IGIVEREADER

SPAIN & GUYANA

MARCH 2023 | VOLUME 10 ISSUE 2

LEARN.
LOVE.
GIVE.

FEATURED STUDENTS:

MINNA ABDELAZIZ

AMAN KAUR

JAMES KIM

THE ARNOLD & MARIE SCHWARTZ COLLEGE OF PHARMACY AND HEALTH SCIENCES
LONG ISLAND UNIVERSITY

GUYANA 2023

PHARMACY CLASS OF 2023

JAMES KIM

GUYANA AT A GLANCE

(left to right) Guyana's National flag, National animal, National bird, Kaieteur Falls

Guyana, a hidden gem located in South America, is a diverse country made up of ethnicities that include African, Indian, Amerindian, Chinese, and Portuguese. It's divided into four geographical regions and has four main rivers. Georgetown is the capital and also its largest city. With a total population of around 800,000 people, 90% live along the coastal plain. Guyana is the third smallest country in South America and the only country where English is the official language. More than 75% of its land regions are covered by rainforests and it's home to the world's largest single-drop waterfall, Kaieteur Falls. Guyana is an indigenous word that means "Land of Many Waters" and the national motto is "One People, One Nation, One Destiny".

MARCH 2023 ITINERARY	
Day 1	Arrival
Day 2	Medication Sorting
Day 3	Wisroc Health Centre
Day 4	Christianburg Health Centre
Day 5	Latitia Holder Health Centre
Day 6	Nabaclis Health Centre
Day 7	Essequibo River Tour
Day 8	Departure

ABSENCE OF EMRs

HERO Team at Wisroc Health Centre

Christianburg Health Centre with pharmacy assistant junior

Latitia Health Centre

Nabaclis Nursery, located right next to its Health Centre

During my medical outreach trip to Guyana, I had the opportunity to practice as an intern pharmacist in 4 health centers. Health centers are patient-directed organizations that deliver comprehensive and affordable care by integrating access to services, such as pharmacy and mental health, in underserved communities. Wisroc, Christianburg and Latitia Holder are located near Linden, while Nabaclis is located near Georgetown. Although these health centers presented different challenges, something that they all had in common was having no electronic medical record (EMR) system. The local healthcare providers did everything manually and used paper-based records. Given these circumstances, it took more time to read through a patient's chart especially when the handwriting wasn't clear or the patient's history was out of order. This was definitely unexpected given the technological advances healthcare has made.

In the United States, EMRs are a crucial tool of modern healthcare systems as they can store, retrieve, and share patient information. They also help to prevent medical errors and ultimately improve patient outcomes. Like many underdeveloped countries, Guyana faces challenges in adopting EMRs. The first major challenge is the lack of infrastructure. Clinics in Guyana do not have access to reliable electricity and internet, making it difficult to maintain EMR systems. Additionally, healthcare budgets are limited and the cost to implement EMR systems can be high. Another challenge is the lack of personnel to manage EMR systems. Some of the clinics that we visited did not have enough health professionals and desperately needed help. Due to these needs, there may not be enough resources to have personnel that can manage health-related data. This can lead to suboptimal use and poor adoption of EMRs.

Healthcare providers rely on medical records to access patient history, manage chronic conditions, and provide timely care. The lack of EMRs in underdeveloped countries is a serious issue that has implications for patient care and overall health outcomes. Addressing this issue will require investment in infrastructure, training, education, and support from the government. Pharmacists play an important role in global health and can have significant impacts by promoting patient education and increasing access to medications. Working at the clinics in Guyana was a humble and unique learning experience! EMRs is something that I've taken for granted but after working at the clinics, it's something that I now come to appreciate.

