

# Serving in the Samaritan's Purse Emergency Field Hospital in Les Cayes, Haiti

By Kara L. Birrer, Vladimir Poplavskiy, and Greg Carlson

Founded in 1970, Samaritan's Purse seeks to follow the example set by the Good Samaritan in Luke 10:30-37 to "meet the needs of people who are victims of war, poverty, natural disasters, disease, and famine with the purpose of sharing God's love through His Son, Jesus Christ. The organization serves the Church worldwide to promote the Gospel of the Lord Jesus Christ."<sup>1</sup>

## KARA BIRRER

In April 2019, I joined Samaritan's Purse's Disaster Assistance Response Team (DART). Serving on DART has opened the door for me to use my skills as a pharmacist and to serve the Lord as part of a mission to share the love of Jesus. Prior to Haiti, I had deployed one other time with DART to Iraq in November 2019 in response to the Syrian Refugee crisis. Haiti was my first deployment working in an Emergency Field Hospital (EFH).

On Saturday, August 14, 2021, a 7.2 magnitude earthquake struck southern Haiti. The DART advance team arrived in Haiti on August 15; and on that same day, I shared with my mom and sister my desire to deploy and also my weariness from the current COVID surge. They both encouraged me with the verse: *"Let us not become weary in doing good, for at the proper time we will reap a harvest if we do not give up"* (Galatians 6:9 NIV). Throughout my time in Haiti, and continuing even after returning to the US, this verse regularly came to mind as a reminder of *Whom* I serve, regardless of *where* I serve.

On Monday, August 16, I was called to deploy with a Tier 1 surgical EFH focused on treating injuries related to the earthquake. I am fully convinced that the Lord opened this door of opportunity for me as even the most minor detail came together – from the approval of time off from my job (despite the COVID surge) to the travel

logistics, it was clear that God wanted me to go. I flew to Haiti on August 17 as part of the initial wave. This deployment was particularly close to my heart as I have worked as a trauma/critical care pharmacist for many years – a skill set that God was going to use in more ways than I could have imagined.

The Haiti DART response had three major areas of service: 1) provide medical care through a Tier 1 Surgical EFH, 2) provide clean water to communities without a clean water source due to the earthquake, and 3) coordinate with local churches to distribute tarps to provide shelter for those who lost their homes. No matter what assignment each member of the team was given, our goal was to bring hope to the people of Haiti and introduce them to the ultimate source of hope, Jesus Christ. This article will focus on the medical response of the EFH.

A Tier 1 Surgical EFH is designed to provide medical care in remote environments that may not have easy access to items such as electricity, water, and ground transportation. Because of the security risks in Haiti, the entire EFH and staff had to be flown across Haiti from Port-a-Prince to Les Cayes where the hospital was set up on the campus of the American University of the Caribbean (AUC). I appreciate all the members of the team who coordinated these flights! A Tier 1 Surgical Hospital consists of an OR, outpatient department (OPD)/ER, and 36 inpatient beds. Healthcare is provided and streamlined to meet needs as simply as possible. For example: laboratory services are limited to hemoglobin, WBC and differential, Gram stain, and urine dip stick. This meant that if a patient needed gentamicin, I relied on urine output to assess renal function and was careful about dosing and duration. The



advantage to having a joint pharmacy/lab tent was that the pharmacist had immediate access to Gram stain results to help recommend the best antibiotic (and bonus: we also got to look in the microscope, how cool!). The building of the EFH was completed and ready to receive patients on August 21. According to the Samaritan's Purse data report of our month-long service time, the medical team treated more than 3400 patients and performed 125 surgeries. (Data courtesy of Samaritan's Purse).

As part of the "first wave" DART team, I had the opportunity to take the lead on the set-up and operation of the EFH pharmacy department with inventory support from some of the advance team. This involved assembling all the shelving units, unpacking, sorting, counting and logging all of the medications, and setting up the narcotic lockbox and log sheets. Pharmacists were responsible for submitting a daily inventory report of all medications used to help headquarters assess the need for resupply. I quickly learned several important lessons (See Table 1 on page 15).

