



IMPACT OF LOW-DOSE HIGH FREQUENCY SIMULATION TRAINING AND MENTORING DELIVERED VIA DIGITAL PLATFORM ON KEY MIDWIFERY SKILLS AMONG MIDWIVES IN AFGHANISTAN

Swati Sethi¹, Unisha Shrestha², Rashmi Aradhya¹

¹Laerdal Global Health, India, ²Laerdal Global Health, Nepal

BACKGROUND AND AIMS

Afghanistan has one of the most fragile health care systems and poor Sexual and Reproductive Health Rights (SRHR) indicators. To meet the Sustainable Development Goals (SDG) target of 12/1,000 live births. Afghanistan needs an annual rate of reduction (ARR) in Neonatal Mortality Rate (NMR) of 10.3%. Tremendous efforts are needed to improve the quality and reach of maternal and child health care programs to end preventable deaths in Afghanistan. To improve the quality of care and end preventable maternal, neonatal and child deaths, simulation-based training has been found very effective and increasingly used to improve quality of care.

The Aim of the project was to increase the quality of midwifery services in 10 provinces of Afghanistan by training midwifery supervisors and community midwives on Midwifery Skills.

METHOD

The project was implemented in collaboration with International Planned Parenthood Foundation (IPPF), Afghanistan Family Guidance Association (AFGA) and Fernandez Foundation (FF). The project did not have research associated with it. The Adaptive Learning methodology was used to train the midwifery supervisors, for which the data was collected.

The project used a virtual platform called **SimCapture** for Training Needs Assessment and to deliver the pre and post-tests. The Training Needs Assessment was captured on a 5-point scale ranging from "Not Proficient At All" to being "Very Proficient".

Then knowledge sessions (knowledge videos) and reflections on 3 identified primary skills of **Pre-eclampsia**, **Newborn Resuscitation** and **Postpartum Hemorrhage** were shared with the participants. This was preceded by a pre-test.

For the learning, the skills, a **peer-to-peer web platform** and **e-learning** was developed and was used by participants as adjuncts to the trainings.

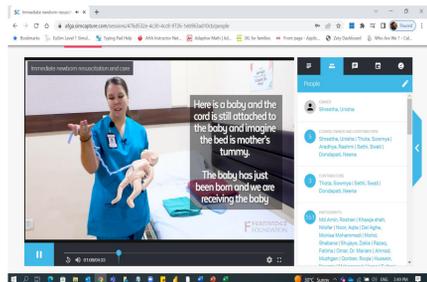


Figure 1. SimCapture Platform

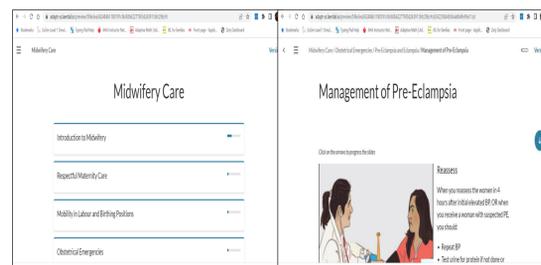


Figure 2. e-learning Platform

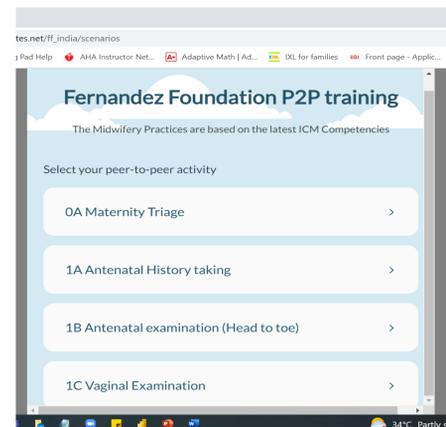
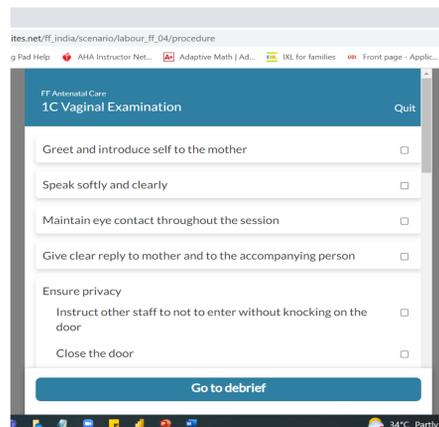


