COMBINE: End of Study Qualitative Review

Acknowledgements

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Contents

1.1 Executive Summary

- From 2008-2013, the Saving Newborn Lives (SNL) program of Save the Children worked with the Federal Ministry of Health (FMOH) and a range of collaborating institutions to implement a two-arm cluster randomized controlled trial (COMBINE). The intervention aimed to strengthen implementation of the Health Extension Program (HEP) according to existing policy, and to assess the effectiveness and feasibility of integrating community-based treatment of neonatal sepsis by Health Extension Workers (HEWs) in the national ICCM platform.
- COMBINE operated through Primary Health Care Units (PHCUs), working with approximately 270 HEWs and 3,500 female community volunteers in 22 study clusters in East Shoa and West Arsi Zones of Oromia Region and Sidama Zone of Southern Nations, Nationalities, and Peoples (SNNP) Region, with an estimated total population of 660,000.
- Community volunteers identified pregnant women (via home visits to neighbours) and, in combination with HEWs, aimed to conduct three pregnancy and five PNC home visits during the first week of life. In the sepsis treatment arm, if a family was unable or unwilling to comply with referral, the HEW managed newborn sepsis cases by administering antibiotics at the HP.
- This End of Study Qualitative Review sought to systematically document key learning points from the experience of implementing the COMBINE study in order to inform a series of recommendations to the Government of Ethiopia regarding scale up and integration of community based ANC and newborn care into the ICCM program nationally. The review involved focus groups with Project Co-ordinators (PO), Project Officers (PO), community volunteers, as well as fathers and grandmothers of recently born babies. Semi-structured interviews were held with COMBINE staff, HEWs and recently delivered women. Interviews were recorded and either transcribed verbatim or written up using expanded notes. The data was analysed thematically to address the key study questions.
- The review identified several factors that influenced performance at COMBINE health posts. The broader context was favourable, with government-led initiatives such as ICCM, IMNCI and the HEP all driving and augmenting community behavior change. However, this favourable context may have made it harder to demonstrate the added value of COMBINE activities.

- A key factor influencing performance was the capacity and commitment of COMBINE project officers (POs), particularly the extent to which they were able to successfully manage negotiations with local leadership. A particular challenge for COMBINE was that HEW did not directly report to POs and, for much of the project, the POs did not directly report to the PC. These 'dotted' reporting lines limited the extent to which supervisors were able to intervene to address poor performance or low morale. Many participants regarded the performance of HEW and volunteers as key to successful implementation, and effective supervision was therefore critical.
- Factors facilitating performance included regular supportive supervision; constructive working relationships with Woreda and Kebele officials; community ownership of the programme; and positive attitudes towards ANC and PNC among the community.
- Performance was hindered where HEW felt over-burdened by their workload; where there was lack of cover for absent HEW (resulting in health posts being closed or left unmanned); where health posts were poorly resourced and short of drugs; where HEW lacked confidence in sepsis management; where HEW and volunteers were required to travel long distances to visit women (particularly during rainy season); and during planting/harvesting periods in which HEW, volunteers and their clients had additional responsibilities.
- Community members were generally positive about home visits. Despite initial concerns about the evil eye or 'buda' (the belief that a stranger who has the evil eye could bring harm to the infant), home visits were gradually becoming accepted by most community members as a normal part of the antenatal and postnatal experience. A minority of families continued to resist visits; mainly those who adhered to traditional religions.
- Home visits were valued because they brought services to the home and were therefore convenient. For those open to professional advice, the imparting of knowledge - both verbally and via the booklet - was greatly appreciated. In particular, community members valued information on danger signs and on planning for the birth. Unease about having the baby examined appeared to persist because of fear of the evil eye. Increasingly these fears were assuaged by the view that HEWs and volunteers were exempt from the evil eye because of their training. With respect to examination of the neonate, weighing of the baby and detection of danger signs were particularly valued. There was a perception among community members that the visits led directly to behaviour change, both antenatal and postnatal.
- Coverage by volunteers and HEW was variable. Some were clearly dedicated, respected and loved, while others were simply not doing their job. In general HEW

appeared to be more highly regarded than volunteers because they were perceived as better educated, more knowledgeable and more professional.

- The review identified a number of socio-cultural issues pertinent to future implementation. There was evidence of change in traditional roles, with expectant mothers taking more initiative for their antenatal and postnatal care; fathers showing greater awareness of the needs of their pregnant partner, and grandmothers less often prescribing behaviour for the expectant mother. Government facilities were gradually replacing traditional healers as the first option for maternal and neonatal treatment and there was a suggestion that traditional healers in many areas were losing their dominant standing in the community.
- Traditionally women have been reluctant to disclose their pregnancy due to shame, fear of the evil eye and fear of miscarriage. Some community members perceived that expectant mothers now disclosed their status at an earlier stage, although it was still common for a mother to admit she was pregnant only after others had noticed her swollen belly.
- In SNNP, home births were seen as more comfortable and commonly regarded as 'God's will'. Births at health facilities were seen by some as unnecessary and therefore, as a waste of money. Most said they would go to a health post or facility if the labour was taking too long or if there were complications. Attitudes towards delivering at health facilities were generally more positive in Oromia, and there was stronger evidence of behaviour change. Here participants were more likely to believe that labouring mothers should be taken to a health post as a matter of course, rather than only in an emergency. A proportion of women who had planned to deliver at health facilities ended up delivering at home, often due to problems with transportation (e.g. husband not home, ambulance driver not available, road in poor condition). Aspects of health facility deliveries appreciated by the community included: the availability of equipment and knowledge of what to do in case of complications; safety and cleanliness; and constant support from staff. Opinions of the quality of care at health facilities were varied. Women were particularly worried about the loss of privacy and modesty and some feared that staff would be too quick to intervene surgically. There were mixed reports about the quality of staff at health facilities.
- Community participants perceived significant change in terms of care of the newborn baby. Traditional practices were being replaced by HEW advice and many participants (mothers, fathers and grandfathers) accurately recalled, and said they practiced, the new advice. In SNNP, the tradition of Hamessa (traditional herbal

remedy given to newborn to inoculate them against disease) was generally thought to be in decline, particularly where protestant religion was replacing traditional beliefs. One HEW estimated that about 5-10% of the community still gave hamessa to the baby, predominantly because of grandmothers who feared that without it, the baby would remain unprotected. However, community members were beginning to view vaccines as a valid replacement. Belief in the evil eye still persisted. Where community members perceived that it was no longer acceptable to believe in the evil eye, they tended to replace the belief with other reasons for protecting the baby from strangers, such as hygiene. Fear of the evil eye or related fears contributed both to a reluctance to have the baby examined, and to take the baby outside the home for treatment. In Oromia (E.Shoa), strict adherents to the traditional practice of Amechisa (traditional religious system of belief which dictates set of rules related to childbirth and the postnatal period, including seclusion of mother and child in the home for a significant period after the birth) were thought to be declining in number and many felt that Amechisa no longer precluded postnatal visits. COMBINE made some progress in working with Ayantus to relax some of the rules of Amechisa on health grounds but several Ayantus refused to compromise. The POs/PCs believed that the Ayantus still held enormous power over the community. There was strong evidence of change in breastfeeding practices with community members almost all aware of the importance of giving colostrum to the baby and of breastfeeding exclusively until 6 months.

- In addition to the socio-cultural issues identified above, several factors constrained volunteer performance. These included: HEW lack of availability and lack of commitment; community suspicion about the role of volunteers (including the belief that volunteers were paid to report on pregnant women to the HEW); negative community attitudes towards volunteerism; lack of confidence due to age or low educational level; perceived lack of training; competing time demands; and difficulties reaching remote households.
- On the other hand, several factors enabled volunteer performance: supportive supervision of the volunteer by the HEW and PO; good working relationship between the HEW and the PO; the ability to communicate with the HEW by mobile phone; adequate community sensitization to explain their role; increasing community support for the behaviours that they sought to promote; availability of free medicines at health facilities; good working relationships with the Woreda/Kebele.
- A number of volunteers did work that went beyond their basic remit and many worked hard despite the lack of renumeration. Volunteers cited a range of motivations: public recognition and status; holding volunteerism in high regard; seeing value in their work; a sense of responsibility; witnessing positive change in the community;

personal relevance of the work to their own experience of mothering/grandmothering; enjoying a broader role in the community; receiving training and skills.

- Some volunteers lacked motivation and were dissatisfied with the role. They cited a number of reasons, most frequently the lack of financial compensation. Other reasons included: lack of refresher trainings; feeling unsupported by the Kebele leadership; believing that women in the community were not following their advice. Volunteer motivation waned towards the end of the project; the volunteers were tired and there was uncertainty about what would happen afterwards.
- The key future implementation challenges are: ensuring the availability of HEW at the HP; ensuring that HEW are able to visit newborns within 2 days after birth (to identify sepsis cases); ensuring consistent support for the HEW from the Woreda and Kebele; ensuring that PHCUs are functioning effectively; keeping volunteers motivated; confronting harmful traditional practices in new intervention areas; overcoming cultural reticence to disclose pregnancy; and ensuring equity of access to services for those living further from the HP.
- In view of these challenges, detailed recommendations are made. These span participation of community; problem identification and demonstrating effectiveness; strengthening capacity of key personnel; and strengthening mechanisms for service delivery.

1.2 List of acronyms

ANC	**Antenatal care**
COMBINE	**Community Based Intervention for New born in Ethiopia**
DTL	**Development Team Leader**
ENC	**Essential newborn care**
HC	**Health Centre**
HDA	**Health Development Army**
HEP	**Health Extension Programme**
HEW	**Health Extension Worker**
HP	**Health post**
ICCM	**Integrated community case management**
IMNCI	**Integrated Management of Neonatal and Childhood Illness**
MNH	**Maternal and neonatal health**
PC	**Project Co-ordinator**
PNC	**Postnatal care**
PO	**Project Officer**

2 Introduction

2.1 Maternal and neonatal health in Ethiopia

With a population of around 85 million people, Ethiopia is the second-most populous country in Sub-Saharan Africa (SSA). It is one of the world's oldest civilizations, and also one of the poorest.

Over the last 15 years Ethiopia has made remarkable progress in reducing child mortality and improving maternal health but reach and coverage of maternal and neonatal health services remain low. Nationally, only 34% of pregnant women access some antenatal care (ANC). Skilled attendance at birth and post-natal care (PNC) remain low at 10% and 7%, respectively, and most PNC does not take place within the critical first two days of delivery when most deaths occur (DHS, 2011).

Maternal and neonatal mortality have been declining but are still unacceptably high (MMR of 676 per 100,000 live births and NMR of 37/1,000 live births; DHS 2011). Ethiopia has recently met the Millenium Development Goal for infant mortality. However, neonatal mortality has declined more slowly than child mortality and now represents 42% of all child mortality in Ethiopia (DHS, 2011). Pre-term births are the leading cause of death at 37%, followed by intrapartum complications (28%) and severe infection (24%) (Liu, 2012).

2.2 Background to the COMBINE trial

From 2008-2013, the Saving Newborn Lives (SNL) program of Save the Children worked with the Federal Ministry of Health (FMOH) and John Snow Research and Technology, Inc. (JSI R&T) to conduct the Community-based Interventions for Newborns in Ethiopia (COMBINE) trial. Collaborating institutions included the London School of Hygiene and Tropical Medicine LSHTM), the Johns Hopkins Bloomberg School of Public Health (JHU), UNICEF, and WHO.

COMBINE was a two-arm cluster randomized controlled trial. Its principal aims were to:

1. Strengthen implementation of the Health Extension Program (HEP) according to existing policy, including pregnancy and postnatal care (PNC) home visits linked to integrated community case management (ICCM) and integrated management of newborn and childhood illnesses (IMNCI); and,

2. Assess the effectiveness and feasibility of integrating community-based treatment of neonatal sepsis by Health Extension Workers (HEWs) in the national ICCM platform.

COMBINE's primary hypothesis was that community-level management of newborn sepsis with antibiotics administered by HEWs at health posts (HPs), when referral is not possible or acceptable to families, reduces neonatal mortality after the first day of life by 33% compared to the current policy of referral to health centres (HCs). The secondary hypothesis, which was tested using a before-after design, is that the HEP, strengthened by linking HEWs to community volunteers to provide pregnancy and PNC home visits with referral of newborns to HCs per IMNCI guidelines, improves coverage of newborn health practices and reduces mortality.

COMBINE operated through Primary Health Care Units (PHCUs), working with approximately 270 HEWs and 3,500 female community volunteers in 22 study clusters in East Shoa and West Arsi Zones of Oromia Region and Sidama Zone of Southern Nations, Nationalities, and Peoples (SNNP) Region with an estimated total population of 660,000.

Preparatory activities for COMBINE included a baseline census, formative research, health facility assessments, and adaptation, testing, and delivery of training and BCC materials. Save the Children supported the HEP in both arms of the COMBINE study beginning in mid-2008, with pregnancy and PNC home visits underway in all study locations by March 2010. HEW treatment of newborn infections in the sepsis treatment arm began in mid-2011. Costing, time motion of HEWs, and supplemental qualitative assessments were also undertaken over the course of COMBINE.

