

Family Medicine: Quality Primary Care Worldwide

September 16-18, 2020 www.aafp.org/ghs



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CME

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Please note that the following session was not approved for CME credit:

• What Employers Look for When Hiring Physicians in Global Health Positions - due to the content not having a direct bearing on patient care

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CME activities approved for AAFP credit are recognized by the AOA as equivalent to AOA Category 2 credit.



Wednesday, September 16

Session 101: Global Primary Care and Family Medicine Development

8:05-8:50 a.m.

101-1: GLOBAL PRIMARY CARE AND FAMILY MEDICINE

Masahiro Morikawa, MD, MPH, FAAFP

Primary care is the foundation of any health care system. However, a challenge remains that where there is a great need for primary care, there is an even greater shortage of providers. These providers are faced with a wide range of patients with a wide range of clinical problems in various age groups with limited resources for the practices. Unfortunately, there are also a limited number of educators to prepare them. This challenge is at the forefront of improving primary care in global health.

Learning objectives:

- Describe what constitutes primary care in low- and middle-income countries.
- 2. Implement how the principles of family medicine are employed in response to community needs in a global setting.
- 3. Examine elements of effective interventions to provide primary care in global health.

8:50-9:35 a.m.

101-2: SECRETS OF HEALTH SYSTEMS STRENGTHENING

N. Ben Fredrick, MD

Clinicians in the United States are well trained to provide health care solutions with longer-lasting potential to their international partners, and collaborating to improve health systems can be very rewarding. Determining where one might bring expertise to their international community can be explored using the Health Impact Pyramid. Since health systems are built through interconnected components, developing new systems or modifying existing systems must be done with care to reduce unintended consequences. The World Health Organization's (WHO's) framework on health systems building blocks can be very helpful. To maximize limited resources of time, money, and personnel, areas of alignment should be pursued with the international partner since malalignments can create friction, tension, and mistrust.

Learning objectives:

- 1. Describe the health impact pyramid related to health interventions.
- 2. Outline the key elements of WHO's health system building blocks.
- Recognize the importance of alignment and misalignments in global health work.

9:50-10:35 a.m.

101-3: PRIMARY HEALTH CARE ON THE GLOBAL STAGE PRE- AND POST-COVID-19

Jeffrey Markuns, MD, EdM, FAAFP

Primary health care has become of greater interest on the global stage since the Declaration of Astana. The coronavirus disease 2019 (COVID-19) pandemic has also now made the importance of strong quality primary health care even clearer. Yet, the shortcomings of health systems during this pandemic have led some to turn their concerns about strengthening health care more exclusively towards hospital-based and governance approaches. In this session, we will share major global developments and successes of primary health care; potential challenges and threats to further primary health care gains; learn more about primary health care systems; outline a blueprint for how attendees can build stronger primary health care and family medicine across the globe.

- 1. Consider the current global state of primary health care, including the impact of COVID-19.
- 2. Identify levers of influence in expanding the breadth and scope of family medicine development programs.
- Construct and employ strategies for engaging new global partners of primary health care and family medicine development in their country of interest, including key stakeholders such as the WHO, the World Bank, and the Global Fund.

10:35-11:20 a.m.

101-4: LEVERAGING PRIMARY HEALTH CARE GLOBALLY THROUGH HEALTH FINANCING INSTITUTIONS

Erin Ferenchick, MD

For decades, successful efforts have been underway to improve health outcomes in diseases such as HIV, tuberculosis, and malaria. However, we also now see how systemic weaknesses have left national disease control programs and the larger health system inflexible and unable to cope with novel and unanticipated epidemiological challenges such as COVID-19. The next frontier in quality health care is the development of strong primary health care and making further substantial gains on these diseases and others. This will ultimately depend on strengthening integrated people-centered health services. Armed with the knowledge from earlier speakers in this session on global primary care development, health system strengthening, and the global landscape of primary health care, learn about how to translate interest in health system strengthening in primary health care to successful action at the global, regional, and country levels. This can be accomplished through the engagement of key stakeholders, specifically global health financing institutions. We will review case examples and brainstorm opportunities for leveraging primary health care and mobilizing family medicine strengthening efforts at the country level.

Learning objectives:

- 1. Examine the role and importance of primary health care in the fight against communicable and non-communicable diseases globally.
- Identify opportunities for family physicians to engage in both secretariat- and country-level processes of global health financing institutions, including the Global Fund.
- Demonstrate attitudes and behaviors that reflect a commitment to the improvement of health systems globally.