Set-up also brought out my creative side. When the certified registered nurse anesthetist (CRNA) and I discussed his medication needs, I quickly realized that we required an organized means to carry the meds to and from the OR each day. One of the other doctors helped me by constructing the "anesthesia tray" from leftover cardboard.

In most mission settings, local translators are crucial to successfully caring for patients. During my first day in Haiti, I had the opportunity to work with our lab technician to interview potential translators. We not only assessed their English language skills but also specifically asked the translator if they would be willing to help us share the hope of Jesus Christ with our patients. I am so thankful for Sara, who was the primary pharmacy translator. She has such a wonderful heart for the Lord and a heart to serve me and her people. She also became an awesome pharmacy technician!

The EFH officially opened on August 21. Mornings started early with team devotions, breakfast, and a medical staff meeting (which often started with praise and worship); then the gates to the hospital/OPD would open. On a typical day, we treated 100 to 150 patients through the outpatient department between 0800 and 1800, performed 1 to 4 surgeries, and provided care for as many as 36 inpatients (which also involved feeding their families). Our patients ranged in age from a newborn (29 days old) to 99 years old.

The EFH only deploys one pharmacist at a time, which means the EFH pharmacist performs all the pharmacy functions: such as inpatient care, outpatient/discharge prescriptions, response to medical emergencies, inventory control, IV medication preparation. The day started with shift change for the inpatients, dispensing pain medications, adjusting antibiotics, or preparing specific pre-operative medications and checking out the refilled anesthesia tray to the CRNA.

Throughout the day, providers and nurses frequently stopped by the pharmacy/lab tent with questions (and to use our fridge to keep their drinks cold... and also to enjoy the shade and fans which made our tent one of the coolest in the EFH). Their questions and requests were quite varied, but here are a few examples:

- 1) Help needed to adjust insulin doses for a patient with diabetes.
- 2) Help needed to find high calorie food options for a little girl

with burns. (The answer, I learned from another DART team member, was that the EFH deploys with emergency caloric-dense food packets, one of which is loved by children. After that, we had no problem getting her to eat enough!)

3) Help needed to dose a pediatric patient with diphenhydramine, which required us to compound diphenhydramine from tablet form to a liquid.

4) Collaboration needed with the orthopedic surgeon, ward nurse practitioner, and CRNA to determine the best antibiotic regimen for a very sick patient using the available options, the most recent Gram stain, and the surgical findings.

Serving as the outpatient/discharge pharmacist, I was privileged to be that last person to care for a patient. This was yet another opportunity to practically demonstrate Christ's love. Working with a combination of Sara my translator and Google Translate, I prepared the discharge prescriptions (including writing the directions in Haitian Creole) then brought them out to the waiting patient to counsel — with much assistance from Sara. (My Haitian Creole is still limited to “Take 1 tablet by mouth with food” and “You’re welcome.”)

Finally, I assisted with medical emergencies in the OR. One such emergency occurred just a few days after we opened when a young man's heart unexpectedly stopped after anesthesia induction. By God's grace alone, we were able to restart his heart and stabilize him to be flown to a local hospital. More importantly, I was encouraged to learn that this patient had put his faith in Christ the night before surgery — his eternal outcome



was assured. These situations are stressful and a great opportunity for Satan to divide and discourage us. However, as we debriefed and prayed after the event, I watched the team actively live out Paul's instructions in Ephesians 4:2-3 NIV — *“Be completely humble and gentle; be patient, bearing with one another in love. Make every effort to keep the unity of the Spirit through the bond of peace.”* The Lord knit together an OR team — and for that matter, the entire EFH medical team. It was an amazing privilege to work alongside those who paused to pray amid a crisis and let God work actively in and through them.

