

A photograph of two Black women in white lab coats. The woman on the left is pointing at a smartphone held by the woman on the right. Both are smiling and looking at the device. The woman on the right has a stethoscope around her neck. They are standing in front of a brick wall and a window with red curtains.

Studies on the impact of the Safe Delivery App across Ethiopia

Strengthening Quality Maternal and Child Health Service through Catchment-Based Mentoring in Afar and Somali Region, Ethiopia

Providing digital health tool integrated catchment-based mentorship has improved the competence of healthcare professionals and enhanced the response to obstetric and neonatal emergencies.

Background

In the Somali and Afar regions, Maternity Foundation Ethiopia joined forces with UNICEF, focusing on 45 health facilities to strengthen their capacity in providing basic emergency obstetric and neonatal care (BEmONC). Efforts were made to equip health professionals with the necessary skills to respond to obstetric and neonatal emergencies. Catchment-based clinical mentorship (CBCM) was provided, with particular attention to protection against sexual exploitation and abuse (PSEA) and genderbased violence (GBV).

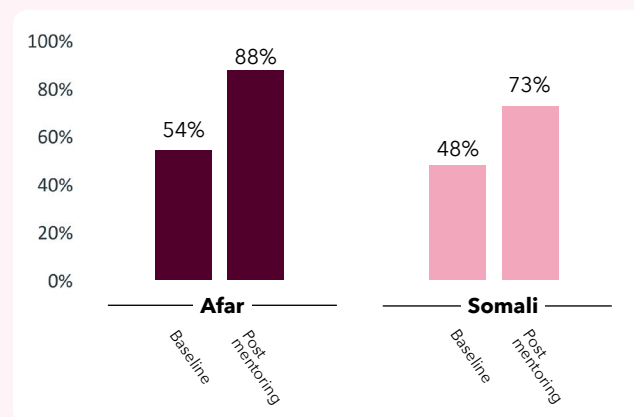
A total of 128 health professionals benefited from the catchment based mentoring program in the Afar and Somali regions. As part of the organization's efforts the Safe Delivery App was integrated into the trainings and mentoring to provide a tool for continuous self-directed learning.²

"After the mentorship service delivery quality improved and as a result client flow increased."
- KII 2

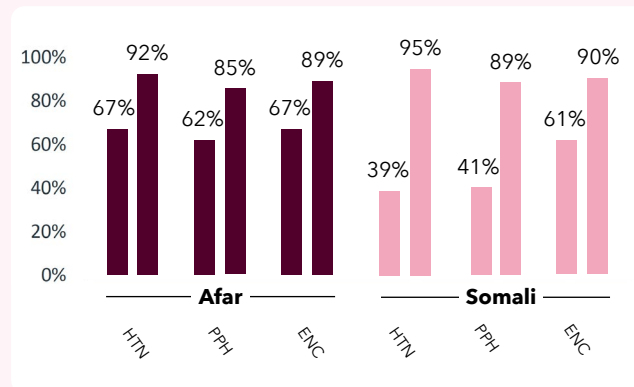
Results

To assess the impact of the clinical mentorship, baseline and endline evaluations of knowledge and skills on selected obstetric and neonatal emergency topics were conducted on the facilities among healthcare professionals.

Participant **Knowledge** Assessment



Participant **Skill** Assessment:
Baseline and Post Mentoring



Participants from the Afar region demonstrated a better baseline in terms of knowledge and skills, while both regions provided positive feedback regarding the CBCM. These results highlight the effectiveness of the CBCM in enhancing the participants' expertise, irrespective of their initial proficiency levels.

"Previously, we didn't even know how to fill partograph let alone manage cases but now, after the CBCM we can manage any case"
- IDI mentee

Lessons learned

The CBCM increased knowledge and skills of the participants. The results also indicate that there is still room for improvement.

- Continued follow-up by the Regional Health bureau/ local health admins
- Stakeholders/RHB should capacitate health facilities in equipping the facilities with the required drugs and equipment
- Motivate mentees by certifying those who graduate in the mentoring
- The Safe Delivery App is a valuable add-on to support continuous learning

Enhancing Access to Sexual and Reproductive Health Services in Afar Region, Ethiopia

By providing a safe and supportive environment for expectant mothers near healthcare facilities, we can ensure timely access to skilled care, reducing the risk of complications and improving overall maternal and child health.

