Studies on TBA Effectiveness:

Among a number of current studies on TBA effectiveness and their assessment within the Malawi national strategy, the outcomes of TBA effectiveness have been measured in their ability to decrease maternal mortalities. However, this measure is not simple to assess as it requires both the ability to determine why the death occurred and how many deaths were averted (or lives were saved) through the intervention. Maternal death is a

complex event that can result from a number of factors including: delays, complications, and cultural beliefs. It is extremely rare that only one factor contributes to maternal death. Therefore, assessing TBA training and other programs in this way fails to recognize the fact that their work is situated in a resource poor context, through which maternal deaths might occur in any case given, for example, lack of resources at the referral facility (Cham et al., 2005). What is important to determine is how many deaths have been averted in their population or community. How this information can be recorded by the TBA and gathered is a major challenge, not only relevant to TBA work, but also in safe motherhood initiatives.

Mixed evidence exists on the ability of TBAs to create change in terms of achieving MDGs 4 and 5. According to a meta-analysis by Sibley and Sipe (2006) training TBAs does create a moderate to large improvement in their behaviour towards targeted practices such as cord care, maternal nutrition, and immunization as well as increases their referrals for ANC (47%) and for obstetric complications (36%). Training also improves women's uptake of ANC (38%) and EmOC (22%) as well as slightly decreases perinatal mortality (8%). In Sibley and Sipe's (2004) preliminary meta-analysis, it was found that the results for TBA attributes (knowledge, attitude, and behaviours) were all positive, and between 86% and 97% of mean effect sizes were all positive. Still, it has been suggested that in areas where TBA coverage is low or their workload is low, it might not be cost effective to focus training on them.

At the same time, in places where the MMR is quite high and many women frequent TBAs, they should be utilized to assist in RH activities, surveillance, and referral (Costello et al., 2006). In another analysis of 15 TBA training programs, it was determined that all training affected TBAs by improving their knowledge, attitudes, and practices. However, it was difficult to ascertain if reductions in maternal mortality were a result of the TBA training because reductions in the MMR were typically a result of multi-sectoral interventions (Ray and Salihu, 2004). In terms of TBA training and improving referral for obstetric emergencies to skilled attendance, the evidence is also inconclusive. Through a meta-analysis, it was seen that TBA training increased knowledge but it was inconclusive whether or not training improved referral. This was due to the lack of quality in the studies and their respective data as well as recognition of the various barriers to access even with TBA referral as decision making is a complex process (Sibley et al., 2004).

In an assessment of eight outcome differences between trained and untrained TBAs in Ghana, little effect was seen in most of the outcomes as three were seen to be affected while the other five had no association between training and outcome. Training was protective against postpartum fever (OR .30) and retained placenta (OR .35), but actually showed an association between longer labour and TBA training (OR 2.57). The study therefore concludes that, given doubtful benefits of TBA training and the limited tasks that they may be able to perform; more energy and resources could be spent in other areas for both primary and secondary prevention in terms of contraception and access to facilities respectively (Smith et al., 2000). Similarly, in a Guatemalan study, the results demonstrate that training of TBAs has little effect on the prevention of antenatal and

intrapartum complications; however, it does have a significant effect on the identification of postpartum complications and corresponding referral. While hospital referrals by TBAs were shown to increase by nearly 200%, the results were based on a small sample not generalizable to the community over time and thus could not be attributed to TBA training. On the other hand, the study also showed that women who did not have a TBA tended to present to the hospital facility more than those who did have a TBA. The study only tracked over the relatively short time interval of one year and thus it was difficult to see if practices had been absorbed yet by the TBAs and was subject to some bias due to self-reporting by women (Bailey et al., 2002). Referral, in this case, also depends upon the relationship between hospital staff and TBAs and thus it is suggested that some project energy should be focused on this end in the future. Overall, while TBA knowledge increased, whether or not this was applied in practice varied significantly with respect to the target indicator for intervention.

2. Qualitative Studies on TBA Effectiveness:

For a variety of reasons, even qualitative studies have concurred that TBA effectiveness is limited and often isolated depending on the social, cultural, and geographic context. TBAs are known to fail to comply with routines, even if they are adequately trained and are assessed to have the appropriate knowledge. This failure can also be attributed to the fact that qualitative research brings out: that TBAs' *own* knowledge and practices that women find desirable are not integrated into the modern health care system (Mathole et al. 2005). A UNFPA study assessing the effectiveness in the agency's participation in TBA training, including that in Malawi, from the 1990s onwards concluded that the greatest impact of TBAs is seen in terms of infection prevention and through referral for immunizations (1996). However, some of the major failures of their programs were: the lack of TBA training integration to MCH strategies, confusion in the community as the changing of the TBA's role to a generalized community health worker, insufficient training of TBAs, little supervision of TBAs, lack of locally developed delivery kits, inconsistent criteria for TBA referral and management of complications, and failure to address women's preferences for attending the TBA (UNFPA, 1996).