Session 102: Quality Improvement in Global Clinical Care

12:35-1:20 p.m.

102-1: ENSURING QUALITY WHILE EXPANDING ACCESS

Jeffrey Hall, MD, FAAFP

Much of the work in global health aims to achieve health equity through aggressively expanding access to care in resource-limited regions and populations. In fact, the United Nations made a commitment to achieve universal health coverage by 2030 as one of its Sustainable Development Goals. While this is a noble goal, efforts have fallen short if increased access fails to provide care of acceptable standards. This session will discuss some examples of projects where improved access failed to demonstrate improved outcomes, and review strategies for ensuring that global health work is high quality to alleviate health disparities.

Learning objectives:

- 1. Evaluate the risks of global health programs that expand access without sufficient attention to quality outcomes.
- List strategies for ensuring high-quality outcomes in global health.
- Compose an outline of the global aims to help expand access to care in resource-limited regions.

1:20-2:05 p.m.

102-2: INTRODUCTION TO QUALITY IMPROVEMENT IN GLOBAL HEALTH

Mark Huntington, MD, PhD, FAAFP

Provision of quality care has always been the goal of compassionate and competent physicians. In recent years, quality improvement (QI) has been developed as a formal method of improving the quality of care by improving the processes of care under the assumption that better patient-oriented outcomes will follow. As a foundation of reimbursement reform in the United States, quality improvement is garnering world-wide attention. This session will provide a review of quality improvement, discuss its relevance to global health activities, and offer strategies for its implementation to severely resource-limited settings which may be operating under crisis standards of care.

- 1. Define QI and describe the QI process.
- 2. Outline the challenges and benefits of implementing QI.
- 3. Consider the relevance of QI to global health.
- 4. Devise plans to implement strategic QI practices into their global health work.

Wednesday, September 16 Session 102, continued

2:20-3:05 p.m.

102-3: PRACTICING QUALITY MEDICINE WITH MINIMAL TECHNOLOGY

Calvin Wilson, MD

One of the greatest adjustments that a physician faces in attempting to teach or provide medical care in a poor, resource-limited setting is determining how to provide the best quality medical care possible when there are so few resources with which to work. This discussion will examine several elements of this conflict, including exploring our own concept of quality care, the concept of quality care in other cultures, and concrete suggestions about how to develop a culture of quality care in another setting. This session will draw on the personal experience of the presenter in the development of family medicine training programs in several countries in development, and include the experiences and insights of the participants in this struggle.

Learning objectives:

- Examine the Western concept of high-quality medical care, and explore the potential conflict in our practice in relation to the majority of the world.
- Propose plans to utilize concrete suggestions for provision of quality medical care in a resource-limited environment.
- 3. Consider potential teaching points for provision of quality care in a resource-limited setting.

3:05-3:50 p.m.

102-4: REVIEW AND UPDATE ON COVID-19

Mark Huntington, MD, PhD, FAAFP

In recent years, outbreaks of a series of novel coronaviruses have emerged as significant human pathogens. These include severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), and COVID-19. With COVID-19 as its primary focus, this session reviews the biology, epidemiology, and clinical aspects of these infections. The public health response to outbreaks and pandemics will be presented and a practical approach for the local family physician will be offered. The current state of the pandemic will also be discussed.

Learning objectives:

- 1. Interpret outbreaks, pandemics, and the public health response to infectious emergencies.
- 2. Demonstrate the epidemiological and clinical course of coronavirus.
- 3. Establish protocols to identify and respond appropriately to COVID-19 cases presenting to their practice.

BREAKOUT SESSIONS

4:25-5:10 p.m.

CONGRESSIONAL ADVOCACY FOR GLOBAL HEALTH

Keith Johnson, MA

A physician's global health experiences and concerns can help convince their congressman or congresswoman to be a champion for global health programs funded by U.S. foreign aid. This session will be an opportunity to:

- Gain an overview of U.S. foreign aid for global health
- Learn about the annual appropriations cycle and key points of influence of it
- Formulate and share with the group a message you could give your representative or senators based on your global health experiences and what you care about
- Learn how to develop a relationship with foreign affairs staff in Washington, D.C., and their local staff
- Learn how to build support for your issue or align with an existing advocacy group
- Learn tips for getting a meeting with your representative or senator
- · Find out about Fund for Global Health's advocacy work

- Demonstrate a general understanding of U.S. foreign aid for global health.
- 2. Examine the congressional appropriations process and how to influence its global health initiatives.
- 3. Prepare a plan that will help physicians develop a relationship with their congressperson's office.

