Evaluation Summary

Maternal & child health video training course for frontline health workers in Nigeria
Project background and objectives

In Ondo State, southwest Nigeria, the maternal mortality rate is 745 per 100,000 live births. Up to 90% of these deaths are attributed to the activities of unskilled birth attendants, which highlights the need to focus on training frontline health workers (FLHWs) to achieve positive health outcomes for pregnant women. The Primary Health Care Development Board (OSPHCDB) in Ondo state has been at the forefront of the state government’s efforts to reduce maternal and infant mortality rates, using mobile technologies to supplement the training of health workers, many of whom lack access to formal continuous training.

In 2016, the Board partnered with three NGOs - mPowering, Instrat Global Health Solutions and Medical Aid Films - to develop and pilot a three month video-based training curriculum that aimed to improve FLHWs’ knowledge and skills in the delivery of maternal and new-born health care. Using tablets to access the training application (a locally supported version of OppiaMobile), staff could access locally-appropriate film content from Medical Aid Films, focusing on antenatal care (ANC), basic emergency obstetric and new-born care, and essential new-born care – topics selected by the PHC Development Board based on their assessment of health worker training needs. The training programme served both experienced and novice healthcare workers by providing access to new techniques and procedures in the field, as well as ‘refresher’ training. Each clinic received one tablet pre-loaded with the app containing 10 weeks’ lesson content and additional, optional content. The app could be installed on any Android device (in addition to the clinic tablet) and although connectivity was necessary for updates, initial login and sending analytic data, the system was designed for offline use.

“Tables were used to access the training application and our films. “What you see, you never forget.” – Officer in Charge (AKURE SOUTH)

This training was rolled out to FLHWs in 18 selected primary health care centres in three local government areas (LGAs) (Ifedore, Akure North and Akure South) in Ondo State between April and June 2016. A total of 200 FLHWs were trained from three districts - Ifedore, Akure North and Akure South.
How we evaluated the project

At the end of the pilot phase, an external assessment was conducted by independent consultancy firm Anadach to explore the effects of the project and review implementation. The assessment team used a mix of site visits and observations, structured questionnaires (pre- and post-training) on tablet computers, face-to-face semi-structured interviews and focus group discussions. A total of 123 FLHWs completed a technical survey pre- and post-training which assessed the trainees’ knowledge of basic maternal and newborn care practices and potential changes in knowledge by the end of the project. 61 FLHWs and three key policymakers in training provision in Ondo State completed semi-structured interviews and, together with 6 focus group discussions, identified which aspects of the training worked well, unexpected outcomes, considered how successes can be replicated and captured perceptions of improved quality of MNH service provision and demand for future video-based training.

Limitations of the assessment included only focusing on improvements in knowledge; the short project timeframe also prevented any assessment of longer-term retention of knowledge. Because of a small and non-random sample, there was variability across the sites in terms of technology literacy and buy-in from management. There was also a state-wide health worker strike for the entire month of June 2016, which affected project implementation in some areas.

Evaluation Findings

Analysis of the pre- and post-training questionnaire scores (123) showed an average of 32% improvement in their scores after training. By the end of the three month pilot period, 120 participants achieved a score of 50% or higher, and 67 people achieved a score of 80% or higher. This was in spite of major project implementation challenges, late payment of salaries for some workers, lack of adequate power supply and faulty accessories to recharge tablet computers and varying levels of support from facility heads.

The FLHWs considered the training content to be appropriate and easy to understand, particularly for community health extension workers, and requested videos on more topics. Participants asked that subsequent projects provide more tablets to match the numbers of health workers at the facilities, so that less experienced staff would then have the opportunity to review and revise at their own pace. A few FLHWs found the English accents used by the speakers in the videos difficult to understand. Additional staff requests included providing projectors to facilitate the sharing of some of the video with pregnant women during ante-natal care, extending the training beyond three months to allow health workers to continue to improve skills and to implement mobile training as part of a comprehensive approach to training, including supervision and recognition.

“AT LEAST, IF THEY DON’T BELIEVE IN US, THEY WILL BELIEVE IN THE VIDEOS”
Nurse/Deputy Officer in Charge - Akure North

Recommendations by the assessment team to enhance project implementation include greater involvement of facility heads in planning and implementation in the video training project, provision of more tablets and accessories and transfer of videos onto smartphones and memory cards. Other recommendations include linkage of training to appraisals to acknowledge progress, issuance of electronic certificates at the end of every module and use of local accents/languages with contextual illustrations in the videos. A consistent supply of electricity or access to portable solar chargers is vital to the smooth implementation of video-based training because the tablets need to be recharged regularly.
Case studies

A video can help health care workers adapt to new practices that may not have been included or emphasised during their training. Omolola and Daodu, both midwives, explained that during their medical training they were taught various methods for the delivery of the placenta. During their practical training and subsequent work experience, the more experienced midwives had a preference for manual delivery, a practice which they both adopted. A video presented natural delivery as the safer, preferred method which caused them to establish a new norm in their clinic. Additionally, Omolola shared this learning with her former schoolmates via a WhatsApp group which they use to maintain contact.

As a result of watching training videos, midwives and CHEWs reported they had greater understanding of the optimal ante-natal care timeline and were therefore better able to schedule patients’ visits across their pregnancies and track expected delivery dates. Watching the videos together has enhanced social interaction and communication amongst staff, strengthened mentorship from senior to more junior staff members and introduced better alignment of processes.

“WE ARE DEALING WITH LIFE HERE, NOT PEPPER AND TOMATO.”
Translation: we are dealing with life, which isn’t a frivolous matter
Daodu, midwife - Ayede Ogbese

Health workers engaging with one of our films during the video training course