EXPLORING THE ROLE OF TRAINED TRADITIONAL BIRTH ATTENDANTS IN AFAR, ETHIOPIA

Discussion Paper No. 003/2010

AMREF Discussion Paper Series

AMREF
Better Health for Africa

al Yousuf
a Mulatu
un Nigatu
it Seyum

AMREF Discussion Paper Series

EXPLORING THE ROLE OF TRAINED TRADITIONAL BIRTH ATTENDANTS IN AFAR, ETHIOPIA

Discussion Paper No. 003/2010

Jemal Yousuf
Tedla Mulatu
Tilahun Nigatu
Dawit Seyum

The African Medical and Research Foundation (AMREF)
P. O. Box 27691 – 00506, Nairobi, Kenya
Tel: +254 20 6993000
Fax: +254 20 609518
Email: info@amref.org
Website: www.amref.org

Design and layout: Nelly Achieng
Printed by : Icon Printers

TABLE OF CONTENTS

Discussion papers are aimed at presenting evidence to inform and solicit discussions on a wide range of topical issues related to health and development interventions.

ABBREVIATIONS AND ACRONYMS

ANC	Antenatal Care
CHA	Community Health Agent
DHO	District Health Office
DWA	District Women Affairs
EFDR	Ethiopian Federal Democratic Republic
FGC	Female Genital Cutting
FGD	Focus Group Discussion
FP	Family Planning
GOE	Government of Ethiopia
HEW	Health Extension Worker
HC	Health Centre
HF	Health Facility
HP	Health Post
HSEP	Health Service Extension Programme
HSP	Health Service Provider
HTP	Harmful Traditional Practice
IDI	In Depth Interview
MCH	Maternal and Child Health
NGO	Non Governmental Organisation
RCT	Cluster Randomised Trial
RHB	Regional Health Bureau
SBA	Skilled Birth Attendant
SRCH	Sexual Reproductive and Child Health
TBA	Traditional Birth Attendant
TTBA	Trained Traditional Birth Attendant

ACKNOWLEDGMENTS

The authors are very grateful to the Dutch Ministry of Foreign Affairs for funding this research as part of the East African Pastoralist Youth Reproductive Health Programme which is implemented by AMREF in Ethiopia, Kenya and Tanzania. We would also like to acknowledge the contribution of the Afar Regional Health Bureau, the District Health Offices and all respondents for providing critically important information.

Our acknowledgement also extends to the dedicated programme staff in Afar and other members of AMREF Ethiopia, especially Dr Alemayehu Seifu, Dr Joao Soares and Awoke Tilahun. We would also like to recognise the efforts of all the data collectors, drivers and research co-ordinators.

The authors acknowledge the contribution of Sanne Feijen, Sophie Zeegers and our colleagues from AMREF Netherlands, especially Woutine Van Beek and Jacqueline Lampe, who actively participated in all steps of this research. We are also grateful to Dr John Nduba, the Acting Director of Community Partnering, for his assistance in shaping the research agenda during the Joint SRCH meeting held in November 2008.

Finally, we are very grateful to the staff of the Directorate of Health Policy and Systems Research, Dr Thomas Kibua, Vicky Kimotho, Betty Rabar and Maureen Olyaro, for reviewing, proofreading and editing the article, and providing important feedback and insights.

ABSTRACT

Traditional birth attendants have been a subject of discussion in the provision of maternal and newborn health care, especially in developing countries where there is a lack of infrastructure and trained health personnel. The objective of this study was to assess the role of trained traditional birth attendants in maternal and newborn health care in Afar Regional State. A qualitative cross-sectional study was conducted and 22 in-depth interviews and 6 focus group discussions conducted with health service providers, trained traditional birth attendants, mothers, men, *kebele* leaders and district health personnel.

The findings of this study indicate that trained traditional birth attendants are the backbone of the maternal and child health development in pastoralist communities. However, the current numbers are inadequate and cannot meet the needs of the pastoralist communities including antenatal care, delivery, postnatal care and family planning. The study found that 92% of women (of which 90% were attended to by TTBAs) in zone 3 of Afar delivered their last child at home. In addition to service delivery (65%), all respondents agreed on multiple contributions of TTBAs, which include counselling, child care, immunisation, postnatal care and other social services. Moreover, most respondents agreed that the TTBAs played an important role in early detection of complications and in linking mothers to the health facilities.

Without deploying adequate number of trained health workers for delivery service, trained traditional birth attendants remain vital for the rural community in need of maternal and child health care service, especially in areas with poor infrastructure. With close supportive supervision and evaluation of the trainings, the TTBAs can greatly contribute to decreasing maternal and newborn mortality rates. Both the government and non-governmental organisations should provide the necessary recognition and supportive supervision since TTBAs enjoy community goodwill and will continue to provide services to rural communities in Ethiopia for a long time.

1.0 INTRODUCTION

Ethiopia is Africa's second most populous country and one of the poorest. Geographically located in the Horn of Africa, the nation has an estimated population of 81 million. Of the total population, more than 84% live in the rural areas. Administratively, the country is divided into nine regional states and two cities. It is one of the sub-Saharan African countries with unacceptably high maternal mortality ratio. EDHS[14] indicated that for the period 1998-2004 the maternal mortality ratio was 673 deaths per 100,000 live births with a range varying from 548-799.