My two weeks of service — despite the heat, mosquitos, and long hours — were two of the most spiritually refreshing weeks I have had since before the COVID-19 pandemic. The blessing of serving with a team whose hearts belong first and foremost to Jesus, and who prayed with and encouraged one another cannot be overstated. I was not ready to leave, but I knew the Lord had ordered my time and availability. During my last two days on deployment, I was joined by Vlad Poplavskiy who would take over for me as the EFH pharmacist. It was good to have some overlap time as I transferred the pharmacy services to him. I'm grateful for the relationships I built during this deployment and the opportunity to learn anew to trust the Lord and persevere and not lose heart. I look forward to the next time He opens the door for me to serve on another Samaritan's Purse DART.

#### **VLADIMIR POPLAVSKIY**

Being a small piece of what God did through Samaritan's Purse in Haiti was a special blessing for me. I'm a clinical pharmacist in a moderate size teaching hospital in Rochester, NY, and it was an honor to bring our skills to the ends of the world... and best yet, to do it in the name of Jesus. I concur with the comments of my colleagues in this article; and since they did a great job in sharing our experience working in the EFH, I will simply share a few personal stories that impacted me.

I had many memorable moments in Haiti but one that comes to mind was

during a hot, sweaty lunch break. Dr. Andy, one of our general surgeons, told me about a Bible verse that was on his mind. It was Matthew 25:40 NIV which says, “...whatever you did for the least of these... you did for me.” Consider this: God is all powerful. He holds the entire universe in His hands and there’s nothing we can do to help Him or pay Him back for what He’s done. Yet He tells us that if we help someone who could never pay us back or return the favor, He sees that as if we did it for Him, God Almighty, who can’t be helped! That truth is so profound and it has resonated in my heart for months.

I also remember getting called to a ward late in the afternoon and delivering labetalol for a patient whose blood pressure was uncontrolled. I noticed a young girl a few cots over who had her arm over her face and was quietly sobbing. I believe she was only 16 years old, and her treatment plan included an above-knee amputation. One of our wonderful, compassionate nurses quietly sat and prayed with her. Eventually the whole ward broke out into soft but heartfelt worship in their native Creole. Even though I couldn’t do much for her by myself, as a team we were able to show her the love of Jesus through what might be the toughest moment in her life. She couldn’t pay us back or return a favor, and that’s the very essence of serving on DART: to help someone in the name of Jesus without expecting anything in return. There were so many stories like this.

On the other side of the spectrum, the staff of the OPD/emergency room saw



everything from indigestion to gunshot

wounds. After a patient was assessed by a provider, they would proceed to the pharmacy for their prescriptions. One particular moment touched my heart: a dad and his young daughter had waited in line for hours just to get a Vitamin A supplement for her. As I helped them, I realized that the concerned father waited many hours in the heat of the day for someone to examine his daughter... and he was okay with that inconvenience because he received assurance that she’ll be fine. In the grand scheme of things, which wasn’t significant at all... but in that dad’s world? Hearing that his daughter was healthy meant everything to him! Regardless of whether it was dosing gentamicin, stewarding IV antibiotics, or dispensing a seemingly insignificant vitamin A capsule, my role was simply to serve in the name of Jesus. Mother Theresa once said, “The miracle isn’t that we do these things, it’s that we’re happy to do them.”<sup>2</sup>

I also want to mention the importance of building relationships in the workplace. When I received the call to deploy to Haiti, I didn’t have much time to find coverage for my shifts... so I was humbled and grateful when many of my co-workers reached out and offered to help. Serving people who were impacted by the earthquake isn’t only limited to those who actually go there, but also those who enable others to go.

As you read this, I hope it stirs a desire in your heart to go on a medical missions trip. Yes, it was physically taxing, but a missions trip can change you forever. If it’s not feasible for you to travel across the globe and work as a mission pharmacist, I encourage you to stay local and serve in your community. I pray that you will find small moments to serve “the least of these” around you.

