

1st Quarter Report 2022



"The idea that some lives matter less

is the root of all that is wrong with the world $^{\prime\prime}$

-Dr. Paul Farmer

Message from the Director:



In 2022 International Mutual Aid deployed a team of three providers to Gbamandu Village, Mofinko Section, Soa Chiefdom, Kono District, Sierra Leone. Two of the providers spent seven weeks in country, and the third spent three weeks. With the generous support of our donors, and the tireless work of our local clinicians and community members, the team was able to achieve far more than I expected.

During our relatively brief deployment, our expat and local clinicians treated over 1300 patients for illnesses and injuries including: Malaria, Typhoid, Acute Appendicitis, Heart

Failure, Dysentery, Pneumonia, Abscesses, Schistosomiasis, River Blindness, Sepsis, Perforated Bowel, untreated Hypertension, and Traumatic Injuries from work and violence. Treatment was provided free of charge, as was medication and transportation to Koidu Government Hospital when needed. The team had the joy of participating in three births, including one full delivery.

Upon our arrival it became very clear that a Women's Health Center (WHC) was a necessity. To this end, multiple donors came forward and enabled the team to repurpose the former clinical staff quarters to create the "Sally and Raymond Haik Women's Health Center". The Center enables all maternity care to occur separate from other patient treatment, thus lowering the possibility of cross contamination to mothers and newborns from infectious disease patients. The new post-natal ward allows newborns and their mothers to remain in facility for three days of monitoring, as opposed to 12 hours (the old standard prior to the WHC's construction).

Per an agreement with the ministry of health and sanitation (MoHS) to repurpose the old quarters for use as the WHC, new quarters needed to be built. Construction has begun on new quarters, set uphill from the clinic. Locally sourced materials, including mud brick and hardwood, were provided by the community. IMA and The Mofinko Development Association (MDA) were able to purchase and transport the remaining materials from the district capitol of Koidu Town.

Due to Gbamandu's remote setting, the clinic uses a Motorbike for supply runs, patient transport and outreach activities. The current bike was provided by UNICEF; however, maintenance is the responsibility of the local MoHS staff. The staff of six make a combined total of \$164 per month and had been dedicating half of that to upkeep on the clinic's motorbike- the main lifeline to Koidu Town and higher-level care for severely ill patients. IMA was able to completely overhaul the clinic bikeincluding new tires, valves, brakes, and shocksto keep the bike in safe operating condition for the next twelve months.



Upon the team's arrival, it was realized that due to environmental conditions, the main town well had dried up. This forced the majority of the population of 1,034 people to source their drinking water from a runoff-contaminated local stream. The team's water safety specialist, Virginia Price, collected and tested samples from the stream, and found the presence of S. Typhi, the causative bacteria of Typhoid. Based on these findings, IMA began an educational campaign within the community and at the local school to teach handwashing and water purification (including SODIS -Solar Disinfection).

Though less exciting than patient care, the team leadership spent multiple days in meetings with MoHS and other implementing partners including the International Rescue Committee, UNICEF, World Vision and Partners in Health (PIH). These meetings proved fruitful. I had the pleasure of spending time with Dr. Bailor Barrie, the PIH CEO for Sierra Leone. Through these meetings we agreed to build a long-term partnership between PIH and IMA. This will ensure patients from our operating area can access free surgical care at KGH (underwritten by PIH) and can be easily enrolled in PIH's programs for free treatment of Tuberculosis, as well as Non-Communicable Diseases (hypertension, diabetes, sickle cell, etc.).

While our team was on the ground, we received the sad news of Dr. Paul Farmer's death in Rwanda, while enroute to Sierra Leone. He was one of the co-founders of PIH, and a personal friend of several of our providers. The team was asked by PIH and Dr. Barrie, to attend the candlelight vigil in Koidu Town for Dr. Farmer, and the memorial service the following day, as VIPs. The team closed the clinic and our entire expat and local staff attended and showed our respect for a great hero of public health in the developing world.

The IMA team accomplished- in a very short time- more than I could dream of. Through a combined effort of the local community, local staff, donor support, in-country expat personnel and, last but certainly not least, a dedicated stateside support staff, IMA has made lasting improvements in Gbamandu and Soa Chiefdom as a whole. I cannot express my awe and thanks to all those who have been involved and hope that everyone's involvement continues as we move forward.