Figure 3. P2P Platform



11 virtual **Zoom discussion sessions**, each 2-3 hours long, were held by experts to reinforce what was already learnt via SimCapture, e-learning and P2P. After the zoom sessions, participants were administered post-test via SimCapture.

2 Virtual Simulation Training Sessions followed thereafter.

Participants practiced the simulation scenarios using manikins on their side with facilitator mentoring from the other side.

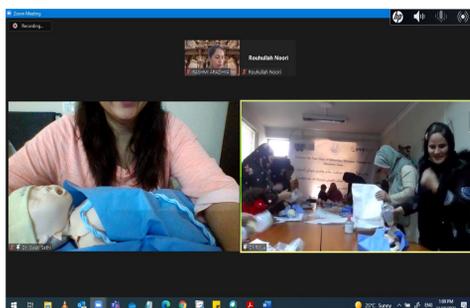


Figure 4. Zoom Sessions – Virtual Simulations



Simulation Sessions were followed by Debriefing by the facilitators and then a discussion with a larger group on the learnings from the individual sessions.

Post these training sessions, Midwifery Supervisors trained community midwives in their provinces in a staggered manner.

Mentoring Sessions could not be continued due to the humanitarian crisis in August 2021.

RESULTS

Training Needs Assessment showed the following results, which helped curate the knowledge sessions-

Table 1. Training Needs Assessment

Proficiency Level in Skills		Skills
I can just manage to perform	41%	Abdominal Palpation Identifying and Classifying/Stratifying High-risk mothers Counselling mothers for care during pregnancy Supporting mother during Labour and Childbirth Supporting mother to breastfeed infants Plotting the new Labour Care Guide introduced by WHO Helping mothers in alternative birth positions Initial Management of Eclampsia Managing Breech Delivery Managing Shoulder Dystocia Perform Episiotomy Managing Birth Asphyxia with Neonatal Resuscitation in the Golden Minute
I am proficient	43%	Antenatal History Taking Antenatal Examination Vaginal Examination Fundal Height Measurement Intelligent Intermittent Auscultation Identifying Postpartum Haemorrhage Managing Primary Postpartum Haemorrhage Identifying Case of Eclampsia Identifying Perineal Tears and Suturing up to 2nd Degree
I am very proficient	31%	Managing Primary Postpartum Haemorrhage

An increase in the scores from pre-test to post-test for **Pre-Eclampsia** and **Newborn Resuscitation** was seen as **19%** and **11%** respectively.

Midwives shared that they felt confident (verbatim) in delivering the quality services at home. They shared following success stories -



Figure 5. Identifying **Shoulder Dystocia** and delivering the baby safely at 4am and then referring them to the nearest hospital



Figure 6. Delivering a baby of the mother with **high blood pressure** at a pharmacy with the help of a nurse

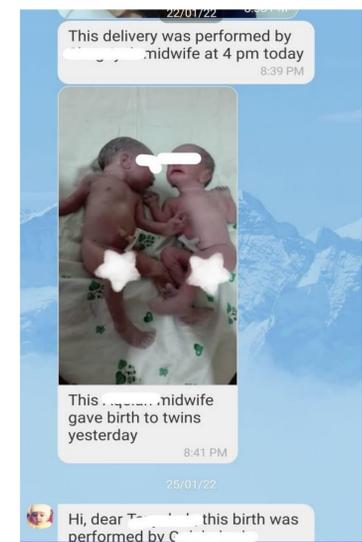


Figure 7. Delivering twins at home

CONCLUSION

Delivering the low-dose high frequency trainings via virtual digital platform can increase the confidence of midwives in delivering quality of care in the community.