Reflection

• Students reflected on the experiences by answering the following questions:

1. Performing a Spiritual Assessment
   • Have you ever talked to a patient about their spirituality? Was it difficult for you? What do you think is the value in performing a spiritual assessment?
   • How do you feel your fellow health professions student performed? How was it different from how you approached this based on your profession?

2. Patient Case
   • What is the value in assessing the patient's religion/spirituality in this case?
   • How did your profession's approach to this differ from your colleague's perspective?

Another larger group IPE activity has been planned for spring 2018. This activity will be conducted in a workshop format for the health professions students who are divided into 41 groups with a faculty facilitator for each group. A case incorporating five required IPE elements will be utilized for the students to solve as an interprofessional group. Since this is the first year to incorporate spirituality in this manner, an optional spirituality element can be added to the cases to determine ways in which the patient's spiritual beliefs or practices might impact the care plan of the patient. The data will be analyzed by students completing an independent research project once the cases are completed. The results of this could certainly impact the direction of the workshop in future years.

Conclusion

The importance of soft skills in pharmacy practice has become increasingly recognized and valued. Most patients will expect their pharmacist to have the appropriate knowledge and skills from their training in pharmacy school to deliver optimal patient care. However, the way in which the pharmacist approaches, interacts, and treats the patient (i.e., soft skills) can make an even further and lasting impact. Recognizing the value of a patient's spirituality and incorporating spirituality into the patient's care is a very important way in which soft skills can be applied in pharmacy practice. In this manner, schools are preparing student pharmacists to develop soft skills that ultimately relate to Christ-like qualities.

References:

Welcome to Honduras and Loma de Luz

Honduras is a beautiful place to learn and grow. The thick green jungle spreads over the mountains rising against the ocean. Trees with broad leaves grow close together, allowing just enough light for the rainbow of flowers and ferns planted below. Howler monkeys scream from branches, and a diverse array of bird calls fill the air.

Along the solitary dirt highway lining the foothills and the Caribbean Sea stand the tiny houses of Balfate and other villages belonging to the Colon coastal region. No matter if the walls are made from plaster or mud, the roofs from thatch or tin, these poor living conditions expose this population to a variety of infections. Harsh work in the farmers’ fields could incur a machete wound, poisonous snake bite, or motorcycle crashes along the pothole-ridden dust roads. Expectant mothers lack prenatal care, and genetic disposition increases risk for obesity, hypertension, and diabetes.

In order to bring healthcare to this isolated corner of the world, Hospital Loma de Luz was established 10 years ago, and it has been staffed by an extraordinary team of Hondurans and medical missionaries ever since. Each morning at 8 am, the hospital gate opens and patients flood into the waiting room, filling the empty seats. The triage physician that day

How God Used a Pharmacy Student: Reflections on a Medical Mission Trip to Honduras

by Rachel Kozinski

When I returned home from my first short-term medical mission trip to Ghana, I was already looking for another mission opportunity. For me, nothing is more rewarding than partnering in the work God is doing overseas. My search led me to Cornerstone Ministries and Hospital Loma de Luz, a mission hospital in the Honduran jungle along the Caribbean coast, which serves an unreached group of villages with limited access to healthcare or the Gospel of Jesus Christ. In October 2017, I joined their team as their only worker with any formal pharmacy training. This was quite an intimidating amount of responsibility for a pharmacy student in my final year of school. I understood how much experience and knowledge I lacked, but I knew that I carried a unique perspective that could bless this facility and their patients. I was also assured that the Lord had prepared this work in advance for me to do (Ephesians 2:10). In courage and trust in God’s plan, I began my month of service and, consequently, my month of transformation into the pharmacist God wants me to be.

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I couldn’t believe how much I had progressed in the short time that I served in Honduras. I had grown from barely talking with friends to explaining complicated instructions to strangers. I suddenly felt bold enough to counsel other patients; and by the end of the day, I no longer needed a translator. This gave “speaking in tongues” a whole new meaning! Despite my feelings of ineptness, clinging to God’s truth gave me courage to embrace the difficult stages of the learning process. God took my “yes” and helped me to achieve more than I imagined possible.

