INTRODUCTION
Emory University's Maternal and Newborn Health in Ethiopia Partnership (MaNHEP) interventions consists of a package of proven care practices that can prevent maternal and newborn death and disability, through clean delivery and essential care in the immediate, postnatal period and basic emergency skill. One component of the MaNHEP models is the Community Maternal and Newborn Health and Nutrition (CMNHN) approach which involves participation of group members in ways that respect and builds on local knowledge and skills through discussions, demonstrations, negotiations and practice. Together, health extension workers, frontline health workers, other volunteers, such as traditional birth attendants, women and family caregivers work towards safe practices that are culturally acceptable and likely to be used when needed.

MaNHEP TAKES ON A NEW CHALLENGE: THE AFAR REGION
Sharing international boundaries with Eritrea and Djibouti, Afar region located in the northeastern part is one of the nine regional states of Ethiopia. The region is characterized by difficult environmental conditions, including rugged desert areas, a vast plain of salt pans and active volcanoes, with average annual rainfall less than 7 inches (17.7 cm) and daily average temperatures as high as 125°F (51°C).

According to the 2013 Population projection the Afar region's five administrative zones (sub-regions) subdivided into 32 Woredas (administrative districts) covering about 270,000 km2 are home to its 1.8 million inhabitants. The region is comprised of primarily pastoral or semi-pastoral populations herding cattle, sheep, goat and camels. According to Ethiopia Demographic and Health Survey 2011, Neonatal, Infant and under five mortality are high in Afar region (33, 64 and 127/1000 live births, respectively as compared to the national 37, 59, 88/1000 live births). Moreover, less than one third of women (32%) receive any ANC from a skilled provider and even fewer receive it from HEWs (3%).

Similarly, only 7% of deliveries are attended by a skilled provider, instead almost all women (96%) give birth at home. The baseline survey conducted by MI in Afar region's selected Woredas confirms the above findings as those who receive any ANC are 25%, only 6.5% deliveries are attended by skilled provider and home delivery is 92%.

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Micronutrient deficiencies, particularly those of iron, iodine and vitamin A, are also serious public health problems in Ethiopia and significantly contribute to child morbidity and mortality. For example, according to the baseline survey anemia in pregnant women results in an increased risk of premature delivery and low birth weight. In Afar, anemia is also very prevalent in both pregnant and non-pregnant women of childbearing age at 48.1%, compared to 17% nationally. There is also very low consumption of foods rich in vitamin A in Afar, at 11% (compared to 26%, nationally), and iron, at 6% (compared to 13%, nationally).

Thus, with the unique challenges posed in Afar, at the request of the Federal Ministry of Health (FMoH) MaNHEP is taking on the new challenge of addressing maternal and newborn health in the Afar region thanks to a four year grant funded by Micronutrient Initiative (MI). This project is being implemented in four rural Woredas (Chifra, Ewa, Aura and Gulina) under a project title “Supporting Ethiopia’s Health Extension Program to Increase Access to Quality Maternal and Neonatal Health and Nutrition Services”

MaNHEP AFAR PROJECT OFFICIALLY LAUNCHED

At the national, regional, and Woreda level launches of the MaNHEP Afar project, community level approaches and strategies were explained with the aim of mobilizing key national and regional stakeholders, ensuring buy-in and validating the MaNHEP project rationale and objective. During the launching events, were presentations with details on the major planned activities for project sites, as well as the results achieved in the previous MaNHEP sites of Amhara and Oromia were given to officials and representatives from various stakeholders.

The national launch was held at the Hilton Hotel in Addis Ababa on July 31, 2012. Officials and representatives from the FMoH, Afar Regional Health Bureau, UN agencies, partner organizations, Addis Ababa University were present.

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The regional and Woreda level launches took place on December, 2012 and May 2013 respectively in Semera, the capital of the Afar region. On both occasions more than 100 representatives from the various stakeholders were in attendance.

COMMUNITY ORIENTATION CARRIED OUT IN ALL 46 KEBELES OF MaNHEP AFAR PROJECT

During the orientation sessions, the MaNHEP community-oriented model was introduced. This component consists of maternal and newborn health and nutrition meetings, a collaborative quality-improvement approach and Behavior Change communications that require the commitment and involvement of community members and leaders.

The orientation was conducted from June 17 to July 10, 2013 in the 46 Kebeles within the four project Woredas. A total of 3,892 individuals participated in the orientation sessions.

HEALTH FACILITY RAPID ASSESSMENT CONDUCTED

The MaNHEP health facility assessment was done to learn about the health systems’ capability to deliver good quality Maternal and Newborn Health services at all levels of the health system (Kebeles/Health Posts, Health Centers, Woreda Health Offices and Hospitals) in MaNHEP Afar project areas.

The assessment was conducted on 4 Woreda Health Offices (WorHOs), 1 hospital, 6 functional health centers (HCs), 33 health posts (HPs) found in project Woredas of Afar region. It was conducted in Feb, 2013.

The assessment involved in-depth interview, group discussion, document review as well as on-site observation using structured data collection instrument and semi-structured interview guide. Group discussion was held with HEWs, FLWs and nurses at HP level; and with heads of Health Facilities a (HC and Hospital) and WorHO levels.