The national health policy of Ethiopia is rooted in the primary health care approach and is thus efficient in mobilising community resources. The implementation of the Health Extension Programme, which began in 2005, resulted in a significant improvement in the health sector. The Government of Ethiopia (GOE) has also established the Health Service Extension Programme (HSEP) which aims to improve equitable access to essential preventive and promotive health interventions and increase coverage to 85% of the population, by extending health services to communities through the deployment of 30,000 female health extension workers (HEW). The HSEP acknowledges the role of TBAs and calls for their incorporation into the system by serving as volunteers who work under the supervision of the HEWs. The programme also recognises the need for pastoralist HSEP and recruitment and training of community health agents (CHAs) and TBAs among literate, traditional healers or religious leaders.

The Afar Regional Health Bureau, which is accountable to the Regional Government, has done a lot to ensure that the national policies are beneficial to the pastoralist communities. Parts of the nation inhabited by pastoralist and semi-pastoralist communities have also benefited from such policies. However, poorly developed infrastructure and inadequate number of health workers is still hampering the full attainment of expected results.

With inadequate number of skilled health workers for service delivery, TTBAs remain vital contributors in ensuring provision of adequate maternal and child health care services in the rural areas. A recent

survey by AMREF indicated that 92% of women in zone 3 of Afar regional state delivered their last child at home. Of these home deliveries, 90% of the women were attended to by a traditional birth attendant. This survey is consistent with the findings of the EDHS[14] which indicated that 95.8% of total deliveries in Afar were carried out at home.

Aware of the significant role of TTBAs, the government has been working closely with NGOs in Afar region to train TTBAs and supply them with delivery kits. The Red Cross, Islamic Relief and Mekaneyesus had phased out their projects by 2004. AMREF and CARE Ethiopia are some of the NGOs still working on strengthening the capacity of TTBAs in collaboration with the Regional Health Bureau and District Offices.

2.0 LITERATURE REVIEW

According to Bergström and Goodburn (2001), throughout history, traditional birth attendants (TBAs) have been the main health care providers for women during childbirth in Africa. They attend to the majority of deliveries in rural areas of developing countries. There is little doubt that they play a significant role when it comes to cultural competence, consolation, empathy and psychosocial support during pregnancy and labour, with important benefits for the mother and the newborn child[9]. It is now estimated that 85% of developing countries have some form of TBA training to enable them provide better maternal health services, thereby reduce maternal mortality[6].

The World Health Organisation's definition of a TBA is "a person who assists the mother during childbirth and who initially acquired her skills by delivering babies herself or by working with other TBAs". TBAs are often older women and are generally illiterate. For most families, TBAs are a cheaper option than domiciliary professional midwives and will often accept payment in kind. Mothers in Ethiopia prefer to give birth at home because most TBAs do not charge anything for deliveries and are willing to make house visits, which allows the mother the privacy that many prefer. Usually, pregnant women will inform their closest adult relatives (spouse, mother, siblings, or in-laws) once they realise the delivery is imminent, who will then contact the TBA. A husband, for example, will then look for a female relative to take care of his wife until the TBA arrives[11].

In addition to attending deliveries, TBAs also help with initiating breastfeeding; providing health education on STIs, reproductive health and nutrition; visiting mothers during and shortly following delivery where they educate them on the associated danger signs; and accompanying referrals to the health facilities for complicated deliveries[10].

In many African communities, TBAs are highly respected, they perform important cultural rituals and provide essential social support to women during childbirth (Chalmers 1983, Chen 1981, Aletor 1981, Campero 1998, Carney 1996)[3,9]. In all cases their beliefs and practices are influenced by local customs and sometimes by religion (Bullough 2000). The workload of TBAs varies considerably from place to place and among individuals[3,8].

NGOs working at community level in resource poor countries, for instance Bangladesh, frequently include TBA training in their activities. In recent years the value of TBA training has been increasingly questioned although there are still many groups who remain enthusiastic. There often appears to be little common ground between the proponents and opponents of TBA training[9]. Research outcomes on TTBA studies that have been done present a mixed picture[12].

In many African countries, training TBAs has been a key strategy to improving maternal and child health care. However, recent analyses[3,9] have concluded that the impact of training TBAs on maternal mortality is low. An emphasis on large scale TBA training efforts could also be counterproductive, as it would hold back the training of the necessary numbers of medium level providers, particularly midwives. The main benefits of training TBAs appear to be improved referral and links with the formal health care system, but only where essential obstetric services are available. Some studies have observed that formal training is not a requirement for this function[3,9]. Core training generally focuses on teaching TBAs to perform deliveries in more hygienic environments, discouraging harmful practices, recognising danger signs and referring women with complications to facilities where essential obstetric care is available. Health education for pregnant women and antenatal and postnatal care are usually included. In some programmes, TBA

training has assumed a much wider agenda and includes child health intervention, health promotion and family planning[9]. A review conducted in four health post catchment areas in Ethiopia, focused on performance assessment of TTBAs which considered management of excessive blood loss after birth and the procedure of referral, showed that there was a significant difference in effective management and referral post-training (11-70% improvement). However, the results showed that one year after the training the improvement decreased in some areas (1-50%)[11].

TBA training programmes should include adequate supervision, transportation, provision of supplies and frequent refresher training. In particular, it is recommended that TBA programmes increase efforts to ensure the availability of supplies to conduct a clean delivery. The evaluation concluded that an effective referral system is critical for success, no matter how well the TBAs are trained[3,6]. The main challenges voiced by TTBAs in Ethiopia (Liben, Somalia region) were the lack of safe delivery kits and gloves, especially following the training they received on HIV/AIDS prevention[11].