Optimizing the Pharmacy in Honduras

I asked the Lord for a similar boldness as I stepped into my first managerial role in a hospital pharmacy. This was the first time I had been asked to find a facility’s weak spots and fortify them. A mission hospital in an unfamiliar country like Honduras would present unique challenges; but if God felt confident that I could do it, then I would believe the same.

My first project was to update the inventory. Loma de Luz uses an electronic medical record (EMR) to record the pharmacy stock. However, many of the professional staff suspected that our counts were far from accurate. Assessing the contents of the two code carts, I found that many of the medications were expired. Expired medications in this situation are better than no medications at all, and it is nearly impossible to acquire these lifesaving drugs. In the pharmacy, however, only approximately a tenth of the inventory was correct, and it was more crucial to explore why errors were occurring.

The technology Loma de Luz uses in the pharmacy is a likely contributor to the incorrect counts. Their EMR software is prone to mistakes because it is neither user-friendly nor efficient. It requires operators to perform many unnecessary manipulations within the program to accomplish simple tasks, thus increasing the likelihood for human error. In addition, the internet signal fades throughout the day and sometimes completely shuts down. Couple this with outdated laptops, and the EMR often significantly lags. All of these inconveniences require users to anticipate possible mistakes, and that is not always realistic when the pharmacy is busy. Technology should protect against human error, but unfortunately mission settings often have to adjust to suboptimal conditions when a limited budget and remote location restrict the quality of equipment available. Patience and attention to detail have to compensate for the suboptimal equipment.

Many day-to-day activities that were once easy in a United States facility are wrought with inconveniences in a mission hospital. Instead of allowing these annoyances to steal our joy, we can choose a positive attitude, remain flexible, and consider possible solutions to these limitations. It is all part of the adventure of going to the ends of the earth, which is worth facing obstacles in our path.
WHO Essential Drug List for my inpatient recommendations. The most vital drugs for their specific patient population. I referenced the for the hospital so that they could allocate their money towards the stock of medications. With shipment delays and insufficient funding, Loma de Luz often lacks many agents that could change the course of diseases and even save lives. This led me to create a formulary for the hospital so that they could allocate their money towards the most vital drugs for their specific patient population. I referenced the WHO Essential Drug List¹ for my inpatient recommendations. The outpatient list was developed from my experience and professional opinions of others. I started by considering the disease states most common to this patient population and then listed the medications used to treat them based on evidence, availability in Honduras, and cost. I only included the agents I believed were absolutely essential to treating these diseases. I also suggested a minimum quantity that, if reached, the hospital should consider ordering more. This formulary could help save the hospital money and help guarantee that patients can receive the necessary drug treatment.

As I considered how I could influence other aspects of patient care long-term, counseling in the pharmacy stood out. Health literacy is incredibly low in the coastal region of Colon. Children don’t often continue school past third grade, and many adults cannot read. The Loma de Luz staff shared with me concerns about medication errors occurring due to poor adherence. While the prescribers often try to counsel patients on their medications, their statements are brief due to patient load and time constraints. The pharmacy manager, Vicente, counsels each patient in La Farmacia, making sure to explain dosing schedules to support adherence. However, he has limited knowledge about other key counseling points.

I thought it would be helpful to make a concise document with additional counseling points that Vicente could reference and then share with patients. For each medication, I wrote in Spanish brief facts that all patients should know. These included common adverse effects; serious toxicities and what to do when one presents; foods or drinks to avoid with this medicine; what to do if the patient becomes pregnant; if the medicine needs to be taken with food or water; and instructions for complicated administration, such as inhalers, eye drops, and nasal sprays. Then these were printed and posted on the shelves where their corresponding medications were stored. This would make it easy for Vicente to review them as he pulls a drug from the shelf for dispensing. I used this same document to develop patient handouts, coordinating pictures with each point so that what was discussed had a visual reminder. If patients are not empowered to manage their own medications when they leave the hospital, then we have failed them and missed our opportunity to properly treat them. Without careful instructions, we could possibly even allow harm to occur. I am sure that this project will have a lasting effect on patient care at Loma de Luz.