Deepest thanks

Colin Dunn Director International Mutual Aid

New Staff Welcome:



IMA is overjoyed to welcome our newest member to the team. Moses Yambie has been selected to serve as our local coordinator. Moses has taken this position as a volunteer, in addition to his other duties as the clinic vaccinator.

Moses Yambie was born in 1976, in Gbamandu. He attended primary school in Gbamandu, before beginning secondary school in Koidu Town. Like that of many students in Kono District, Mose's secondary education was interrupted by the advance of rebels into the area, the death of his parents, and the flight of Gbamandu villagers to a refugee camp in Guinea. Moses volunteered as a nursing aid with Médecins Sans Frontiers (MSF) for two years in the camp, seeing over 100 patients a day. When the rebel forces began attacking the refugee camp, Moses returned to Sierra Leone. He served in his war-torn home country as a clinician

International Mutual Aid

at Koidu Government Hospital for several years. During the post-war period, Moses served as a field supervisor for the International Rescue Committee. Following his service with IRC, Moses accepted an MoHS position running the childhood immunization program at the newly rebuilt Gbamandu clinic. IMA began working with Moses in 2015, during the Ebola response. Moses's dedication to patient care is a testament to his amazing character. Moses embodies IMA's values of Compassion and Empathy. He has spent the past two months working 12-to-14-hour days performing patient care, making countless motorbike rides to Koidu with other staff members and patients, ensuring transparent and accountable logistical support, and building productive working relationships with providers at Koidu Government Hospital/other partners. In the long-term Moses intends to return to school to increase his medical certifications. We are overjoyed to welcome Moses to the IMA team.



Clean Water / SODIS

By Virginia Price

"Next week we'll be busy with diarrhea cases" Moses Yambie predicts as he guides the clinic motorbike up the last rough hill into town. He gestures at the looming thunderstorm above us.

The next morning, I make the rounds of the surface streams that local residents resort to for drinking water during the

dry season, when the village's shallow hand-dug wells invariably run dry. Sure enough, both streams are cloudy with runoff. I take mid-column water samples and test for bacteria and mineral content. A crowd of school-age children watch in fascination, and a few of the bolder kids get an impromptu hands-on lesson in testing water. Rural Kono has an extremely high rate of waterborne Typhoid Fever. Surrounded by agricultural land and informal fieldside toileting areas, the stream water is, unsurprisingly, heavily laden with Salmonella bacteria species.

The village Chief, Aiah Ngolo, calls a community meeting together the next evening. The town crier's calls and the tolling of a large gong (the latter situated uncomfortably



close to our heads as we sit in an elevated place of honor) serve to fill the town Barre (gathering hall) to capacity. Most of the audience is freshly arrived from a long day of hand-tilling fields in preparation for planting season; there are many tired faces in the audience.

When discussing health and development with local acquaintances, no topic comes up more frequently than clean water. Nostalgia runs rampant for the village's historical water system: clean, abundant, and spring fed, it was destroyed in the civil war. Here in Gbamandu, there's no smartphone access to ask Google how to make dirty stream water safe. Even if there was, most adults are illiterate.

So, when we start to talk about clean water, we have the audience's undivided attention. Unfortunately, our most effective solution, boiling, isn't easy. Unlike a boil-water order in the States, achievable in moments on the stove or microwave, boiling water in Sierra Leone involves a fairly sizeable opportunity cost. Residents' daylight hours and energy are already fully invested in farming, processing food, taking care of children and livestock, etc. Almost everyone in the village works hard all day, yet still flirts annually with malnutrition during the lean pre-harvest month of August. The pittance that cash crops like coffee bring in is never quite enough for school fees and clothes. For most families, eating meat or fish is a once-a-week special event. Gathering extra fuel and taking time to boil water means losing food-growing time and energy.

A convenient alternative, almost as effective as boiling, is SODIS (Solar Water Disinfection). By the light of a solar flashlight, I show the townspeople how to select a clean, clear plastic PET bottle, fill it with water filtered through a t-shirt, shake it to add dissolved oxygen, and place it in full sunlight on a roof for 6 hours. The resulting mix of heat (100-110 degrees), UV light, and oxygen kills off almost all bacteria, viruses, and protozoa. Later, we also handed out PET bottles at the local school and taught the students to perform SODIS.



