



Saving babies before they are born

The Umbiflow[™] device can identify babies that are at risk of being stillborn.

Dr Tsakane Hlongwane is an obstetrician and gynaecologist at the University of Pretoria with special interest in maternal health and preventing stillbirths.



Scholarship programme:

SAMRC Clinician Researcher Programme

Orcid ID:

https://orcid.org/0000-0003-1839-6018

Additional information:

https://doi.org/10.1016/j.eclinm.2021.100792



Umbilical blood flow screening can save babies from being stillborn.

regnant women want to experience a good pregnancy and give birth to a healthy baby. Unfortunately, some pregnancies end in tragedy, with the birth of a stillborn baby.

The University of Pretoria's

Maternal and Infant Health Care

Strategies Research Unit has been testing an innovative fetal blood flow device called the Umbiflow™ to try and see whether screening healthy pregnant women will help identify pregnancies which are at risk of stillbirth.

Healthcare providers at the antenatal clinics have offered UmbiflowTM screening examinations to over 7 000 pregnant women in South Africa. Women who were identified with abnormal fetal umbilical blood flow were referred to the hospital for a more comprehensive check-up of the mother and to examine the pregnancy more intently.

"This helped us to assess the pregnancy for any adverse problems and to recommend timely interventions if the baby's blood flow was compromised," says Dr Tsakane Hlongwane.

Screening with the UmbiflowTM device showed that around 13% of healthy pregnant women have babies with abnormal umbilical blood flow, and are at risk of poor

fetal growth. These babies can be at risk of dying in the uterus if they are not identified and referred for specialised care.

"Pregnant women should attend antenatal care, and should start the antenatal care at their local clinics as soon as they realise they are pregnant," says Hlongwane.

During antenatal care, they can be offered a non-invasive screening examination using the UmbiflowTM device when between six and eight months into their pregnancy.

"This can identify babies that are not growing appropriately and save the babies."

Presented in association with the South African Medical Research Council, this programme forms part of #theArtofResearch, an initiative of research communication specialists Jive Media Africa.



THEAT OFRESEARCH