All of these projects had potential for massive positive impact, and I praise God for empowering me to meet such a big need. Yet, I realized that many of the most influential jobs are also the least glamorous. Working on my laptop, often for many hours late into the evenings, was hardly thrilling compared to many other intense daily events that occur around a mission hospital, like emergency surgeries and codes. There is not always an immediate reward in serving patients through an administrative role, as there is in helping deliver a baby or watching your admitted patient improve throughout the day. Sometimes in order to help others, we have to do many jobs that aren’t glamorous. Daily, I trusted that the work I was doing was significant, even though I may never actually see the full impact of what I accomplished at Loma de Luz. I consistently reminded myself that Jesus notices my efforts and knows the outcomes. Whatever we do, we work at it with all of our hearts, as we work for the Lord (Colossians 3:23). This is how we store up treasures in heaven. That is where our reward waits for us, not here on earth.

Tools for Long-term Change

One of the greatest needs of every mission hospital is a full, diverse stock of medications. With shipment delays and insufficient funding, Loma de Luz often lacks many agents that could change the course of diseases and even save lives. This led me to create a formulary for the hospital so that they could allocate their money towards the most vital drugs for their specific patient population. I referenced the WHO Essential Drug List¹ for my inpatient recommendations. The outpatient list was developed from my experience and professional opinions of others. I started by considering the disease states most common to this patient population and then listed the medications used to treat them based on evidence, availability in Honduras, and cost. I only included the agents I believed were absolutely essential to treating these diseases. I also suggested a minimum quantity that, if reached, the hospital should consider ordering more. This formulary could help save the hospital money and help guarantee that patients can receive the necessary drug treatment.

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Divine Appointments for a Pharmacy Student

Outside of La Farmacia, at the bedside and in the consultation rooms, I accompanied the physicians as they rounded and conducted patient interviews. At first, many of the patients we encountered required no intervention from me. I doubted if I could have any direct impact in this area of my work, but I had greatly underestimated how much God could use my abilities as a future drug expert. He brought many patients across my path who needed a pharmacy student’s care, and I was humbled that the Lord chose me to serve them.

One lady with a past medical history of HIV presented in La Clinica complaining of chronic headaches with a 6/10 pain that would result in vomiting. She also mentioned pain upon urination and increased clear vaginal discharge. We decided we needed a plan to treat migraines, a urinary tract infection (UTI), and bacterial vaginosis. She was currently taking ritonavir, lopinavir, truvada and trimethoprim-sulfamethoxazole for HIV. Naturally, I stressed the importance of choosing medications that would not interact. After brainstorming a few ideas and checking each option for drug-drug interactions, I recommended ibuprofen for her migraines, metoclopramide for nausea, ciprofloxacin for UTI, and clindamycin for bacterial vaginosis. This poor woman had been suffering with this painful condition for at least 5 months, and I was thankful we were able to treat her with a safe and effective medication regimen.

Our next patient had a significant history of atrial fibrillation, cardiomyopathy post-partum, and a consequential stroke. She was taking spironolactone, digoxin, and warfarin. She complained of sharp, stabbing pain in her chest, and upon X-ray, she appeared to have pericarditis. The two first-line therapies for treatment are non-steroidal anti-inflammatory drugs (NSAIDs) or colchicine. I advised strongly against either of these options because NSAIDs are contraindicated

¹WHO Essential Drug List
with warfarin due to increased risk of GI bleed, and colchicine in combination with digoxin increases the risk for rhabdomyolysis. This interaction proved to be very relevant because our patient already struggled with muscle cramps. Instead, I recommended prednisone 10 mg daily to be taken until her follow-up visit in a few weeks.

One day, a young man shaking in a wheelchair was brought by his mother and grandmother to our clinic. A few days earlier, we had sent this family to purchase three methylprednisolone 1000mg IV kits to treat his multiple sclerosis flare. At first his primary care physician wanted to train the family to administer these agents at home. I quickly realized that this would not be possible. This drug product needed to be reconstituted with the bacteriostatic water included in the kit and administered within 48 hours of mixing due to stability concerns. Additionally, this particular dose had to be given over 30 minutes or more in normal saline because doses greater than 500mg given under 10 minutes were associated with arrhythmias and cardiac arrest. With the short length of stability after reconstitution, we wouldn’t be able to prepare these medications in advance for the family to use, and the drug had too many grave risks if the family didn’t adhere perfectly to the administration instructions. We decided to give the first dose that day and refer the family to a clinic closer to home for the following two days’ administration. I wrote a prescription in Spanish for the outpatient clinic, detailing the preparation and administration instructions.