Another study dealing with home-based life saving skills in Ethiopia noted that families are willing to cover the costs of these supplies, if they have the money. The TBAs expressed concern about the challenges associated with complicated deliveries due to lack of emergency obstetric care in the district, the difficulties of transportation, and the lack of communication equipment. Finally, several noted that with the high number of home deliveries many pregnant women are still being attended to by untrained individuals rather than project-trained TBAs and that many of the trained TBAs are getting too old, therefore, there is a need to recruit and train younger TBAs[10].

However, adoption of improved practices is not universal and the extra confidence gained from the training experience may lead to a higher incidence of dangerous procedures and sometimes delays in referral[3]. There is also evidence that training does not substantially alter the belief systems of TBAs and will therefore have little impact on practices that are rooted in these beliefs. Goodburn[13] argues that trained TBAs are more likely to practise hygienic delivery than those that are untrained. However, hygienic delivery practices do not prevent post-partum infections. Training TBAs to wash their hands is not an effective strategy to prevent maternal

post-partum infection. TBA training as a package of interventions has rarely been submitted to any kind of rigorous assessment in terms of outcomes[9]. Another study from Malawi could not determine the actual contribution that TTBAs are making towards the reduction of maternal mortality and morbidity, but it was very clear that those who have been trained can contribute to improving maternal and child health as they offer the only means by which women in rural communities have access to a clean delivery[3].

Four studies involving over 2000 TBAs and nearly 27,000 women, undertaken by Sibley *et. al* indicated that one cluster-randomised trial (RCT) found significantly lower rates in the intervention (TTBA) group regarding stillbirths, perinatal death rate and neonatal death rate. Maternal death rate was lower but not significant, while referral rates were significantly higher. One RCT found a significant difference in advice about introduction of complementary foods, but no significant difference for immediate feeding of colostrum. Another RCT found no significant differences in frequency of postpartum haemorrhage among women cared for by trained versus TBAs[1]. Some of the feedback received from this are cited below:

> *"What I found most useful is about the woman who is bleeding too much. Helping her, taking her to a health facility and saving her life. This is the most important topic." (TTBA)*

> *"I like to teach about bleeding during pregnancy and after delivery. The community and mothers really like this." (TTBA)*

> *"We learn what we need to do (for bleeding). But we didn't learn about long labour and what should be done. I want to learn about long labour. Before we send them to the hospital we need to learn about what actions to take." (TTBA)*

Evidence of the effectiveness of TBA training, based on 60 studies and standard meta-analytic procedures, includes moderate-to-large improvements in behaviours of TBAs relating to selected intra-partum and postnatal care practices, small significant increases in women's use of antenatal care and emergency obstetric care, and small significant decreases in perinatal and neonatal mortality due

to birth asphyxia and pneumonia. Such findings are consistent with the historical focus of TBA training on extending the reach of primary health care and a few programmes that have included home-based management of complications of births and the newborns, such as birth asphyxia and pneumonia[6]. As in the study of Smith *et al*, more studies found that the majority of the programmes were ineffective because TBAs did not have sufficient literacy or general knowledge when they started their training. Without supervision and backup support, they tended to slide back to the old ways and were not able to prevent death when life-threatening complications arose during childbirth[7].

Use of the term "TBAs" has been controversial. The WHO recommends use of Skilled Birth Attendants (SBAs). However, studies have shown that people often prefer a TBA to a trained midwife, especially when the midwife is a young, unmarried girl without children. TBAs not only provide technical assistance, but also attend to and support the mother during the whole process of childbirth and thereafter. The work of TBAs is adapted and strictly bound to the social and cultural matrix to which they belong; their practices and beliefs are in accordance with the needs of the local community[4].

More research is necessary to understand the contribution of TBAs to maternal health in the community. More studies are also needed to understand the level of collaboration, communication and co-operation between Trained Traditional Birth Attendants and formal health facilities.

3.0 OBJECTIVES OF THE STUDY

3.1 General Objective

To assess the role of trained traditional birth attendants in maternal health care in Afar Regional State.

3.2 Specific Objectives

1. To investigate the contribution of trained traditional birth attendants in the provision of maternal health services
2. To describe the working relationship between trained traditional birth attendants and the formal health system:
    - By exploring the referral linkage between trained traditional birth attendants and the formal health system
    - By examining how the health system supports the efforts of trained traditional birth attendants.

4.0 METHODOLOGY

4.1 Study Design

This was a cross-sectional qualitative study. The study used focus group discussions (FGDs) and individual in-depth interviews (IDIs) to collect data. A total of 22 in-depth interviews and 6 focus group discussions were conducted with health service providers (HSPs), TTBAs, mothers, men, *kebele* leaders and district health managers across three zones of Afar Region.

4.2 Study Area

The study was conducted in Zone 1, Zone 3 and Zone 5 of Afar Regional State. Three districts (Gewane, Argoba and Awash) from Zone 3, two districts (Aysaita and Dubti) from Zone 1 and one district (Telalak) from Zone 5 were selected for the study.