Collaboration between community volunteers and HEWs was the cornerstone of COMBINE's approach to reach mothers and newborns. Through home visits with their neighbours, community volunteers identified pregnant women, initiating a series of structured home visits by both the volunteer and HEW. The visits were essential to active case finding and reducing neonatal sepsis mortality. Combined, HEWs and volunteers

aimed to conduct three pregnancy and five PNC home visits during the first week of life according to specified schedules and content that educated families about maternal and newborn health (MNH), danger signs, and services available to treat newborn infections. In both arms of COMBINE, HEWs assessed, classified, and referred sick newborns to the next level facility. In the sepsis treatment arm, if a family was unable or unwilling to comply with referral, the HEW managed newborns with sepsis by administering antibiotics at the HP. The 7-day regimen included injectable gentamicin given every 24 hours by the HEW and amoxicillin syrup three times a day by the caretaker.

In both trial arms, COMBINE provided training and supportive supervision for health workers and HEWs. In the sepsis treatment arm, HEWs received additional training on antibiotic management of newborn sepsis. Community dialogues were conducted in both arms to discuss birth preparation, delivery, essential newborn care (ENC), and care-seeking; in the sepsis treatment arm, dialogues included information about the availability of treatment at HPs as well as HCs. HEWs held monthly meetings with community volunteers to review home visit activities, share experiences, and impart and refresh counselling capacity and newborn assessment skills.

COMBINE used a number of tools for documentation and monitoring of activities and outcomes. Community volunteers used sets of pictorial, color-coded cards to record pregnancy and PNC visits, including referrals. COMBINE field staff also completed activity and tracking forms related to pregnancy and PNC home visit coverage, ICCM performance, and sick neonate identification, treatment and completion. Routine monitoring results were supplemented by external validation exercises in 2011. A 5-month endline census of neonatal mortality and key household practices and care-seeking was undertaken from February-June 2013.

3. Background to the End of Study Qualitative Review

3.1 Study rationale and objectives

The End of Study Qualitative Review sought to systematically document key learning points from the experience of implementing the COMBINE study in order to inform a series of recommendations to the Government of Ethiopia regarding scale up and

integration of community-based ANC and newborn care into the ICCM program nationally.

The aim of the review was to identify and examine lessons learned throughout the duration of the project.

The review drew from implementing staff and community members to answer the following research questions:

1. What are the attributes/factors that lead to high performing COMBINE Health Posts in both the control and intervention arms?

2. At this end stage, how does the community value pregnancy and PNC visits? Are there specific socio/cultural issues that should be considered for these visits in the future?

3. What are the enabling and constraining factors for volunteers in working with HEWs? What motivates the volunteers? And more specifically, what motivates and demotivates them in terms of pregnancy and PNC home visits?

4. What are challenges and opportunities for the future implementation of neonatal interventions (pregnancy and PNC home visits, sepsis management)?

The study asked two further subsidiary questions:

5. What are PO/PC challenges and recommendations re. logistics, M&E, supervision, and reporting (within health system, not COMBINE). Interviews/discussions.

6. In E. Shoa zone of Oromia region, what differences and challenges/opportunities in working with the HDA vs. fCHPs have POs observed?

A detailed description of the methods and an example topic guide are given in appendices one and two.

3.2 References

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4. RESULTS

The results section is structured around the study research questions.

4.1 What are the attributes/factors that lead to high performing COMBINE Health Posts in both the control and intervention arms? And what are the barriers to high performance?

In this section we describe the factors facilitating and hindering performance at COMBINE health posts. The results in this section come from the following sources: focus groups with PC's and PO's, community volunteers, and interviews with HEW.

Capacity and commitment of Project Officers. The PCs and POs cited several personal attributes that influenced performance including personal commitment, dedication to the job and dependability. Two skills were considered crucial for the PO role. The first was the ability to provide effective technical mentorship and support to the HEW's, particularly those who were not performing well. The second was the ability to manage local politics, including relationships with local government officials as well as community/religious leaders. This required a high level of skill in negotiation and strategic communication; and the POs and PCs varied considerably in their ability to manage difficult relationships. No specific training was given to PO's and PC's on this aspect of the job and in retrospect this was viewed as a weakness of the project by Save the Children staff.

Project reporting structures. A particular constraint related to the project reporting structure, such that individuals in certain roles were supported, supervised and mentored by one individual but were accountable to another. For much of the project life, the project officers (POs) were employed by Save the Children and the project coordinators (PCs), by JSI. During this phase of the project, there was only a 'dotted' reporting line between POs and PCs, limiting the extent to which the PCs could effectively supervise the officers. Where POs were able to work efficiently and independently, this did not pose difficulties. However, weak monitoring of POs by project coordinators, occasionally allowed individual POs to neglect their duties. Where problems with PO performance were identified, there was often a limited range of actions that the PC could take, partly because of the 'dotted' reporting line, and partly because documentation of field staff performance issues was generally poor. Similarly, the HEW reported to the Woreda rather than the PO, and again,

POs were limited in the extent to which they could address poor performance among HEWs. If the relationship between the PO and the HEW was strong, this was of little consequence, but where relationships between the PO and the HEW or the Woreda were strained, the PO was often unable to take decisive action. For instance, there were reported isolated cases of Kebele managers who signed off on HEW timesheets, regardless of whether the work had been done. In such circumstances, it was difficult for the PO to intervene. The POs felt that some HEW viewed COMBINE activities as Save the Children's work and not their own; they were frustrated about what they perceived as extra workload. The lack of integral reporting structures probably contributed to this problem.

Monitoring and supportive supervision. Several aspects of the COMBINE monitoring and evaluation systems were believed to enhance performance. As an example, staff cited the monthly staff-planning meeting during which staff members were encouraged to share experiences and work through mistakes. The monthly sepsis management meeting was said to be motivating for HEW (in part because of the per diem for attendance). A common view was that the clear goal and vision for the project, as well as detailed performance feedback, motivated staff.

Working with Woreda and Kebele officials. In some areas the project was able to establish good working relationships with the Regional Health Bureau, and with Woreda and Kebele officials. In these Kebeles, Woreda officials supported COMBINE work by effective supervision of HEWs via quartely review meetings. In particular, they supported the project by addressing problems of non-performing HEWs. There were also reports of Kebele officials supporting HEWs to confront volunteer absenteeism and poor performance. In a few instances, HEWs were members of the Kebele cabinet and this usually facilitated a good working relationship.

In other areas, the working relationship with the Woreda and Kebele was more difficult. In particular some HEW felt that their Woreda undervalued their health work and placed unreasonable demands on them in relation to non-health activities such as attending political meetings. Others felt unduly criticised by the Woreda. Similarly, some HEWs reported feeling unsupported by their Kebele, who they felt were more concerned about agriculture than health.

Health services context. The ICCM programme, operational in all COMBINE project areas, appears to have created community awareness that HEWs are equipped and able

to provide health and even curative services. In general, HEW were perceived as knowledgeable and well-trained, and the ICCM is likely to have bolstered this reputation.

The emerging Health Development Army (HDA) provides a potential community network for enhanced coverage of COMBINE services. Although COMBINE staff believed this to be more a potential than actual facilitating factor, several volunteers mentioned that they utlised HDA networks to identify newly pregnant and newly delivered women.

During the project lifetime, the Ethiopian government introduced the 'Pregnant Mother's forum', an opportunity for pregnant mothers to discuss issues related to pregnancy and birth preparedness with the HEWs. The aim of the forum was to encourage deliveries at health centres. To the extent that this forum reinforced messages about ANC and PNC consistent with those of COMBINE, it probably facilitated COMBINE activities, although the impact was not systematically tracked.

It is important to note that community members did not generally differentiate between COMBINE activities and general government initiatives. They viewed improvements in maternal and neonatal health within the broader context of improved health and well-being brought about by the government. Positive change salient to the community included other HEP interventions such as latrine building, vaccinations, family planning and bringing health posts to the local community. Participants also perceived positive change brought about by the Health Development Army (HDA). Thus the reputation of COMBINE within the community is inextricably linked with improvements to health services being delivered by government.

HEW working conditions. Many of the PO/PC interviewed commented on how hard the HEWs worked. The HEWs themselves noted that it was easier to reach targets when they had fewer competing demands. The workload was generally felt to be manageable under 'usual' conditions but there appeared to be little back up for contingencies such as HEW illness, maternity leave or resignation. During these times, a backlog of work built up. Attrition of HEW was higher in some Kebeles than others and it was not always straightforward to replace HEWs. Because of this, Kebele officials were sometimes reluctant to confront poor performing HEW. HEW's also struggled to fulfil COMBINE duties during periods in which they were assigned additional responsibilities by the Woreda, for instance during health or agricultural campaigns.

In interviews, the HEWs felt that there was growing recognition that the health post should always be staffed by at least one HEW, and that the Kebele/Woreda generally supported them in this regard. HEWs felt the most challenging aspect of their work was the postnatal visit within 48 hours. It was difficult to make a visit within the timeframe if they had a heavy workload, if the volunteer notified them late or if the mother lived far away. One disgruntled HEW said she would never have agreed to the COMBINE work had she been aware of the requirement of postnatal visits. On the other hand, several HEWs said they prioritised this work over their other health packages because of its urgency and importance. The PO/PC felt that HEWs who lived within the community they served (as opposed to a nearby town) did a better job because they were more available to the community. However, the preference of many HEWs was to live in town because of poor living conditions in the Kebele.

HEWs felt their standing in the community had been greatly enhanced by ICCM, largely because their provision of free treatment for children under 5 was greatly appreciated by the community. Many HEWs were particularly motivated in relation to sepsis management, despite finding it challenging, logistically difficult and somewhat 'scary'. Sepsis cases were not that frequent and for some HEWs, it was difficult to maintain their skills and confidence. Community members occasionally expressed concern that their HEWs were not sufficiently competent to provide curative services, and indeed spot checks by PO/PCs occasionally identified individual HEWs who were not confident in this role.

HEW employed a range of strategies to convince the community: they would meet with the husbands and mother-in-law of recalcitrant pregnant women; and they would enlist the help of community associations (such as farmers, edir and womens' groups) to help them during community meetings. They sometimes employed clever persuasion strategies: One HEW described how she got a mother to drink the hamessa herb (see Box 1) herself. When the mother realised how bad it tasted she decided not to give it to her baby.

Service availability and quality at health posts (HP). The availability of free treatment was cited as a clear factor facilitating treatment-seeking on the part of the community and therefore contributing to higher COMBINE performance, but there were several factors that hampered the attainment of targets.

Both project staff and community members felt that opening hours of health posts were short and even then, the health post might be unattended during working hours if both HEWs were engaged in other community activities. Health posts were generally shut at night and during weekends, creating potential problems for women who went into labour during these hours, or mothers whose neonate fell sick or required treatment over the weekend period. Weekend closure also caused delays in delivery notification for women who delivered their baby during this time.

On the other hand, there were several accounts by community members of HEWs working after hours, particularly at weekends, to ensure that they were available to mothers and neonates. In particular, HEWs took seriously their responsibility for providing the seven-day treatment course for neonatal sepsis and they would generally work at weekends to ensure that the course was completed.

Some health posts were in poor condition. In particular, health posts usually lacked electricity and sometimes a clean water supply. In HEW interviews several resource shortages were mentioned including lack of chairs for waiting patients and lack of refrigerator for medicine. Lack of drugs and vital equipment was raised as a concern by community participants. A grandmother in Oromiya described her local health post as *“an empty room; it doesn’t even have anti-pain medicine”.*

Drug stock outs impacted on community use of the health post. If community members perceived a shortage at the health post they tended to bypass it and go straight to the health centre or hospital, or to private health facilities if they had an income. If one drug was unavailable, there was a tendency for community members to assume that this shortage extended to all drugs. Conversely, the knowledge that drugs were in stock tended to spread rapidly within the community and was assumed to encourage self-referral.

Families often travelled reasonable distances, sometimes at cost, to reach health posts. If the health post was closed or unmanned, or if drugs were unavailable, it was believed that this would discourage families from seeking care in future.

Referral to health centres. Referral from health post to health centre was common. Referral generated several issues that were felt by COMBINE project staff to affect community motivation to seek treatment. One issue concerned treatment unavailability at the health centre, which meant that having reached the health centre, patients were then

referred on to hospital. At this point, it was thought that some patients, due to time and cost constraints, would give up and go home. A further challenge for families was that health centres admitted patients only up to 24 hours. Where treatment required a longer period (as in sepsis management for neonates), families would be obliged to find accommodation near the health centre at personal cost, or return twice a day for the ampicillan injection. Hospitals were a preferable option because the neonate would be treated intravenously and could therefore stay as an inpatient. Finally, treatment regimens were not consistent between health post and health centre. This created potential confusion for patients if they were referred back to the HP from the HC.

Service quality at health centres A number of quality issues were cited as specific to health centres. Project staff noted that some staff at health centres were not trained in IMNCI and did not necessarily send the appropriate individuals to receive this training when it was offered. The PO/PCs felt that staff at health centres were not always equipped to support the HEWs and were sometimes critical and unhelpful.

Some centres had lost credibility after advertising vaccination campaigns then failing to deliver a vaccination service. Loss of faith in health centres had potential to undermine project messages about treatment seeking.

Community help-seeking. There was strong evidence, both from field staff and from the community that attitudes towards care-seeking were changing. Of relevance to COMBINE, community members seemed increasingly aware of danger signs in neonates and appeared less likely to delay seeking help. Attending health posts for ANC was gradually becoming normalised and there was greater community awareness of the services on offer. Although it is not possible to attribute causality here, it seems likely that these changes in behavior would facilitate coverage by COMBINE. They are discussed in further detail in section 4.3.