H.E.R.O. (Health and Educational Relief Organization) is a not-for-profit humanitarian organization dedicated to providing free, high-quality health care and educational support services in needy communities throughout the Caribbean. For more information, visit heroglobal.org

2022-23 Memory Lane

IGIVE X PROJECT SUNSHINE:

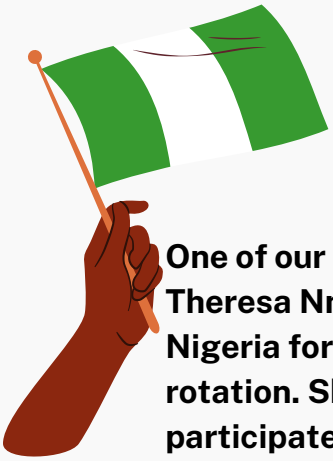
Sweet Relief Fundraiser for Pediatric Patients

Bunnies & Baskets Easter Event

APPES RECAP

A memorable part of this trip, besides playing soccer in the rain with the brigade team, was going out of my comfort zone and counseling patients in Spanish. In the clinic, we see a lot of patients come in with pain, especially in their backs. Therefore, "dolor" and "espalda" was used a lot and you can also see the patients appreciate that you were trying to communicate with them in their own language.

-Jamie Wong



One of our P6 students, Theresa Nnoli visited Nigeria for her APPE rotation. She was able to participate in a patient case presentation on HIVAN- which is kidney disease associated with HIV infection. Heart to heart clinic services are available in every region of the country, offering treatment for HIV/AIDS patients.

COVID-19 RECAP

ANNA WU

Risks to the heart?

Long-term studies have shown COVID-19 survivors to be at higher risk of problems such as stroke and heart failure.

Impact on economy?

A study in 2020 has predicted that over 88 million people will be pushed into extreme poverty as this pandemic continues. In the worse case scenario, the predicted number can be as high as 115 million.

The World Bank and IMF has called for suspension of debt-service payments for the poorest countries so they can focus resources on fighting the pandemic. Even before the spread of COVID-19 , almost half of all low-income countries were already in debt.

> COVID-19 IS STILL WITH US.

It has been 3 years since WHO declared COVID-19 to be a pandemic on March 11, 2020. Over the last three years, the Americas had over 190.3 million COVID-19 cases and over 2.9 million deaths. Incidence rates are 20-30 times lower than a year ago, however, COVID-19 is still a threat even in 30 years due to the unpredictable evolution of the coronavirus.

On a global scale, COVID-19 has not received the attention it deserves and there is still a lack of public awareness. There is a lack of data in low and middle-income countries. Without specific treatments for COVID, there is a need for preventive measures to keep COVID-19 cases low. The way to treat COVID-19 is very personalized, depending on the patient's risk factors for severe diseases.

MAR, 9. (N.D.). AFTER THREE YEARS OF COVID-19, SURVEILLANCE AND VACCINATION KEY TO ENDING PANDEMIC IN THE AMERICAS. PAHO.ORG. RETRIEVED APRIL 17, 2023, FROM HTTPS://WWW.PAHO.ORG/EN/NEWS/9-3-2023-AFTER-THREE-YEARS-COVID-19-SURVEILLANCE-AND-VACCINATION-KEY-ENDING-PANDEMIC-AMERICAS.
BLAKE, P., & WADHWA, D. (2020, DECEMBER 14). 2020 YEAR IN REVIEW: THE IMPACT OF COVID-19 IN 12 CHARTS. WORLD BANK BLOGS. HTTPS://BLOGS.WORLDBANK.ORG/VOICES/2020-YEAR-REVIEW-IMPACT-COVID-19-12-CHARTS

Khalid Hassan

Chronic Kidney Disease on a Global Scale

The mission of the LIU iGIVE chapter is to provide opportunities for students interested in service abroad, particularly in underdeveloped countries. The organization is dedicated to building sustainable projects in the communities they visit. With this in mind, students need to aware of global health issues.

The Global Burden of Disease, Injuries, and Risk Factors Study (GBD) is one of the few studies that have the resources to obtain statistical data for a more comprehensive estimation of CKD's impact in 195 countries. Between the years 1990 to 2017, GBD estimated about 700 million patients are affected by CKD globally. Out of all 195 countries, the population in China and India are the most affected, with 132 million and 115 million individuals. China and India are the top two most populated countries in the world. Hence, about 10% of the total population of each country are diagnosed with CKD.

This is a table showing CKD data in some of the underserved countries:

Country	CKD Cases	Mortality due to CKD
Nigeria	12,681,837	13,740
Guyana	63,209	181
Bangladesh	11,196,657	16,783
Spain	4,233,637	10,605
Honduras	683,978	744
Venezuela	3,090,745	8403
Myanmar	5,258,275	12,026

WHAT IS CHRONIC KIDNEY DISEASE?

