MIE2018|Vitalis 2018 Technology moving Health

At the end of April 2018 I was blessed to attend the joint Medical Informatics Europe and Vitalis healthcare conferences. This was made possible with an international travel grant from NRSGH, the Norwegian Research School on Global Health. This venue, Svenska Massan conference centre at the Gothia Towers, was right at the heart of Gothenburg, Sweden's second biggest city. Transport to and from the airport was like a piece of cake.
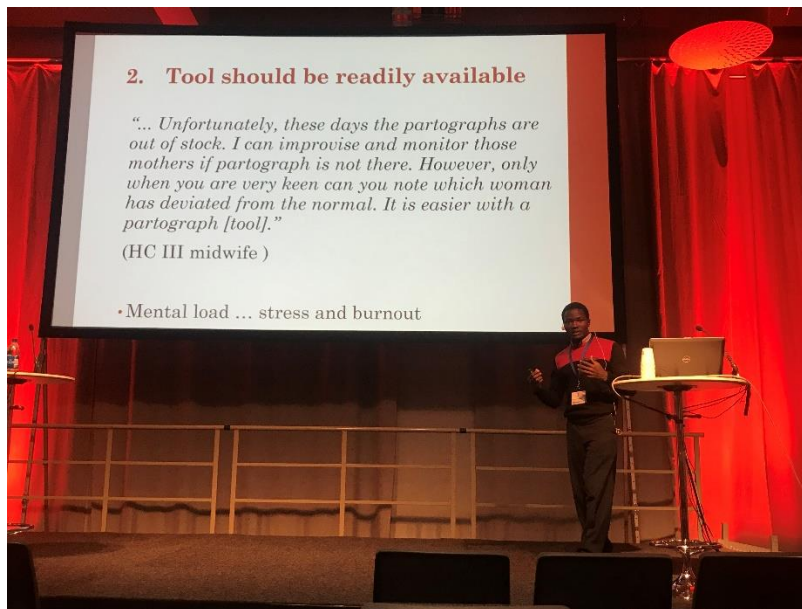
The outside of Gothia towers looked quiet but the inside was a beehive of activity, for over 1000 delegates and hundreds of hospitality staff were present. From seeing the human beings, you quickly came to the exhibition hall that had hundreds of local and international companies showcasing the latest in the field of health care technology. I was lost for choice on where to start. Since I had to give my presentation after lunch, I decided to head to the scientific tracks and would return to the exhibitors later. During the first break, and after deciding my presentations of interest, I took to a vantage point on the next floor to where I had a scope of what was where. Microsoft's stall with "large goggles" and a 1-meter-tall white robot as well as Vitalis's connected hospital and ICU were outstanding.

Downstairs, I found interesting devices and software services like smart watches, a wireless EKG with a single electrode, clinical decision support systems, smart hospital beds, name it. In the smart hospital and ICU, actors showed us how a connected hospital-home system simplifies communication between a patient and the health care team and among the hospital teams using a cloud-based network. My favorite was the Microsoft robot which could speak and track motion hence actively interacting with me. Once rolled out it will engage patients especially children as they wait at the clinics. With the large goggles on display, I saw and moved around a pulsatile human heart. This was virtual reality!

The presentations went on concurrently in over 20 tracks and the posters on display were refreshed every one of the three main conference days. We were so spoilt for choice that I even missed a couple of interesting session that coincided with equally good one. The thick conference book was a good guide with overviews to each presentation. I gave my presentation to an engaged audience of 30 – 40 delegates much as I had anticipated a smaller number given the competing presentations. At the end the session chair and others told me, "it was very nice, and the study is practical."

Over the three days I made a number of medical informatics gurus and researchers with whom we exchanged ideas, contacts, and explored areas of possible collaboration between our institutions. Potential collaborations discussed include;

- using Ubuntu GNU Health hospital information system to translate forms for electronic medical records into common languages in Uganda,
- developing our childbirth monitoring tool (my PhD project) with voice input options based on Cortana (of Microsoft) whose voice recognition error rate has dropped 6% (c.f: Apple's Siri with 5%), and
- Medical Informatics teachers from the Netherlands visiting Makerere University to give Health Informatics lectures, coaching and mentoring.

1 PhD Candidate Michael Balikuddembe presents a paper at MIE2018 Conference

The opening keynote address, by the Swedish minister for health, focused on the GDPR that aims at patient privacy and data protection in the face of growing artificial intelligence that only thrives on big data. The conundrum is that AI thrives on multiple sources of data (including social media and web browsing) about a subject to build a profile and suggest solutions. On the other hand, the laws restrict collection and use of data that will not be used for patient care. This puts the medical informatician at crossroads with the law, and the patient has to decide on trading privacy for better care for AI is the foundation of personalized prescription and treatment. The closing keynote was by Robin Farmanfarmaian, author of the Patient as CEO, who took us through the current and future health care innovations in and outside of Silicon Valley. She laid the mantle before us to improve health care services with the aim of empowering the consumer to guide the decision making team in a patient-

centered care. It was a total wrap-up of MIE|Vitalis 2018. We can only partake of the bridge for the consumer needs – untested technological prototypes.