Landscape. Geography influenced the performance of all project staff from volunteer to POs, but the challenges varied considerably in scope and severity. For some staff the sheer distance between homes and health post posed a major problem, while for others, challenges arose from poor road conditions, difficult terrain and isolated trails with their attendant risk of wild animals, assault and even rape. Walking alone was a concern for volunteers and HEWs, all of whom were women. HEWs and volunteers occasionally reported long round trips to reach single households for ANC and PNC visits. Some volunteers also complained of long journeys to hand in reports to HEWs, although this

was sometimes resolved by sending others – including their own children - to deliver their reports. Some volunteers and HEWs also said they used their mobile phones for communicating with each other. Other project staff members were fortunate to live close to their health post, or to live in areas with good roads or where villagers were living less remotely. While there was evident objective variation in the geographical challenges faced by COMBINE workers, there also appeared to be variation in subjective assessment by project staff of the extent to which those challenges posed a barrier to effective working. Geographical challenges certainly had potential to be used as an excuse for poor performance, but the extent to which they were actually used as such is difficult to assess.

Seasons and calendar Project implementation was more challenging at certain times of year. Planting and harvesting seasons, for instance, affected performance because HEW and volunteers had to juggle their COMBINE-led MNH work with additional agricultural responsibilities. In addition, pregnant women were busier and therefore less likely to attend ANC or be around to receive volunteer/HEW visits. During rainy season, roads could become impassable due to flooding and excessive mud. Holidays, market days and periods of mourning also tended to disrupt project activities, particularly where there was no back-up for the individual called away. Seasonal migration made it difficult to follow up women for community visits. In addition some pregnant women moved out of the area in order to be close to their own mother for the birth.

Capacity and commitment of volunteers. The volunteers were recognised as one of the keys to the success of COMBINE. The capacity and commitment of volunteers was clearly variable and this is explored further in section 4.4.

Cultural traditions. A range of cultural traditions were cited by PCs, POs and HEWs as obstructing the adoption of safer practices, and therefore impeding efforts to meet COMBINE targets. These traditional beliefs are discussed in detail in section 4.3 below.

Behaviour change in the community. One powerful influence on performance was felt to be recognition of the value of the intervention by the community. PO/PCs noted that in some places there was prior recognition of a problem: namely that too many mothers and babies were dying during the antenatal and postnatal period. This view was corroborated in community focus groups; there was a general feeling among grandmothers and fathers that whereas babies formerly survived according to *'the will of God'*, they now received proper care.

There was a sense that behaviour was changing, not just in response to COMBINE activities, but as a result of broader social change. Participants in community focus groups and interviews attributed behaviour change to a general improvement in educational levels as well as to specific health messages delivered by HEWs; community meetings; improved health services and; to a lesser extent, religious groups and mass media. Furthermore there was evidence of change occurring through positive peer influence; Grandmothers in Messenkella said that families in their area observed their neighbours taking care of themselves and wanted to emulate that. They also heard stories from their neighbours of sick neonates being cured at health centres. And finally behaviour appeared to be changing through greater awareness of unnecessary death: *'We are changing for the sake of our lives, six mothers have died last year due to delivery complications and the community has become cautious about such things.'* (mother in Boset, Oromia).

The baby hat. During most of the project lifetime, volunteers brought a baby hat to newly delivered mothers. The baby hat fulfilled a cultural obligation to bring a gift for the newborn and it appeared to be valued by community members. Knowledge of the hat appeared to be widespread and in this sense may have facilitated access for volunteers, who became known as the lady who brings the hat. Unfortunately, it would not be feasible to scale-up this practice at a national level.

Community mobilisation meetings Community mobilisation meetings were introduced late in the study, and some staff believed that in some areas, this late introduction contributed to lack of community support for the project. The mobilisation meetings lacked a clear strategy and suffered from high turnover of community attendees because there was an expectation of an incentive for participation which was not fulfilled. Although some staff believed the mobilisation meetings were instrumental in changing community help seeking behaviours, it was argued by others that their effects were short-lived.

Community participants also discussed community meetings although it was not always clear whether these meetings were part of the COMBINE intervention or other government initiatives. One group of fathers (in Oromia) viewed community meetings as instrumental in bringing about behaviour change, and several mothers said they found the meetings helpful. One mother commented that she committed to going for check-ups as a direct result of attending a meeting.

Keys to success. When asked what they thought were the factors contributing most significantly to high performance, the PO/PC identified the following:

1. The volunteers; particularly their role in pregnancy identification, birth notification and reinforcing the advice of HEWs.
2. Pregnancy home visits were the key activity
3. The availability of HEWs at health post and the HEW visits, particularly post-birth
4. Commitment of individuals at HEW, PO, Kebele and Woreda level
5. Community ownership of the programme

4.2 At this end stage, how does the community value pregnancy and PNC visits?

In this section we draw on focus groups with fathers and grandmothers of recently delivered babies and on semi-structured interviews with recently delivered women (referred to hereon as mothers).

Study participants were generally positive about home visits. Although some were initially concerned about the evil eye (Box 1), they were gradually beginning to accept visits as a normal part of the antenatal and postnatal experience. However, participants described others in their community who continued to resent the visits and refused to cooperate with the examination of the neonate. These were largely perceived to be families who adhered to traditional religions and/or practices.

Convenience. Several respondents commented that they liked services being brought to their door, particularly since mothers are busy and usually working in the home.

Changing the support dynamic. Traditionally grandmothers (usually the mother-in-law of the pregnant woman) played a significant role in supporting a pregnant women during the antenatal and postnatal period. Fathers (the husband of the pregnant woman) also played a role, particularly in making key decisions concerning health care. Visits by volunteers and the HEWs unsettled this dynamic by introducing an alternative source of support and advice. Some grandmothers, and many fathers, welcomed this change and there was evidence of grandmothers revising their advice so that it was aligned with that of the HEW. Several grandmothers recognised that their daughters or daughters-in-law (referred to hereon as daughters) were more comfortable talking to the HEW/volunteer,

and liked the fact that their daughters had an alternative confidante. This was particularly the case where the grandmother and daughter had a difficult relationship or were not open with each other.

Involvement of family members Involvement of other family members in volunteer/HEW visits was variable. Fathers were often away when meetings occurred and some were briefed later by their wives. Most of the fathers in the study appeared to value the volunteer visits, regardless of whether or not they were present. Several grandmothers in Godino (Oromia) expressed resentment at having been excluded from meetings with volunteers/HEW, but in other Kebeles, such as Kofele (Oromia), the 'rules' were more relaxed and other family members appeared to be more involved.

Gaining knowledge. Advice given during home vists was clearly valued by those who were open to receiving it. In general, this tended to be individuals with more education and less loyalty to traditional customs. In particular community members appreciated the advice they were given on danger signs in neonates. They also appeared to welcome the advice to save up contingency money for transport to health services during and after the birth. And participants described how they found it helpful to have a better sense of when their baby was likely to arrive.

Knowledge imparted by HEWs and volunteers appeared to proliferate via informal get togethers such as coffee ceremonies. Grandmothers in particular said they sometimes discussed ideas and advised each other in such settings. On occasion, volunteer advice was experienced as repetitive: *"You are telling me what I know, don't bore me repeatedly"* (father in Messenkella, SNNP).

There was also evidence that the community sometimes followed advice without understanding why:

Q: Did they tell you the reason why you shouldn't give that mixture to newborns?

A: They didn't tell us about the consequence that might come along if we keep on doing that but we believed that what they told us was important (Mother in Godino, Oromia)

Sometimes the advice was only valued in retrospect, after the safe delivery of a healthy child. Occasionally, it was not valued at all.

The booklet The booklet was generally regarded as helpful, even by those with low literacy. In isolated cases, participants described the book as solely responsible for a particular course of action (such as giving colostrum to the newborn)

Examining newborn Entrenched fear of the evil eye (see box 1) meant that many families were reluctant to have their baby examined. Some mothers clearly had to work to overcome these fears in order to consent to the examination. In some instances volunteers/HEWs were able to assauge fears by spitting on the baby prior to the examination (a traditional practice believed to protect against evil eye); in other instances mothers assuaged their own fears by viewing the volunteers/HEW as exempt from the evil eye because of their training:

'Yes, I would be happy if she could do that to my baby, I know she could spit on him after looking at him/examining since it is the tradition of the area so it would be ok. I wouldn't even mind if she couldn't spit since I already know that she is a trained person.' (Mother in Godino, Oromia)

Those who did consent usually found the examination immensely reassuring. Community members particularly valued the weighing of the baby and the detection of danger signs.

Behaviour change. Participants cited many examples of changes they had made as a direct result of the advice of HEWs and volunteers. Reported behaviour change ranged from attending antenatal visits through delivering at health posts/health centres to hygenic cord care and washing hands before holding the baby.

Those who had adopted the advice of HEWs/volunteers were generally very positive about the changes. In particular, community members saw the connection between improved hygiene and reduced infection. Instruction from HEWs/volunteers also empowered mothers to refuse traditional practices such as Hamessa.

In general community members recognised the health benefits for mother and child. They perceived that babies in their community were sick less often because of the visits and some husbands mentioned that the visits prevented illness and therefore saved them from additional medical expenses.

Coverage by volunteers. Most community participants were aware of the volunteers, but there were mixed reports in focus groups, suggesting that coverage was somewhat

patchy. Several individuals – usually those living in isolated areas - said they had not been visited, while in other study sites the volunteers appeared to be very active, with most participants recalling several visits both before and after birth.

Some volunteers were clearly dedicated, respected and loved, while others were simply not doing their job. At one end of the quality spectrum, a participant described a volunteer who simply wrote things down and left without talking to her. At the other end, there were accounts of mothers preparing coffee for visiting volunteers, and of volunteers being called to assist mothers in labour. In general, the volunteers were felt to be more available and involved, in comparison to the HEW.

Coverage by HEW. As with volunteers, coverage by HEWs was variable. A few participants said they had not been visited and others described cursory attention from their HEW. Some described how the HEW had been unavailable when they gave birth, while others said that the HEW in their Kebele were always available to the community and would always visit even if they were busy. Among those motivated to seek antenatal care, there was also an option of going to visit the HEW rather than waiting for them to visit the home.

Acceptance of HEW visits versus volunteer visits. Some community members (such as grandmothers in Godino, Oromia) felt that HEWs had a greater chance of acceptance than volunteers, simply because they were not personally known to community members.

In many study sites, HEWs were more highly regarded than volunteers because they were better educated, perceived as knowing more and being more professional. The fact that they arrived with equipment such as weighing scales, and the fact that they were paid, were key aspects of their perceived professionalism. HEWs were also often better known for their other primary health care duties such as administering vaccines and teaching on hygiene (such as latrine building). In this sense they transferred their knowledge to the whole community and not only pregnant women, and this was felt to aid their acceptance by the community. Because of their higher level of education, HEW were perceived to play the leading role, with volunteers in support role.

4.3 Are there specific socio/cultural issues that should be considered for these visits in the future?

4.3.1 Traditional roles in pregnancy and childbirth

Expectant mothers, fathers and grandmothers have traditionally adhered to strictly-defined and culturally prescribed roles. The COMBINE project, as well as broader government-led interventions in maternal health care, have required the community to re-examine these roles. The data suggest a state of transition, with some individuals holding on to 'the old ways' while others seek to adopt new roles and ways of behaving. In this section, the focus is on aspects of the pregnant mother, expectant father and expectant grandmother roles that are of consequence for future visits.

Expectant mothers. The data suggest that stigma and shame around pregnancy persisted and that some mothers, especially the first-time, young and uneducated ones, continued to be fearful about disclosing their pregnancy and shy about discussing it with volunteers and HEWs. On the other hand, there was evidence of mothers taking the initiative to visit the HEWs and of resisting pressure from grandmothers to observe harmful traditional practices. The mothers interviewed also demonstrated good awareness of 'new' practices associated with healthy pregnancy and safe childbirth.

Grandmothers. Grandmothers have traditionally expected to play an important role, perhaps more so in SNNP, than in Oromia. They are often among the first to learn of a pregnancy, they support and advise the mother during the antenatal period, and in the case of home births, they play a key role in delivering the baby. Traditionally they have exerted a strong influence on the behaviour of the mother, and their own experience of childbirth is often important in this regard.

There was some evidence of grandmothers substituting 'traditional' advice for volunteer/HEW messages, though this was by no means universal. While one pregnant woman described going for a check-up because her mother-in-law advised her to do so, another grandmother candidly described how her daughter-in-law visited the health centre secretly because she feared her mother-in-law's disapproval. There was a perception among community participants that the influence exerted by grandmothers was gradually declining in some areas.

Fathers The fathers in focus groups appeared knowledgeable about many aspects of pregnancy and neonatal care. They knew less about safe childbirth, and were generally excluded from this activity, because men are not supposed to discover the shameful 'secrets' of women. Their role was largely limited to ensuring transportation to clinic if required. There was evidence of an increasing interest in ensuring that their wives ate well and avoided heavy work during pregnancy, and an increasing awareness of danger signs in neonates, as well as the need to seek immediate help. Several men said that since they had been educated, they played a greater practical role in caring for their pregnant wives, in particular providing nutritious food, and saving money for the birth. In general fathers continued to be uninvolved in practical aspects of caring for the newborn, with many subscribing to a prevalent belief that men are 'too strong' and risk harming a fragile infant. Involved fathers clearly risked social ridicule because of cultural rules dictating baby care as 'women's work'. There appeared to be a practical limit to involvement in volunteer/HEW visits because men were often absent at these times. Several men expressed interest in volunteer/HEW messages and supported their wives in adhering to the advice, but on the other hand, there were reports from HEWs of fathers obstructing visits or refusing to let their wives attend antenatal care. The PO/PC's noted that fathers are dominant and if a father refuses his wife permission to seek care, she often had little recourse.