To make the research data representative of the zones where TBAs were trained the study included: More accessible urban and less accessible remote rural districts, districts with higher and lower numbers of Traditional Birth Attendants, fully pastoralist and semi-pastoralist districts, districts with different cultures (Argoba special district in Afar) and a district where TTBAs had been trained by different organisations (Ayisaita).

4.3 Study Population

The perspective of the TTBAs was the main focus, because they were the ones who participated in the training programme and have been providing services to the communities. Exclusion criteria include non-trained and non-functional TBAs. Study participants were purposively selected and the number of informants was based on saturation of information during the survey after consultation with principal investigators. The health service providers who receive women referred by the TTBAs were interviewed about their experiences.

The district health office (2) and head of women affairs (1) were interviewed about their views on TTBAs and whether they were willing to support the collaboration between TTBAs and formal health service providers. Women (3) from the community were also interviewed about their experiences with TTBAs during their

pregnancy and delivery and about their perspective on maternity care in health facilities. The men (*kebele* leaders and married adult men) from the community were interviewed about their views on the role of TTBAs in the health system and their recommendations. Furthermore, 7 TTBAs were interviewed. The following table shows number and distribution of in-depth interview informants and FGDs (2 groups of TTBA, 2 groups of *kebele* leaders and 2 groups of mothers).

4.4 Data Collection Tools and Procedures

Data collectors were recruited based on their academic qualifications and experience in research. The team comprised public health, social science, midwifery and other medical professionals. There were a total of seven moderators, five translators who speak the local language and one co-ordinator from AMREF.

Open-ended interview guidelines were prepared, both for the individual in-depth interview and focus group discussion. The individual IDIs and FGDs were tape-recorded after verbal consent was granted and finally translated and transcribed by data collectors. The transcriptions, were checked by the supervisor everyday and discussed with data collectors. Pre-testing was conducted in Awash Fentale district, one of the study areas where AMREF Afar Field Office is located, and adjustments made accordingly.

Different categories of respondents including TTBAs, health care providers, mothers, *kebele* leaders, mother co-ordinators, district health office heads and district women affair heads were interviewed during the IDIs. A total of 22 in-depth interviews were planned and 21 were completed.

TTBAs, *kebele* leaders and mother co-ordinators were the target for the focus group discussion. They were selected based on the richness of information they could provide. A total of six FGDs were planned and completed. The discussions were used to explore sensitive and controversial topics and to confirm information on community knowledge, beliefs, attitudes and behaviour.

Interviewees and discussants were asked about four major issues related to the services provided by traditional birth attendants in their districts.

Table 1: The study population

District	IDI	FGD
Awash	1 DHO	
	1 HSP	
Gewane	2 TTBAs	1 group of TTBAs
	1 HSP	
Dupti	1 gynaecologist	
	1 MCH Nurse	
Aysaita	2 TTBAs	1 group of *kebele* leaders
	1 adult man	
Telalak	2 TTBAs 1adult man	1 group of *kebele* leaders 1 group of mothers
	1 Mother	
Argoba	1 TTBA	1 group of mothers
	1 DHO, 1 DWA	
	2 mothers	
	1 adult man	

They were asked about the contribution of TBAs to the health of the community, the support provided by the formal health system to facilitate and improve the contribution of TBAs and the relationship between TBAs and the formal health system. Additional information was also gathered about the challenges TBAs face. Interviewees were also asked to make recommendations on how the link between TTBAs and the formal health system could be strengthened.

4.5 Data Analysis and Interpretation

During data collection, field notes and audiotape recordings, as well as observations were carefully logged, translated from the local language into English, coded and categorised. Codes were summarised and analysed thematically with frequencies and interpreted accordingly. The findings were verified by members of the data collection team to ensure that the original discussions and interviews were well represented and not lost in the coding.

4.6 Ethical Considerations

Approval for the study was obtained from Afar Regional Health Bureau. A letter of collaboration was issued from the Bureau and shared with the respondents.

All participants were informed about the purpose of the study and the research methods that were being employed. Informed verbal consent was obtained from all respondents. They were assured that their participation was voluntary and they were free to pull out of the study at any stage. The data collectors also sought permission from respondents to record the interviews and discussions.

5.0 FINDINGS AND DISCUSSIONS

5.1 Contribution of TTBAs to Maternal and Child Health

The majority of the interviewees (92%) believe that TTBAs make a significant contribution to maternal and child health care and reproductive health. A District Health Officer interviewed in Awash stated, "TTBAs make an immense contribution in the area of reproductive health in Afar. Without them we cannot move an inch! In this district, more than 50% of the people live in rural areas. TTBAs also play a great role in improving community health and in the fight against HTPs; for instance, if you want to eliminate FGC, you need to do this with the people who perform antenatal and postnatal care, family planning and post abortion care."

Another respondent mentioned that TTBAs are highly respected in the community and women tell them all their secrets. A health service provider from Dubti hospital said, "TTBAs play a significant role in maternal health care since they decrease the workload of HSPs."

5.1.1 Family Planning

The contribution of TTBAs in family planning is controversial. In some districts, FP is accepted and practised (e.g. Argoba), while in others, it remains a challenge (e.g. Awash). A TTBA in Argoba mentioned that everybody in her *kebele* is interested in family planning, although most are against the permanent sterilisation method.

A District Health Officer remarked, "In Awash, the contribution of TTBAs to FP awareness is low. It is difficult for them to implement this, because it is not accepted by the community. Some women obtain FP services secretly in collaboration with the TTBA. Community conversation to deal with the myths and consensus would ease the difficulty in this area".

