Rebekah Jo McCurdy, MD, MPH

2017 Queenan Visiting Teaching Fellowship: Final Report

Site: Mali, West Africa

Dates: April 2018 – May 2018

I would like to take this opportunity to express my profound gratitude for the 2017 Queenan Visiting Teaching Fellowship, as well as to provide a report regarding the services provided because of this grant. It is truly an honor to have been selected as the grant recipient for this year. This grant covered most of my personal expenses; additional fundraising through a local U.S. church enabled me to travel with my husband and four daughters (ages 6, 4, 2, and 9 months – see photo of my baby above). I spent the months of April and May 2018 serving at a hospital in Mali, West Africa. This hospital cares predominantly for women and children and has a six-bed labor and delivery room (with an additional four-bed triage/overflow area) with over 2,000 deliveries per year. The neonatal intensive care unit houses over a dozen neonates and has been reasonably successful in ensuring survival for neonates weighing 1kg or larger. Located in a busy city of an estimated 300,000 to 400,000 people, this hospital also services a much wider catchment area, with some patients traveling multiple hours to seek specialty care there. Services provided include emergency services, limited intensive care services, obstetric and gynecology care (including prenatal care), general surgery, orthopedic and trauma care, wound care, pediatric care

(including oncology), radiology and laboratory services, and professional development for nursing, midwifery, and physicians.

Prior to arrival, I communicated with the leadership team, to ascertain what services they would find most useful. I offered ultrasound lectures, simulations, operative obstetric teaching, clinical rounds teaching, and consultations, or other services as they preferred. They expressed interest in an ultrasound teaching series. As the physicians spoke French fluently, but had limited English proficiency, I reached out to Alfred Abuhamad, MD to see if he might have access to ultrasound PowerPoint presentations in French. He graciously provided me with four high-quality presentations covering first trimester, second trimester, adnexal masses, and the placenta, all in French. When the physicians met weekly for administrative and educational meetings, I presented the material from the lectures (each lecture approximately 45 minutes in length for a total of five lectures) with the aid of a translator. This was enthusiastically received as all of the physicians have ultrasounds in their consultation offices as well as labor and delivery and the emergency room. However, none of them has completed an obstetrics/gynecology residency, even though they predominantly care for obstetric and gynecology patients. Time was granted for questions and answers, and I served as a consultant for any findings of interest throughout the day. This gave an added element of clinical practicum to supplement the teaching series. While there, the physicians scanned and identified patients with ectopic pregnancies (including a 20+ week abdominal pregnancy), molar pregnancies, ovarian serous cystadenomas, multiple hemorrhagic cysts, twin pregnancies, placenta previas, placental abruptions, ovarian torsion, leiomyomas, fetal anomalies

(including achondroplasia and cystic hygroma), intrauterine growth restriction (including umbilical artery Doppler), and transvaginal cervical length screening to assess for risk of preterm birth, among others.

Shortly into the time there, the Labor and Delivery leadership team (including a physician and midwife) approached me about the possibility of providing additional education regarding electronic fetal monitoring for their midwives and labor and delivery nurses. They have fetal monitors; however, there is no paper for recording, and given the uncertainty regarding fetal well-being, staff desired to build confidence in tools for deciding when a cesarean delivery might be indicated. I presented a review of fetal monitoring, focusing on decelerations and heart rate abnormalities that would warrant a cesarean delivery in this context. I reviewed the challenges of working without paper but commended them for their proficiency in audible recognition. I then reviewed some decelerations in real-time with active patient monitoring on labor and delivery.