4.3.2 Treatment seeking

The data suggest a trend towards seeking care and treatment at government health facilities, rather than from traditional healers or birth attendants. In some areas (such as Godino, Oromia) there was evidence that traditional healers were no longer feared, and were even censured (grandmothers in Rufo Chancho, SNNP) because of the harm they caused. However, elsewhere (e.g. Boset, Oromia), volunteers said that traditional healers (wogesha) still posed a challenge because they lived within the villages and were often a more convenient source of help. They felt that some people still feared that if they ignored the Wogesha they would be cursed. Some HEWs also reported that community members still delay seeking treatment and many are unaware of danger signs.

4.3.3 Traditional beliefs

Box 1 describes the key beliefs that have traditionally dictated child care practices.

BOX 1: Key traditional beliefs

Traditional herbs, remedies and practices.

- **Hamessa.** Traditional herbal drink given to babies in SNNP to prevent the fontanelle ('sammo') from sinking. It is also thought to protect the baby against illness.
- **Heto.** Traditional herb preparation used in Oromia. It is eaten by the mother to prevent the baby being born with 'shameful' defects. (GM Kof).
- **Wugat.** Condition treated by traditional healer placing burning wood on the affected area (SNNP)
- **Buateto.** In SNNP, pregnant woman might visit a wogesha (traditional healer) who would massage her belly with butter. This is also done for neonates.
- **Hobeta.** In Oromia (kofele and Boset), the new mother is not expected to wash until the 4th or 5th day after birth, when female neighbours and family members bathe her in traditional herbs, massage her with butter and share a special meal.
- **Traditional care of neonate practices. I**mmediate bathing of infant in cold water, forcing the neonate to swallow butter, rubbing butter on the cord, feeding the baby a sugar solution, giving the baby Hamessa (see above), keeping the baby indoors, and not allowing non-family members to visit the baby.

The evil eye ('Ejenema' in Oromia, and 'Ngnato' in SNNP)

- This is the belief that certain individuals, known as 'Buda' can give newborn babies the evil eye, particularly if they see the baby inadvertently. The evil eye is believed to cause failure to thrive and a range of sicknesses. In places (grandmothers in Messenkella, SNNP) the belief was so strong that a Buda could give the evil eye just by seeing the baby's food. Spitting on the baby's forehead prior to looking at it or holding it, is believed to protect against the possibility of harm due to evil eye.
- Effectively this means that, only family members, and those who attended the birth, are allowed to touch the baby until 1-2 months after the birth. It also means that mothers are expected to remain indoors with their baby until this time.
- Buda is perhaps the most tenacious of the traditional beliefs and although some participants said that it was in decline, there is still a pervasive fear associated with taking newborn babies outside the home, and of allowing them to be examined by strangers. These fears are attributable to lingering superstitions about the causes of

illness.

Amechisa

- In E.Shoa, amechisa is a traditional religious system of belief governed by traditional spiritual leaders (also known as Amechisa or Aba Ayantu). The belief system dictates a set of rules related to childbirth and the post-natal period. The rules centre on the Amechisa ceremony at which the "Aba Ayantu" blesses the infant and names him/her. This usually takes place around 40 days after the birth for a boy and 80 days for a girl. The parents bring money (a few birr), Tela (traditional drink), bread and such as a gift for the Aba Ayantu. Until the baby has been blessed, the mother and baby live in exclusion and no one except the mother may touch the baby

Traditional beliefs about pregnancy, childbirth and postnatal care

In addition to the specific beliefs described in Box 1, a number of traditional practices around maternal and neonatal health were documented.

Disclosing pregnancy. Traditionally there have been cultural taboos about openly discussing pregnancy. As one mother commented, *"talking about pregnancy is shameful"* (Boset, Oromia). Fear of miscarriage and fear of the evil eye were also strong influences. However, grandmothers in Oromia and SNNP perceived a generational shift in willingness to disclose pregnancy. They contrasted their own 'shyness' during their pregnancies with the willingness of their daughters to disclose their pregnancy to significant others, particularly husbands. Many participants believed that these days, expectant mothers disclosed earlier although it still appeared common for a mother to admit she was pregnant only after others had noticed her swollen belly. On the whole, embarrassment and shame around pregnancy was believed to be declining, although it was noticeable that grandmothers and fathers perceived a greater shift than the mothers themselves. The fact that antenatal check-ups were becoming normalised may be reinforcing the willingness to disclose at an earlier stage in the pregnancy.

Antenatal care Historically there have been strong and specific traditional beliefs about what women should and should not eat during pregnancy. Prohibitions were grouped around certain types of risk, principally that the baby would be born too big or with a birthmark, or that the baby would experience pain during delivery. There was remarkable

geographical variation in the types of food prohibited. Other foods were encouraged because they were believed to fulfil a purpose such as chewing a bitter wood to clean the foetus (Kofele, Oromia). Participants suggested that traditional beliefs were gradually being replaced by information and teaching from health workers (and elsewhere) and some grandmothers (Godino, Oromia) said they had observed significant generational change. The majority of participants said that these days mothers generally ate what they wanted and sought a balanced diet. As one mother commented, *"I did eat despite the tradition"* (Godino, Oromia). In some areas (e.g. grandmothers in SNNP), participants described changes in terms of better quality and range of foods, rather than a lessening of taboos. There was good awareness of the need to eat iron-dense foods, dairy as well as fruit and vegetables and many made the link between nutrition during pregnancy and having a healthier baby. Commonly though, participants said they were restricted in following this advice because of a limited household budget.

Traditional remedies such as Heto are discussed in Box 1. Most participants described these as practices of the past, replaced by modern medicine and HEW advice. There was also greater recognition of the need to avoid heavy workloads during pregnancy.

Delivery at health facility versus delivery at home

In SNNP, mothers and grandmothers said they preferred to give birth at home and most of the recent births they recounted had taken place at home. Fathers were more amenable to considering delivery at health facilities because they were seen as safer and cleaner and their wife would receive assistance. The PO/PC believed there was a prevailing cultural belief in most communities that women who required help with delivery were simply being lazy. Home births were seen as more comfortable and were regarded as "God's will". Births at health facilities were seen by some as unnecessary, and therefore, as a waste of money. That said, community participants said they would go to a health post or facility if the labour was taking too long or if there were complications (e.g. heavy bleeding or baby not in the right position). Since transfer to a health post or health centre usually only occurred in this context, the news that a woman was being transferred tended to alarm community members, who generally assumed that the labour had gone wrong. The decision to transfer to a health facility was generally taken by the father, usually on the advice of the mother-in-law. Increasingly, volunteers were said to be included in making the decision.

Attitudes towards delivering at health facilities were generally more positive in Oromia, and there was stronger evidence of behaviour change. Here participants were more likely to believe that labouring mothers should be taken to a health post as a matter of course, rather than only in an emergency. Many believed that fewer women were dying these days due to an increase in facility deliveries. However, the 'old' view that 'peaceful' home births were 'God's will' persisted among some participants, particularly grandmothers who had experienced straightforward home births themselves. There were also accounts of labouring women visiting a traditional healer on the way to the health facility 'as a precaution'.

Among women who had planned to deliver at a health facility, a proportion ended up delivering at home because the birth was quick, because the husband was not home, because the means of transportation were not available, because there were insufficient community members to assist with transportation, because the local ambulance driver had switched off his phone, or because the road condition was too poor to allow for transportation.

Motivations for seeking a health facility birth were varied. Some mothers said they wanted it because they had had a difficult labour or a difficult birth previously. Other mothers said they sought *"better service and better help".* Aspects of health facility deliveries appreciated by the community included: the availability of equipment and knowledge of what to do in case of complications; safety and cleanliness; and constant support from staff. There was evidence of peer influence, for instance mothers learned of women who had experienced complications during home deliveries and did not want to experience this themselves. There was also a perception that home births had been 'outlawed' by the government.

Opinions of the quality of care at health posts and facilities were varied. One woman described being made to walk around when she wanted to rest, others said they felt *"disgusted to sleep/sit on that bed which stretches your legs"* and which exposed them; some said they were left on the bed for a long time. Some women also feared surgical intervention and believed that staff at health facilities opted for this too quickly. Others felt that staff at health post delayed referring mothers to health facilities.

Staff attitudes also varied. There were reports of good care but also reports of labouring women being insulted and abused by health workers. Not surprisingly mothers felt that the care at health centres was less supportive compared to that of relatives at home.

Care of the newborn.

Community participants perceived significant change in terms of care of the newborn baby. Traditional practices were focused on protecting the mother (for instance, against evil spirits); according to PO/PCs, the neonate was traditionally viewed as not yet fully human and therefore not yet requiring protection. This view was thought to be in decline.

Traditional practices (see Box 1) were being replaced by HEW advice and many participants (mothers, fathers and grandfathers) accurately recalled the 'new' advice such as delaying the washing of the infant and then washing it in warm water and soap, using a sterilised razor blade and thread to cut and tie the cord, giving the baby colostrum and breast milk only, not putting butter on the cord, wrapping the baby in clean cloths and changing clothes regularly. These practices were evident in birth stories told by interviewed mothers, fathers and grandmothers. There was a sense of loss surrounding the decline of these customs. One mother expressed sadness at the fact that she had not used butter on her second child but felt *'there must be a problem, otherwise they wouldn't say that'*.

Herbal treatments were preferred by the community partly because they can be prepared and administered within the home. In SNNP the practice of Hamessa is a concern because of possible harm to the digestive tract, the risk of infection introduced by non-sterile utensils, and because once a baby is given Hamessa it is believed to be inoculated against disease, thus negating the need to seek professional health care.

The tradition of Hamessa was talked about frequently. Most participants felt the practice was in decline, particularly where protestant religion was becoming dominant. Some commented that it was now difficult to obtain, although one father said pharmacies now stocked a version of it. He was probably referring to antibiotic syrups which, according to the POs, some parents consider as a replacement for Hamessa. HEWs often had a good sense of whether Hamessa was being practiced because they would observe the traditional implements used to make it during their home visits. One HEW estimated that about 5-10% of the community still give hamessa to the baby. HEWs and fathers believed it was predominantly grandmothers who continued the practice, arguing *"we raised you with Hamessa".* There was a suspicion that some grandmothers gave Hamessa secretly without the mother's knowledge. This was because of a fear that without Hamessa the baby would be left unprotected. However, community members were beginning to view vaccines as a valid replacement.

The fear that others might bring harm to a newborn baby by looking at it or touching it, continued to be prevalent. Where community members perceived that it was no longer acceptable to believe in the evil eye, they tended to replace it with other reasons for protecting the baby from strangers, such as hygiene. For instance, protestant grandmothers in Rufo Chancho (SNNP) explained that their religion preached against the existence of the evil eye, but they still believed that only parents should hold the baby because it was sensitive and might get *"cold air".* Indeed, fear of the baby getting cold was an additional reason why mothers were reluctant to have their baby examined. One HEW estimated that for every 15-20 mothers, three would refuse to let their baby be examined.

Fear of the evil eye impacted on the willingness of families to have their babies examined and to seek help for danger signs. In general, HEW and volunteers, because they were "sent by the government", were increasingly viewed as exempt from suspicion of having the evil eye. This meant they were also exempt from traditional rules about who can visit the baby: *"I would not let other people see my baby but I am willing to let volunteers and HEWs see and examine my baby."* There was evidence that some families permitted the examination despite their discomfort: *"I don't want the volunteer see and touch my baby but it is not appropriate to tell her that. My husband is not happy with that as well but he just keeps quiet."* (mother in Kofele, Oromia). One woman said she feared the examination not because of the evil eye, but because the HEW might scold her for having a skinny baby. In Godino, a mother described how the volunteer had been allowed to visit but had stood in the doorway because the priest had not yet sprinkled holy water on the seventh day (a Christian Orthodox custom).

In Oromia (E.Shoa) a proportion of the community continued to follow Amechisa, but community participants perceived that the number of strict adherents was in decline and many felt that Amechisa no longer precluded postnatal visits. Increasingly the practice was viewed as backward: "those traditions deceived our forefathers" (fathers in Kofele, Oromia). In accounts given by mothers, Amechisa was talked about as a source of conflict within families. For instance, one mother said her own mother (the grandmother) was angry that she defied the 40-day exclusion rule in order to take her baby for a check up. The baby cried a lot after the check up and the grandmother blamed her for taking the baby out, saying*: "we have raised all these children with the will of God and you should do the same."*

A strong influence on the level of adherence was the attitude of the local Aba Ayantu (spiritual leader). Community members were afraid to stop the practice incase their Aba Ayantu refused to bless their child; and an unblessed baby was considered to be unprotected from evil. While some Aba Ayantu took a pragmatic approach and relaxed the rules on health grounds, others refused to compromise. During the lifetime of the COMBINE project, there were several instances in which HEWs met with Aba Ayantus in order to resolve conflict. The PO's/PC's believed that the Aba Ayantu's still held enormous power over the community.

POs and PCs noted practical barriers to the examination of infants. Mothers and their babies were often confined to a dark part of the house making it difficult to identify danger signs. Volunteers sometimes used the light of their mobile phones to improve vision but this was not ideal.

Care of mother after birth.
In interviews with mothers in Oromia there was evidence of interesting adaptions to the practice of Hobeta (see box 1). All the mothers said they had undergone the ceremony but one refused the herbs, another refused to be massaged with butter, and another did not wait 4/5 days before washing herself. Mothers were usually still expected to stay indoors with their baby for the first two weeks to a month and were not expected to fulfil usual domestic chores. There was a perception that increasingly mothers had freedom to move around within the house and to keep better hygeine.