A Health Service Provider from Dubti stated that the TTBAs would be the ideal group to use to increase awareness on FP practices. This is because the gap between HSPs and the community is too big, due to distance and cultural barriers. The gap can be closed by TTBAs, because they live among and are a part of the community.

A TTBA in Gewane disclosed that she advises each woman that in order to remain strong and healthy, she has to "deliver the children with enough space in between". Some interviewees mentioned that there has been some change in the communities due to the TTBAs' increasing awareness of FP, although religion is still a major influence. According to a District Health Officer in Adaar, "These topics are discussed in the training, so the role of TTBAs in providing access to family planning and counselling is very important".

5.1.2 Antenatal Care

All (100%) of the respondents recognised the contribution of TTBAs in screening at-risk mothers during pregnancy. According to a health service provider in Gewane, TTBAs are trained in identifying danger signs associated with pregnancy.

In addition, considering the fact that TTBAs develop close relationships with their clients, most interviewees (58%) confirmed that they often play a big role in encouraging pregnant women to seek ANC at the health facility. They educate the women about the health facility and help to clear up existing misunderstandings. Of course, they believe that this is something that needs further involvement of the formal HSPs.

Besides the screening role and the contribution in encouragement of utilisation of ANC services at a health facility, all (100%) of the

interviewees mentioned the counselling service that TTBAs provide as a significant support. They educate the pregnant women on the importance of personal and environmental hygiene, nutrition, immunisation, malaria prevention and healthy behaviour such as exercising, having sufficient rest and reducing their work load.

Most of the TTBAs (85.7%) said that they usually refer a woman to a health facility when she gains too much weight, when she is too tired, when she has abnormal oedema, hypertension, little foetal movement, blood loss, malaria and when she still vomits after six months. The HSP from Dubti said that most cases of referral in pregnancy are less foetal movement and blood loss.

5.1.3 Delivery

The majority of the interviewees (65%) mentioned the TTBAs' contribution towards delivery care. Most women prefer to give birth at home. A health service provider in Dupti confirmed this when he said, "We serve about 15% of pregnant women during ANC, but only 3% of these will eventually deliver in our hospital."

According to the participants, TTBAs ensure clean delivery care. It was mentioned that there were major differences between TBAs and TTBAs. A respondent from Telelak pointed out that TTBAs were trained on the importance of providing clean delivery services. During the procedure TTBAs use razorblades and gloves, which they dispose after use. This was confirmed by other interviewees who mentioned the role of TTBAs in infection prevention.

All the TTBAs (100%) said that during delivery, they would refer a woman to the HF after abnormal presentation, prolonged labour, obstructed labour and excessive blood loss. Some TTBAs refer after four hours of labour. They referred to this as prolonged labour. They learned during the training to refer patients early, in order to have adequate time to arrange for transportation and money. According to a HSP from Dubti, most cases of referral during delivery are obstructed and prolonged labour.

The HSP from Dubti told of a case of a woman with two uteruses (abnormal uterus). A woman was referred to Dubti hospital after giving birth to a male neonate and its placenta at home. The delivery was attended by a

elderly TTBA in the village. However, after the first delivery, the TTBA still felt an undelivered baby abdominally. Due to her experience of handling twin pregnancies, she knew that the placenta always comes after delivering the last baby. Thus, she referred the women to Dubti hospital. Ultrasound suggested two uteruses and two cervixes. Caesarean section was performed to rescue the second baby. The TTBA told the HSP that it was due to the training that she was able to recognise this danger sign.

A *kebele* leader in Telelak mentioned that TTBAs provide better services since they give moral support and important information to patients during delivery. All (100%) the interviewees emphasized TTBAs' contribution concerning the recognition of danger signs during delivery. Whenever a complication arose they would mobilise the women for referral to the nearest HF.

According to the TTBAs, religion and social practices are vital and cannot be ignored. Most of them found the practices due to religion harmless; some supported the women in labour by calling the people of the community together to pray.

The following short story was narrated by TTBA:
Three years ago I went to the health centre with a woman in labour. I referred her due to prolonged labour. At the centre, the HSP did the pelvic examination to measure the dilatation. He told the woman that her child would not be expected soon, so he left after preparing the room. But soon after his departure, I discovered the foetal head crowning. I quickly put on my gloves and delivered the baby. When the HSP heard the newborn cry, he returned to the delivery room and asked who delivered this baby, and I replied, "God did".

Another TTBA said, "I will travel with the mother to a HF for referral, but it is the sole decision of Allah. Our confidence in doing so is not the treatment that we expect from the health facilities, but it is Allah."

5.1.4 Child care

All (100%) the participants who took part in the IDIs mentioned that TTBAs clean the newborn after delivery and when the baby is awake and alert, they encourage the mothers to breastfeed. The study also

revealed that there still exist unacceptable practices such as feeding th newborn a mixture of sugar and (boiled) water, sometimes milk and butte This was a key issue identified during the trainings conducted in Afar ar has been strongly discouraged among TTBAs.

TTBAs also educate mothers on how to care for their newborns. A Distric Health Officer in Awash said, "After the training, TTBAs improved chil care infection prevention (aspiration pneumonia) and advise mother on proper cord-care. However, there are still some TTBAs who provid butter and milk when the baby doesn't want to breastfeed. This is no recommended for newborns".