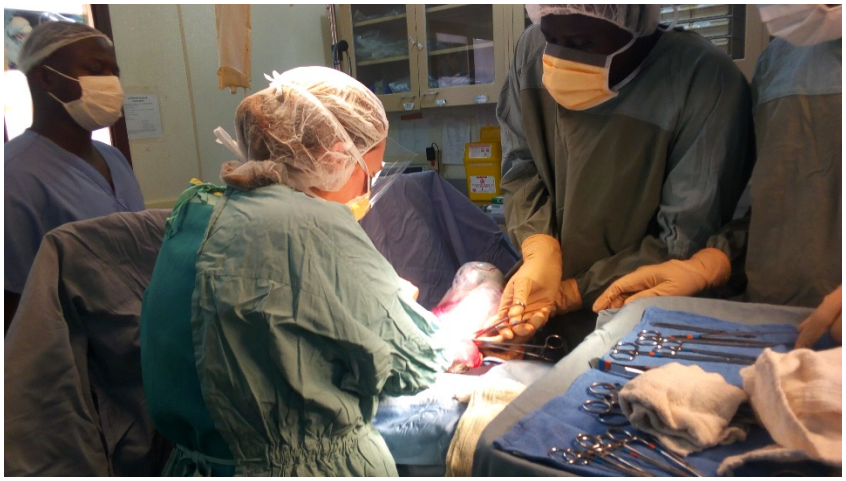
Nursing leadership (including expatriate staff from an NGO) then approached me about providing continuing medical education via a simulation about postpartum hemorrhage for the labor

and delivery nurses. They had recently purchased a Mama Natalie (https://www.laerdal.com/us/products/simulation-training/obstetrics-pediatrics/mamanatalie/) and NeoNatalie simulator and had been successful in improving the neonatal resuscitation care with the NeoNatalie. They wanted to likewise improve the standards for maternal postpartum hemorrhage care.

They had training materials (https://laerdalglobalhealth.com/products/hms-bleeding-after-birth/) and a protocol in place with all of the needed resources available (Pitocin, misoprostol, Bakri, etc.), but wanted to ensure staff were comfortable with this protocol. I then led a two-day simulation in postpartum hemorrhage which was well-received (see photos).

As surgical emergencies continued to arrive, staff asked for assistance in the operating room. I took the opportunity to provide some education in evidence-based cesarean delivery for a physician

hired while I was there who had not operated in over 10 years so that he could take independent Labor and Delivery call. After performing multiple cesarean deliveries together, he "flew solo" and completed a cesarean overnight independently. Surgical procedures that I completed, co-scrubbing with a local physician wherever possible (to provide surgical education, to ensure contextually appropriate care, etc): laparotomy and cesarean hysterectomy for resection of an abdominal pregnancy with hemorrhage management, dilation and evacuation of a complete molar pregnancy, multiple cesarean deliveries for history of prior cesareans with placenta previas (after evaluating for accreta!), repair of a posterior uterine rupture including repair of posterior vaginal/cervical transection on an unscarred uterus after the patient consumed a traditional medicine known for causing



tachysystole, vaginal hysterectomy, abdominal hysterectomies, including one for a hemorrhaging cervical cancer, adnexectomies (for torsion, large symptomatic ovarian cysts, etc), tubal ligations at patient request, among others.

High-risk deliveries were referred to this hospital for management and I had the wonderful privilege of welcoming newborns into the world. The physicians were aware of my willingness to come and assist with difficult births as needed. To this end, I staffed forceps deliveries, vaginal breech deliveries

(both singletons and second twin breech extraction), fetal tracing abnormalities, labor inductions, trials of labor after cesarean, and external cephalic versions, among others. In addition, we had high-risk antepartum and postpartum patients with an overwhelming number presenting with postpartum cardiomyopathy or severe anemia from malaria.

There were multiple patients evaluated with the surprising ability to ambulate with hemoglobin values of 2-4 mg/dL. The needs truly covered the spectrum of maternal-fetal medicine.

In summary, this was an incredible opportunity to collaborate with a highly resilient and proficient team of local physicians, midwives, nurses, and ancillary staff to provide exceptional care to women and children. Several lives were saved during this fellowship as a direct result of the grant. Many staff members received valuable education. There are many needs that remain. Four maternal deaths occurred during my stay there, all from potentially preventable causes, had they sought care in a timely fashion and had that care been available to them. The image to the left shows a little boy, born in the early morning hours. He did not cry for long because I picked him up to comfort him. However, he had reason to cry as the woman lying covered in the blue blanket in the background was his mother. She died that morning, likely from a complication of preeclampsia. His future is uncertain now as he does not have a mother to care for him.

Thank you for sending me to West Africa with this grant. Please continue to support this visiting teaching fellowship through the Foundation for SMFM. For those considering applying for this grant, know that this is an incredible experience, full of opportunities to provide valuable services.

With Gratitude,

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