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iGIVE Guatemala'14

iGIVE READER / Volume 1(02) / February 2015

Hello! We are Arielle and Stephanie and we went on the annual iGIVE trip to Guatemala! This trip was organized by a non- profit organization called Global Penicillin Girl. It was founded by a pharmacist from Mount Sinai Hospital who works with a group in Guatemala called Vivamos Mejor that just celebrated their 25th anniversary. Vivamos Mejor provided us with transportation and translators, and without them the mission would have been much harder to complete successfully. We were a group of 15 including physicians, dentists, dental residents, physician assistants, an optometrist, pediatrician, pharmacists and pharmacy students, not to mention the handful of translators and medical students from Guatemala that helped with triage.

The trip was truly a team effort, as Physician Assistants helped pre-pack ibuprofen and acetaminophen and pharmacy students helped triage dental patients. We saw about 600 patients in four days and while it was hard work, it was rewarding. This newsletter will be your inside access to everything that happened on our trip, hope you enjoy the read!

> "We want this to be a movement;
> A movement of learning, loving, and living!"

Preparation & Donations

>> By Arielle Valenti

Preparation for the trip involved creating a drug formulary, packing all our donations, and altering our patient intake form to reflect all the patient information we needed to collect and all the medication we would have. This was the most tedious part of the entire mission, but the most important part to create an easy workflow.

Donations in the form of supplies and medications were received from Walgreen's, Americares, Mt Sinai Hospital, fellow classmates, the iGIVE team, and faculty from LIU and Touro College of Pharmacy. Without these donations, our mission would have not been successful. Some of these donations included: over-the-counter medications, gloves, gauze, glucose test strips and other medical supplies, and also prescription medications such as antibiotics and acid-reducing agents.

Monetary donations were gathered using GoFoundMe.com. On a trip like this, donations were a crucial part in ensuring an efficacious mission because without donations, we would not have had all the medicine and supplies we needed for proper patient care.

SUPPLY DONATIONS

> "Without these donations, our mission would have not been successful."

This pre-trip preparation involved many hours of packing and repacking to ensure our luggage was not overweight and that we had everything we needed. We also confirmed all medications and supplies were accounted for on our formulary so we could keep an accurate inventory. Although it was a long process, it was nothing our pharmacy team was not familiar with because of our retail experiences and its demands to constantly keep accurate inventory and organization.

In anticipation of not having much to create a pharmacy when we arrive at our clinic location, we had to design a pharmacy layout to guarantee organization.

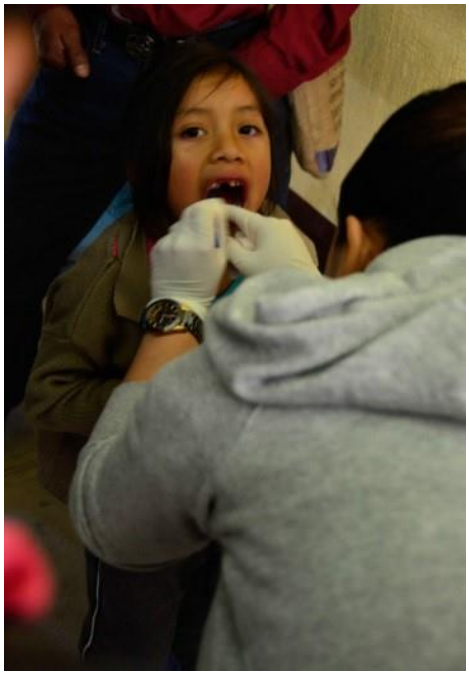
After all of our preparation was complete and our bags were packed, we were ready to begin our mission!

DONATIONS

OUTSIDE OF SOLOLA CLINIC

Getting Started

>> By Arielle Valenti



Can you make a difference? The answer is YES, any type of help is a difference.

Our first day at clinic involved set up of our pharmacy and getting used to the workflow we created. Our clinic was in a municipal building with six rooms with our triage station at the front door for recording patient's vitals, height, and weight. The medical team had a room with three tables for patient interviews and a curtain for physical examinations. The pediatric team also had a room for patient interviews and physical examination. Optometry had their own room for eye examinations and glasses fittings. The dentals team was the largest and was given two rooms for dental treatments.

Our pharmacy was in the room closest to the entrance/exit because we were always the last stop for the patient. We were given a book shelf and a table. Instead of traditional pharmacy setup by alphabetizing pill bottles, we organized our pharmacy by types of medications. We had a section for antibiotics, analgesics, GI, vitamins, cough/cold/allergy, topicals, hypertension, diabetes, and inhalers. This made it easy to keep inventory of our medications and allowed us to always know what we had to treat each diagnosis.

When the patient was finished seeing the doctors, they would come into our pharmacy for their prescriptions and medication counseling. We had patients line up outside the pharmacy and called in one patient at a time to keep organization and protect patient privacy during counseling.

