Global Health in the World’s Youngest Nation

The Department of Emergency Medicine at the Thomas Jefferson University has offered a two-year Fellowship in Global Health since 2011. Fellows work part-time as attending physicians in the Emergency Department, and study towards a Master of Public Health degree at the Jefferson School of Population Health, while spending three months per year doing fieldwork. As our department’s first Global Health Fellow, I volunteered (May - August 2012) with a non-governmental organization called International Medical Corps (IMC) in the East-African nation of South Sudan.

South Sudan seceded from Sudan in July 2011 to become the world’s youngest nation. The country was wracked by almost 60 years of civil war, leaving the South one of the most undeveloped countries in the world and with some of the poorest economic and health indicators in all of Africa. It has less than 200 miles of paved roads, only 16% of the population has access to healthcare of any kind, and for every 100,000 births over 2,000 women die from the complications of delivery.

IMC has had aid and development programs in many parts of South Sudan prior to its secession from the North. One of their most long-standing programs is in Akobo County on the eastern border of country. Akobo has no paved roads and heavy rains turn large swaths of the county into impassable swamps for almost nine months out of the year. The standing water is a perfect breeding ground for mosquitoes that carry malaria and the thick mud makes walking just a few hundred meters an energy-sapping slog.

The people of Akobo mostly come from one of two tribes that have a long-standing history of deadly conflict between them: the LuoNuer and the Murle. Both tribes live in tukuls (mud and straw huts) and survive off of a combination of subsistence agriculture, fishing, and raising cattle and goats. A custom the tribes have in common is that they use cattle as dowry; a man must give a woman’s father roughly 20 cows to secure her hand in marriage. This need for cattle has led the two tribes to carry out raids on each other’s herds. Cattle raiding, combined with a history of conflict between the tribes, has resulted in deadly and ongoing violence that has only worsened with the introduction of automatic weapons during the long civil war.

IMC operates the Akobo County Hospital – the only hospital for hundreds of kilometers in every direction. IMC employs one doctor at the hospital; the remainder of the medical staff there is composed of community health workers, clinical officers, and assistant nurses. Staff have had anywhere from three months to two years of medical training. While they are hardworking and dedicated to their community, I found that many of them had extremely limited reading, writing, and math skills, which sometimes led to errors such as incorrect medication dosages or administration.

I worked on an IMC project funded by the UN’s Common Humanitarian Fund and the European Community Humanitarian Office to improve care for traumatically injured patients in Akobo County. People in Akobo may suffer trauma due to falls or farming accidents, but the majority of serious trauma is due to gunshot wounds or stabblings that occur during inter-tribal conflicts. Working with IMC employees and volunteers, I developed a curriculum to teach hospital medical staff and lay community members skills and concepts that are important to treating trauma victims. Some of the topics we covered included mass casualty triage, stabilization of bleeding or burned patients, and splinting of broken bones.

Curriculum development proved to be especially challenging in this environment. For one, the majority of the people we were targeting for training did not speak English and were not literate. We also had no reliable source of electricity, so the lectures and training sessions had to be given using only a dry-erase board and some printed diagrams. Additionally, medical resources at the hospital were very limited so the material had to be closely tailored to what was on-hand; x-rays were not available so we did not discuss x-rays. To overcome some of these challenges we made use of local interpreters and used simulations to teach clinical principles.

During this global health project I learned firsthand about some of the challenges of developing and implementing a health education program. These experiences will help guide me during future public health projects. The project in Akobo is ongoing and a new set of IMC employees and volunteers is currently in Akobo County. There is some hope for South Sudan overall as the conflict over oil production with Sudan is being gradually resolved.

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REFERENCES