#### **GREG CARLSON**

On Thursday, September 2, 2021, I received a phone call from Samaritan’s Purse asking if I would deploy to Haiti for two weeks to serve as an EFH pharmacist. I was told that I did not have to depart until Tuesday September 7, which was a blessing since most DART deployment departures are expected within 24 to 72 hours. I



arrived in Port Au Prince, Haiti on Wednesday, September 8, 2021, and then flew on a Mission Aviation Fellowship (MAF) 10-passenger Cessna plane to Les Cayes, Haiti.

I was grateful to have two days of overlap with Vlad before he departed on Saturday morning. Kara, Vlad, and I were very impressed with our translator, Sara, who also served as a pharmacy technician. Sara is a “Pastor’s Kid,” and she had been eager to learn about pharmacy. Combined with her translation skills, she was a tremendous blessing to us.

Whenever we had any breaks in our pharmacy service, we often talked about things of God. From time to time, various DART members would visit the wards to sing praise songs to the inpatients, and Sara would join in with the praise team.

From the time of her arrival, Kara had done an outstanding job of assembling the pharmacy. She not only set up the shelving units and arranged the medications as per Samaritan’s Purse protocol, but she also established the distribution systems in both the inpatient and outpatient settings. This included arranging an IV extemporaneous preparation station. Vlad built on these systems, so by the time I began my service the pharmacy was operating efficiently. During my time, the OPD was treating 160 to 210 patients a day. The most common classes of dispensed medications included non-narcotic analgesics, antibiotics, vitamins, tetanus, and tetanus immune globulin. As previously mentioned, over 3400 patients were treated at the EFH.

The operating room was in a tent equipped with much-needed air

conditioning. The OR team worked every day, often getting called during the night. At the end of each day, the pharmacist restocked the anesthesia box in preparation for the next day. The pharmacist was on-call 24/7 for either emergency restocking or additional medications. Over the duration that the EFH was in service, 125 surgeries were performed... many of those surgeries were necessary to treat serious orthopedic injuries from the earthquake.

A typical day started with breakfast at 6:30am, devotions at 7:00am, and a medical staff meeting at 7:45am. The medical staff meeting opened with a praise song and prayer. Each daily devotion was biblically based, inspiring, and able to speak to each person's heart in various ways.

My role was in the third and final wave of pharmacist staffing. Samaritan's Purse had committed to the Haitian authorities to provide the EFH for one month. The EFH had four wards, and the planning for ward closures had now begun. The schedule was to close the first ward on September 13, the second on September 15, and the third on September 17. The fourth and final closed on September 20.

On Monday morning, September 13, the OPD had 110 patients waiting at the front gate of the hospital. When the day ended, a record number of patients had been seen. Two days later, toward the end of the day in OPD, an adult



female patient presented with a rash for which she had initially sought treatment with a witch doctor. He had attempted to heal the rash by using a chemical burn. After triage and treatment of the wound, a lab report revealed a low hemoglobin count of 5.4. Three units of blood were donated by the nursing staff to transfuse the patient. Praise God, the patient was doing well at discharge.

The pharmacy inventory was closely monitored. Medications dispensed daily were tabulated and reported to Samaritan's Purse corporate via laptop computer. When Samaritan's Purse's time commitment to the Haitian authorities was coming to an end, I was given a detailed procedural plan to inventory and pack up all medications. As time permitted, the medical and nursing staff assisted me in the task. The final inventory was entered into the pharmacy laptop and transmitted to corporate headquarters. Samaritan's Purse donated all of the remaining medication inventory (prescription and over the counter) to Haiti's Ministry of Health.