5.1.5 Postnatal Care

After delivery, the majority (62%) of the TTBAs wash the mother with wate and soap. They also teach their clients about the importance of persona hygiene and eating a healthy diet. Afari culture recommends that mother and babies stay in the house for 40 days. During this period, drinking o water and eating of solid foods is prohibited. The women can only leave the house for some morning-sun and to urinate.

With regard to postnatal care, all the TTBAs would refer the woman after a retained placenta or excessive bleeding. They would refer a woman with a retained placenta after 30 minutes.

5.1.6 As a Social Capital for MCH

Participants of FGDs and IDIs acknowledged the role that TTBAs played as health educators at the community level. They trained the community about the problems associated with FGC.

It was mentioned that although a TTBA provides a special service to women, every community member has a social obligation to collaborate with the TTBA when the need arises. One of the mother interviewees discusses the level of community collaboration as follows:

If a woman needs to go to the health facility, everybody (neighbours, friend and the family) will collect money for transportation. There are also cases where support is sought from the woreda *administration.*

As such it is possible to conclude that, community members come together to help each other during emergencies. It has been observed that this is an obligation and sanctions can be imposed if any member fails to provide the needed assistance. Sanctions are stiffer in the Afar community and might range from paying money to corporal punishment.

5.1.7 In Prevention of Harmful Practices

TTBAs are also reported to be useful in the fight against harmful traditional practices. After the training, they began promoting behaviour change among community members and other untrained birth attendants. The move to stop some harmful cultural practices would have been impossible without involvement of insiders. TTBAs have been very effective in this area since, to a large extent, women are the ones affected by HTPs.

Some of the HTPs associated with pregnancy and delivery were mentioned by the respondents. For example, not using gloves and using one knife for several deliveries (TBA in Argoba); definition of prolonged labour as one extending for over three days (TBA in Argoba), referring patients only after shock and/or excessive bleeding (TBA in Argoba); pushing to see how far dilatation is, instead of conducting a pelvic examination (Argoba); leaving the mother to bleed, believing that bad blood needs to leave the body (Awash); feeding the newborn with honey, butter, (camel) milk (Argoba, Awash, Gewane); feeding of milk and butter to the newborn at the first sunrise after birth for heroism (Telelak); leaving the women inside the house for 40 days in a very dark place[1] and wrapping the abdomen tight (Awash).

5.2 Collaboration between TTBAs and the Health System

Collaboration of stakeholders is an important factor in effective service delivery. Access and utilisation of reproductive health services are affected by the interaction between the formal and traditional health systems. The formal health system, as a result of its limited capability

[1] Some do it without food and water for 15 days. Some tie the woman's legs together for the healing of the wound. Most women are not allowed to clean themselves. Some believe that if they leave the house, evil spirits may take possession of them. Some belive it is to prevent the mothers from acquiring pneumonia or similar diseases(Aysaita)

to reach all the communities, opted to train traditional health service providers. Moreover, given that over 80% of deliveries occur at home in Afar and the geographical distribution of pastoralist communities, the traditional service providers should be recognised.

5.2.1 TTBAs' Need for Collaboration With Other Health Care Providers

Beyond the advice they provide during the prenatal and post-natal period, and during home delivery, TTBAs are also central in referring women to the health facilities. When a woman needs to be referred the TTBA will contact the husband to obtain permission and to accompany the patient to the hospital. The TTBA will also inform the adult men to arrange for transportation. Most communities use either the traditional *wasaka* or hire a car.

In Aysaita there was a case where a trained traditional birth attendant had just given birth and there was nobody in the community to help the other women in labour. The women had to rely on their neighbours to assist them. One neighbour who was not sure about what to do chose to take her client to the health centre. When they arrived, they did not receive any assistance, and the neighbour had to deliver the baby, despite her lack of skills in the area. This story narrated to the interviewer by a TTBA has several implications. First we can infer that TTBAs are essential in the attempts to reduce maternal and child mortality rates during delivery. Secondly, TTBAs need to have appropriate contact with the health workers, especially during those times when they cannot assist their clients, such as when they themselves are ill, have just had a baby or are away attending social occasions.

Health systems would greatly improve if all community-based health agents were well co-ordinated. There are mother co-ordinators working on malaria eradication, there are trained and untrained TBAs and a number of other health care agents. All these groups work on their own and hardly ever come together. FGD participants mentioned that some of the collaboration that has been created through provision of training has helped the various groups to act as change agents in harmful traditional practices.

Some of the TTBA respondents in different districts mentioned that they received little recognition from health workers. At times when TTBAs came to the health facility along with patients, they were treated poorly.

One respondent narrated her experience:

'The fact that I know how to communicate in Amharic and have better social recognition helps me to receive fast service when I go along with a pregnant women during referral. But many TTBAs are observed yelling about the poor service they get during referral inside health centres and hospitals'.

A midwife from Awash Health Centre also reported that no system had been established to promote collaboration between TTBAs and health facilities.

Most of the TTBAs mentioned that whenever there is a public event they will gather and discuss their cases. They use such forums to share experiences. However, this is not done on a regular basis since the distance and their duties at home make it impossible to see each other more often.

5.2.2 Training

During the study, two types of training were mentioned: basic and refresher. Both were short term. There was no evidence of practical training or mentoring at the health facility level. The training was mainly conducted by NGOs, with limited participation by the district health management team. This definitely would have implications on sustainability of the operations.