Breastfeeding practices. There was strong evidence of change in breastfeeding practices with community members almost all aware of the importance of giving colostrum to the baby, of washing the breast before feeding and of breastfeeding exclusively until 6 months. Changing practice was also evident in mother, father and grandmother accounts of recent births. In Oromia, foods such as chicken and eggs were prohibited according to the rules of Hamechisa, but there was a perception that in practice, many lactating women ate what they wanted.

4.3.4 Living conditions

Poverty influenced neonatal care in several ways. Families with very limited incomes said they could not afford to provide a balanced diet for their pregnant or lactating women. Lack of funds sometimes deterred families from taking labouring women to health posts or led them to resist HEW referral to health centres/hospitals, particularly if treatment

required staying near to the health centre/hospital. Finally, poor living conditions meant that babies were exposed to germs and bacteria, making it difficult to ensure their health.

4.4 What are the enabling and constraining factors for volunteers in working with HEWs and PO?

4.4.1 Volunteers described a range of enabling and constraining factors that influenced their working relationship with HEWs. These are summarised as follows:

HEW workload and availability As discussed in section 4.1, the HEW have a heavy workload and were occasionally not available to volunteers when needed.

HEW and PO commitment. Volunteers were attentive to the level of commitment shown by their HEW and PO and this had a strong impact on their own motivation. For instance, the PO/PC's noted that if a volunteer promised a family that the HEW would visit and then the HEW did not turn up, the volunteer would feel she had let down the family. Occasionally volunteers reported that the presentation of cards to the HEW was met with annoyance because the HEW was then obliged to make a visit.

Supportive supervision. The volunteers clearly appreciated active support from their HEW and it was important to them that the HEW respected their work. They described supportive supervision as: correcting mistakes and filling in gaps in knowledge, providing positive feedback and following up on their work. Volunteers in Gerbicho (SNNP) felt that supervision by the HEW was critical in helping them to reach their targets. Conversely the volunteers felt de-motivated if their HEW criticised them in public.

The volunteers were also appreciative of supportive POs. They described supportive POs as those who: met regularly with them, dealt effectively with problems, encouraged them in their work, gave them skills and confidence to approach households, and ensured that the HEW was active in her duties. Some mentioned that the continuous nature of the support was more helpful than isolated trainings. Role playing visits to families was specifically mentioned as a helpful training strategy used by POs. Volunteers in Rufo Chancho (SNNP) described how their PO would make unannounced visits to their community to check up on their work. Fear of these visits appeared to motivate them to work.

Volunteers in Rufo Chancho (SNNP) noted that good communication between the PO and HEW was helpful to the volunteers. In several volunteer focus groups, participants said their HEWs were good at handling difficult situations and responding quickly to urgent problems. For instance, volunteers in Rufo Chancho described how an HEW had arranged an ambulance for a mother in a difficult labour.

Community sensitisation by HEW and PO. Several volunteers mentioned HEW meetings with the community as an enabling factor. Volunteers in Godino (Oromia) described how their HEW had called all married couples in the Gere for a meeting. She explained the intervention and addressed fears. As a result the community, including their husbands, were more supportive of their work. In Kofele (Oromia), volunteers described how a PO came to help persuade a mother to seek help for a sick neonate. And in Boset (Oromia), the volunteers described how their PO had met with local Amechisa leaders and in doing so had helped to address a barrier to their work.

Telecoms Several volunteers noted that most volunteers used their mobile phones to communicate with HEW and that this had enhanced their working relationship.

HEW working with volunteers The HEWs were asked about their working relationship with volunteers. In particular, the HEWs appreciated the work of volunteers in bringing women to the health post, and in identifying pregnant women. They felt that volunteers supported them, not only in COMBINE activities but in other packages too.

The HEW were reliant on the volunteers but felt their performance was variable and highly influenced by their level of motivation. Some felt that many volunteers actually wanted to give up their job, though most continued to work. It was reportedly common for volunteers to disappear from their work because of personal problems. Other HEWs believed that volunteers were loyal and committed but there were simply not enough of them: *"we will face difficulties if we miss a single volunteer"* (HEW, wolenchiti, Oromia). Occasionally when targets not being met, HEW said they stepped in to do the work of the volunteer: *"we will not let mothers suffer".*

4.4.2 General enabling and constraining factors for volunteers

Volunteers described a range of factors that enabled or constrained their work:

Community beliefs about maternal and neonatal care. Cultural beliefs and expectations affecting implementation are discussed in detail in section 4.3. The focus here is their impact on volunteer work.

Most volunteers commented that it was still difficult to identify pregnant women in any systematic way. There was widespread reluctance among women to reveal a pregnancy – even to husbands and mothers-in-law - because of fear of miscarriage, fear that the evil eye might harm their baby or because of shame/embarrassment. Although this reluctance was thought to be gradually declining, it was still rare for women to approach volunteers themselves. Thus volunteers were obliged to keep a look out for visibly pregnant women in markets, at social events, religious gatherings or during community meetings. They had to rely on gossip and some made systematic use of the one to five networks to glean information. Although volunteers were supposed to go from house to house seeking pregnant women, it appears that few actually did this. Volunteers said that at the beginning, women would often be offended or deny their pregnancy when confronted, saying 'Who told you?'. With time however, suspicion of volunteers had gradually lessened.

Fear of the evil eye continued to impact on the work of volunteers. A common fear among volunteers was that if a baby they had examined later died, they would be blamed for giving it the evil eye and at least one volunteer said this had actually happened. Several volunteers described having to go ahead with examinations despite the visible discomfort of the mother.

Community attitudes towards volunteerism. The volunteers generally perceived themselves to be less accepted than the HEWs. Some attributed this to community skepticism that an individual from within the community could have the requisite knowledge and skills. Indeed, being known within the community was seen as a disadvantage where community members were more willing to accept advice from strangers. For instance, grandmothers in Godino (Oromia) talked about a traditional culture of "awekush nakush", or avoiding people they know. But on the other hand, volunteers appeared less hesitant and more able to access clients who were neighbours,

friends or family members (i.e better known to them). Being known also meant being trusted, and feeling trusted gave volunteers greater confidence when examining babies.

In some study sites, participants mentioned that volunteerism is not particularly respected in their community. In addition community members initially found it difficult to believe that volunteers were not being paid. A volunteer in Boset (Oromia) described how her neighbours said: *"look she is about to go and wander around and she is paid for that".* This led to a perception among community members that volunteers were simply paid to 'report' women to the HEWs and that they were not bringing any benefit to the women they visited. Particularly in the beginning, volunteers received insults from those who were resistant to their messages. Men (including the husbands of volunteers) were thought by some to be particularly resistant, with some refusing to believe that the volunteers were not paid for their work. Another volunteer in Boset described the men in her gasha/gere saying: *"it's just because you have nothing to do in your house that you go to other people's houses and wander around. We are busy unlike you so you just leave us alone."*

A few volunteers described resorting to rather heavy-handed tactics in order to persuade obstructive mothers, including threatening to sue them, while the approach of others was to be polite and to bring small gifts such as milk. A few volunteers said they would send another volunteer if they encountered a problem with a particular women.

In general though, community attitudes towards the volunteers had improved over time. Volunteers felt this was partly a result of misconceptions about their role being addressed at community meetings. In addition, stories of volunteers helping to save the life of a baby tended to spread within the community and helped to change attitudes. Finally attitudes towards the volunteers improved in line with growing acceptance of changing practices. As a grandmother in Garbichu (SNNP) commented *"we don't hate what time and God brought for us".* Volunteers in Messenkella (SNNP) said they were now known as *"someone who comes from the Woreda to teach".*

Time demands. Volunteers mentioned that it was sometimes difficult to juggle their volunteer work with domestic responsibilities, particularly during planting and harvesting seasons. They felt they performed better in the dry season (when there was no farming work to be done), and in school holidays because their children helped them with their other work. They might also be away from work due to sickness, maternity leave or other personal reasons. However, most volunteers said visiting mothers was their priority.

Volunteer confidence, education and age. A number of study participants described the volunteers they knew as shy and lacking in confidence. In addition some volunteers were hesitant because they feared being given an 'unpleasant welcome' (grandmothers in Godino, Oromia). In Oromia culture for instance, visitors are not expected to enter a house unless welcomed, and in families resistant to volunteer work, the risk of rejection intensified. Educational level appeared to influence the confidence of the volunteer, and relatedly, the confidence of the client in the volunteer. This was particularly true when the client was more educated than the volunteer. However, volunteers were perceived as trained and sent by the HEWs, and this accorded them a level of respect. Several community participants commented on the age of volunteers. While younger women were perceived to have greater energy for the job, older women were thought to command greater respect as elders.

Access to support and resources Several volunteers described how they initially lacked confidence and were fearful of making mistakes, although most said they had grown in confidence with time. PO/PCs noted that where volunteers lacked skills or confidence, visits were sometimes reduced to simply confirming that the mother was breastfeeding.

Lack of literacy skills concerned some volunteers, particularly in relation to the training and in using the COMBINE card system. However most found the card system straightforward and said it provided a structure for their work. Many said that their children helped them with the cards, and the only real problem mentioned in relation to the card system was that mothers sometimes misplaced their cards. Despite low literacy levels, volunteers generally said they liked the book, which provided a focus for discussion with mothers and reinforced volunteer messages.

Volunteers often referred community members to health posts or health centres and felt that the availability of free medicine greatly facilitated their work in persuading mothers to seek help from health facilities. In Rufo Chancho (SNNP), volunteers felt that the introduction of a free ambulance service had had a similar effect. However, volunteers felt let down when medicines were not available or when health centre staff members were unhelpful. Volunteers in Boset were particularly negative about their local health centre and felt that the staff discriminated against rural patients.

Relationships with the Kebele and Woreda leadership Volunteers presented mixed views about their relationship with local government structures. Some volunteers said the Kebele leadership was very supportive of their work, for instance following up on inactive volunteers and working to change community attitudes. Community meetings held by government were felt to be particularly effective. Volunteers in Boset (Oromia) noted that the one to five network facilitated their work by helping the community get to know each other. In Rufo Chancho and Garbicho (both SNNP), volunteers reported that local leaders had not been particularly helpful but they acknowledged that they had never directly asked for support. Elsewhere (Kofele and Boset, Oromia) volunteers felt unsupported, undervalued and unacknowledged by local government.

Distance to households As discussed in section 4.1, long distance and difficult terrain between households as well as from home to the health post, made the work challenging for some volunteers, particularly those who were older. Community members who lived near to their volunteer appeared to receive a better service. Several volunteers wished for shoes and umbrellas so that they could move about in rainy season with greater ease.

4.4.3 What motivates the volunteers?

A number of volunteers did work that went beyond their basic remit and many worked hard despite the lack of renumeration. Volunteers cited a range of motivations:

Public recognition and status. Having status, and feeling accepted by the community motivated volunteers (and HEW). Public recognition during community meetings was said to be very motivating, particularly when women who had been helped by the volunteers, publicly conveyed their gratitude.

A positive perception of volunteerism. Some volunteers regarded their work as *"storing up reward in Heaven".* PO/PCs noted that volunteers liked helping their own people. They noted that volunteers selected as a result of nepotism were less likely to have a volunteer spirit.

Seeing value in their work was important. Volunteers in Kofele (Oromia) recalled how they did not see their work as valuable until Save the Children persuaded them of this fact.

A sense of responsibility motivated volunteers. Many felt accountable to the community, and responsible for saving lives. Some viewed their responsibility as God-given. Those who viewed their work in this way tended to give it priority.

Witnessing positive change was clearly motivating to volunteers. Over time they sensed their jobs were becoming easier and that the community was more co-operative. It was satisfying to volunteers to see women following their instructions and taking better care of their babies. Volunteers were immensely proud of the times they had played a role in saving the life of a newborn. Conversely, witnessing the unnecessary deaths of mothers and babies was also motivating to the extent that they realised their own valuable role in preventing deaths.

Personal relevance. Many volunteers were of child-bearing age or were mothers to women of child-bearing age. Thus their work was of personal relevance and some perceived a personal benefit in terms of better health of their own children and grandchildren.

Having a broader role in the community. Some volunteers were also members of the one to five network and they said they liked having a broader remit than just COMBINE. Where the volunteers and HEW had a good working relationship, HEW sometimes called on them to assist with other health campaigns (e.g. malaria). Having a job that brought them out the home was a motivating factor for some women.

Training and skills development was frequently mentioned by volunteers as a motivating factor and in general the volunteers wished they had received more of it. Although the per diem was clearly part of the appeal, volunteers were also motivated by gaining skills (e.g. in identification of danger signs) and by receiving certificates.

The 'Ekub' savings club, which operated during their fortnightly meeting with HEW was a source of motivation.

HEW and PO had a significant impact on volunteer motivation. Where HEW and PO were working effectively, the volunteers were motivated by the fact that they were playing a role in a well working system. HEWs, in turn, were motivated by working with hard working, systematic and motivated POs, and by PCs who were effective technical mentors.

4.4.4 What de-motivates the volunteers?

Lack of compensation appeared to be the significant demotivating factor. It was frequently mentioned but of the six volunteer focus groups, only those in Messenkella (SNNP) expressed significant dissatisfaction because of it.

Some volunteers described how they were '*getting tired'* of working for free. They felt the lack of remuneration was particularly galling given community suspicion that they were paid: *"we get insulted for nothing"* (volunteer in Messenkella, SNNP). In Messenkella, volunteers expressed resentment at having to work for the PO and HEW who are themselves paid.