Background

Maternity Foundation (MF), a Danish-based international organization, is actively working towards reducing maternal and neonatal morbidity and mortality in Ethiopia. In collaboration with the Afar Regional Health Bureau, MF is implementing a project titled "Towards Universal Access to Sexual Reproductive Health and Rights Services" in the Afar region with support from UNFPA. The project aims to enhance sexual and reproductive health services by supporting selected health facilities, health professionals, and the community. The activities of the project include community awareness creation, orientation of health extension workers (HEW), construction and maintenance of maternity waiting homes, pregnant mothers' conferences, and referral facilitation for gender-based violence survivors.

Results

- ✓ 1677 (993 male and 684 females) community representatives and influential people participated in awareness raising event to further enhance community engagement.
- ✓ 363 pregnant and lactating women attended the pregnant mothers conference sessions. Focusing on the utilization of Antenatal care (ANC), Skilled Birth Attendance (SBA), Postnatal Care (PNC), Family planning (FP), and Prevention of Sexual Exploitation and Abuse (PSEA) and timely referral of any Gender Base Violences (GBV) cases.
- ✓ 32 community volunteers/HEW oriented.
- ✓ International Youth Day celebration in Chifra Woreda engaged 184 youths, focused on promoting a healthy life for youths.
- ✓ Billboards with sexual and reproductive health messages posted in nine health facilities.
- ✓ Constructed and handed over nine cultural Maternity Waiting Homes in the Afar region.
- ✓ Conducted dissemination workshop to discuss challenges, lessons learned, and sustainability of the MWH initiatives.

Challenges

- The project has faced challenges such as demands for infrastructure (road, water) development.
- Food provision during maternal stay.
- Interrupted services due to conflicts.

Lessons learned

- By working synergistically, UNFPA and UNICEF programs aim to address the complex challenges and meet the diverse needs of the target population, ultimately contributing to sustainable development goals and improved maternal and child health.

Recommendations

- Sustaining pregnant mothers' conferences.
- Improving referral linkages.
- Promoting the use of maternity waiting homes to enhance institutional delivery.

Strengthening Quality Maternal and Child Health Service through Catchment-Based Mentoring in Afar and Somali Regions, Ethiopia

Providing targeted support and guidance to healthcare professionals in their respective catchment areas to enhance their knowledge, skills, and confidence in managing maternal and child health cases effectively.

Background

In the Somali and Afar regions, Maternity Foundation Ethiopia joined forces with UNICEF, focusing on 33 health facilities to strengthen their capacity in providing basic emergency obstetric and neonatal care (BEmONC). Efforts were made to equip health professionals with the necessary skills to respond to obstetric and neonatal emergencies. Catchment-based clinical mentorship was provided, with particular attention to protection against sexual exploitation and abuse (PSEA) and gender-based violence (GBV). A total of 118 health professionals benefited from the catchment based mentoring program in the Afar and Somali regions. Additionally, in selected health centers; Kommami, Hadelela, Todob, and Mayomuluqo, water, sanitation, and hygiene (WASH) facilities were maintained. During the mentorship high-level donor visits and joint supportive supervision were carried out to evaluate the implementation of the intervention, which received note-worthy recognition.

The mentorship offered by mentees to health extension workers at catchment health posts covers a wide range of essential areas, including focused antenatal care, exclusive breastfeeding advocacy, immunization

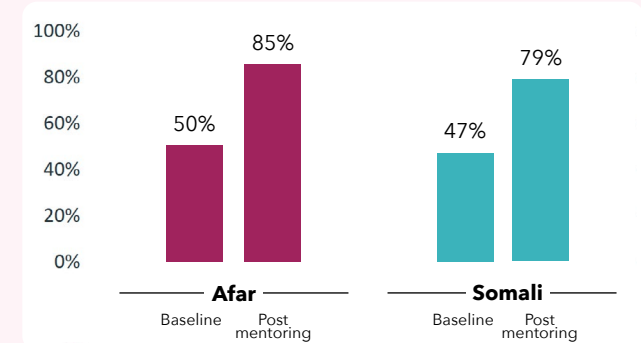
programs, identification of maternal and neonatal danger signs, prevention of harmful traditional practices, infection prevention measures, birth preparedness, complication readiness, and recording and registration protocols. This mentorship not only facilitates the dissemination of knowledge but also ensures the delivery of exceptional healthcare services to local communities.

