

BASIC ULTRASOUND TRAINING IN OBSTETRICS –

USING THE EXAMPLE OF KITETE REGIONAL REFERRAL HOSPITAL TABORA, TANZANIA

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Background

In low-resource countries maternal and newborn mortality is devastating. Tanzania still has one of the highest rates worldwide. While in high income countries this rate has been reduced through high quality ante-, intra-, and postnatal care, these interventions are insufficient or missing in Tanzania. In this context prenatal and intrapartum ultrasound has gained importance during the last decades in higher resource countries.

By identification of risk factors like placenta previa, multiple pregnancies or fetal abnormal position, adequate measures can be taken before an emergency occurs. The Swiss non-governmental organisation “Stiftung für medizinischen Wissenstransfer” has been taking this into account for many years by offering basic ultrasound training in obstetrics for doctors and midwives in low resource countries. Since 2016, medical staff of the Kitete Regional Referral Hospital (KRRH) in Tabora, Tanzania, the partner-hospital of the University Hospital Basel (UHB) have the opportunity to participate in these trainings.



From Basel to Tanzania:
6500 km



Ultrasound device being used
in a district hospital in Tanzania

Project

Since 2016, 12 doctors and midwives from KRRH have participated in a basic ultrasound course in Tanzania organized by the “Stiftung für medizinischen Wissenstransfer”. This basic course has to be followed by 50 documented ultrasound examinations between 20 and 24 weeks of gestation. These ultrasound scans were supervised by obstetricians of the UHB in Tabora. After completion of the examinations, a second advanced course has to be taken, completed by a written and practical exam.



Lecture at Huruma District
Hospital, Mkuu

Basic course

50 examinations

Advanced course

Written and practical exam

Capability to perform
ultrasound examinations in
obstetrical emergency
situations on-site



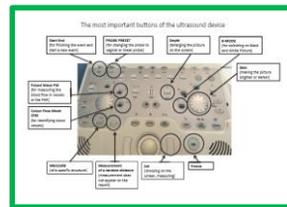
Supervision of scanning and review of the documentation by obstetricians of the UHB



Practical exercises during
the course



One of the participants of
the KRRH receiving her
certificate



Instructions for use at the on-site
ultrasound device providing practical
help for future scans without supervision

Results and Conclusion

While it is very difficult to include one routine ultrasound examination in antenatal care of all pregnant women, we do see changes in management of risk pregnancies and intrapartum care. Before 2016, ultrasounds were only done by one radiographer in the hospital located far away from antenatal care and labour ward and only available during working hours on weekdays. Now, medical staff is able to perform ultrasound examinations in emergency situations in labour ward 24/7. Thereby, considerable improvements in handling of obstetrical emergencies are achieved.