Assessment of qualitative research from the region also demonstrates reasons for the gap between TBA knowledge and action. This is often a result of failure of TBAs to accept training as more influential on their practice than their lived experience of having delivered a number of babies. In a study by Mathole, Lindmark and Ahlberg in Zimbabwe, failure of the TBA to accompany a woman to the health facility was often a result of fear of surgery (Caesarean section), late presentation by the woman to the TBA, as well as mistrust of the health facility staff, even including the village health worker (2005). This common dichotomy between TBAs and the nurse-midwife or even HSA is a common theme, both from a client perspective and a health worker perspective and should be addressed with practical solutions in terms of protocols for women in labour at the health facilities. This is an area of further exploration outside the scope of this study.

3. Resources Needs for TBA Effectiveness:

While a number of studies have been conducted on training TBAs in the lifesaving process and safe childbirth, fewer studies have been conducted on the unmet needs of TBAs. In a study in rural Uganda, the majority of TBAs cited lack of transport as the major reason for failure to refer pregnant women with complications and suggested bicycles or motorcycles to improve access to the referral facility. However, the recommended transport for TBAs was a *single-ambulance-multiple cellular phone system.* Through this system, there would be one ambulance per district hospital, but the TBA as well as each health facility where the ambulance is stationed would be equipped with a cellular telephone so that they could communicate in the case of an emergency. A similar strategy has also been tested in Cameroon, through which the cell phone companies allowed a reduced rate for the public sector as they received the perk of guaranteed service from each and every district (Chalo et al., 2005). Perhaps through such a public-private partnership, TBA effectiveness could be guaranteed.

It is further important to address the issue of resources on the quality of care for pregnant women. In the rural study by Van den Broek et al., although improved outcomes for pregnant women were seen between skilled attendants and delivery by a family relative, this same phenomenon, measured in perinatal mortality, was not seen between nurse-midwifes and untrained TBAs. In this community, there were no birthing kits or special equipment available to the TBAs. As is recommended by the MOH, the TBA in this case, is supposed to refer any complications to the health centre. The study found this lack of difference in outcome between the TBA and nurse-midwife shocking and explained that either TBAs properly referred complicated cases or that there was a lack of EmOC facilities at the nearest health facility, resulting in similar mortality rates (Van den Broek, et al. 2003). This alludes to the idea that, even with skilled attendance, if the appropriate supplies and facilities are not present to ensure MCH, then mortality rates will still remain high. To clearly understand the effects of TBAs on birth mortality outcomes, therefore, it would be necessary to ensure that appropriate referral facilities exist with services in EmOC as well as adequate numbers of skilled attendants.

Yet another way to look at the effectiveness of TBA training at the national level is to view TBAs as part of a model of care. In an analysis of four models of care, the first model was to train non-professionals who conduct home deliveries, such as TBAs. Model 2 was to improve home delivery by using a professional, Model 3 incorporated a professional attendant at a BEmOC facility, and Model 4 utilized professional attendants in a CEmOC facility. The models follow a spectrum based on availability of political, economic, and human resources. A combination of models can be used to achieve improved maternal health care, but should also focus on key aspects of each model, for example in model 1, ensuring that the home attendants are linked to the formal sector in a positive and strategic way (Koblinsky et al., 1999). This model of care actually places TBAs at the health centre, in places where there is no nurse or midwife and there is a need for TBA care. This has been demonstrated in Senegal, where TBAs are shown to provide basic obstetric care at the health centre and are supervised by the nurse-midwife (Ronsmans et al., 2003). Other frameworks see TBAs as attendants starting with a lower education level and not able to be trained to be up to par with skilled attendants. Therefore, a pilot program in Nepal trained over 100 maternal and child health workers

with a 15 week course in maternal and child health as well as a 6 week refresher course. Based on a clinical skills assessment, most of the workers demonstrated that they had the right level of competency to fit the definition of a community level skilled birth attendant. The women selected overall had a higher level of education than TBAs and thus the study showed that perhaps choosing from this population would be better than working with the TBAs (Carlough and McCall, 2005). Hence, the notion that TBAs should be phased out with the selection of more educated women to join the ranks of midwife cadres is consistent with this study.