A District Health Officer in Gewane indicated, "It is challenging for the District Health Office to support them. There is no relationship between TTBAs and the District Health Office, so they don't come and ask for help. The District Health Office has very little information about what the TTBAs require since they only report to NGOs. I know that lack of supplies is a challenge for many of the birth attendants, but they rarely come to ask for assistance."

Traditional birth attendants acknowledged the role of the health system and NGOs in training them. This was confirmed during all the seven interviews conducted with TTBAs. The provision of delivery kits following the training has also made the work of TTBAs easier. This was confirmed by FGD participants in Aysaita.

During an in-depth interview at Gewane, a TTBA mentioned that she appreciated the opportunity to attend the training. However, she said that since then, no further steps have been taken to build her skills and provide her with equipment used during delivery. In fact she has been forced to purchase these on her own.

5.2.3 Referral Linkage

In some instances, the co-operation between the health system and TTBAs is reflected through referral. A gynaecologist indicated that once pregnant mothers accompanied by the TTBAs came into the hospital, they were attended to accordingly. Some of the doctors also provided feedback to the TTBAs. One male interviewee from Gewane mentioned that, since their training, TTBAs had started to advocate for the banning of HTPs.

One health worker in Dubti hospital indicated that there were still a lot of challenges in the referral system. In some cases, TTBAs did not accompany the female patients to the health facility, something which they should do to assist in providing a history of the patient. The TTBAs mentioned that they were sometimes hesitant because some health workers blamed them for the complications that arose. In some cases, when they arrived at the HF, the patient was not given priority by the health service provider. They also felt that the HSPs did not believe in their expertise. Most of the TTBAs indicated that they would prefer to hear what they should have done when complications arose as this provided them with opportunities to learn and develop new skills.

However, a health professional in Gewane revealed that the presence of TTBAs was very important as it decreased the workload in the health facilities. In his view, the working relationship between TTBAs and those from the formal health structure was very good and the number of women attending ANC services had increased after TBAs were trained.

In this study, TTBAs indicated that when they have to refer cases the communication between them and the community is good. There are multiple channels and points of communication and referral which include referral from one TTBA to another and/or to a nearby HF. There is a well established communication system among the TTBAs. Some of them prefer to first refer a woman to another TTBA. In this way they can discuss the case and decide together if further referral to a health facility is needed. However, one TTBA pointed out that she never hesitates to refer a woman to a health facility since they are not too far off.

When it is too difficult to arrange for referral, a few TTBAs said that they try to get a health service provider to the home of the woman in labour. Relatives of the woman in labour will go to the HF to ask for help. Most HSPs indicated that they are willing to assist when a complication occurs during delivery, but they are not always in a position to do so due to lack of supplies, transport and shortage of human resources at the facility. Most TTBAs said that the first line referral points are health posts (HP) close to them, and if the case is beyond the capacity of a HP the women have to be referred to other health facilities, like Awash HC, Nazareth hospital or Dubti hospital.

A DHO from Awash mentioned that it is important to increase the level of referral, to decrease maternal mortality. To increase this level the TTBAs needed more recognition from the HF in their work.

5.2.4 Supervision and Reporting

In several instances TTBAs, HSPs and other interviewees indicated that as a result of weak linkages among the various systems, supervision and support from the formal health system is sporadic. In spite of this weakness, the study revealed that TTBAs can be helpful in the development of a community-based health system. For instance, a TTBA report to the Aysaita district health office indicated that in the three months prior to this study she had supported 25 deliveries (16 male and 9 female babies). The co-operation between the *kebele* administration and TTBAs is an essential component of verifying information collected and reported by TTBAs to NGOs.

Apart from the reports to the HFs most of the TTBAs also prepare reports to the *woreda* health offices, *kebele* leaders and NGOs. For instance, in Gewane the HC asks TTBAs to provide a filled form monthly, which it then shares with the *woreda* leaders. The *woreda* office will make a copy and send the reports to various NGOs.

6.0 CHALLENGES

TTBAs encountered several challenges while working. The training of TBAs is usually carried out by NGOs. Government agencies have not paid much attention to the activities of TBAs. Although coverage of the training is good, there has been little follow-up and support to the TTBAs. In most cases, they lack essential supplies such as scissors. TTBAs also need up-to-date information related to their practice. In most cases, TBAs argued that the trainings are not long enough to address all the important issues. In Afar the workshops lasted 15-21 days only[2].

Most TTBAs mentioned that their services are not valued by the health facility workers. This is usually reflected by the way they are treated when they take mothers to the health facilities.

Since the area is hot and arid, there is perennial scarcity water. This has had a major impact on hygiene and sanitation. In addition, mothers to be referred to a health facility need to travel long distances of up to 80 km in some cases. This distance is compounded by poor infrastructure and lack of transport. Most of the health centres are understaffed and ill-equipped and therefore it is likely that on arrival at the health centre, the patient will receive upward referral to another facility.

One mentioned that cultural practices remained a challenge. For example, in Afar women are required to stay inside a dark house for 40 days immediately after delivery. Hence it is difficult to provide postnatal care. Besides, blood from the mother is considered dirty and it is believed that they should be left on their own to bleed out. These and other similar issues are deep-rooted in the communities.

[2] Communication with Reproductive Health Programme Manager of an NGO project in Afar, 2009.