I truly believe that the Lord had intentionally placed these patients in my path. All three of them needed a pharmacy student’s intervention, and they may have not received optimal drug therapies without one. I am amazed that the Lord trusts us to care for His children and can use pharmacy as a profession to help others so significantly. Weeks later, the HIV patient approached me as I worked in La Farmacia. She sweetly thanked me for how I served her and for my attention to detail. I never expected her to remember me or to express such sincere gratitude. I was grateful to have played a small role in her life and that the Lord crossed my path in the jungles of Honduras.

Two Niños Used by God

Jesus used many patients to touch my heart and change my life, but two babies in particular impacted me eternally. I met the first niño, a 2-week-old infant, during his follow-up appointment with his mother, father, and auntie. He suffered from Epidermolysis bullosa, a condition I had never heard of before, but nothing could have prepared me for what I saw. In Therapia, on a bed made for someone much bigger, the family began to take off his clothes. He started to shriek cry faintly and shrilly as mom slowly and gingerly unraveled bandages that wrapped every inch of his skin. Underneath, his little body was covered in open blisters. Some were the size of his entire thigh. Some were grey and already decaying. Some oozed with pus.

At his bedside surrounded by his parents and aunt, I’ve never wanted to run from a room so desperately in all of my life. I can’t describe how horrified I felt. This precious boy was too weak to cry, and too weak to even express his suffering. I could hardly behold it myself, but I stood beside this family without even a wince. God gave me the strength I needed to maintain composure and to encourage them that in spite of how it looked, there was still hope. They watched stoically, like most Honduran parents would do. Then the mother’s hand unexpectedly covered her mouth. As she began to weep, I placed my hand on her shoulder.

What could we do to help them? Epidermolysis bullosa compromises the tight junctions in the squamous tissue, making the skin prone to sloughing. In addition to the topical chlorhexidine he was already receiving, we recommended bleach baths with dressing changes. We also wanted to start a prophylactic oral antibiotic rotation to prevent skin infection, but we only had clindamycin and amoxicillin solutions in La Farmacia. The antibiotics would have to be switched every couple of weeks to prevent resistance, and we only had two to offer. The most we could do was to prescribe amoxicillin oral suspension for now. When the family came back in a few weeks for follow-up, we could add clindamycin if he wasn’t improving. This plan seemed insufficient to me. How would this impoverished family even keep this little boy clean in their mud-walled hut? How was it fair that the coming of a new life, usually a joyous and pure moment, was immediately met with suffering?

Epidermolysis bullosa is a genetic recessive disorder that occurs as a result of inbreeding. The people living in the villages of this region have no choice but to marry someone in close proximity because they do not have the financial means or education to build a life elsewhere. Thus everyone is remotely related, which leads to increased incidence of these cruel diseases. Even more so, the root cause of these disorders is poverty. It not only prevents people from pursuing a better life, it can lead to the presentation of these horrific conditions. I realized in a new way the brutality of poverty as I cared for this precious niño, fighting for his life from day one.

I met the second baby boy during inpatient rounds. He was so small and new – a premature infant at 31-weeks gestational age. After only a day of supportive care, he seemed to be stable and healthy. He even looked cute amongst the awkward, makeshift neonatal intensive care unit bed, and all his vitals were at goal. We felt confident that he was going to survive. For this reason, the next day when I was told he had died, I couldn’t accept the news. Early that morning, the team found this niño blue and losing oxygen rapidly. They immediately called a code; but after 30 minutes of trying to resuscitate him, they realized he wasn’t coming back.

I felt helpless. I didn’t have any knowledge or skills to offer that could have saved that precious boy. I felt at the mercy of a situation outside of my control and also to my own ignorance. In that moment, my gaps in pharmaceutical knowledge looked more like massive canyons. I realized how my competency could be the difference between life or death, or suffering or freedom for countless patients in the future. Suddenly, my commitment to excellence as a future pharmacist carried a much more significant value. Excellence is the call on all of us as pharmacists – not for ourselves, but for our patients, so that even if people still suffer and even die, we have assurance that we gave nothing less than our best effort and left the rest in God’s hands.

