

chest infections. Many times, by the time the disease is recognised, it is too late to save a life.

in telecommunication engineering at Makerere University. Passionate about information technology and social

Concerned about the impact of

WEKEBERE DEVICE HELPS

By Ahmad Muto

Maternal and neonatal health are of great concern, especially in hard-to-reach areas, where there is little or no access to quality antenatal services. However, with the advancement in technology, steps are being taken to make those services more available through innovation.

A team of three engineers: Steven Tashobya, Richard Ssejongo and Kennedy Kalemera, came up with *Wekebere*, an easy-to-use and reliable fetal monitor to reduce maternal and infant deaths related to pregnancy complications. This is a low-cost option to help expectant mothers monitor the condition of their babies in the comfort of

PLANS
The team is working on improving the device's sensitivity to 90%, up from the current 75%. They also plan to improve it by removing the cable, and making it smaller. This prototype is made of cardboard, but the final product is plastic.

their homes. The system has a device with a display screen for the results. The device is attached to a belt, which has sensors using a cable. The belt is wrapped around the abdomen of the pregnant woman and then switched on.

"If the belt is not tied in the right position, the screen

displays as much, so one can adjust. When it is activated, the device begins to display the results of the foetus and the mother," Tashobya explains.

A red light shows abnormal conditions and green light shows normal conditions. The device checks the position of the foetus, fetal heart rate, and contractions to show whether they are normal or not, according to Ssejongo.

To use *Wekebere*, the pregnancy must be in its second trimester (about five months). The device is made of a micro-processor, a screen, light modules and buttons with a nine-volts rechargeable battery that can last a month on daily usage and one-and-a-half months if not used daily. The device is charged with

MONITOR YOUR UNBORN CHILD

both grid electricity and solar power that is common in hard-to-reach areas.

"We are still testing the app and have done needs assessment in Mukono and Kanungu, teaching midwives and expectant mothers how they are going to use the device," Tashobya says.

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Apparently, the *Wekebere* device can handle heavy usage of up to 100 expectant mothers in a day.



The low-cost device can help expectant mothers monitor the condition of their unborn babies

University of Berkeley in the significantly reduce pneumonia deaths.

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