7.0 RECOMMENDATIONS

All respondents indicated the great need for strengthened support to provide delivery services beyond the recent improvements. It was mentioned that the TTBAs were not effectively linked to the formal health system, therefore they did not receive the follow-up training and support after the initial training. The TTBAs recommended that there is a need for continuous follow-up and support after the training to ensure that they were continuously updated on new developments.

A respondent mentioned that TTBAs should be acknowledged as a cadre within the health extension workers (HEWs) programme since they played a major role in maternal and child health among pastoralist communities in arid areas. There is need to put in place a sustainable system to ensure that the trained traditional birth attendants are part of MCH care. Moreover, these community-based health agents should be given the necessary recognition and support.

Some mentioned that the issues of incentives including training, supply of materials and equipment and financial benefits to the TTBAs needed to be addressed. Some NGOs that had been involved in supporting TBAs through training and by providing equipment, but usually did not address issues of sustainability. Moreover, communities can provide some support to TTBAs who are working without pay. Since TTBAs are required to travel long distances, day and night, they need security back-up in some conflict districts.

One informant recommended that since most women lack financial resources when they are referred to a health facility, there is need to establish community support groups that would take care of the transport and medical expenses.

It was also suggested that the referral relationship could be strengthened by partnering with health workers in training of TTBAs. To facilitate the process, systems should be developed further to provide the TTBA with a referral reporting process that uses visual illustrations for the mother to take to the health facility upon referral. Finally, the respondents recommended that health facilities co-ordinate longer term training for TBAs with practical sessions.

8.0 CONCLUSION

Trained traditional birth attendants remain a vital resource in rural Ethiopia, particularly in the provision of maternal and child health care services. With availability of requisite tools and equipment, close supportive supervision, access to continuing education and recognition by the formal health system, trained traditional birth attendants can effectively contribute towards efforts to decrease maternal and newborn mortality rates in the country. Both governmental and non-governmental bodies should give the necessary recognition and support to this cadre of traditional health service providers.

REFERENCES

1. Sibley LM, Sipe TA, *et al* (2007) Traditional birth attendant training for improving health behaviours and pregnancy outcomes. Cochrane Database of Systematic Reviews, Issue 3. Art. No.: CD005460. DOI: 10.1002/14651858.CD005460.pub2
2. Kongnyuy EJ, Mlava G, Broek van den N. (2009) Facility-based maternal death review in three districts in the central region of Malawi: An Analysis of Causes and Characteristics of Maternal Deaths; Women's Health Issues; Issue 19: 14-20
3. Bisika T (2008) The effectiveness of the TBA programme in reducing maternal mortality and morbidity in Malawi; East African Journal of Public Heath; Issue 5(2): 103-110
4. Lefeber Y, Voorhoever H. (1997) Practices and beliefs of traditional birth attendants: Lessons for obstetrics in the North? Tropical Medicine and International Health; Issue 2 (1); 1175-1179
5. Oosterhof J (2001) TTBA performance in Kaoma district: A report on contributing factors to low number of supervised deliveries by TTBAs
6. Sibley LM, Sipe TA (2006) Transition to skilled birth attendance: Is there a future role for trained traditional birth attendants? J Health Popul Nutr; Issue 24(4): 472-478
7. Smith JB, *et al.* (2000) The impact of traditional birth attendants training on delivery complications in Ghana; Health Policy and Planning; issue 15(3): 326
8. Fortney JA and JB Smith (1999) Measuring maternal mortality, in Safe Motherhood Initiatives: Critical Issues. Berer M and TKS Ravindran (eds), 43–50. Blackwell Science Ltd.: Oxford, United Kingdom. Weil O

and H Fernandez. Is safe motherhood an orphan initiative? The Lancet 354 (9182): 940–943

9. Bergström S and Goodburn E (2001) The role of traditional birth attendants in the reduction of maternal mortality: Studies in Health Service organization and Policy (HSO&P) Issue 17: 85-89
10. Sibley L, *et al.* (2003) Home-based life saving skills Ethiopia: field-test Review. Washington, D.C.: American College of Nurse-Midwives. NGO Networks for Health Save the Children (US)
11. Essential Services for Maternal and Child Survival in Ethiopia (2003) Mobilizing the Traditional and Public Health Sectors and Informing Programming for Pastoralist Populations Ethiopia Mid-Term Evaluation, Save the Children
12. Lartson LI, Sodipe OA, Ebrahim GJ, Abel R (1987) The trained traditional birth attendant: A study of her role in two cultures. Journal of Tropical Paediatrics 33, 29-34.
13. Goodburn E, Chowdohury, R *et. al* (2000) Training traditional birth attendants in clean delivery does not prevent post partum infection: Health Policy and Planning 15 (4): 394-399, Oxford University Press
14. Central Statistical Authority (CSA) and ORC Macro (2005) Ethiopia Demographic and Health Survey. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Authority and ORC Macro. 2005.

The authors are responsible for any technical errors or omissions, in this paper.

Vision
Better Health for Africa

Mission

AMREF is committed to improving health and health care in Africa. We aim to ensure that every African can enjoy th right to good health by helping to create vibrant networks of informed and empowered communities and health care prov working together in strong health systems.

AMREF
Better Health for Africa

AMREF Headquarters
P.O.Box 27691-00506, Nairobi, Kenya.
Tel: +254 20 6993000, Fax: +254 20 609518,
E-mail-info@amref.org
www.amref.org