Was our lesson effective?

Moses Yambie's prediction came true; that week we treated dozens of patients for diarrhea- from infants to great-grandmothers. But we also noticed our translator's young daughter, Ann-Marie, had begun toting around a SODIS bottle every day. Gradually, more SODIS bottles appeared on rooftops, and more patients told us they'd been boiling or SODIS-treating all of their drinking water. Slowly, other complaints replaced diarrhea as the most common illnesses seen at the clinic.

This year, IMA has made a great start on clean water promotion in the Gbamandu area. We now have a firm base from which to expand future public education efforts in the greater Kono District.

Women's Health Center Update

By Ashley Liewer

Sierra Leone has the highest maternal mortality rate in the world, due to many challenges, including lack of access and



International Mutual Aid

underutilization of maternal health services. In the Mofinko District, many of the families live far from the Gbamandu clinic, and may have to travel many miles on foot or via motorbike to access care. This isn't safe or easy for most people, and especially not for women in labor. The local community of Gbamandu has been housing women during the last few weeks of their pregnancies, in order to increase access to delivery services. However, this will not be sustainable as the district continues to grow. In addition, the prenatal care clinic is run out of the main clinic once a week,

WWW.IM-AID.ORG

taking up most of the available primary care/emergency care space. Furthermore, because the main exam room is also the delivery room, the clinic struggles to provide routine and emergency healthcare when a delivery is taking place.

One of the key focus areas of the World Health Organization's Country Cooperation Strategic Agenda for Sierra Leone, is to improve access to and utilization of reproductive, maternal, and newborn care. To this end, IMA and the Mofinko Development Association developed a strategic initiative to fund and build a Women's Health Center. This will provide space for antenatal services, and labor and delivery. The new Sally and Raymond Haik Women's Health Center (WHC) will provide:

- **Reproductive health services and counseling-** to improve quality and access to family planning and treatment for sexually transmitted infections
- **Prenatal services** for pregnant women- including nutritional counseling, education, and recognition and treatment of pregnancy-related conditions and complications
- Housing for expectant mothers in the last 2 weeks of their pregnancy- to improve the accessibility of hospital-based labor and delivery services for women living in the service area, but outside the village of Gbamandu
- A labor and delivery ward- separate from the main clinic, that creates a safe and private space for women to deliver. This will allow the clinic to remain in service for other patients
- **Post-partum care** for mother and baby- to decrease the number of newborn and maternal deaths, and provide women with services and education, in preparation for taking baby home

As part of this initiative, the original nursing quarters are being converted into the WHC. Renovations include cleaning, painting, updated plaster work, new doors, and the addition of a solar system with individually controlled lighting at each patient's bed. In addition, a new delivery bed has been installed in the WHC. Lastly, the renovations include installing the wiring for the future addition of fans in the patient care areas. This work was started on March 15 and the WHC will be open by early May.



The final stage of this initiative is to replace the nursing quarters, as is required by the Ministry of Health. The new quarters are well underway and should be ready for occupants by late May.

This entire project was made possible this year by generous donors and the local community. The community has worked long and tirelessly to ensure this project can be completed before the rainy season. Residents have been hard at work making bricks, laying the foundation, and contributing to all phases of this project.

Accomplishments at a glance:

- A. Provided free healthcare, including medication, to over 1100 patients.
- B. Treated 30 patients as inpatients at Gbamandu clinic. Achieved definitive care for 1064 patient contacts (94%) at the clinic. Treated 12 patients in critical condition, 52 in serious condition, 610 in fair condition, 130 in good condition, and 328 patient contacts for chronic conditions (HTN, diabetes, etc).



