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The gadget which can scan a pregnant woman's womb
newvision

By Carol Natukunda

[Makerere University](#) students have invented a hand-held gadget that can be used to scan a pregnant woman's womb and detect problems such as ectopic pregnancy or abnormal foetal heart beats.

The mobile application, named WinSenga, consists of a funnel-like pinnard horn similar to the one used by midwives, connected to a smart phone. When the pinnard horn is pressed against the abdomen, the smart phone screen displays data on the location and condition of the foetus.

The application is the brain child of three second year students from the College of Computing and Information Technology (CIT); Aaron Tushabe, Joshua Okello and Josiah Kavuma.

The students explained that their technology is based on the traditional pinnard horn and was done in consultation with Dr. Davis Musinguzi, who works with UNICEF as a health systems consultant.

Normally, midwives and gynaecologists listen to foetal sounds through the pinnard horn and make a diagnosis basing on the type and strength of the foetal sounds they get. The IT students have automated the process by designing a software that enables the smart phone receive and interpret the sounds.

The lay person clicks on the "quick diagnosis" window while medical persons use the "advanced diagnosis" option. Speaking to Sunday Vision, Michael Niyitegeka, CIT's head of corporate

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communications said the device would help in bridging staff shortage gap in the health sector as well as maternal deaths.

Statistics show that an estimated 6,000 women or 16 women in Uganda die every day due to maternal health complications.

SAVE LIVES

“If they were detected early, many lives would be saved. When you use this device, you are hitting two birds with one stone. You are equipping the health care provider in the local community to be able to work faster and efficiently. Mothers can as well use the gadget to know the condition of their baby and act accordingly,” said Niyitegeka.

The team leader, Tushabe, said: “We are not trying to re-invent the wheel, but to use technology to prevent unnecessary deaths.” Tushabe says it was after visiting the antenatal department at Mulago Hospital and watching mothers and children suffer that they decided to come up with the WinSenga device.

“We called it WinSenga to relate to traditional birth attendants. When you go to our hospitals, you find the midwife using the traditional pinnard to listen to the baby’s heartbeat. But they might not always hear anything or get enough details about the baby. We thought we could aid doctors to give the best services.

With this device, you can know how old the foetus is, whether it is underweight, its position and breathing pattern. Then decide on what precaution to take or the treatment to give,” said Tushabe. “You can access the information anytime you log on because once you are done with diagnosis, it records automatically,” said Tushabe.

CHEAP

“At \$3,000 (sh7.3m) it is cheaper and affordable compared to the ultrasound scan.” Tushabe and his team members call themselves CIPHER256.

On May 3, they were recognised for their creativeness during this year’s East and Southern Africa Microsoft Imagine Cup competitions. The Microsoft Imagine Cup is a global competition aimed at encouraging students to use imagination, creativity, passion and technology to create solutions to real life problems.

The competition is sponsored by the United Nations Millennium Development Goals to “imagine a world where technology helps solve the toughest problems”.



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bella

as a mother and woman,i need to know the side effects. yes its a good invention,,but technology come with benefits and also disadvantages.

Isaac Sakira