

The Pediatric Academic Societies (PAS) Meeting 2019 in Baltimore, USA

I am a Swedish pediatric specialist and I am right now doing a PhD in Global Health in Bergen focusing on neonatal resuscitation in low resource settings. I am part of a research group who have done several observational studies, one qualitative study and one RCT at Mulago Hospital, Kampala, Uganda. The hospital has 30 000 deliveries per year and around 60% are referrals. There are few doctors around to help out at resuscitations, its mostly done by midwives. I have until recently lived one year in Kampala, Uganda.

We are currently running the RCT NeoSupra trial in Uganda comparing neonatal resuscitation with laryngeal mask airway (LMA) or bag and mask, ClinicalTrials.gov Identifier: NCT03133572. The study has so far recruited 950 resuscitation, all filmed in HD, and will end in 2-3 months after having recruited 1150. The primary outcome is a composite outcome of a) early neonatal death (within 7 days) b) neonatal encephalopathy (admission to NICU with a Thompson score of 11 or above in day 1-5 during hospitalization). We have trained over 200 midwives at the hospital in Helping Babies Breathe and have supplied the hospital with bag and masks and LMA:s. This has decreased the neonatal mortality at the hospital and increased the quality of care. The study is supported by The Norwegian Research Council and CISMAL through the University of Bergen, Norway.

I attended PAS 26-29 April 2019. PAS brings together thousands of pediatricians and other health care providers united by a common mission: improve the health and well-being of children worldwide. This international gathering includes researchers, academics, as well as clinical care providers and community practitioners. Presentations cover issues of interest to generalists as well as topics critical to a wide array of specialty and sub-specialty areas.

I went to PAS to present my last Abstract **“Informing change – a qualitative study on midwives’ capability, opportunity and motivation to perform evidence-based neonatal resuscitation behavior at Mulago Hospital, Uganda”**. Asphyxia is a main cause of neonatal mortality. Improved neonatal resuscitation guidelines implies changing behavior. In this qualitative study I interviewed 44 midwives at the high-risk labor ward and high-risk theatre. The conclusion states that the midwives recognized their high capability to enact appropriate neonatal resuscitation behavior but acknowledged need of continuous updates for best practice. Aside from capability, the physical opportunity to enact was perceived to be very low as the social opportunity was not supportive. Motivation remains a challenge that should not be overlooked when informing future interventions. I fear that things are going to get back to how it was before the study shortly after our study is finished if training and supplies are ending and motivation declines. This is according to me an important finding and needs attention both from local and international policymakers. The response of the Poster was great and I got several very interesting contacts both for further studies, collaborations and potential donors for further work in the area. I met with a Canadian group who said that they now want to start with teaching implementation science in low-resource setting before they do any kind of interventions. That is to make the local society find what they need to change and find a strategy for it before they receive training. In this way they see better motivation locally to keep the knowledge over time. Very interesting shift from research -> training -> implementation to implementation training -> identifying problems locally -> more research needed or not? -> training -> action!

I also attended several interesting workshops and lectures in the area of Global Health and workshops in laryngeal mask airways.

Here is a short glance of some of the courses I attended:

- Poster Session Global Neonatal & Children's Health
- Poster Session Quality improvement: Delivery Room
- Meet the Professor: Global Child Health with Professor Zulfiqar A Bhutta and Junaid Razzak
- Uses and Potential Applications of Laryngeal Mask Airway Devices in neonates
- Life-Saving Innovations in low- and middle-income country settings: common challenges and solution
- Global neonatal and Children's Health lectures

The LMA workshop was brilliant and the room was full of interest and I had a lot of very fruitful discussions and could share my experience of LMA in a low-resource setting. At the meet the professor session I got some good contacts at WHO apart from interesting comments on my work. In the last two lecture groups mentioned above, 16 presenters presented fantastic new innovations in Global Health. One that really left an impression was "Disposable cardboard low-cost incubator..." showing a new incubator in cardboard. A genius and very interesting solution to prevent hypothermia and infections in newborns in low resource settings.

We also run a small NGO developing free-of-charge smart-phone apps for support of neonatal resuscitation, NeoTapLS (life-support). The app is meant for training and evaluation of heart rate but can also be used for guiding a resuscitation and kept track of time, Apgar-scoring etc.

<http://tap4life.org/neotapls-life-support/>.

At the conference I met another group who had now done a study on NeoTapLS. It was great to meet them and learn about their experiences with the app. We will collaborate in a future study. This is my second time at PAS, last time was in San Francisco in 2017. I would recommend PhD candidates to join this conference if they work in the area of Global Health, are pediatrician or nurses and work in neonatal care since the focus of the Global Health session mainly focused on neonates.

These kinds of large conferences are great to attend but also challenging because of the amount of people on site and in this case, most attendants are not primarily focusing on Global Health. You need to do a lot of research before so you do not miss the parts dedicated to your area. Find time to talk to the people you meet, take a photo of them and note their contact information. When back home, write them! Otherwise it's easily forgotten. Schedule meeting in advance with other research groups of your area. And most of all: Have fun!