- C. Transported 68 patients via motorbike to Koidu Government Hospital (KGH) / Vision Clinic, 22 to Vision Clinic, 46 patients for treatment at KGH including 6 emergency surgeries, 3 neonatal emergency admissions
- D. Underwrote eye care for 22 patients at KGH Vision Clinic, including 3 Cataract surgeries.
- E. Provided public health talks to 2000 people regarding hand washing, water purification, typhoid and diarrheal disease prevention
- F. Distributed 500 bottles for use by the community for SODIS water disinfection
- G. Ensured deworming medication was distributed to all school aged children in Gbamandu. Performed 2 health engagements at the Gbamandu Primary school
- H. Constructed the Sally and Raymond Haik Women's Health Center with Delivery room, 3 postnatal care beds in the Postnatal ward, and one antenatal care office.
- I. Began construction on new health quarters and provided all non-local materials for a 2 bedroom, 2 parlor medical provider quarters
- J. Mapped the entire catchment area with use of GPS and advanced mapping technology to allow IMA and partners to most effectively implement health outreach activities.
- K. Maintained the Clinic bike to ensure continuous safe use for patient transfer and health outreach
- L. Provided mentoring and guidance to entire local PHU staff
- M. Participated in 4 multilateral partner meetings with MOHS, PIH, IRC, World Vision, 10 bilateral meetings with PIH, and frequent ongoing dialogue with MOHS. 4 partner meetings with MDA.
- N. Began a substance abuse recovery program using health providers and local support systems
- O. Identified and implemented effective support for developmentally disabled children so they can return to school
- P. Built partnership with a local NGO, Mofinko Development Association (MDA). Assisted MDA in board structuring and financial planning.

WWW.IM-AID.ORG

- Q. Installed 8 handwashing stations throughout the community, including at the local primary school and the PHU
- R. Provided diagnostic equipment to the PHU including a fetal doppler, Pulse Oximetry technology, and Automatic Blood Pressure equipment
- S. Instituted a comprehensive medical record program in SOAP format to ensure all patients have effective tracking.



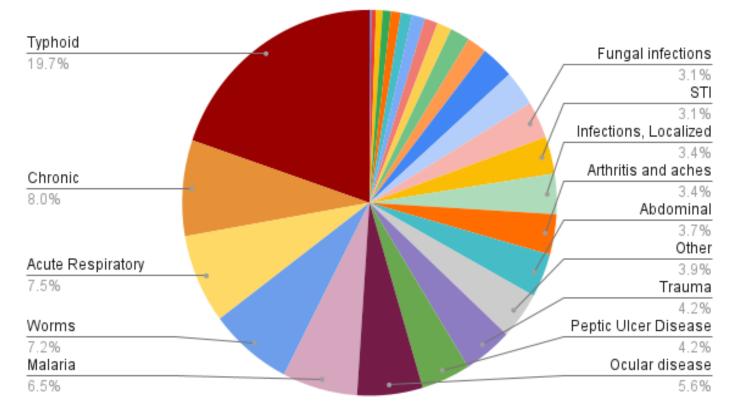






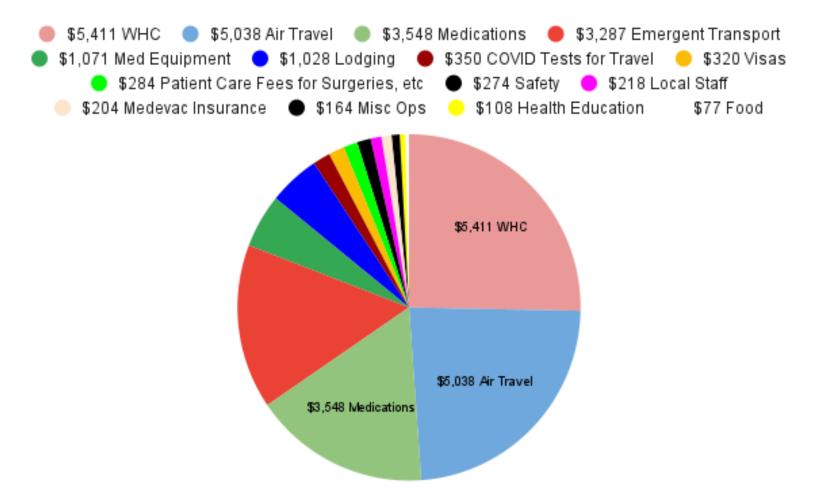
- T. Refurbished the rain catchment system on the PHU with a new millitank and new piping, ensuring clean water for use at the clinic
- U. Constructed an Isolation facility at the Gbamandu PHU

Basic Patient Breakdown:



Top Diagnoses Broad Categories, Gbamandu Clinic, 2022 IMA Deployment

IMA's Amazing Staff, they did so much with so little:





International Mutual Aid

WWW.IM-AID.ORG

Mail@IM-Aid.org