

This App can save thousands of mothers' lives at childbirth

Dar es Salaam, July 16, 2017. Ifakara Health Institute (IHI) has joined global efforts to curb maternal deaths by introducing in Tanzania a smartphone application poised to save lives of thousands of mothers and newborns in the country. According to the World Health Organisation (WHO), an estimated 550 women die each day in sub-Saharan Africa due to complications related to childbirth.

IHI launched the application, known as Safe Delivery App (SDA), at a remote district of Mpwapwa in Dodoma region on Thursday. The App was successfully tested in Ethiopia recently.

The App is one of the latest technologies being tested by health scientists to save more lives as latest WHO statistics show an estimated 303,000 women will die annually from complications related to pregnancy or childbirth.

“The Safe Delivery App is designed to empower skilled birth attendants to provide a safer birth for mothers and newborns everywhere. It provides skilled birth attendants direct and instant access to evidence-based and up-to-date clinical guidelines on Basic Emergency Obstetric and Neonatal Care,” says research scientist for the SDA project, Donat Shamba.

In ensuring that the project works, IHI has provided birth attendants at Mpwapwa health centres with new smartphones installed with the App and has partnered with Bluetown – a company dedicated to providing internet services in unconnected, mostly rural areas – to assure connectivity.

Bluetown project manager Paul Kaiza says, “We’ve been working to connect remote locations with internet services in Mpwapwa and similar locations. We’re proud to be part of this great project intended to save lives.”

The App was created in 2012 with the support from MSD for Mothers in collaboration with the University of Copenhagen and the University of Southern Denmark, and is currently supported by The Bill and Melinda Gates Foundation as well. In Tanzania, the SDA project is supported by Danida and implemented by IHI in collaboration with the Maternity Foundation.

IHI is currently undertaking a study at health centres in Mpwapwa District, Dodoma region, to test the App, before it’s rolled out in other centres in the country. The project works with the Ministry of Health, Community Development, Gender, Elderly and Children, President’s Office Regional Administration and Local Government and authorities charged with the overseeing the health sector in Mpwapwa.

Mpwapwa District Medical Officer Dr. Said Mawji expresses optimism that the project will help the district in addressing some of the challenges it encountered in avoiding deaths at childbirth caused by poor skills and knowledge.

“We’re very happy to be take part in piloting this project and look forward to its successful implementation. We’ll give researchers all the support they need to make the testing of the App a success,” says Dr. Mawji when commenting on a study being conducted in his district to test the App.

Mpwapwa District Chief Nursing Officer Rhobi Kenyunko expresses hope that the App will help in giving some childbirth skills to other health workers who in normal circumstances assist skilled birth attendants during childbirth.

“Our district is short of skilled birth attendants. I hope that knowledge available in the App will help in creating a pool of medical staff knowledgeable of the basics of attending to mothers and newborns at childbirth,” she says.

Content of the App

The App contains the latest WHO clinical guidelines on BEmONC: infection prevention, post-abortion care, hypertension, active management of third stage of labour, prolonged labour, post-partum haemorrhage, manual removal of placenta, maternal sepsis, neonatal resuscitation, newborn management. The App is organized by subject areas.

App features

It contains four basic features: easy to understand animated instruction videos, action cards, drug list and practical procedure instructions. All features and functions are designed for low-literacy, low-income settings and work completely offline once downloaded.

The 10 instruction films include the seven signal functions of BEmONC and an additional three essential procedures on infection prevention, newborn management and active third stage of labor. The videos are between 5 – 7 minutes and can be watched in sections.

Uses cases

The App can be used in low and middle income countries and humanitarian settings as a tool to improve skills, knowledge and practice in a variety of ways determined by the need of existing health systems, programs, facilities and individual skilled birth attendants.

Examples include: continuous use for learning in users’ own time, as an emergency job aid, pre-service and in-service training, to support competency-based education through strong video demonstration, to transfer of knowledge and skills to clinical sites, and for follow-up by supervisors.

To download

The app is free for download, works offline and can be found in English and French (additional languages coming soon) at Google Play and at App Store.

Background: Global maternal deaths

In 2015, an estimated 303 000 women will die from complications related to pregnancy or childbirth. In addition, for every woman who dies in childbirth, dozens more suffer injury, infection or disease, according to the WHO.

The majority of maternal deaths are due to haemorrhage, infection, unsafe abortion, and eclampsia (very high blood pressure leading to seizures), or from health complications worsened in pregnancy. In all these cases, unavailable, inaccessible, unaffordable, or poor quality care is fundamentally responsible.

Maternal deaths are detrimental to social development and wellbeing, as some 1 million children are left motherless each year. These children are more likely to die within 1-2 years of their mothers' death.

Women need not die in childbirth and App is designed to exactly help avoid that. “We must give a young woman the information and support she needs to address her reproductive health needs, help her through a pregnancy, and care for her and her newborn well into childhood,” WHO says on its website.

“The vast majority of maternal deaths could be prevented if women had access to quality family planning services; skilled care during pregnancy, childbirth and after delivery; or post-abortion care and where permissible, safe abortion services. Increased attention for women living in conflict situations, or under humanitarian crisis is needed because a working health system with skilled personnel is key to saving these women's lives.”

The WHO says, although the world did not achieve the Millennium Development Goal of reducing maternal mortality by three quarters between 1990 and 2015; great strides were made and many countries saw significant improvements in maternal health.

“Looking beyond 2015, WHO is committed to support accelerated reductions in maternal mortality by 2030, as part of the Sustainable Development Goals agenda. For this to happen, high quality reproductive, maternal and newborn health care must be available, accessible and acceptable to all in need,” it stresses. #

About the IHI

Ifakara Health Institute is one of Africa’s leading research centres with a strong track record in public health research which dates back to the 1950s. With a history of multi-stakeholder engagement, the Institute provides a vital link between quality research, programme evaluation, and policy change. A key strength of the Institute holds in the fact that its scientists come from a broad range of disciplines, and therefore engage in a complex understanding of health.

The IHI [work](#) spans across a wide spectrum of public health research, much of it from social determinants of health (SDH) aspect. The IHI, which has offices in Dar es Salaam, Ifakara and Bagamoyo, is driven by a core strategic mandate for *research, training and services*. Learn more about IHI [here](http://ihi.or.tz/): <http://ihi.or.tz/>

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