

uptake of other services in some poor populations in Mesoamerica, and highlights the need for continued and varied efforts in these populations to increase uptake and improve effectiveness of ANC in encouraging positive and lasting effects on women's participation in health services.

**Source of Funding:** Inter-American Development Bank.

**Abstract #:** 2.002\_WOM

### Exploring Variations in Perceptions of Neonatal Airway Management with Traditional Birth Attendants and Midwives Practicing in Rural Uganda: A Qualitative Study

*M. Mendhi<sup>1</sup>, D.C. Pope<sup>2</sup>; <sup>1</sup>Medical University of South Carolina, Charleston, South Carolina, USA, <sup>2</sup>Medical University of South Carolina, Charleston, USA*

**Background:** Each year worldwide, 2.8 million neonatal deaths occur, and 25% are caused by hypoxic events, also referred as birth asphyxia. The World Health Organization (WHO) recognizes the need to educate the developing nation's physicians, nurses and midwives to reduce the neonatal mortality rate, to address the Millennium Development Goal (MDG). Although trained health care workers decrease the neonatal mortality rate, the limited numbers are unable to cover rural areas. Therefore, Traditional Birth Attendants (TBAs) remain the primary healthcare providers in the rural areas. Yet a need exists to train and assimilate the TBAs with the facility-based midwives to provide culturally appropriate educational resources in rural areas to manage birth asphyxia.

**Aim:** This study captured the "voices" of TBAs and midwives practicing in rural Uganda at Masindi-Kitara Medical Center (MKMC) and affiliated villages to assess their perceptions of safety in neonatal airway management, the need for modifying educational resources, such as Helping Babies Breathe (HBB) guidelines, that is cultural appropriate and enhances learning preferences for better adaptation in local contexts.

**Methods:** A qualitative focused ethnographic method was used to collect data by field-notes during observation of births, interviews with the MKMC management, midwives, TBA facilitator and a focus group discussion with seven TBAs.

**Findings:** The analysis confirms that the facilitators are the best practices of the MKMC midwives who are competent in providing neonatal airway management training, while the TBAs have barriers to performing optimal neonatal airway management due to lack of resources, a limited knowledge base and cultural practices. The learning preferences of the TBAs are "demonstration" and the "time honored" method through created song in the local language to remember the importance of neonatal airway management.

**Interpretation:** The knowledge gained in this study will contribute to development and dissemination of culturally tailored educational intervention to enhance the TBAs understanding of effective neonatal airway management by re-demonstration and verbalizing the HBB steps. The joint effort of midwives and TBAs (facility/home-based) in creating a preferred learning method to implement the HBB guidelines may address a sustainable approach for future transition from MDG ending in 2015 to a Sustainable Development Goal.

**Source of Funding:** Travel grant from Medical University of South Carolina Center for Global Health.

**Abstract #:** 2.003\_WOM

### Evaluating the Feasibility, Acceptability and Clinical Impact of Implementing New Pregnancy Dating and Fetal and Newborn Growth Standards in Peri-Urban Nairobi, Kenya

*K.R. Millar<sup>1</sup>, A. Langer<sup>2</sup>, F. Muigai<sup>3</sup>, M. Munson<sup>3</sup>, S. Patel<sup>3</sup>, S. Subbiab<sup>3</sup>, M.N. Wegner<sup>4</sup>; <sup>1</sup>Harvard T.H. Chan School of Public Health, Boston, Massachusetts, USA, <sup>2</sup>Harvard T.H. Chan School of Public Health, Boston, USA, <sup>3</sup>Jacaranda Health, Nairobi, Kenya, <sup>4</sup>Harvard T.H. Chan School of Public Health, Santa Fe, USA*

**Background:** The INTERGROWTH-21<sup>st</sup> Project, which involved 60,000 mothers and infants across the world, produced the only comprehensive, scientifically-based platform to assess gestational age, fetal growth, and newborn size at birth.

Despite overwhelming evidence about the importance of prenatal growth and development, few facilities and providers are equipped with the measurement tools necessary to successfully determine gestational age (GA) and monitor and evaluate fetal and newborn growth.

This study will assess the feasibility, acceptability and clinical impact of integrating obstetric ultrasound for gestational dating into routine antenatal care (ANC), fetal growth assessment into high-risk ANC, assessment of newborn size at birth and size for gestational age. The clinical tools for gestational dating, fetal growth and newborn size at birth use the INTERGROWTH-21<sup>st</sup> growth curves, which have been validated in the Kenyan population and internationally.

**Methods:** We are using a pre-post study design to evaluate the implementation of the package of INTERGROWTH-21<sup>st</sup> standards as well as the association between package implementation and clinical decision-making and provider and client satisfaction. Using quantitative, descriptive, and qualitative data from chart reviews, focus group discussions, and key informant interviews, we will assess the acceptability, adoption, appropriateness, feasibility, fidelity, penetration and efficiency of implementing the INTERGROWTH-21<sup>st</sup> tools; if providers are able to offer women an evidence-based approach to pregnancy dating and growth monitoring during ANC visits; if more accurate dating and growth monitoring is associated with changes in clinical decision-making (including appropriate referrals); and if accurately assessing size at birth is associated with newborn clinical care management and appropriate referrals. The project will work within Jacaranda Health's high-quality, low-cost maternal and newborn health service delivery model, with targeted outreach to low-income and middle-income women in Nairobi, Kenya.

**Findings:** This project will finish in April 2018, therefore, we will present preliminary results at CUGH 2017. These preliminary results will summarize the implementation process dimensions of the INTERGROWTH-21<sup>st</sup> standards and the process and analysis of training providers in ultrasound and neonatal anthropometry.

**Interpretation:** The implementation of new technologies in low-resource contexts is a complex process that must balance various stakeholders and clinical considerations.