According to the National Kidney Foundation (NKF), Chronic Kidney Disease, also known as Chronic Renal Disease or CKD, is a condition that causes a steady decrease in kidney function over time.

KOVESDY CP. EPIDEMIOLOGY OF CHRONIC KIDNEY DISEASE: AN UPDATE 2022. KIDNEY INT SUPPL (2011). 2022;12(1):7-11. DOI:10.1016/J.KISU.2021.11.003.
GBD CHRONIC KIDNEY DISEASE COLLABORATION. GLOBAL, REGIONAL, AND NATIONAL BURDEN OF CHRONIC KIDNEY DISEASE, 1990-2017: A SYSTEMATIC ANALYSIS FOR THE GLOBAL BURDEN OF DISEASE STUDY 2017. LANCET. 2020;395(10225):709-733. DOI:10.1016/S0140-6736(20)30045-3.

Air Pollution Alert: Impacts on Public Health

Tia Char

Air pollution is a threat to the health of millions of people around the world. Fine particulate matter (PM2.5) and other air pollutants are released from various sources, such as industrial activities, vehicular emissions, and burning of fossil fuels. As for the global lack of access to clean indoor air in personal households, solid fuels like biomass and coal are culprits commonly used for cooking and heating.

2.4 billion people (almost one-third of the world's population) cook over open flames or with stoves powered by kerosene, biomass (wood, animal dung, and crop waste), and coal.

Exposure to air pollution has been linked to respiratory diseases, cardiovascular diseases, lung cancer, and other adverse health outcomes. Moreover, vulnerable populations, such as children, elderly individuals, and those with pre-existing health conditions, are particularly susceptible to the harmful effects of air pollution.

THE LATEST WORLD HEALTH ORGANIZATION (WHO) STATISTICS ESTIMATE THAT WORLDWIDE *AMBIENT (OUTDOOR)* POLLUTION ACCOUNTS FOR...

4.2

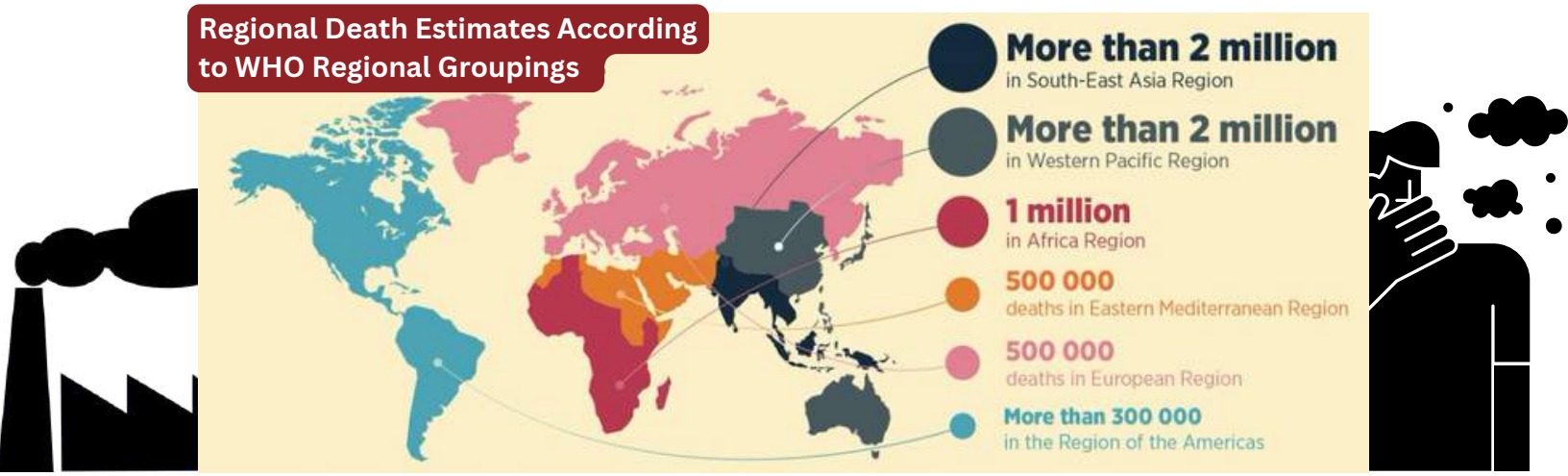
MILLION

***premature* deaths.**

89%

of the 4.2 million mortalities were documented in low- and middle-income countries, with high prevalence in **South-East Asia and Western Pacific Regions**.