As part of the organization's efforts the **Safe Delivery App** was integrated into the trainings- and mentoring to provide a tool for continuous self-directed learning.¹

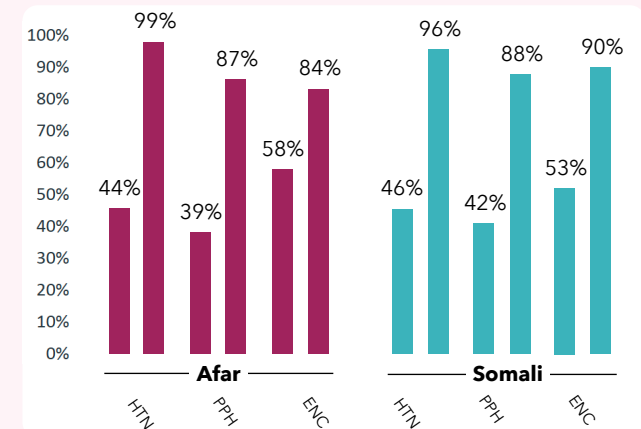
Results

To assess the impact of the clinical mentorship, baseline and endline evaluations of knowledge and skills on selected obstetric and neonatal emergency topics were conducted on the facilities among healthcare professionals.

This comparison highlights the variation in the initial knowledge and skills of participants in different regions. It also underscores the significance of recognizing and building upon existing strengths while addressing specific areas for improvement. By tailoring the program to meet the needs of each region, we can further enhance the knowledge and skills of participants, ensuring their continued growth and success. Even though participants feedback was positive in both regions, the results indicate that there is still room for improvement.



Participant Knowledge Assessment



Participant Skill Assessment: Baseline and Post Mentoring

Lessons learned

- Working closely with government structure had a positive impact on project implementation
- Continuous follow up and mentorship improve quality of care
- Dedicated time off for mentees during mentorship
- Two health centers mentorship were interrupted due to inaccessible road
- The Safe Delivery App is a valuable add-on to support continuous learning

Introducing a mLearning tool to midwifery students in four universities, Ethiopia

Digital learning tools can play an important role in supporting traditional midwifery teaching and help bridge the transition from studying to practice.

Background

Ethiopia has seen a rapid increase in midwifery training institutions over the past decade, from 23 in 2009 to 52 in 2021. The National Human Resources for Health Strategic Plan for Ethiopia 2016-2025 published by the Ministry of Health describes how the rapid expansion of teaching institutions combined with insufficient capacity to conduct quality audits of all institutions and limited ability to implement reaccreditations of institutions has led to non-compliance and insufficient quality auditing.

A recent study of clinical teaching practice conducted on 424 midwifery educators from 30 public education institutions offering midwifery degrees in Ethiopia found that less than half the educators had effective clinical teaching practices. Among the reasons identified for the lack of effective clinical teaching practice was over-crowded clinical teaching sites and inadequate resources for clinical teaching¹.

There is a need to further improve and standardise midwifery education in Ethiopia. The Ministry of Health and Higher Education Relevant and Quality Agency (HERQA) lead such initiatives, but other organisations and associations may play an important role in supporting this work. MF has collaborated closely with the Ministry of Health over the past 10 years to provide

in-service training to midwives and other skilled birth attendants. After learning about the gaps in pre-service midwifery education MF has explored ways to support quality improvement and standardisation of initiatives where possible.

Pre-service initiatives

The Safe Delivery App, developed by MF, the University of Copenhagen and the University of Southern Denmark can support the standardisation of teaching on the most common obstetric complications. The content of the App is aligned with the national guidelines and is already in use by thousands of midwives across Ethiopia.

Introducing the Safe Delivery App to students during their midwifery degree both serve as a learning aid and revision tool during their degree and ensures that the students are familiar with the App and can use it as a reference tool on the job when they progress into working life. Since 2018 Maternity Foundation has engaged in various ways:

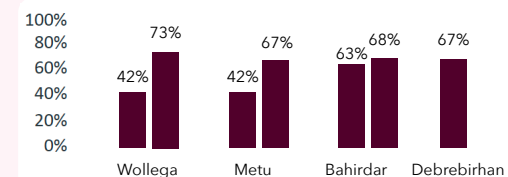
- **2018:** Workshop with more than 40 midwifery instructors from 19 teaching institutions. The App was introduced and discussions on how it could be integrated to the midwifery curriculum was held over 4 days.
- **2019:** Partnerships with 5 selected universities to introduce the App to 2nd, 3rd and 4th year students. Interrupted by COVID-19.
- **2021:** Partnership with 4 universities to introduce the Safe Delivery App to 4th year students.