4. Heterogeneity of TBAs:

While a number of studies exist in the area of TBA effectiveness and their ability to be trained in normal obstetric situations, little research exists on the "non-midwife" related practices of the TBAs. To only examine the practices of TBAs as only those comparable to the modern sector is limiting in terms of understanding the possibility of integration. The MOH in Ghana discovered in its 1990 Operations Research Project, that, even though the majority of TBAs focused on midwifery (59%), other important practices were self-identified spiritual practices (22%) and herbalist practices (19%). In a similar lens, the study identified a number of different types of TBAs, lending to the idea that beyond trained and untrained TBAs, there are further distinctions between the level of skill, the types of practices, their role in their community, and their kinship to the pregnant woman (Coleman, et al.). All of these considerations are important in the identification of heterogeneity in TBAs, both at a District and National level. This plays a significant part in determining if a homogenous national strategy is the most efficient means to address a potentially diverse population (Galaa, 2006). For example, if all nurses have the same level of training, a policy could address their needs. However, if they do not and some receive 2 year training and others 4 years, then different policies would have to be implemented for each cadre of nurse that exists.

With TBAs, some deliver hundreds of babies a year and others play the role of the labour assistant and perhaps deliver only very few per year. The issue with different levels is that TBAs require quite a bit of supervision, perhaps countering the fact that they are meant to make up for scarce health care resources (De Brouwere et al., 1998). In the current set up in Malawi, TBAs are supposed to receive monthly supervision by HSAs in addition to a yearly refresher course after the initial training course. However, now that TBAs are no longer being trained, the timings and amounts of refreshers and supervision are being debated as well as who should actually be supervising the TBAs. The question of whether a nurse-midwife can spare the time for supervision and that the district should have the capacity for training is currently in debate and is elucidated when viewed in light of qualitative data that stresses the importance of these activities on TBA practices.

Still, what is clear is that on a national scale, how to deal with TBAs should be addressed uniformly, although recognizing variations within TBAs and as a whole between geographical regions. One element of this is the creation of national TBA association to formalize or standardize the process. Associations such as those seen in Malawi in terms of traditional medicine would be beneficial for TBAs and assist them in coalition building if they were able to gain membership or even begin their own association.

These associations include: the Association of Herbalists of Malawi (HAM in Kasungu), the Yohane Herbalists Association of Malawi (Lilongwe), the International Traditional Medicines Council of Malawi (ITMCM in Blantyre), and the Chizgani Ethnomedical Association (Mzuzu) (Fassil, 2004). This brings prestige to the practice and allows TBAs to feel that their ability to practice as community level midwifes is dependent upon the training. Therefore, it allows a level of skill for all the TBAs, if organized, should seek to attain (Galaa, 2006).

5. Future Effectiveness of TBAs Based on Evidence:

If TBA services are to shift gear, it is also relevant to discuss the effectiveness in engaging TBAs in other community level health activities. A study in Ghana, where there is a long tradition of working with TBAs, tested the feasibility of working with the traditional sector, specifically TBAs, to deliver community based family planning activities. Another study assessed the ability of TBAs to deliver misoprostol for PPH, through which they diagnosed PPH by soaking more than 2 local cloths (500mL), then gave misoprostol, and referred to the nearest health care facility. Although it is agreed that TBAs should not be trained, if speaking in terms of limited resources and targeted interventions, as one of the greatest contributors to maternal death, administration of misoprostol by TBAs could be an effective intervention strategy (Prata et al., 2005). Pilot programs are also being tested in Malawi with the delivery of Nevirapine, but most safe motherhood initiatives agree that TBAs simply do not have the technical capacity to administer complex programs and regimens, for example, by engaging in HIV/AIDS programming (Berer, 2003). Current debate hence recognizes that TBA training could be a waste of time and resources; these are resources that could be utilized in the training of nurse-midwives (De Brouwere et al., 1998).

Still, given all of these considerations, the push by the international community to improve health facilities and increase skilled attendance has done little in terms of increasing access in rural populations. According to a study in the *Lancet* on Maternal Health, the attendance at birth by a skilled professional has improved very little over the past 15 years (Costello et al., 2006). In addition, when looking at the four major causes of maternal death (obstructed labour, eclampsia, puerperal sepsis, and obstetric haemorrhage), how TBAs can prove effective in these respects is a question which remains unanswered.

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