Dr. Bob Pierce, founder of Samaritan's Purse and mentor to Franklin Graham, told Franklin that "when you see a need you believe God wants you to meet, you have to leave 'God room'... which is that space between what we can humanly do and what we want to do."<sup>3</sup> For the month that the EFH was operating in Haiti, God filled in the gaps between what we wanted to accomplish and what we were able to accomplish. The need in Haiti is great... but with God, all things are possible.

I look back on my deployment with joy. It was a time of growth in Christ through caring for the Haitians, observing the faith of my brothers and sisters in Christ, and listening to their testimonies and prayers. Time spent in a very different culture helped me to see how blessed we are in the United States of America. I was reminded of the importance of having a Biblical worldview as opposed to a secular or humanistic worldview. It was a great privilege and an enormous blessing to serve the Lord through DART, alongside



other Christians who also share a Biblical worldview.

In closing, we encourage each of you to serve as a pharmacist wherever the Lord has called you, whether home or abroad and to recognize it as a mission field. *"Because of the Lord's great love we are not consumed, for his compassions never fail. They are new every morning; great is your faithfulness. I say to myself, 'The Lord is my portion; therefore I will wait for him.' The Lord is good to those whose hope is in him, to the one who seeks; it is good to wait quietly for the salvation of the Lord"* (Lamentations 3:22-26 NIV). There are several different actions mentioned in that passage – wait, hope, seek – all of which are meant to keep our hearts and minds fixed on our Savior. When our focus is on Jesus Christ, then the outpouring of our hearts into our daily life becomes His work in us. Samaritan's Purse DART desperately needs more pharmacists, so we ask you to prayerfully consider serving. To learn more about DART, visit [www.samaritanpurse.org/our-ministry/dart](http://www.samaritanpurse.org/our-ministry/dart) where you will also find a link to apply as a pharmacist. May the grace and peace of our Lord be with you.

#### References:

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2. Mother Theresa Quote. Accessed January 31, 2022. Mother Teresa - The miracle is not that we do this work... ([brainyquote.com](http://brainyquote.com)).
3. Graham F. Chapter 11. "God Room." In: Graham F. Rebel with A Cause: Finally Comfortable Being Graham. An Autobiography. Thomas Nelson;1995:1

## Table 1: Lessons Learned on Haiti DART



### **Never throw anything away!**

- Water bottle → Inhaler Spacer
- Water bottle bottom →
  - Pen holder
  - Syringe / needle holder
  - Pill crusher or splitter holder



### **Duct tape holds the world together!**

- Create an anesthesia medication tray
- Create inhaler spacers
- Hang signs
- Tape down cords
- And more...



### ***Pack twice the number of sharpies you think you need!***

*In 2 weeks, I used ~25 sharpies and all my black ones! (The ultra-fine point black is great for discharge prescriptions). And there was NO Staples or Walmarts around the corner to restock!*



### ***Be creative – avoid wasting medications!***

*EXAMPLE: Morphine 10mg/1mL ampule*

- Use a 10mL Sterile Water for Injection (SWFI) vial
- Remove 1mL and add Morphine = 10mg / 10mL “multidose” vial



### ***“SALADs” (Sound Alike, Look Alike Drugs) Are always a problem in the field of pharmacy – no matter where you are!***

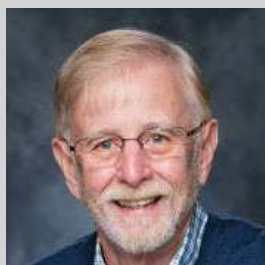
*During the first emergency, I initially grabbed the package of ePHEDrine instead of EPInephrine. This prompted me to review all my SALADs and rearrange the shelves to avoid future errors!*



**Dr. Birrer** received her PharmD from Butler University in Indianapolis, IN and completed her PGY-1 pharmacy practice and PGY-2 critical care residencies at the University of Kentucky. Since completing her training, she has worked as a critical care pharmacist in trauma, general surgery, emergency medicine and neurocritical care. She currently works as a neurocritical care clinical pharmacist at Orlando Regional Medical Center (ORMC, Orlando Health, Orlando FL). She has been active in both state and national pharmacy organizations with several presentations and publications and also serves as a preceptor for pharmacy students and residents. Dr. Birrer joined the Samaritan's Purse Disaster Assistance Response Team in 2019 and has been deployed to Iraq (2019) and Haiti (2021). She is an active member of her local church, First Presbyterian Church of Orlando, including singing in the choir and hosting a small group. She also enjoys hiking trips and time with her family.