App Usage Feedback

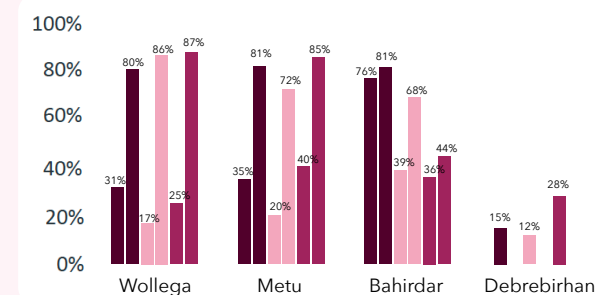
By looking at the App users with geolocation enabled, we can zoom in on 39 users in the areas of the 4 universities.

University	Average # of sessions
Metu	45.2
Bahirdar	36.9
Debrebirhan	20.3
Wollega	16.2
Total	36.5

Infection Prevention and Safe Abortion modules have been used by the highest number of users, but the Active Management of Third stage labour has been used most frequently. Feedback from instructors suggest that the integration of the Safe Delivery App has been beneficial to the learners, as the tool provides a different way to engage with the clinical content and helps bridge the transition into internship.



Students Average Knowledge Score
Pre and post knowledge



Students Average Skill Score
Pre and post HTN
Pre and post NR
Pre and post PPH

Lessons learned

- Continue sharing, implementing and documenting the SDA integration in more universities
- Work closely with MOH and Midwifery Association to improve quality of midwifery education

Delivering Clinical Midwifery Training under Covid-19 Restrictions

In a world faced by COVID-19 restrictions it is necessary to rethink how to train midwives.

Background

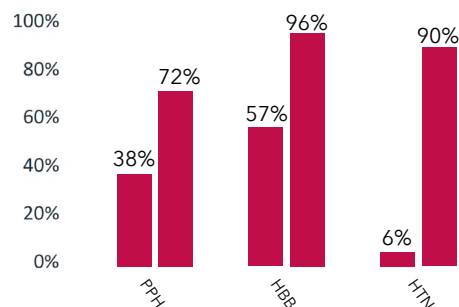
With support from Novo Nordisk Foundation MF delivered trainings to 81 midwives to strengthen the response to COVID-19 and the provision of quality maternal and child health care across 14 health centers in Addis Ababa, Ethiopia. All 81 midwives received training on management of obstetric emergencies, COVID-19 and infection prevention, management of post-partum hemorrhage (PPH), management of hypertension (HTN), and essential newborn care (HBB). In light of COVID-19 restrictions, remote training options were explored. The core trainings were delivered via Zoom or pre-recorded videos with support from on-site facilitators who were trained in demonstrating simulation exercises. They were also trained to take on the mentoring role. The mentors were selected from 4 catchment hospitals to strengthen the link between hospitals and health facilities. The 15 mentors were trained at their four hospitals by Maternity Foundation master trainers on catchment based clinical mentoring using simulation exercises for each of the clinical modules. Mentoring visits took place over a 6-month period.

The Safe Delivery App was integrated into the trainings and mentoring to provide a tool for continuous self-directed learning.

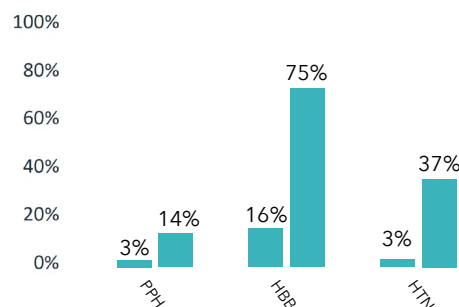
Results

Knowledge and skills assessments in each of the clinical topics were performed before the training and after the final mentoring visit.

