

DART Deployments with Samaritan's Purse: *Growing in Faith and as a Pharmacist*

By Kara L. Birrer

*"And if you give yourself to the hungry
And satisfy the desire of the afflicted,
Then your light will rise in darkness
And your gloom will become like midday.
"And the Lord will continually guide you,
And satisfy your desire in scorched places,
And give strength to your bones;
And you will be like a watered garden,
And like a spring of water whose waters do not fail."
Isaiah 58:10-11 (NASB 1995)*

The day before I deployed to Jamaica as part of the Samaritan's Purse International Disaster Assistance Response Team (DART), my friend, DART teammate, and fellow CPFI member Greg Carlson texted me the passage above from the book of Isaiah. These verses were exactly the reminders I needed to carry with me. First, to remind me *why* I go: to meet physical needs and to open the door for Christ's light to shine in the darkness. Second and more importantly, to remind me that the Lord will guide me every step of the way and that He will sustain me and strengthen me when I am weary.

In 2025, I had the opportunity to serve on two very different DART deployments: in February at a Women's and Pediatric Emergency Field Hospital (EFH) in Sudan, and in November at an EFH in Jamaica following Hurricane Melissa. Each deployment brought unique challenges but also helped me grow personally, spiritually and professionally.

Sudan – February 2025

There has been a civil war in Sudan for almost 2 years now (mainly western Sudan). This has led to the displacement of more than 11 million people, mostly women and children, to safer regions. The large number of internally displaced people (IDPs) puts immense pressure on the local healthcare system.¹ In December 2024, Samaritan's Purse set up an EFH in partnership with (and physically adjacent to) a local obstetrics hospital. This EFH had an emergency room/outpatient department, labor and delivery ward, a pediatric ward, and a women's ward for pre/post-Caesarean section patients or gynecological patients with a total inpatient capacity of 27 to 36 patients. I was the third pharmacist to serve at this EFH which provided me with some time to gain knowledge of OB emergencies and ensure I had plenty of pediatric references.



Supporting me in the pharmacy was a local Sudanese pharmacist and two assistants – they helped translate into Arabic and then fill all of the outpatient and discharge prescriptions. I am especially thankful for the two DART pharmacists who served before me – not only did they set up a great pharmacy, but the Lord used them in the lives of our staff to plant seeds for the Gospel. Working so closely with national staff was an opportunity to continue to plant and water the Gospel – and it became a daily prayer that the Lord would give me the right words at the right time. I continue to pray for salvation of the Sudanese pharmacy staff.

The Sudanese pharmacist and I also served the inpatients - including making multiple pediatric/neonatal IV antibiotics. Women were discharged typically within two hours after a vaginal birth and 24 hours after a Caesarean birth. During the 3 weeks I served in this EFH, over 130 babies were delivered. One of the nurses and I made baby hats out of extra cast padding to help keep their little heads warm. Our pediatric patients came to us with a range of medical issues including burns, hyperglycemia or diabetic ketoacidosis, malaria, pertussis, and neonatal sepsis.

