

POG's Personal Perspectives

Obstetrics in Uganda: a reflection

I spent the summer after my first year of medical school working with the Kigezi Healthcare Foundation (KIHEFO) and Kirigame Maternal Hospital, a small private clinic in southwestern Uganda. I was particularly interested in this program because it provided clinical experience and also addressed social determinants of health, community empowerment, and health education. As a medical student, I have realized that health is as much of a product of individual circumstance as it is a patient's environment and societal factors that impact access to healthcare and health resources. My experience was an observation of low resource prenatal care and efforts to reduce maternal and infant mortality in a country whose maternal mortality rate is 343 in 100,000 live births compared to 14 in 100,000 for the United States.¹

My second week, I observed a primigravid delivery to a 17-year-old female. She was quite anxious and her mother and grandmother kept turning her away when she wandered outside to them. When it was time to push, the grandmother came into the delivery

room and covered the mother's mouth with her hand to prevent her from making any noise. It seemed cruel but the midwives told me women in Uganda typically labor alone and it's expected they do it in silence. They saw this behavior often from female family members. The delivery was precipitous with significant bleeding. After assessing in a poorly lit delivery room, a large 3rd degree laceration was discovered. They gave her IM Pitocin, the only medication option, and lidocaine for local anesthesia. Visualization was terrible but the midwives sutured as best they could as the patient squirmed in pain. I watched feeling utterly helpless as the midwives worked and finally, the hemorrhage was controlled.

Post-partum hemorrhage is the number one cause of maternal death worldwide.² I witnessed several cases of post-partum hemorrhage during my Ob/Gyn clerkship and each time I saw how quickly additional cares were employed (a stark contrast to resources in Uganda). I was instructed in one situation to get "the hemorrhage cart from down the hall". In both places, the

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causes of post-partum hemorrhage are the same and it's an all hands-on deck affair to address and treat those causes. Unlike a tertiary care center in Iowa, in Uganda there was no hemorrhage cart just down the hall, nearly unlimited supplies, bright surgical lights in delivery rooms, or operating rooms with trained obstetric surgeons and anesthesia. There was no other option except suture, pack, and hope she survived. The midwives had limited options to prevent this young mother from dying but their tenacity, determination, and faith pushed them to keep working. This was clearly not the first time they had faced a complicated delivery - and I imagined what it might have been like if the woman had delivered in her home village. Would she have survived? Would she have developed rectal incontinence and be shunned by her community? Would her baby girl have survived without her mother to breastfeed her? These were but a few of my questions as I realized the realities for women of Uganda.

I discovered that maternal mortality in itself is a risk as well as a leading predictor of infant mortality. During another delivery, the labor was prolonged causing severe maternal fatigue and poor pushing effort. We did not know the baby's status (apart from periodic heart rate checks with a fetoscope) or the adequacy of her contractions. She pushed for over two hours and when her son was delivered he was mottled and gray, limp, and without any spontaneous respiratory efforts. Resuscitation techniques were started with infant stimulation and a bagged mask to improve ventilation. I do not remember how long we worked, but

eventually, the baby's color improved and he began moving and breathing on his own. The next day, the baby was feeding well and seemed out of the woods. My relief at his improvement was overshadowed by concern about his future wellbeing after such a long period of resuscitation. We had no way of knowing if the prolonged delivery was the cause of the infant's respiratory distress or if there was something else at play: were his lungs developed, did he have a birth defect that affected his ability to breath, was this a term delivery?

Pregnancy dating is very difficult in Uganda because most women either present late for prenatal care or have no prenatal care at all. In contrast, my experiences with Ob/Gyn at Iowa showed me how much we depend on technology for prenatal and neonatal care. We have high-tech ultrasounds, blood screenings, continuous fetal monitoring and telemetry devices, as well as pediatric teams with advanced support options, and the ability to perform cesarean delivery if baby's status deteriorates. Yes, most pregnancies and deliveries are uncomplicated but are we more equipped to make this determination of "uncomplicated" because we have technology to back us up? We have options to maximize maternal and infant outcomes supported by a highly developed healthcare infrastructure, pharmaceutical market, and technology industry.

Uganda ranks 148th in maternal mortality rate out of 184 countries.³ In 2015, on average 830 women died each day worldwide due to complications of pregnancy and childbirth. Of those 830,

550 occurred in sub-Saharan Africa and only 5 in developed countries.⁴ My experiences in Uganda showed me that “low resource” meant limited access to supplies and technology without reliable facilities or tertiary care. I assisted one late night delivery that went smoothly apart from the fact that there was no power at the delivery center and we performed an episiotomy and delivered a healthy baby with only the light of a flashlight with a dying battery and a headlamp I kept in my bag. I left my headlamp with the midwives as my parting gift. It was a simple thing, but it made a huge difference. Things we take for granted like electricity and running water were unreliable at the clinic – “low resource” took on another meaning: that improvisation, making do with what was available, and determination were some of the strongest tools that doctors and midwives have to care for their patients.

After having been immersed in rural maternal care in Uganda and completing my Ob/Gyn clerkship at the University of Iowa, I appreciate even more how limited the resources, technology, and preventive measures truly are and how incredibly fortunate we are to practice medicine in the United States. We have hospitals with sterile equipment, post-partum hemorrhage and mass transfusion protocols, access to emergency transport services, and so much more to maximize good outcomes. It was an immense privilege to work alongside and learn from the midwives of Kirigame Maternal Hospital. This experience gave me so much insight and encouraged me to pursue my interests in global women’s health but also to appreciate the training I’m receiving in the United States so that I

can work to improve maternal mortality both in countries like Uganda and here at home in the US.

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