In the beginning of each day and periodically throughout our days at clinic we pre-packed medications that were frequently prescribed to patients to save time. These pre-packed medications included multi-vitamins, acetaminophen, and ibuprofen for adults and children. This was a huge help in the pharmacy because it saved time and it allowed us to distribute these pre-packs to our doctors for the patient's convenience so they did not have to stop in the pharmacy if they did not need any other medications.

Overall, setup went smoothly and we quickly adjusted to the environment we had to work in.

Interdisciplinary Teamwork

>> By Arielle Valenti

A challenging but gratifying part of this experience was working closely with the medicine and dental teams to make sure the patient received the correct therapy. Although we were working in a very small environment, we did not always know where the patient was coming from when they arrived at our pharmacy and what the doctors had told them. If something was unclear on the patient's form, it was necessary to go to the doctor and clarify.

It was also very educational to work with many other healthcare professionals. As students, we were able to work very closely with all the doctors, get involved with all components of our clinics, and use our own skills and knowledge. We always spent some part of the day at triage taking patients' blood pressure, pulse, height, and weight, a skill we don't normally get to utilize in our community careers. We also got to work with the dental team, something we would probably never get the chance to experience if we did not go on this trip. Working with the medical team is when we got to use our pharmacy education. We sat down with a doctor during the patient interview and made our recommendations on treatment for the patient. Because we had full knowledge of our pharmacy's inventory, we were able to recommend the treatment we had in stock and made interventions when treatment the patient required was not available.

Our role as pharmacy students was to provide counseling to our patients so we created patient education pamphlets about diabetes and distributed other pamphlets about oral hygiene and other common disease states of our patient population such as scabies. Each patient was given a pamphlet and we explained what was included in each pamphlet and why it was important to learn about these topics. This part of our counseling connected each part of our medical team for the patient and also helped us in exercising our counseling skills.

Our interdisciplinary team was very successful. Everyone respected each other's professions and we were able to have a very effective clinic while increasing awareness of pharmacists as an essential part of improving patient care.

> **"Healthcare professionals cooperated together to improve health outcomes in underprivileged communities."**

Como se k'iche?

>> By Arielle Valenti and Stephanie Cardinale

We already had the language barrier of English to Spanish, but we also had the barrier of a Mayan dialect called k'iche. There are 20 Mayan dialects that still exist in Guatemala. Luckily, the pharmacy team had a translator that spoke English, Spanish and K'iche fluently, so we had a perfect time speaking with her and teaching her the counseling points for the commonly dispensed medications. Without her, counseling patients would not have been possible and even though the patient received the medication, without knowing how to take it or what to expect from the medication would render it useless to the patient.

These are a few useful phrases we learned:
"Utz a woch" – "Hello" – We said this to everyone who walked into the pharmacy and the response was usually a chuckle and "utz" back
"Cabaila chi" – "Open your mouth" – we used this phrase in triage and dental when we gave all of the children fluoride treatment
"Tyosh" – "Thank you"
"Ja'i"- "No"
"Shway Olah" – "You're finished"

The pharmacy group with our translator Mika

Patient “S”:
The Difference You Can Make

LEARNING
LOVING
LIVING

>> By Stephanie Cardinale

The most rewarding and life changing experience was when we met patient S. She came in on clinic Day 2 with her mom and 2 siblings. Just by looking at her you knew she had an infection. Her face was covered in scabs and you could see lesions on her trunk as well. Knowing scabies was prominent in the area that was our first thought and we recommended the pediatrician to give enough scabicide medication for the whole family. Upon further examination, she was diagnosed with impetigo. Impetigo is a skin infection commonly caused by staph or strep infections. Risk factors for this condition is poverty, close contact, poor hygiene and underlying scabies[1].

Our formulary had Cephalexin 250mg suspension for children so we gave her enough for 10 days. We also gave the whole family scabicide medication and told them to use it for 3 nights. On our last day of clinic, two days after originally seeing patient S, she came back with her mom. They were already in clinic waiting for us, and when we walked in we had the greatest surprise.

While she wasn't completely healed yet, her scabs were gone leaving her face a soft pink. We gasped with joy and hugged her, asking her to pose for some "after" pictures with us. She probably had no idea what was going on but smiled and posed with us nonetheless.

She brought tears to all of our eyes that day and we thanked her mother for bringing her back to show us her progress. Her mom looked very pleased and thanked us for helping her. It's very rare to see the impact you had on someone and we were truly lucky to have that experience.

To donate online go to https://community.liu.edu/donate For Designation select "Other" & type "International Pharmacy Fund" in the Comments section.