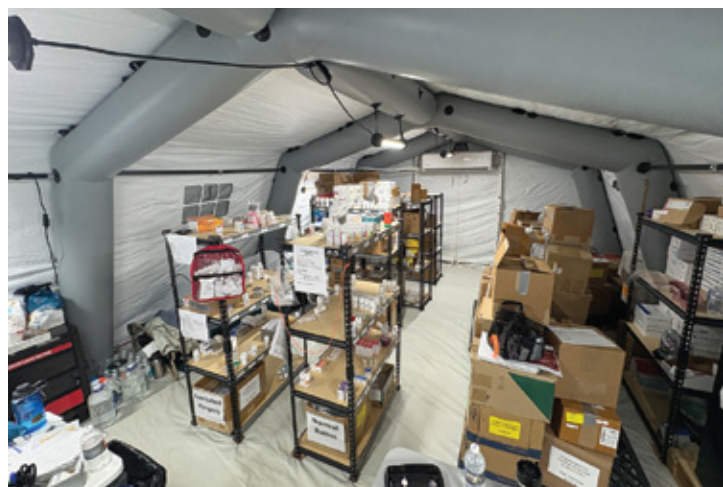


This was a deployment of trading knowledge. Our team worked very closely with Sudanese medical staff, including attendings and residents for pediatrics and OB/GYN as well as nursing and lab. I enjoyed this team and had multiple opportunities to teach the residents not only on drug selection and dosing, but also how to write pediatric medication orders safely. The Sudanese residents and attendings also taught me as we treated patients with disease states I have only read about, such as measles, pertussis, and malaria. Malaria is endemic and we had multiple cases of severe malaria requiring IV artesunate, and mild-moderate cases treated with oral artemether/lumefantrine (Coartem). I learned to dose both agents for children and adults, we even had to dissolve and dose oral Coartem for a baby born to a mother who had severe malaria. Fun Fact: it is much less expensive to treat severe malaria internationally: artesunate 120 mg (2 x 60 mg vials) in Sudan is \$1.35, compared to a 110 mg vial in the USA for \$6,454.^{2,3}

If you would like to learn more about this field hospital, here is a link to a video from the Sudan EFH in January 2025. The video also provides a tour of the pharmacy tent: <https://www.samaritanspurse.org/article/caring-for-displaced-mothers-in-war-torn-sudan>.

Jamaica after Hurricane Melissa – November 2025

Hurricane Melissa came ashore as a Category 5 Hurricane (sustained winds 185 mph) in Black River, Jamaica, on October 28, 2025. This storm destroyed the Black River hospital and Samaritan's Purse deployed an EFH at the invitation of the Jamaican Ministry of Health. This EFH contained an emergency room, pharmacy/lab, ICU and Stepdown unit, women's and men's wards, as well as an operating room. We cared for patients of all ages, including delivering a baby (throwback to Sudan – I was well prepared).



This was one of the busiest and highest patient acuity of any EFH I have worked in to date. One of our very first patients seen in the ER had severe diabetic ketoacidosis (DKA). This patient and several subsequent patients were admitted to our ICU for IV fluids and insulin drips, then transitioned back to subcutaneous insulin. A challenge when serving in a limited resource setting (such as DART) is managing these patients while also conserving pharmacy and laboratory supplies. A DKA patient in an American hospital will likely have lab work every 4 hours and point-of-care blood sugar checks every hour. In Jamaica, we only had a limited number of chemistry test cartridges and blood glucose strips; so the providers carefully assessed the need for repeat labs and ordered them only when they would change our treatment plan. For example, we might do blood sugars every hour for 4 to 5 hours until we needed to add dextrose to the IV fluids and then decrease frequency. We might wait 8 to 12 hours to repeat electrolytes. We also aimed to replace potassium orally since we had more oral inventory than IV potassium.

One fun part of DART is all the creative ways we use and reuse what we have. I worked with a nurse (whom I also served with in Sudan) to make spacers for inhalers and incentive spirometers (IS) out of clean, empty water bottles and duct tape. These spacers made it so much easier to teach patients (and/or parents) to use inhalers and the IS devices helped our post-operative patients re-expand their lungs.



Our team dealt with numerous patient emergencies, day and night. The consequences of medications that were lost in the hurricane were serious. We treated a lot of heart failure, COPD exacerbations, and asthma. Our go-to therapies included high-dose furosemide, dexamethasone, and multiple albuterol nebulizer treatments. I also learned to identify potential leptospirosis cases and proactively treat them with doxycycline (mild-moderate) or ceftriaxone (severe). Leptospirosis is a bacterial infection contracted by contact with soil or water which is contaminated with the urine or body fluids of infected animals. It is found worldwide but most frequently in tropical climates, and the risk is increased after hurricanes or floods.⁴ This infection, if caught early, can be treated; however, if left untreated, it can lead to liver failure, renal failure, pulmonary hemorrhage and cardiac arrest.

This was also a deployment where I grew in trusting the Lord as *El Shama*, the God who hears. We encountered several situations in which prayer was the most important intervention. It started with our evening worship service as we waited for permission to open the EFH. God displayed His power, His wisdom, and His mercy on many occasions – just to name a few: He provided a transfer for a critical patient. He gave us a new idea for treating a patient within our limited formulary: we used sublingual nitroglycerin as a PRN antihypertensive in a bradycardic patient (since my only other option was labetalol). And He gave our team comfort and peace when a patient passed away. Serving on DART with a team that diligently prays over every situation has translated to me diligently praying for my patients here in the US as I walk the halls of the hospital.

