

Pharmacy Experiences in Afghanistan

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I first learned about Afghanistan missions through a couple at the health center that I work at. They chose to take their three kids there to serve alongside them several years ago. When they came back for their first furlough, they shared their experiences and showed video coverage of Kabul. All I remember seeing were grey buildings in various stages of disrepair. I felt God pulling at my heart, but when they mentioned land mines that were crippling kids in Afghanistan, I thought, "Oh God, please, not there!"

Despite my fears, God had other plans, I work at Lawndale Christian Health Center (LCHC), a non-profit Christian clinic serving the inner city population of Chicago on the west side. One of our pediatricians, Dr Jerry Umanos, has been working in Afghanistan since 2006, and various providers and staff have traveled to Afghanistan for short-term trips. When they were looking for volunteers to go in May of 2012, my husband and I prayed and felt called to go. This would be my second trip to Afghanistan, and this time we decided to bring our 4-year old son, Micah.

The team consisted of two clinical psychologists, one pharmacist (myself), one family practice physician, and an OB/GYN physician (my husband). Our role was to assist the ongoing efforts of Dr Umanos at two different private hospitals and a clinic funded by US charities. In addition, I was able to visit and consult with a small pharmacy at Kabul University, which mainly serves university students and staff.

My work began at a small health center in Murad Khane, a neighborhood of

Kabul. It is a community clinic that was established by one of the private hospitals. It was set up as a model for future community clinics that the hospital eventually hopes to develop. The clinic pharmacy was very small and was run only by a pharmacy technician. In Afghanistan, two years of post-high school education is required to become a pharmacy technician. Pharmacy technicians work as pharmacists in most places. The pharmacy technician at this clinic, Shafid, was a very intelligent and conscientious young man who ran the pharmacy efficiently. He had a database that he used to track each patient's name and medications. He also doubled as a nurse and helped with patient registration when needed. My main focus of work at the clinic involved helping with inventory control. Using the database already present, I worked with Shafid to figure out the average monthly consumption (AMC) for all medications in stock. Then, based on the AMC, we calculated the minimum and maximum stock they should have on the shelves. This information was then passed on to Dr Umanos to be used for future purposes.

Next, I volunteered at a small hospital located in the outskirts of Kabul. Three full-time pharmacists staffed the hospital pharmacy. There is only one pharmacy school in Afghanistan, at Kabul University, which graduates about 100 students per year. However, pharmacist jobs are still very scarce, since a pharmacy degree is not required to open and run a pharmacy in Afghanistan. My job was to observe and work alongside the hospital pharmacists and give any advice when needed.

Amina, one of the pharmacists, was a middle-aged woman who had an interesting work history. She graduated from pharmacy school at Kabul University in the 1990's and worked at Avicenna Pharmaceutical for nine years as a tablet manager. Avicenna was the only manufacturing company in Afghanistan that, at one time, produced about 30% of medicine in Afghanistan. The company was destroyed during the war, and currently all of the medications in Afghanistan are imported from other countries. While serving there, I had a chance to look over the hospital's pharmacy and therapeutics committee (P & T) meeting minutes and agendas. Due to timing, I was unable to attend one of their meetings. However, I believe a long-term pharmacist could make a difference by being part of this team, to recommend formulary changes, and perform other activities for the P&T committee. One thing I observed at both the clinic and the hospital pharmacy was how the pharmacy staff counted medication by hand due to lack of simple resources. I recommended using a pill counter to count the medications, and was able to send several counting trays to them via Dr Umanos upon my return to the States. I also instructed Dr Umanos on how to use them correctly.

I also returned to a hospital in Kabul to work. I had served at this hospital in 2008 when I was there as a volunteer pharmacist for two weeks. I was very glad to see that two of the pharmacists that I had worked with were still there, Mahamad Khan and Mustaq. In my previous trip, the hospital administration had asked me to complete a "standard based management" assessment as well as to

make recommendations on their drug supply chain management. This time there were no specific projects that needed to be worked on. However, Dr Wali, a family physician who is also Director of Clinical Service at the hospital, wanted more information about starting a P & T Committee. Previous attempts at maintaining a P & T committee had not been very successful; however, I supplied Dr Wali with several resources for starting a P & T Committee so hopefully future attempts will be fruitful.

The main goal of our trip was to train and educate family medicine residents at the hospitals and clinics. Each of us was encouraged to give educational presentations during morning and afternoon rounds at the hospital. I decided to give a talk on misuse of medications with a focus on patient medication counseling.

From my experience working at the hospitals, most of the medications are given out with little to no written instructions. Verbal instructions are given but are typically extremely brief. For example, when albuterol inhalers were dispensed I did not notice any pharmacists pulling them out of the boxes to show patients how to use them. According to one study done by the Management Sciences of Health, an organization that supports Afghanistan's Ministry of Public Health to improve their pharmaceutical system, the average

amount of time spent on counseling patients at a pharmacy was 13 seconds. I gave my presentation on medication misuse to the medical residents and pharmacy staff at both hospitals. The pharmacy technicians from the clinic and Kabul University were also able to attend. The presentation was well received. One of the residents at the hospital in Kabul showed me a picture from his cell phone of a baby surrounded by at least ten different medications. When the doctors examined the baby it was concluded that the baby only needed acetaminophen, not the numerous medications it was receiving. Most of the private pharmacies make money by selling medications and there are virtually no regulations for dispensing medications. I heard numerous accounts from missionaries and expats of Afghans coming out of local pharmacies with a bag full of medications, because of the lack of prescription requirements. Another resident told about a patient who was admitted to the hospital with an INR of 10 because the patient thought warfarin was acetaminophen and took it as needed when she had pain. One of the doctors described a 15-year old type 1 diabetic patient whose glucose levels were frequently in the 500's and were very difficult to control. This raised the issue of the quality and storage of insulin. As in most developing countries, there are only a few people with refrigerators in Afghanistan, so storage of insulin is a

major issue. One of the pharmacists at the small hospital had been diagnosed with diabetes. As a health care professional he did not trust the quality of insulin that were sold in Afghanistan, so he had been making regular trips to Pakistan to obtain his insulin pens.

Practicing pharmacy in Afghanistan is a very challenging endeavor. Although two weeks were not enough to fully comprehend the issues at hand, let alone solve any of them, I am thankful for having had the opportunity to interact with my Afghan colleagues. On a personal level, this was a faith-building trip. Many of our friends and family were concerned about us taking our son, Micah, to Afghanistan. Every prayer we had for Micah during this trip was answered, from finding a babysitter who would take care of him while my husband and I worked, to adjusting quickly to Kabul time, to even finding five additional playmates for him.

The lessons learned on the mission field are invaluable. If an opportunity arises for you to serve through missions, I encourage you to take it. Put your worries in God's hands and trust that He will bless you and bless others through your service to Him.

Postscript: Sadly, Dr Umanos was killed, along with 2 other Americans, in an attack by an Afghan security guard at the Cure Hospital in April 2014. ✝