As I complete my final months as a pharmacy student and pursue a PGY1 residency, I remember the two niños God introduced to me.
He shared with me His eyes for His people. He hadn’t forgotten either of these babies. He also gave me His heart, which aches over the pain they’ve endured. If I am a better pharmacist, then I am a better servant to many like them, and I give all the glory to God. In this way, I will follow Jesus’ example. He went the extra mile to serve us. “He made himself nothing by taking the very nature of a servant, being made in human likeness …by becoming obedient to death – even death on a cross!” (Philippians 2:7, 8b, NIV)

**God’s Plan**

I see now why God saw fit to plant me in the jungle of Honduras for a month. First, He wanted these patients to have a pharmacy student. He believes in our profession, and He knew the influence for change that even a student could have. All I had to do was say, “Yes, Lord, I’ll go.” Second, He wanted me to grow. Those two beautiful babies, the three divine appointments, and every resident of the Colon coastal region were

![Image](image_url) born into a fallen world, wrought with suffering. It was there that God nurtured a desire in my heart to bring relief and freedom to the forgotten corners of the world. If He is at work in these places, I want to join Him. Death, disease, and poverty are already defeated and under the feet of Jesus. We are His ambassadors, bringing His kingdom of eternal life, health and prosperity to the ends of this earth. The mission field, both overseas and on the home front, needs Christian pharmacists, bearers of the Holy Spirit and messengers of the Good News of Jesus Christ crucified for us. With Him before us, beside us, and behind us, we are commissioned and empowered with boldness to serve Him in excellence and to expect great things. “Now to him who is able to do immeasurably more than all we ask or imagine, according to his power that is at work within us, to him be glory in the church and in Christ Jesus throughout all generations, for ever and ever! Amen.” (Ephesians 3:20-21)

**Paths of Uncertainty** by Anna M. Staudt

I n the few months prior to graduation from pharmacy school, I faced many uncertainties regarding my path as a soon-to-be pharmacist. What is the right path for me? This question weighed heavily on my heart for months, especially after my plan for residency did not turn out as I thought it would. The burden of anxiety was overwhelming. I remember sitting on the back of my husband’s truck at the park with my head in my hands, wondering what my path was supposed to be.

Still feeling rejected and lost, I was leery of the next option presented to me. My advisor suggested considering the two-year pharmacy fellowship offered through my university. It was honestly something I had never considered. The opportunity encompassed a variety of experiences, including clinical ambulatory experience, teaching, and research. As I prayed and pondered this option during the following weeks, the Lord opened my mind and gave me a few revelations. An ambulatory care experience during an introductory pharmacy practice experience was what initially sparked my interest in completing a residency. I had also been praying for a post-graduate opportunity close to the city where my husband had a stable job, since living apart during our second year of marriage or uprooting our family was not ideal. As I investigated the fellowship further, I discovered that the clinical site was located close to where my husband worked and it had an ambulatory care focus. An opportunity I had struggled to comprehend slowly began to form into a tangible, bright picture. It felt as if God had turned what I thought was a small window into a huge door with signs pointing right at it. Joshua 1:9 (NIV) reminded me, “Have I not commanded you? Be strong and courageous. Do not be afraid; do not be discouraged, for the LORD your God will be with you wherever you go.” With this in mind, I followed God’s prompting and took a step through that door.

As a federally qualified health center (FQHC) in the downtown area of a large city, my fellowship clinical practice provides care for many homeless, formerly homeless, and uninsured patients. The health center often furnishes certain essential medications free of charge. One of my primary functions in the health center is to provide medication counseling to patients. While doing this activity one day, I entered an exam room to find that my patient was a homeless young man not much older than myself. I went through my routine of counseling him on his medications and asked if he had any questions. He looked at me calmly, and after a moment asked why I had decided to work there. Despite my surprise at his question, I immediately knew the answer: I had been called by God to this place and these people, even if only for a short time. My heart was at peace as I shared my calling to this position and to people in similar circumstances as him. He held my gaze with his own briefly before saying, “You are an angel. All of you here are angels.” In that moment, I realized his burdens must be great to think of me as an angel, since I’m just an imperfect human fulfilling the duties of my job.

It is natural to face uncertainty in life — some face more, others less. Not all uncertainties are the same; rather, each individual has a unique soul writing its own life story. Many of the patients coming into the clinic carry constant burdens of uncertainty. My homeless patients are unsure as to when they will have their next meal, where it will come from, or whether they