Focus areas of the assessment were

- Existence of resources and infrastructure for provision of MNHN services
- MNHN service availability, such as ANC, delivery, PNC, etc
- Current practice of HEWs and FLWs in MNHN service provision
- Recording and reporting system
- Linkage between the different levels of the health system

The assessment findings revealed that there is serious shortage of health workers including vCHWs across the health system pyramid. No single health facility fulfilled the basic infrastructures and equipment required to deliver the services. The contribution of HEWs and FLWs for MNHN service is negligible and almost no HPs were providing MNHN service. Besides, Linkage across the health system pyramid was found to be very weak; and at all levels the standard recording and reporting system was not in place. Hence, the system was not providing the required quality of MNHN services at all levels.
### Key Findings included:

- **Only 5% of women had attended ANC at least four times during the pregnancy of the index child.**
- **More than 90% of women had delivered the index child at home, mostly with the help of TBAs.**
- **Only a few mothers and adults knew key danger signs during pregnancy, delivery and postnatal period.**
- **More than three-fourths of women had created a safe birth plan during the pregnancy.**
- **More than 90% of women in the districts had washed their neonates in the first day of life.**
- **Butter, oil, or dung was put on the stump of the umbilical cord among in 50% of all cases.**
- **Only about half of the mothers gave colostrum to their children.**
- **Food intake is increased in less than one fifth of the women during pregnancy.**
- **FLHWs do not know when misoprostol is given to postpartum women.**
- **Several FLHWs do not practice properly positioning and attaching baby during breastfeeding.**

### COMPLETION OF BASELINE SURVEY ESTABLISHES A STARTING POINT FOR MANHEP’S WORK IN AFAER

**WHAT IS IT?**

MaNHEP’s new project in the Afar region of Ethiopia is off to a successful start with the completion of the baseline survey, a key component of the program’s monitoring and evaluation process. The purpose of the MI conducted baseline study, which took place between April and June 2013, was to determine maternal and newborn health service utilization, and assess knowledge, attitude and practices of childbearing women, adults in the community and frontline health workers related to maternal and newborn health and nutrition. This survey is similar to the baseline survey conducted in the Amhara and Oromiya regions in 2010, however with the new collaboration with Micronutrient Initiative (MI), a new objective to “determine the prevalence of anemia among women who delivered within three months prior to the survey” was added to the survey.

### HOW WAS IT CONDUCTED?

Survey administration involved a total of 41 household. A total of 1,969 women who gave birth in the previous year (998 in intervention branch and 971 in comparison branch) were included in this study. In addition to interviewing women, selected supervisors and coordinators checked the hemoglobin level of women who had given birth in the study Kebeles during the previous three months prior to the survey. Additionally, 379 adult stakeholders were interviewed from the study areas. Adult stakeholders were asked about their knowledge of each of the 18 core items of the maternal health intervention package. Finally, 109 FLWs (HEWs, TBAs and CHDAs) working in the study areas were interviewed.

### HEALTH PROFESSIONALS ATTENDED THE CMNH-N TRAINING OF TRAINERS

CMNHN Training is a skill based training which helps to build on local knowledge and solutions before attempting to solve delivery related problems. The purpose of the training is to introduce CMNHN program approach and transfer skill through hands-on practice to the health care providers who are working at the health facility as well as community levels.

![Some of the trainees posing for a group photo](image-url)
The CMNH-N training included six modules

1. Introduction
2. Woman and baby problems
3. Prevent problems
4. Referral
5. Too much bleeding
6. Helping baby breath

The Guide Team that conducts the CMNHN programs;
ToT 3 involved Guide Teams(GTs) and Quality Improvement Teams(QITs)

TOT-1 & TOT-2 were provided for seven consecutive days from Oct. 03 up to Dec. 20, 2013 in four rounds. All the participants representing all four project woredas who were given CMNHN TOT training and received pre- and post-training skills assessments. The majority of the trainees (66%) were male. Profession wise, the majority (44%) were HEWs followed by 30% nurses and midwives, and 19% FLWs.

During and right after the training pre and post training skills assessment was done using observation against skills checklists. Substantial improvement was noted in the mean scores of post training results as compared to the pre-test results. The average scores for care steps during pregnancy increased from 15% to 75% and for first and other actions, it increased from 17% to 79%.
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GLOSSARY

ANC  Antenatal Care
BCC  Behavior Change Communications
CHDA  Community Health and Development Agents
CMNHN  Community Maternal and Newborn Health and Nutrition
DHS  Demographic and Health Survey
FLWs  Frontline Workers (TBAs, CHDAs, HEWs)
FMoH  Federal Ministry of Health
HC  Health Center
HDA  Health Development Army
HEW  Health Extension Worker
HP  Health post
LS  Learning Session
MaNHEP  Maternal and Newborn Health in Ethiopia Partnership
MNHN  Maternal and Newborn Health and Nutrition
PNC  First Postnatal Care Visit
PPH  Postpartum Hemorrhage
QI  Quality Improvement
RHB  Regional Health Bureau
vCHW voluntary Community Health Workers
WorHOs  Woreda Health Office

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