Regional Death Estimates According to WHO Regional Groupings



WORLD HEALTH ORGANIZATION. EXPOSURE & HEALTH IMPACTS OF AIR POLLUTION. WHO. FROM HTTPS://WWW.WHO.INT/TEAMS/ENVIRONMENT-CLIMATE-CHANGE-AND-HEALTH/AIR-QUALITY-AND-HEALTH/HEALTH-IMPACTS/EXPOSURE-AIR-POLLUTION
WORLD HEALTH ORGANIZATION. (2022, DECEMBER 19). AMBIENT (OUTDOOR) AIR POLLUTION. WHO. FROM HTTPS://WWW.WHO.INT/NEWS-ROOM/FACT-SHEETS/DETAIL/AMBIENT-(OUTDOOR)-AIR-QUALITY-AND-HEALTH

ALUMNI CORNER

FEATURING DR. ELENA KHACHATURYAN

ASSISTANT DIRECTOR FOR SITE AND PRECEPTOR DEVELOPMENT AT LIU PHARMACY

INTENSIVE CARE UNIT-OPERATION ROOM PHARMACIST AT NEW YORK-PRESBYTERIAN HOSPITAL

LIU PHARMACY GRADUATE '19

My passion for travel and helping people was always strong since I was a child. When I heard about the opportunity to travel abroad to volunteer in an underserved community, I didn't hesitate and reached out to Dr. Gim immediately. She explained the benefits of the trip and gave me valuable advice in selecting the right country to travel to. I was the secretary of iGIVE at the time, which helped me keep track of meetings and raised funds for my upcoming trip in the P6 year.

I chose Guyana because the trip was fairly short (12 days) and it was the only country in South America that spoke English. We got to travel to several villages and set up our own pharmacy at various churches, schools, and even one small hospital. I was very interested in infectious diseases and ambulatory care, which paired perfectly with the direct patient contact I got to experience and the variety of conditions we got to treat.

One of the main lessons I learned from that trip was an appreciation for small things that can sometimes save people's lives. Life is different in Guyana, and there are many issues in the healthcare system despite the availability of free universal care in the country. Every single patient we treated was grateful from the bottom of their heart through their eyes, their smiles... This experience was everything I expected and even more because it gave me hope for the change we as pharmacists can bring to not only our own communities but to those abroad who desperately need us.

This trip was also probably one of the most selfish things I did to my family during my pharmacy career because I did this for my own growth as a person and as a healthcare professional. I was amazed at how my family and my small children at the time supported me with my decision to go to a country I have never been to before. It shaped, disciplined, and humbled me, and sharpened my communication and writing skills, which I still use today when communicating with healthcare professionals, patients, and students.

SPAIN X GUYANA PDP

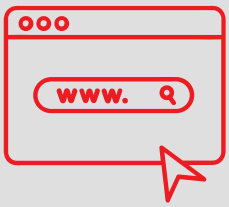
STAY TUNED FOR OUR NEXT E-BOARD FOR 2023-2024 ON OUR LAST MEMBER MEETING ON 4/26/2033 @ 5 PM IN HS 107

FACULTY ADVISORS

DR. SUZANNA GIM
SUZANNA.GIM@LIU.EDU

DR. REBECCA COPE
REBECCA.COPE@LIU.EDU

CONTACT US



HTTPS://LIU.EDU/PHARMACY/CURRENT-STUDENTS/STUDY-ABROAD

BKLN-IGIVE@MY.LIU.EDU

IGIVE-LONG ISLAND UNIVERSITY

@IGIVE_LIU

EDITOR: ANNA WU

NEWSLETTER COMMITTEE

KHALID HASSAN

TIA CHAR