Many volunteers bemoaned the lack of a refresher training. It seemed likely that the training was valued mainly for the associated per diem, but volunteers also perceived it as an indication that the COMBINE project valued their work. In some Kebeles, volunteers were demotivated by a belief that, unlike them, volunteers elsewhere had received umbrellas and coats. Visiting mothers empty handed was a concern for several volunteers. They felt that mothers expected material gain from volunteer visits and yet they had nothing to give them.

Lack of financial compensation and refresher trainings was a source of discontent among the husbands of some volunteers. Some were resistant to their wives working for free: As one volunteer in Messenkella said: *"Even our spouses have started complaining saying 'what good do you get out of it?".* Other demotivating factors were mentioned briefly, including feeling unsupported by the Kebele and feeling that women in the community were not following their advice.

Towards the end of the project volunteer motivation was said to wane, partly because they had expected a second training (which did not occur), and partly because of uncertainty about what would happen after the end of the project.

4.5 What are challenges for the future implementation of neonatal interventions (pregnancy and PNC home visits, sepsis management).

Based on the findings above and the views of project staff and community members, a number of challenges for future implementation were identified. The key challenges are as follows:

1. *COMBINE sites show great variation in terms of when community members can be assured they will find an HEW at the HP. The availability of HEWs impacts on consistent access to services. Substantial coverage improvements in ICCM and sepsis management will require overarching solutions to this issue at the highest levels of the FMOH.*

2. *A challenge for effective sepsis management will be to ensure that HEWs are able to visit newborns within two days of birth. This will continue to be a challenge where HEWs have significant other responsibilities.*

3. *Woreda and Kebele officials can play a key roles in facilitating HEW MNH activities by undertaking community mobilisation, by solving disputes between volunteers and the community, and by ensuring that HEWs have the resources and protected time to fulfil their responsibilities. In practice support for HEW from the Woreda and Kebele was variable. A future challenge will be to ensure more consistent support.*

4. *For sepsis case management to be successful at the community level, PHCUs must be functional, with an adequate mix and number of staff, reliable supplies of essential drugs and equipment, the will and capability to implement systems that maintain standards and improve quality, and a focus on patient satisfaction. COMBINE's success in efforts to work with PHCU and Woreda Health Offices to strengthen PHCU functionality, was strongly dependent on individual initiative on the part of assigned COMBINE project staff as well as individual PHCU staff commitment and will need to be further institutionalized in order to be successful.*

5. *The volunteers played a crucial role in pregnancy identification, alerting the HEWs to deliveries and reinforcing HEW advice on antenatal and postnatal care. Keeping volunteers motivated in the absence of financial remuneration was a significant challenge, and is likely to continue be an issue in future.*

6. *COMBINE has had considerable success in overcoming entrenched cultural practices of seclusion that prevent families from taking newborns out of the home and/or allowing non-family members to see or touch them. The experience of COMBINE was that behaviour change filtered through the community as families witnessed, or became aware of, babies being saved through early detection of danger signs and treatment at health facilities. A challenge for scale-up will be confronting cultural practices in new intervention areas.*

7. *Similarly, culturally driven reticence to disclose pregnancy is likely to be a challenge in new intervention areas. The experience of COMBINE was that as antenatal care seeking became normalised, women were motivated to disclose their pregnancy despite their reservations.*

8. *COMBINE found that individuals who lived near to health posts and HEWs tended to receive a better service. Ensuring equality of access for community members living further away will be a challenge, particularly where roads are non-existent or in poor condition.*

4.6 What are the suggestions (opportunities and recommendations) for the future implementation and scale up of neonatal interventions (pregnancy and PNC home visits, sepsis management).

Project staff and community members made a number of suggestions for the future improvement of services. The key suggestions are summarised in Box 2.

Box 2: Key recommendations for future implementation

Generating community support

- *Implement community mobilisation strategies from the outset and ensure that this is a strong and ongoing component of the intervention. Ensure that community mobilisation strategies are flexible and adapted to the needs of each community.*
- *At an early stage, meet with religious leaders, traditional healers and other key stakeholders to ensure their support.*
- *Address cultural beliefs related to care-seeking and examination of infants during the early neonatal period. Beliefs and practices may be addressed via BCC*

strategies but will also involve continued work by HEWs and the HDA through the Kebele development teams.

- *Generate sense of pride and ownership among volunteers (in future, the HDA) via public recognition of their work. Address the issue of material incentives from the outset so that volunteers/HDA agree to the role understanding that they will work not for financial reward but for the good of their community. Encourage the community to demand a good service from their volunteers/HDA.*
- *Reward high performance and use social events such as coffee ceremonies to generate a 'team' identity. Use encouraging and constructive feedback to further support the volunteers/HDA.*
- *Consider written agreements with volunteers/HDA to ensure a commitment to their responsibilities*
- *Consider expanding the remit of volunteers (e.g. examination of pregnant women prior to visiting health centre), in order to provide greater support to the HEW*
- *Provide ongoing training for volunteers to ensure that their skills stay up-to-date.*
- *Ensure clear mechanism for identifying and training volunteers to replace those who wish to end their service after two years.*
- *Consider a role for male volunteers*
- *Establish positive roles for grandmothers and husbands, and specifically target grandmothers and fathers in BCC campaigns*

Problem identification and demonstrating effectiveness

- *Ensure a strong M&E system with clear benchmarks and targets. The M&E system should be designed to enable quick and accurate identification of problems with performance.*
- *Institute regular checks on activities within the community, particularly in relation to postnatal care visits. Establish ways of cross-checking reports on community activities.*

Strengthening capacity of key personnel

- *It is possible that a strengthened HDA will free up HEWs to assume more skilled preventive and curative roles.*
- *Provide closer support and post-training supervision to HEW who are new to sepsis management. Consider repeat trainings and prioritise support to poor-*

performing health posts.

- *Restrict responsibility for sepsis management to HEWs who are capable of delivering it reliably.*
- *Strengthen focus of the PHCU on MNH services and on sepsis management in particular. Ensure greater availability of female health professionals to assist with deliveries*
- *Strengthen the support of PHCU to HEW.*
- *Train hospital staff on IMNCI and establish mechanism whereby hospital staff (rather than the Woreda) provide technical support to Health Centre staff*

Strengthening mechanisms for service delivery

- *Ensure strong engagement at Zonal level. Institute regular evidence based review meeting with Zonal and Regional Health Bureau to discuss issues related to service coverage and quality and to compare delivery across Woredas.*
- *Ensure support from key stakeholders at Woreda and Kebele level*
- *Extend the opening hours of health posts. Ensure that one HEW is always available at the health post. Address key resource issues at health posts such as water supply and refrigeration.*
- *Ensure stronger accountability of HEWs to the Woreda.*
- *Align the IMNCI protocol for sepsis management at the health centre level with the ICCM protocol at health post level.*
- *Strengthen the ambulance service.*
- *Use mobile phone technology to strengthen communications between HEW and volunteers*
- *Ensure that drugs are always available at the health posts and establish an effective re-supply system from health centre to health post*
- *At health posts, possibly provide a wider range of medicines, as well as diagnostic services and further medical equipment.*
- *Improve the quality of service at health centres.*

Intervention package

- *Ensure that intervention spans continuum of care, including maternal as well as neonatal health.*
- *Include kangaroo mother care, asphyxia management and continued promotion of*

institutional delivery.

4.7 What are PO/PC challenges and recommendations re. logistics, M&E, supervision, and reporting (within health system, not COMBINE). Interviews/discussions.

Re: Logistics

I. Challenges:

- **Poor Logistics management:**
  - No responsible body at all level (Zone, woreda, HC) that monitors stock balance, drug utilization, how drugs are kept(stored)
  - Drug distribution is not based on demand, it is rather quota based (sometimes non malaria areas get RDT kit and qoartem in bulk). And the system also lucks flexibility to shift drugs from where demand is low to area where there is high demand.
  - Unfair distribution are observed in many places, for example, one PO said, in one HP HEWs had thermo-meter which could enough for the whole district while some HPs have no thermometer in the same district.
  - The system is not strong to rule out stock out. HEWs usually do not request until they get out of stock. They lack knowledge on how to use bin card and the system does not support them on logistics management (poor forecasting, handling, distribution, resupply, & reporting)

- **Poor storage at HP**
  - Facility not suitable- no table or chair, no place to store drugs appropriately. A lot of expensive materials are stored at HP but no doors in some areas, keys not available.
- **Lack of transport (From PHCU/district health office) to health post**. As a result HPs run out of stock while they have their quota at PHCU or district health office. Geographically challenging or remote health posts are highly affected by this as they do not usually get drugs on time and are not supervised at all.

- **Knowledge and skill gaps**: There was no orientation on how to use the items distributed to HPs. Many deliveries such us autoclave, delivery kits were kept in HPs without providing any service that they were intended for and some items were being used for other purposes. E.g some metal items are used as cooker and things such as kidney-dishes are used as serving dishes.
- **Poor system to hold HEWs accountable for the items delivered to HP**. When HEWs get transferred or resign for various reasons, they sometimes take some items with them. There needs to be a system to hold HEWs accountable on goods they receive and there also need to be annual inventory

II. Opportunities re-logistics:

- Availability of issuing vouchers at HP: Any item can directly be issued to HEWs using the issuing vouchers and it will be possible to hold HEWs accountable for any misuse
- Emerging health centers at rural areas: Items can be transported to HC level and HPs can collect their items from nearby HCs
- Recently introduced bin card system at HP level. Though needs some work it will improve the logistics management system
- Presence of Logistics Management Information System (LMIS) and integrated pharmaceutical logistics system (IPLS) in the government structure. Strengthening this structure and getting the structure functional at HP level with adequate technical support to HEWs will bring solution to most of the existing problems.
- Presence of monthly review meeting at PHCU level. This could be a venue to discuss on all issues including logistics
- Presence of trained health workers at health facilities on logistics

III. Recommendations

- Ensure that forms at HP level especially Model 19, 22 to be functional
- Have monthly reporting format include logistics
- Assign someone trained in Pharmacy at all level to handle logistics with clear role and responsibilities who could be hold accountable

- Have annual inventory system at HP and also proper handover of items when one leaves or resigns
- Build HEWs capacity on bin-card usage
- Avail transport for timely dispatch of drugs
- Incorporate logistics issue on PHCU supervision checklist

Re: M & E

I. Challenges:

- Capacity problem of PHCU staff. Some of the PHCU staff just go to HP and ask the HEW for figures on listed indicators. They do not check any register and they can't provide feedback. (Supervisors lack comprehensive knowledge & skill to provide technical support to HEWs, many supervisors just focus on their area of specialty
- It seems that PHCUs do not have standard monitoring checklist. PHCUs use different formats at different districts. The formats even vary from PHCU to PHCU within a district
- No regular supervision and frequency not enough
- Poor feedback mechanism and lack of follow-up on progress made or improvement based on the feedback.
- Lack of adequate budget and transportation facility for supervision
- PHCU system is not functional in some areas
- Supervision focuses only on numbers; quality of the service is not assessed and support is not given
- HC staffs are assigned to support and supervise HPs under them, but there is no mechanism that insures if they are really doing their job. There is no follow up mechanism of supervisor's activity. Some supervisors spend their day somewhere else in the name supervision.
- Non health professionals or professionals with no clinical background such as environmental health professionals are assigned to supervise HEWs
- Closure of HPs on working days. HEWs are not available when the supervisor gets there.

II. Opportunities:

- Presence of PHCU structure
- Presence of HDA structure and command post. Engage command posts in management of HEWs to ensure their availability
- Presence of bimonthly/monthly meeting at PHCU level. Could be good avenue to share experience among supervisors and HEWs
- Presence of standard registers (ICCM) and chart booklet. This helps to conduct objective assessment and provide supportive feedback to HEWs.

III. Recommendations:

- Sepsis management meeting will be perfect avenue to share HEWs experience and improve their skill and confidence. So plan sepsis management meeting for future
- Capacitate and maximize trained human resource for HEWs supervision
- Allocate fair budget and transportation facility for supervision (monitoring, evaluating, and supporting activities at HP level)
- Standardize the monitoring tools and have follow up mechanism if things have improved
- Have a system that holds the supervisors accountable and responsible for the HPs under them. They should report their findings, proposed solutions and the progress made after their feedback

4.8 In E. Shoa zone of Oromia region, what differences and challenges/opportunities in working with the HDA vs. fCHPs have POs observed?

I. Challenges:

- No clear guide on how HDA should operate at the ground. HEWs say they have no idea how HDA would work going forward.
- DTLs are multi tasked (they are expected to undertake all development activities in the community). They are responsible for agriculture, education, and health activity in the community. They say they are being called to too many meetings in the month and are tired of meetings. That has effect on their work

- Work overload has led to less commitment and there are dropouts of DTLs. It has been challenging to replace those dropouts as no one is willing to take on the job.
- No follow up of DTLs functionality from higher level (zone, woreda, PHCU.). Some feel abandoned after training and feel that they lack clear guidance. Not all 1 to 5 network leaders know their role as a leader.
- Going forward if 1 to 5 networks are expected to work on PNC visit, it will be challenging. These networks are too many in a kebele and it will be difficult to train them, coach them, follow them. It will also be difficult to maintain their skill of danger sign assessment as the probability of having a birth in 5 households is very low in a year time.
- As DTLs are multi tasked the community does not consider them as health cadre unlike fCHPS (who are considered as health cadre in the community), this has negative effect on their pregnancy and PNC related home visits.