Participant Knowledge Assessment:
Baseline and Post Mentoring



Participant Skills Assessment:
Baseline and Post Mentoring



PPH and HTN training was delivered by prerecorded videos. The skills results in these two topics were lower than for HBB, which was delivered via Zoom. Participants' feedback was positive for both the videos and the Zoom trainings, but the results suggest that the human component of the Zoom training was more engaging and leading to stronger results.



"The Safe Delivery App is motivating and so helpful that I will recommend it to others"
- Mentee

Lessons learned

The training successfully increased knowledge and skills of participant midwives. The results also indicate that there is still room for improvement.

- Zoom delivered skills trainings can work
- Competent on-site facilitators are paramount
- Providing trainings at the facility saves resources
- The Safe Delivery App is a valuable add-on to support continuous learning

A Mixed Methods Feasibility and Effectiveness Pilot Study of 4 Training Approaches of the ENC Now!-Content

In light of COVID-19 the demand for online trainings has been on the rise, but little is known about which trainings approaches are best suited for remote learning.

Background

In collaboration with the American Academy of Pediatrics (AAP) and Laerdal Global Health (LGH), MF implemented a pilot-study to explore the feasibility and effectiveness of 4 remote training approaches of the ENC Now! curricula. MF master trainers were trained by AAP and LGH before cascading the training. The training focused on essential newborn care and management of birth asphyxia including bag and mask ventilation exercises. The training was delivered on-site through a blended learning approach with online lecture based and onsite exercises and practice delivered to 59 participants across 18 facilities in Minjar, Tarmaber, Merehabete, and Basona Werena, Amhara region from May to October 2021. The trainings were supported by on the ground facilitators who were trained by MF master trainers. Materials and tools used for the training include online ENC slides, digital flipchart, tablets, peer-to-peer clinical practice cards, Neonatalie mannequins, the Safe Delivery App, and a weekly clinical practice card.

Four approaches were tested:

- An intense 2-day training followed by 3 months of selfdirected learning with the Safe Delivery App integrated
- An intense 2-day training followed by 3 months of selfdirected learning without the Safe Delivery App integrated
- A spaced-out training of 5 sessions delivered bi-weekly with weekly self-directed learning and the Safe Delivery App integrated
- A spaced-out training of 5 sessions delivered bi-weekly with weekly self-directed learning without the Safe Delivery App integrated

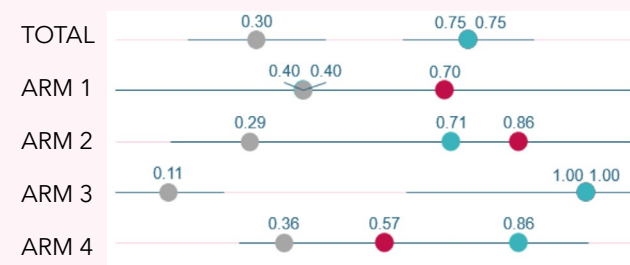
Results

Knowledge and skills assessment was performed before the training, after the core training and 3 months after the last training session. Extensive qualitative feedback was collected from participants, facilitators and facility managers. Overall, there was a strong improvement in knowledge and skills across all 4 approaches.

Proportion of participants passing the knowledge assessment at baseline, endline and follow-up



Proportion of participants passing the skills assessment at baseline, endline and follow-up



Regional instability caused delays in Arm 1 follow-up data collection and a different team conducted the assessments which has possibly influenced results.

The observed increases in skills were confirmed in the qualitative feedback. Generally, the trainings were well received by participants and facility managers across all four arms. They all expressed that the training had helped improve the knowledge and skills in essential newborn care and neonatal resuscitation and fill existing gaps. Furthermore, participants and onsite facilitators mentioned that there is a change in the facility after the training. They started to manage asphyxiated babies in the facility instead of referring, and as a result the number of referrals to the hospitals decreased.

Lessons learned

Remote delivery of ENC Now! trainings to learners in facilities with self-directed learning is feasible. Feedback suggest that the spaced-out approach is better suited for online training, as full day Zoom sessions are tiring and it is difficult to maintain motivation.

- Highly competent on-site facilitators are critical.
- Zoom delivered skills trainings can work.
- It is important to ensure that participants have time off to participate fully.
- Communities of practice on Telegram or WhatsApp can nudge motivation for completing weekly exercises.
- Integrating the Safe Delivery App is feasible and was appreciated by learners as a supportive tool for selfdirected learning.