

COMMENTARY

ANTENATAL ULTRASOUND

The use of ultrasound in antenatal care has increased significantly worldwide over the last 20 to 30 years. Currently, the International Society for Ultrasound in Obstetrics and Gynaecology (ISUOG) recommends a mid-trimester Ultrasound to help confirm pregnancy-dating, number of fetuses, placental location and identify any congenital malformations. If resources and expertise are available, an early Ultrasound at 11 to 13 weeks is also recommended to further improve accuracy of pregnancy dating and early screening of congenital malformations. While first and second trimester Ultrasounds alone have not been shown to decrease perinatal mortality, information provided from these scans can be helpful to organize management plans for the pregnancy, including twin pregnancies and abnormal placentation. In addition, more accurate dating with Ultrasound is known to decrease rates of post-date induction of labour and rates of Caesarean section. It can also assist with the identification of lethal congenital anomalies and abnormal fetal growth and add to the assessment of fetal well-being.

Over the last 10 years, Ghana has worked hard to decrease the neonatal mortality rate from 33.6 per 1000 live births in 2005 to 26.9 per 1000 live births in 2016. Despite this decrease, the 4th Millennium Development Goal to reduce child mortality by 2/3 has not been met nationwide. The 3rd Sustainable Development Goal has a new target of decreasing the neonatal mortality rate to 12 per 1000 live births by 2030. Given the top causes of neonatal mortality in Ghana include congenital anomalies, complications of prematurity and intrapartum complications including stillbirth; Ultrasound is a tool used in Obstetrics to identify some of these at-risk fetuses. Improved Ultrasound surveillance of these fetuses including use of Umbilical artery Doppler and Biophysical profiles, may help to achieve these goals by 2030.

Korle bu Teaching Hospital has recently launched a Fetal Assessment Centre within the Obstetrics department. Currently, the unit consists of one Ultrasound machine, and one CTG machine. There is at the moment a separate Cardiotocography Unit which was out doored in 2010 and efforts are being made to integrate the activities of this Unit with the Fetal assessment Centre. I recently had the opportunity to travel to Accra from Halifax, Canada, for a two-week period to conduct lectures and hands-on teaching within the Ultrasound unit. This opportunity was afforded to me through a growing partnership between Korle Bu Teaching Hospital, the University of Ghana and Dalhousie University in Halifax. Through further training and education, the goal is to expand and improve the quality of Ultrasounds provided at Korle bu Teaching Hospital and augment maternal fetal medicine training within the Department of Obstetrics and Gynaecology. Part of this initiative is to assist with the development of local guidelines for Ultrasound assessments including standardized training, appropriate timing and essential components of the Ultrasound assessment. With improved and consistent Ultrasounds, performed in a timely fashion by skilled care providers, improved maternal and neonatal outcomes may be realized. Another area we hope to invest resources within the centre is in the area of Simulation which we believe will improve care and outcome.

The vision of this Fetal assessment Centre is to grow into a Fetal assessment and treatment centre where a wide range of interventions could be done to optimize fetal outcome and reduce neonatal morbidity and mortality. We are hopeful that this centre with assistance from our Partners will provide the appropriate milieu for the training of maternal fetal medicine specialists for the country.

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