II. **Opportunity**:

- Presence of command post: if command posts made functional they could be good way of insuring DTLs activity,
- Presence of 1 to 5 networks: if these networks are used to notify DTLs on vital events; such as pregnancy, and delivery DTLs do not need to do census to get the information. This would minimize some workload and will give DTLs, who will again notify HEWs, timely information.

III. Recommendations:

- Currently DTLs are multi tasked and responsible to all development activities in the community (Education, agriculture, health). They are not happy on this and there are many meetings being held at different time. So to have effective pregnancy and PNC home visits it would be good to have DTLs that are responsible to health issues only or need to integrate the activities and minimize number of meetings that they have.
- The system needs to have proper follow up and support (supervision). There needs to be proper guideline for HEWS working with DTLs and meetings should be strategized.
- There is a capacity difference b/n DTLs and 1 to 5 network leaders. Therefore it would be good if network leaders are trained to inform DTLs of vital events and DTLs are trained to conduct home visits.

5. APPENDICES

1 Methods

The review was undertaken in two stages. In the first stage prorgramme staff were interviewed about their experience of working on COMBINE. In the second, community stage, interviews and focus groups were conducted among members of the target group (mothers, fathers and grandmothers) as well as community members working on the programme (HEW and community volunteers (fCHP and DTL)).

In both stages the sample for the review comprised individuals from project areas in Oromia and SNNP, the two regions involved in the study. Qualitative methods, which allow open-ended, in-depth exploration were employed to elicit participant view and experiences.

Stage One

Stage one was conducted during the two-day end of project meeting for field staff, which took place in Awassa on the 9th/10th May 2013. Five focus groups and one plenary session were held with the following staff groups:

- Project co-ordinators (n=4)
- Project officers from intervention clusters that were ‘high performing’ (n=11)
- Project officers from Control clusters that were ‘high performing’ (n=8)
- Project officers from intervention clusters that were ‘low performing’ (n=9)
- Project officers from control clusters that were ‘low performing’ (n=7)

Clusters were defined as low performing or high performing depending on the extent to which they met project targets (see box 3).

COMBINE Performance targets:

- At least 70% of deliveries are identified
- At least 60% of new mothers receive a postnatal visit within 2 days
- At least 50% of newborn sepsis cases are treated
- At least 75% of newborn treatment cases are completed

Box 3: Combine performance targets

Following the meeting, key informant interviews were held with two Save the Children staff members at the Save the Children head office in Addis Ababa who were closely involved in the study.

Focus group and interview guides were developed by the COMBINE team, with review and input from a qualitative research expert from IDEAS.

The focus groups were facilitated by two externally-hired qualitative researchers and one Save the children staff member who were fluent in Amharic and English. Prior to fieldwork, they were given an orientation to the review and to the research tools. Each facilitator was assisted by a note-taker and sessions were tape-recorded, with participant consent, to ensure accurate reporting. The plenary session was facilitated by the Save the Children's research coordinator and focused on practical aspects of implementation and evaluation such as logistics, M&E, supervision and reporting. The challenges and recommendations raised during this discussion were recorded on flipchart during the discussion.

Immediately following each focus group, the facilitator and note-taker worked with a member of the Review team to develop expanded notes comprising a detailed record of the session, organised by theme. Given the applied and specific focus of enquiry, a thematic framework was designed a priori, and was consistent with topic guide headings and the study objectives. Blank thematic charts were prepared prior to fieldwork and the expanded notes were entered into these charts. The fieldworkers checked the final chart against the tape recording of the session to ensure that the notes were accurate and that no key information had been ommitted. The semi-structured interviews were digitally recorded and expanded notes were taken from the recording.

Stage two

Stage two involved community members and was conducted over a two-week period in June 2013. The sample comprised:

- 6 focus groups with fathers of infants born in the preceding 5 months (47)
- 6 focus groups with grandmothers of infants born in the preceding 5 months (n=49)
- 12 semi-structured interviews with women who had delivered in the preceding 5 months
- 11 semi-structured interviews with HEW
- 6 focus groups with volunteers (VCHW) (50)

Table X shows the sample breakdown by region, programme cluster and Kebele.

Oromia			
Type	No.	Participants	Cluster, Kebele
FGD FGD FGD IDI IDI	1 1 1 2 2	VCHWs Grand mothers Fathers Recently delivered women HEWs	Godino, Ganda gorba
FGD FGD FGD IDI IDI	1 1 1 2 2	VCHWs Grand mothers Fathers Recently delivered women HEWs	Wolenchiti, Dongore tiyo
FGD FGD FGD IDI IDI	1 1 1 2 2	VCHWs Grand mothers Fathers Recently delivered women HEWs	Kofele, Affamo
SNNPR			
FGD FGD FGD IDI IDI	1 1 1 2 2	VCHWs Grand mothers Fathers Recently delivered women HEWs	Chuko, Rufo chancho
FGD FGD FGD IDI IDI	1 1 1 2 2	VCHWs Grand mothers Fathers Recently delivered women HEWs	Gerbicho lela, Gerbicho kila

FGD FGD FGD IDI IDI	1 1 1 2 1	VCHWs Grand mothers Fathers Recently delivered women HEWs	Mesenkela, Debub Mesenkela

The focus groups and interviews were conducted by four externally-hired qualitative researchers (two men and two women) who were experienced in qualitative research and fluent in Amharic and English. Prior to fieldwork, they were given a one-day orientation, which included role-plays to gain confidence with the research tools. Each facilitator was assisted by a note-taker and sessions were tape-recorded, with participant consent, to ensure accurate reporting. Discussions took place in local language and were translated by a translator. The recorded interviews and focus groups were translated and transcribed into English by the field workers.

Analysis

Once the notes from both stages were complete, data from across the range of interviews and focus groups was organised and summarised under a set of key themes, dictated by the study research questions. Thematic analysis (Green & Thorogood, 2009) was undertaken to explore patterns across the data and associations within it.

Methodological limitations

This study employed a qualitative methodology to explore the views of project staff and community members involved in COMBINE. It presents issues relating to the COMBINE study from the perspective of study staff and community participants. Qualitative methods seek to describe phenomenon but because the sample is small they do not aim to quantify them.

Social desirability bias is likely to have affected the responses given by participants. There was evidence in focus groups transcripts that some participants thought that the researchers were representing the government, and thus may have wanted to present practices relating to ANC and PNC in a more positive light.

Ethics

The COMBINE study received ethical approval from London School of Hygiene & Tropical Medicine Ethics Committee and the Ethiopian Science and Technology Agency (now known as the Federal Democratic Republic of Ethiopia, Ministry of Science and

Technology).For this study, the review team gained permission from the relevant districts to conduct the research. All participants were given a standard introduction to the COMBINE study and the purpose of the review (either verbally or via an information sheet, depending on literacy level). They were assured of confidentiality, and informed that they could terminate their participation at any point without giving a reason. Consent was given verbally or in writing, again depending on literacy level.

All data generated by the review was stored on secure password-protected computers and was available only to members of the research team.

Green J, Thorogood, N (2009) Qualitative Methods for Health Research. SAGE: London

2. Topic guide example 1: Project co-ordinators

Saving Newborn Lives: COMBINE study

Project Learning and reflection

Project Co-ordinators Information Sheet

Overview of the Study

We are conducting a study to learn lessons from the COMBINE study which will help us to implement similar community interventions in the future. This study is being undertaken in partnership with the COMBINE Study, but does not form part of the evaluation. The information we collect for this study will not be used to assess whether, or how well, project co-ordinators (PCs) are undertaking their activities. We simply wish to understand different factors that have affected community based newborn care implementation so that we can learn from your experience to design even better projects in future.

How do I take part?

We would like to learn from your experiences as a Project Co-ordinator (PC). We would like you to join with other PCs, in a discussion about your experiences of working on the COMBINE study. The discussion will last between one and two hours and will be led by a facilitator who is not part of the COMBINE project. It will focus on your opinions and experiences of implementing maternal and newborn health at community level. There are no right or wrong answers to any of the questions that the facilitator asks; we are simply interested in your opinions.

The interview will be recorded but that is only so that the facilitator can record the details of the discussion without having to note everything down in detail.

Are there any benefits or disadvantages in taking part in this survey?

By taking part you will help us learn what works and what doesn't work with respect to implementing maternal and newborn interventions at community level. In doing so, you will

make a valuable contribution to maternal and newborn health in Ethiopia. There are no disadvantages to taking part but equally, there are no benefits to you as an individual either.

Who will have access to the information?

Everything you tell us will be **strictly confidential**. No one will be able to trace anything said in the discussion back to you as an individual. Data and results from this study will not include any names or identifying information and will be stored securely in line with the research team's policies. We urge group members to respect the confidentiality of others and not disclose details of the discussion to anyone outside the group.

Do I have to participate?

Participation in this research is voluntary. You are free to decide if you want to take part in this study. If you do agree, you can still change your mind at any time. You can refuse to answer any specific question, or stop at any point. If you chose not to answer a question, or not participate there will not be any negative implications for you.

Action

Please read this information sheet carefully and make sure that you understand what it is saying. If you are unsure of anything it contains, please ask the research team. **If you are willing to participate in this research project you must sign the accompanying consent form.**

CONSENT FORM

1. I have read the information sheet.
2. I had the opportunity to ask questions and all the questions I have about the study have been answered.
3. I clearly understand what is being asked of me if I agree to participate in this study.
4. I also know that I have the right to leave the study at any time if I do not want to continue.
5. I am aware that information disclosed during the discussion is confidential. No one reading the results of the study will be able to trace any information back to me as an individual.
6. I will respect the confidentiality of other group members by not repeating what is said during the discussion to anyone outside the group
7. I agree to take part in this study.

NAME (in capital letters)	
SIGNATURE	
DATE OF SIGNATURE (in DD/MM/YYYY)	

RESEARCH QUESTIONS:

7. What are the attributes/factors that lead to high performing COMBINE Health Posts in both the control and intervention arms?

8. What are the enabling and constraining factors for volunteers in working with HEWs? What motivates the volunteers? And more specifically, what motivates and de-motivates them in terms of pregnancy and PNC home visits?

9. What are challenges and opportunities for the future implementation of neonatal interventions (pregnancy and PNC home visits, sepsis management)?

10. **OBJECTIVES:**

The purpose of the study is to conduct formative research in order:

- To explore attributing factors towards good performance of the system.
- To identify what worked well, what did not and why?
- To explore non monetary motivating factors of DTLs/HEWs in conducting pregnancy and post natal home visits .
- To describe the role of supervisors in maintaining implementation quality.
- To explore challenges and opportunities for future implementation.
- To explore potential ways to address the challenges.

I. Introduction and instructions for participants

- Introduce yourself.
- Explain that participants have been selected to participate because of their experience as POs.
- Discuss the purpose and process of the interview and obtain informed consent.
- Explain the presence and purpose of recording equipment and introduce translator (if there is one).
- Explain the presence and purpose of the note-taker
- Outline general ground rules: there are no right or wrong answers; all opinions are valid; and members should respect the views of others.
- Emphasise that participants need to respect the confidentiality of other group members by not repeating what is said during the discussion to anyone outside the group
- Explain that this is a group discussion and not a question and answer session; they should feel free to interact with each other as they would in a real conversation. But they should try to keep their comments and interactions relevant to the topic in hand.
- Explain that you will make sure that the discussion keeps focused
- Ask participants if they have any questions.

Let's begin!

Questions and probes	**Moderator notes**
SECTION ONE: FACTORS AFFECTING PERFORMANCE	
I'd like to start by talking about the factors that help or hinder you in terms of meeting COMBINE project targets in your cluster. **1. Thinking of the clusters you co-ordinate, what factors have helped**	*Try to keep discussion away from talking about HEW and volunteers at this stage.*

you to reach coverage targets during the COMBINE project? **Talk about each in turn:** **a) Pregnancy and delivery identification** **b) Early PNC visit (within 2 days of birth) plus identification of sick neonates** **c) Treatment of sick neonates and encouraging families with sick neonates to seek care** **Potential factors to explore:** • Local geography (accessibility, distance for HEW to reach community) • Traditional beliefs and customs • Seasonal variations in farming etc. • Family and community attitudes to care seeking • Local leadership and politics • Availability of supplies or other resources • Other factors?	*Reassure participants that this will be discussed in detail later.* *If the discussion lags, you can use the list of factors to suggest ideas to respondents, but let them suggest factors spontaneously first.* *Be sure to use general probes such as 'can you tell me more about that?', 'why do you think that was?'*
2 Of the factors (or reasons) we've just discussed, which do you think are the biggest or most important factors? **Probe:** • Why was that factor (or reason) more significant than the rest?	*Be sure to relate the most important factor to a specific target.*
3. Again, thinking of the clusters you co-ordinate, what barriers were experienced in trying to meet targets? **Relate things to specific targets:** **a) Pregnancy and delivery identification** **b) Early PNC visit (within 2 days of birth) plus identification of sick neonates** **c) Treatment of sick neonates and encouraging families with sick neonates to seek care**	*Be sure to encourage individuals to talk about their own personal experiences, but without feeling singled out….*

Potential barriers to explore: • Local geography (accessibility, distance for HEW to reach community) • Traditional beliefs and customs • Seasonal variations in farming etc. • Family and community attitudes to care seeking • Local leadership and politics • Availability of supplies or other resources • Other factors?	
3b Of the barriers we've just discussed, which do you think are the biggest or most important barriers? **Again, relate discussion to specific targets** **Probe:** • Why was that barrier more significant than the rest?	*Use general probes to 'draw out' the discussion.*
4 Thinking about your role as PC, what things did you do to try and ensure that targets were met in your cluster? **Probe:** To what extent did these activities work? Can you explain why these activities did or did not work? **Strategies might include:** • Communication with HEW/DTL/VCHW • Strategies to improve motivation among volunteers • Strategies to overcome community level barriers	*Suggest possible strategies if the discussion flags.*
	Try to draw out new ideas, rather than