If you would like to send a check, write out to "Long Island University" and in the memo section write "International Pharmacy Fund" and mail to Suzanna Gim 75 Dekalb Ave, Brooklyn, NY 11201

Before Treatment

After Treatment

EXPECTATION vs REALITY

>> By Stephanie Cardinale

Coming from community pharmacy practice backgrounds we were ready to build a pharmacy from scratch. We knew exactly how to manage inventory and planned on setting up the pharmacy by category, for example, children's products, antibiotics, hypertension, etc. We thought organizing it this way would be the most effective and time efficient way to get the medication out to the patient. We knew our formulary inside and out and thought we had enough of every type of medication. We were especially excited about having donated brand medications such as Zestril(R) and Crestor(R) on our formulary, especially since dispensing brand medications is such a barrier back home due to insurance companies. What we weren't expecting was that we wouldn't be needing these medications at all. High blood pressure and cholesterol were not common disease states in the patients we were treating and we didn't initiate anyone on blood pressure medications due to lack of follow up. We only gave out such medications if the patient informed us that they were already on it and needed more.

We prepared for the trip for weeks but nothing could mentally prepare you for a mission trip like this. We knew we would have sick people, and that scabies and parasites would be more prominent. But what we didn't know was that treating chronic disease states such as hypertension and hyperlipidemia was virtually unheard of. In America, many people are overweight and the most common disease states are those related to the heart. In Guatemala, we were most focused on prophylaxing the children with scabicides and antiparasitic medications since those were the most prevalent. For adults, the most common chief complaints were headaches and various muscle pains so we mostly dispensed ibuprofen and acetaminophen. Everyone received a multivitamin, placebo effect at its finest.

A particular eye-opening event was when we had a patient, diagnosed with asthma, and the only inhalers we had were Pulmicort®. This is a DPI, and difficult to use, especially for someone who has never seen a device like it before, like our patient. We taught the translator how to use the inhaler and after they told the patient how to use it we made the patient show us how he would use it. He did not understand that he had to put the inhaler in his mouth and take a deep breath for the medication to get in his lungs, and since you can't feel anything when you inhale it seems like you aren't doing anything at all. We take for granted that not everyone understands how to use our formulations and seeing how foreign of an object he inhaler was, was definitely a turning point in the trip. Our next patient that came in for inhalers demonstrated how to use it perfectly on his first try and we were so excited that we clapped for him. He probably thought we were crazy but it was a highlight for us, and it left us feeling like we truly made an impact.

In a retail setting we are also used to getting a prescription with the medication, dose, directions and quantity written on it, but at clinic the doctor would write the diagnosis and check off the medication and we would have to figure out the dose and duration of the medication. It really gave us an opportunity to play a clinical role and apply what we learned in school into practice.

>> ENQUIRE ABOUT HOW YOU CAN MAKE A DIFFERENCE, JOIN iGIVE
https://www.facebook.com/groups/igiveliu/

More Than Just A Number

>> THE PROOF OF OUR SUCCESS

"The good physician treats the disease; The great physician treats the patient who has the disease."

-William Osler"

NUMBER OF DIAGNOSES

	Adults	Pediatric
Rash	17	24
Scabies	5	40
Otitis Media/Externa	10	18
Asthma	6	3
URI	8	25
Diarrhea	3	3
Parasites	4	63
Fever	3	13
Pain	140	20
Dyspepsia/gastritis	64	16
HA	52	5
Fatigue/Weakness/Anemia	40	14
Tinea	35	7
Fem/OBGyn	25	3
UTI	21	4
HTN	12	0
General check up	5	25
Cough/cold	8	10
Allergy	2	3
Acne	5	1
Arthritis/ Joint/ Back pain	4	1

NUMBER OF PATIENTS SEEN

Total Patients	619
Adult Patients	348
Pediatric Patients	271
Adult Dental Patients	150
Pediatric Dental Patients	226
Total Number of prescriptions dispensed	1,308

NUMBER OF MEDICATIONS DISPENSED

	Adults	Pediatrics
Analgesics	255	120
Antacids	63	11
Antihypertensives	7	1
Antidiabetic	4	1
Bronchodilators	5	5
Opthalmic/Otic Drops	8	5
Antifungals	7	1
Antihistamines/Cough/Cold	13	30
Antibiotics	54	36
Topicals	43	31
Steroids	3	1
Vitamins	216	152
Scabicides	7	39

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https://www.facebook.com/groups/igiveliu/

Learn more about the Global Penicillin Girl Project by visiting http://globalpenicillingirl.org/

Live Better Association, Salpores street 0-83 zone 3, Jucanyá neighborhood, Panajachel, phone: 502-77622080 - 77620159-77621093 - email: info@vivamosmejor.org.gt - www.vivamosmejor.org.gt

INITIATION OF GIVING INTERNATIONALLY THROUGH VOLUNTEER EXPERIENCES

We would like to recognize the following partners for their contributions:

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To our 2014 donors, Thank You!

The iGIVE team thanks you for your generous donations. Your charity and kind hearts enabled us to supply Guatemala with needed medications and medical supplies. Your donations allowed us to provide care for so many people during our mission, and our patients were truly grateful! Because of your generosity, our mission was a great success!

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