**Dr. Poplavskiy** graduated from Saint John Fisher College in Rochester, NY. He currently practices as a clinical pharmacist in a 300-bed community hospital, Rochester Regional Health. He's been on several medical mission trips to Haiti and Kenya. When he's not working as a clinical pharmacist, you can find him outside either cycling, mountain biking, or sailing on Lake Ontario. Dr. Poplavskiy joined the Samaritan's Purse Disaster Assistance Response Team in 2021.



**Dr. Carlson** is retired from over 30 years as a Director of Pharmacy at Pioneer Community Hospital in Stuart, Virginia. Over the course of his 40-plus years in pharmacy, he also practiced in community and long-term care. He currently works part-time in an independent pharmacy in Patrick Springs, Virginia. Dr. Carlson received his BS Degree in Pharmacy and his PharmD from Mercer University in Atlanta, GA. Prior to pharmacy school, he served in the US Army as a pharmacy technician which included serving a year in Viet Nam with the 24th Evacuation Hospital. He is currently Vice President of Christian Pharmacists Fellowship International. He serves the Lord at home as an active member and deacon of Grace Baptist Church. Dr. Carlson joined the Samaritan's Purse Disaster Assistance Response Team in 2019.

## Rephaiah: Focus on Health and Hope for Neglected Populations

By Peter Kumpalume, Adwoa Nornoo, Joshua Nthakomwa, Agness Mpoto Bandazi, Precious Ngwalero Katundu, Baxter H Kachingwe, Hellen Chabunya, Harm Maarsingh and Sveinbjorn Gizurarson

### Introduction

Every 3 minutes, two children die because of malaria in Sub-Saharan Africa.<sup>1</sup> Why do we still have an entire continent where thousands of children die every week? One reason is this: the active pharmaceutical ingredients are available to treat this disease, but unfortunately there is no manufactured dosage form for the pediatric population. According to the World Health Organization (WHO), the lack of pediatric formulations requires dividing adult tablets into smaller portions for these children.<sup>2</sup> However, if they are unconscious and/or unable to swallow a tablet, the only other option is to get to the nearest hospital – which could take hours or even days in some parts of the rural African areas (such as Malawi). In the meantime, the malaria parasite will continue to worsen their condition, ultimately killing them.

The disease with the next highest health burden after malaria is schistosomiasis (also called bilharzia or snail fever). Unfortunately, children under the age of five who suffer from schistosomiasis are usually not treated – although the drug (praziquantel) is available – because it is difficult to grind the

tablet and to give a fraction of the powder to an infant or a child.

Malaria is a life-threatening disease, and children who survive this illness are at a higher risk for developing multiple neurological problems, such as attention-deficit hyperactivity disorder (ADHD), and autism spectrum disorders with long-term impairments in academic performance. These complications lead to increased stress levels in the children's families, all caused by the parasite.<sup>3</sup> Severe or cerebral malaria is not just a disease that is cured when the child has recovered – it often results in life-long neurological problems.<sup>4</sup> It is also known that schistosomiasis inhibits cognitive growth, making children drop out of school due to poor memory and learning difficulties. Additionally, girls infected with schistosomiasis are four times more likely to become infected with HIV.<sup>5</sup> Therefore, the best strategy to fight HIV in African infants and children (especially girls) is to treat them for schistosomiasis. Thus, it is crucial to have medications for malaria and schistosomiasis that are formulated specifically for infants and young