Jamaica is a beautiful country, and I continue to pray for the people as they work to recover and begin the rebuilding process. It will take many years, but the people are so joyful and resilient. If you would like to learn more about all the ways (medical and beyond) that Samaritan's Purse responded in Jamaica after Hurricane Melissa – see: <https://www.samaritanspurse.org/our-ministry/hurricane-melissa-response>

If you are interested in serving on the DART team, visit <https://samaritanspurse.org/our-ministry/dart>

I'd like to give special thanks to the Orlando Health Orlando Regional Medical Center pharmacy team for supporting and encouraging me to go and serve. And most of all, thank You Jesus, for giving me such blessed opportunities to use the skills You have given me both here at home and overseas.

*"Praise the Lord, my soul;
all my inmost being, praise his holy name.
Praise the Lord, my soul,
and forget not all his benefits—
who forgives all your sins
and heals all your diseases..."*
Psalm 103:1-3 (NIV)

References:

1. Sudan Situation Analysis: 03/11/25 - 09/11/25 - Sudan. ReliefWeb. Published November 14, 2025. <https://reliefweb.int/report/sudan/sudan-situation-analysis-031125-091125> [Accessed December 11, 2025].
2. Pooled Procurement Mechanism Reference Pricing: Antimalarial Medicines. https://www.theglobalfund.org/media/0lpo24ux/ppm_act-reference-pricing_table_en.pdf. [Accessed December 11, 2025].
3. UpToDate Lexidrug/Artesunate. UpToDate Lexidrug app. UpToDate Inc. Version 8.2.0. [Accessed December 11, 2025.]
4. CDC. Clinical Overview of Leptospirosis. Leptospirosis. Published April 25, 2024. <https://www.cdc.gov/leptospirosis/hcp/clinical-overview/index.html> [Accessed December 11, 2025].



Dr. Birrer received her PharmD from Butler University in Indianapolis, IN and completed her PCY-1 pharmacy practice and PCY-2 critical care residencies at the University of Kentucky. Since completing her training, she has worked as a critical care pharmacist for more than 20 years in trauma, general surgery, emergency medicine and neurocritical care. She currently works as a neurocritical care clinical pharmacist at Orlando Health Orlando Regional Medical Center, Orlando, FL. She has been active in both state and national pharmacy organizations with several presentations and publications and 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 seven times. 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.

When a Conference Becomes a Catalyst: How The CPFI Annual Meeting Became My Bridge to Medical Missions

By Deidra Simpson

Are you considering attending this year's Christian Pharmacists Fellowship International (CPFI) Annual Meeting, but you're just not sure? I get it—another meeting on the calendar, another event that might feel like a box to check. That was me last year when I first considered attending the CPFI meeting. I almost didn't go. But what I thought would be just another professional gathering turned into something far more meaningful: unexpected friendships, powerful worship, and even the spark that led me to join a medical missions trip. It wasn't just a meeting for me—it was a turning point. If you're on the fence, let me share why this experience might be exactly what you didn't know you needed.

My heartbeat is missions. I have served for many years in youth and student ministry, both domestically and internationally, but I had never participated in medical missions. Although intrigued, I hesitated. I attended several conferences—Global Missions Health Conference, CMDA Remedy, and Samaritan's Purse Renewal Conference—but when I explored opportunities for pharmacists, most roles emphasized dispensing medications. Having spent decades in academia and clinical practice, and knowing my primary giftings lie in evangelism, shepherding, and discipleship, I struggled to see where I fit in the role as pharmacist in medical missions.

At the CPFI meeting, several pharmacists shared their experiences on medical missions teams, reigniting my curiosity and leading me to scroll through Global Health Outreach's upcoming trips. One opportunity stood out: a trip to Bangkok, Thailand serving women in the red-light district. I began praying—and making excuses. The trip fell during the semester (I'm a professor). It was costly (again, I'm a professor – haha). Yet the Lord reminded me, again and again, that He provides, and that I am to simply follow.