5 Thinking about the future, what suggestions would you make to community-level antenatal and neonatal interventions to ensure that coverage targets are met in future? **Relate things to specific targets:** **a) Pregnancy and delivery identification** **b) Early PNC visit (within 2 days of birth) plus identification of sick neonates** **c) Treatment of sick neonates and encouraging families with sick neonates to seek care**	*repeating answers to Q3 and Q4.*
SECTION TWO: WORKING WITH HEW AND VOLUNTEERS Now I'd like to talk in more detail about working with HEW and volunteers (DTL/VCHW)	
6 Can you think of a time that the HEWs and DTLs/VCHWS in your clusters did particularly well in meeting their targets? Please tell me about that time **Probe** • what were the main reasons that they did so well? **Ask about factors contributing to success at different levels:** • Family level • Community level • System (Kebele, district administration, district health office, PHCU etc)	*Use probes to draw out responses such as 'why do you say that?' and ask others in group 'did anyone have a similar experience?'* *Clarify stories relating to DTL/VCHW and stories relating to HEW*
7a How well do you work with PO, HEW and with DTL/VCHW? • How easy or difficult did you find it to meet with POs? • For what reasons was it easy or difficult? • If difficult, what were the challenges? If easy, why? • To what extent did you interact with DTL/VCHW and HEW? • Tell me about the challenges of working with HEW volunteers…	

7b How well do POs, DTLs , VCHWs and HEW work with each other? **ASK:** • What did you learn about PO, HEW and volunteer communication? • Are HEW able to get hold of POs? (if not, why not?) • Are volunteers able to get hold of HEW when they want to report events? • What barriers do volunteers face in trying to reaching HEW? • Why do HEW visit homes much less often than DTL/VCHW • What factors influence when HEW visit families after they have received a report? • Does the response by HEW to families identified by volunteers (i.e. visiting them or not) have any effect on the activity of volunteers?	*This question may have been partly answered in discussing the previous question but you might need to explore further*
8 Thinking about the PO, HEW and DTLs/VCHW in your area, what do you think they like about their job and what do they dislike? **Probe** • What do they find motivating and why? • What thing de-motivate them and why? • Do they feel valued by the community? • Do they take pride in their role? • How could they be motivated to do a better job?	*Talk about PO, HEW and DTLs/VCHW separately.* *Discourage discussion about monetary incentives*
9 What other strategies have been used in your clusters to encourage PO, HEW and DTLs/VCHWS to carry out their jobs more efficiently? **Probes** • How well did these strategies work? • Why do you think these strategies worked or did not work? • Do you have other suggestions as to how PO, HEW and also volunteers could be assisted to meet their targets?	*Talk about PO, DTL/VCHW and HEW separately.*

CHALLENGES AND OPPORTUNITIES	
10 Thinking about the services that have been provided, which are the most challenging to provide and why? **Services to include in discussion** • Pregnancy and delivery identification • Early PNC visit after two days • Danger signs identified by DTLs/VCHW • Referral acceptance and care seeking practice of family • Service availability at Health post/health centre • Treatment completion **Probe:** • Can you share stories of particular challenges you, or the PO or HEW in your clusters encountered and how you resolved them? • In terms of meeting these challenges, what worked and what did not work?	*Encourage participants to reflect on why things did or did not work….* *Encourage them to interact with each other, using probes such as 'does anyone want to add to that?' or 'did anyone have a very different experience?'*
11 Is there anything that the COMBINE project did NOT do but that you feel would be good to do in future implementation of newborn interventions at community level? **Ask in relation to:** • POs • DTLs/VCHWs • ICCM programme and ICCM trained HEW • PHCU • The community **Probe:** • Describe your idea and say why you recommend it	
12 ANYTHING ELSE TO ADD?	*Encourage discussion here but be wary of staying relevant to aims of the research*

THANK YOU!	
Age Gender Family status (married? Children?) Number of years of Education Number of service year as PC Received training in ICCM: Yes No Received training in supportive supervision Yes No How many POs under your supervision? How many intervention clusters do you coordinate? How many intervention clusters do you co-ordinate?	*Participants should be given individual forms to collect this information.*

Topic guide example 2: Focus group with fathers in the community

FGD Fathers

Saving Newborn Lives Project

Save the Children -USA, Ethiopia Country Office

Focus Group Discussion with husbands of recently delivered women

Introduction and Consent

Hello. My name is _____, and my colleague's name is _____ . We are from the Saving Newborn Lives Project. The Saving Newborn Lives Project is working with the _____Regional Health Bureau and _____ Woreda Health Office to conduct discussions with groups of fathers like yourselves to find about your experience of having a wife who has recently been pregnant and delivered a baby. We are asking fathers in other communities the same questions in order to understand what worked well and what needs improvement, regarding mother and newborn health, specifically delivery care, care of newborns, and care after delivery. This information will help government better understand what is taking place in communities so that they can work out how to improve health services in the woreda. Our discussion will take between, 1 hour and 30 minutes to 2 hours to complete. Your names will not be shared with anyone else outside of this group and your responses during the discussion will be combined with answers from our other discussions so no one outside of this discussion will know what you said. Your privacy will be protected and the facilitators will keep your answers confidential.

Your participation in this discussion is completely voluntary and you can choose not to answer particular questions. If you decide not to participate, this will not affect your right to receive treatment from HEWs and other health staff. However, we hope that you will participate fully in the discussion as your experiences and opinions are important.

Persons to contact:

Dr. Abeba Bekele is the manager of this project. If you have questions about this study or if you feel that you have been treated unfairly or have been hurt by joining the study, you may call the following number; 011372 0031

Do you have any questions for me? May I proceed with the questions?

	Agrees to participate in discussion	Does not agree
Respondent 1		
Respondent 2		
Respondent 3		
Respondent 4		
Respondent 5		
Respondent 6		
Respondent 7		
Respondent 8		
Respondent 9		
Respondent 10		

_____ _____

Group Facilitators Signature Date

_____ _____

Witness Date

RESEARCH QUESTIONS:

- **To what extent does the community value pregnancy and PNC home visits by fCHPs/DTLs and HEWs?**
    - ***What aspects of the visits are valued?***
    - ***What aspects are not valued?***
- **What socio-cultural and programmatic issues affect the acceptability of visits?**
- **To what extent do community members perceive that attitudes, beliefs and behaviours around pregnancy and childbirth have changed since the inception of COMBINE?**
- **What were the key challenges and opportunities in terms of service delivery?**
    - ***How could these challenges be addressed in future?***

I. Introduction and instructions for participants

- Introduce yourself.
- Explain that participants have been selected to participate because of their wives have recently given birth.
- Discuss the purpose and process of the interview and obtain informed consent.
- Explain the presence and purpose of recording equipment and introduce translator (if there is one).
- Explain the presence and purpose of the note-taker
- Outline general ground rules: there are no right or wrong answers; all opinions are valid; and members should respect the views of others.
- Emphasise that participants need to respect the confidentiality of other group members by not repeating what is said during the discussion to anyone outside the group
- Explain that this is a group discussion and not a question and answer session; they should feel free to interact with each other as they would in a real conversation. But they should try to keep their comments and interactions relevant to the topic in hand.
- Explain that you will make sure that the discussion keeps focused
- Ask participants if they have any questions.

Let's begin!

Questions and probes	**Moderator notes**
Perceptions of changes to ways of being pregnant and giving birth	

1. Please tell me how women in your community experience pregnancy and childbirth. Please, first tell me <u>what happens now.</u> Then please tell me if what happens now is different to what used to happen say 5 years ago (before HEW and volunteers used to visit). **Probe the following:** • *Telling others about pregnancy: when and whom* • *Getting advice on staying healthy during pregnancy and looking after baby in womb. Whose advice is sought and what advice given?* • *Changes to diet and workload during pregnancy* • *Contact with trained professionals during pregnancy and childbirth?* • *Role of father during pregnancy, delivery and after birth. How are men involved? What are the barriers to their involvement?* • *Preferences about where to give birth and who should be present* • *What if things go wrong during labour? What actions are taken?* • *Looking after the newborn baby.* ***Probe:*** *cord care; skin to skin; rules about who can visit; wrapping baby; breast feeding; who is allowed to hold the baby; who <u>decides</u> who can hold the baby* • *Looking after the mother.* ***Probe:*** *after birth; cleaning; diet; rules about what she can and cannot do.* • *Identifying signs that something might be wrong with mother and newborn – what signs do people look for?* • *Responding to illness in mother or newborn – What actions are taken? (probe: fever, bleeding, infection)*	*Go through each probe in turn. First ask how things are now. Then ask if this represents a change from how things used to be done (before volunteers and HEW used to visit).* *Try to get at social norms, that is, what practices are seen as acceptable by community members in general.*
<u>2. Why</u> do you think these changes have taken place? **PROBE:** *community members influencing each other; exposure to messages and information from elsewhere; changes in availability of services* *Compared to the influences we've discussed, to what extent do you think visits from HEW/volunteers have made a difference?*	

Experience of antenatal home visits	
3. I'd like to talk about your own experiences now. I'd like you to think back to the time when your wife was last pregnant. When your wife was pregnant was she ever visited by an HEW/volunteer? If yes, please could you tell me about your experience of being visited. **Ensure that accounts include the following:** • *Number of visits, person visiting, timing of visits* • *Your presence and participation during visits* • *Who else present?* • *What was discussed? How much can you remember? Was it helpful?* • *What did you think of the visits? (likes and dislikes and reasons)* • *What did your wife think of the visits? What about other family members?* • *What for you are the key benefits of being visited?* • *What are the key drawbacks?* • *Did you or your wife plan to do anything differently as a result of things that the HEW/volunteer told you? (probe: attendance by professionals, clean delivery, newborn care)* • *What for you were the main differences between being visited by an HEW and being visited by a volunteer?* • *Are HEW and volunteer visits equally acceptable?* If anyone was NOT visited by an HEW or volunteer, please ask them why they did not receive visits.	*Allow men to tell their stories but try to avoid stories that are repetitious. Use the probes to keep people on track. The probes on benefits and drawbacks are most important so make sure those are asked.*
Experience of post natal home visits	
4. Again, thinking of when your wife was last pregnant, I'd like to ask you now to think about the birth and just after the birth. Was your wife visited by an HEW/volunteer during this time?	*Allow men to tell their stories but try to avoid stories that are repetitious. Use the*

If yes, please could you tell me about your experience of being visited. **Ensure that accounts include the following:** • *Number of visits, person visiting, timing of visits* • *Your presence and participation during visits* • *Who else present?* • *What was discussed? How much can you remember? Was it helpful?* • *Was the baby examined? How did you feel about that? Do you feel it was necessary? Did the volunteer notice anything about your baby when they examined them?* • *What did you think of the visits? (acceptability; likes and dislikes and reasons)* • *What did your wife/other family members think of the visits?* • *What for you are the key benefits of being visited?* • *What are the key drawbacks?* • *Did you or your wife plan to do anything differently as a result of things that the HEW/volunteer told you? (probe: looking out for danger signs)* • *What for you were the main differences between being visited postnatally by an HEW and being visited by a volunteer?* • *Are HEW and volunteer visits equally acceptable?* If anyone was not visited by an HEW or volunteer, please ask them to explain why not.	*probes to keep people on track. The probes on benefits and drawbacks are most important so make sure those are asked.*
Socio-cultural and programmatic issues	
5. Thinking of the practices and beliefs we discussed at the beginning, do any of these have an influence on the ways in which HEW and volunteers can assist your wife during pregnancy and childbirth? To what extent do they influence the acceptability of HEW and volunteer involvement in your wife's pregnancy? To what extent do they influence the acceptability of the advice that HEW and volunteers give?	*Try to base this discussion on interesting points that came out of question one*

Probe the following: • *Social rules about discussing pregnancy* • *Beliefs about who should advise the mother* • *Beliefs about diet and workload during pregnancy* • *Beliefs about whether it is necessary to consult professionals* • *Beliefs about role of father during pregnancy, delivery and after birth* • *Preferences about where to give birth and who should be present* • *Knowledge about dangers of childbirth and beliefs about what to do if things go wrong* • *Beliefs about who is allowed to visit and touch the baby* • *Beliefs about what mothers are allowed to do e.g. leaving the house, receiving visitors* • *Knowledge about danger signs and what to do about them* • *Other religious or cultural or traditional beliefs* Of the beliefs and practices we've discussed, which do you think are most important?	
6. Are there any other barriers to receiving services from HEW and volunteers? **Probe:** *availability of HEW and volunteers; reputation of HEW and volunteers; availability of medicines; distance to health posts; being far from where the volunteer lives; difficulty notifying volunteers; level of skill and knowledge of HEW and volunteers; any other traditional beliefs*	
Challenges and opportunities	
7. Lets talk now about how things could be improved in future • *If your wife gets pregnant again in future, would you want her to be visited by volunteers to discuss pregnancy and childbirth? (explore why and why not)* • *How do you think the work of HEW and volunteers could be made more acceptable to fathers in your community?* ***Probe:*** *examining baby, giving information, timing and frequency of*	

visits • *Can you think of any other ways in which their work could be improved?* • *Do you prefer to be visited by a volunteer or an HEW? Why?* • *Do you think the volunteers and HEW had sufficient knowledge and skills? If no, what should they know more about?*	