DEVELOPMENT OF A BORDER HEALTH ROTATION IN A FAMILY MEDICINE RESIDENCY

Danielle Fitzsimmons-Pattison, MD; Mary Alice Scott, PhD; John Andazola, MD, FAAFP; Laura Parajon, MD, MPH

This session discusses developing a border health rotation in a family medicine residency in southern New Mexico. As current events have changed, we have adjusted the curriculum to meet community needs. The rotation addresses complex political, economic, social, and cultural dynamics of the region, going beyond providing medical care towards advocating for better policies and practices to support well-being in border region residents. While this presentation focuses specifically on border health in graduate medical education, the principles are applicable across a range of global health initiatives. The rotation focuses on understanding the interplay of multiple factors affecting health, allowing residents to interact with community organizations working to address community health concerns, and allowing residents to practice advocacy by bringing ideas back to their home institutions. We will discuss the evolution and planning of our rotation, and development of curriculum and techniques we have used to adapt to changing political environments.

Learning objectives:

- 1. Apply the concepts of global health in a local setting.
- 2. Identify key collaborators that may be able to assist in your planning.
- Strategize ways to promote advocacy and health promotion among residents.

GLOBAL HEALTH TRACK CURRICULUM IN FAMILY MEDICINE RESIDENCY, HOW TO START AND HOW TO IMPROVE: A CONTINUOUS DISCUSSION

Ruben Hernandez, MD, FAAFP; Weyinshet Gossa, MD, MPH; Sommer Aldulaimi, MD, FAAFP; Ann Evensen, MD, FAAFP

Residency directors report having a global health elective in a residency's curriculum increases applications from medical students. Global health experiences during residency prepare residents for, and are associated with, future practice in underserved areas. They also have positive affects on residents' awareness of cost-effective medicine and cultural factors, and improve exam skills. Both the AAFP and Society of Teachers of Family Medicine (STFM) members understand the importance of global health education, which continues to change in our world. This workshop is a continuous collaboration between the STFM Global Health Educator Collaborative and the AAFP Center for Global Health initiatives to review different types

of family medicine residency-level global health tracks and share best practices for starting or improving a global health track in residency. This session is going to be presented first at the STFM Annual Conference in August 2020. We will bring updates of this discussion from the STFM Annual Conference to the AAFP Global Health Summit.

Learning objectives:

- Explain the different types of global health experiences and tracks that can be implemented in family medicine residency programs.
- 2. Analyze strategies for creating or improving global health training in family medicine residencies.
- 3. Develop a plan for the next steps of the AAFP-STFM global health track working group.

A NEW PRIMARY CARE MODEL FOR THE GUATEMALAN HEALTH SYSTEM: TRAINING PROVIDERS (DOCTORS AND NURSES)

Jennifer Hoock, MD, MPH

As is the case in many developing countries, the lack of resources to invest in health care results in poor health outcomes for vulnerable populations and is severely exacerbated by the lack of a primary care health system with well-trained providers. Guatemala is a prime example of such a health system, but now has the potential to rectify this given favorable political leadership and an incredibly well-developed primary-care-based model: Modelo Incluyente en Salud (MIS) developed by a local nonprofit institute working with the Ministry of Health. Exisiting pilots of the model's community-based primary level demonstrate its effectiveness, but to date the second-level inclusive, accessible primary care provided by doctors and professional nurses has not been implemented. We will discuss an overview of the model with a detailed curriculum for training existing providers in family medicine as adapted to the MIS system for review and discussion.

- Describe a comprehensive model and plan for implementing a primary-care based health system created and piloted in Guatemala.
- Devise a strategy to address the need for training of existing care providers and adapting to local primary care practice and teaching needs as a step toward implementing traditional family medicine residency training.
- Participate in feedback and discuss training curriculum in primary care developed for doctors and nurses in practice based on the principles of family medicine.

Wednesday, September 16 4:25-5:10 p.m., continued

THE ROLE OF THE FAMILY MEDICINE PHYSICIAN IN DISASTERS: BRIDGING THE GAP WITH GLOCAL CARE

Shaunna Escobar, MD, MPH, CPH, MHL

Family physicians care for the community and continue to do so in a disaster. As family physicians, we are uniquely positioned to continue to care for our patients in the setting of a disaster. Since we are a face communities trust, we know the needs of our community, we continuously connect and collaborate with community resources, and we are valuable local partners to governmental organizations in a disaster. Globally health trained family physicians have the opportunity to be advocates to ensure vulnerable patient populations that we care for migrants, refugees, asylum seekers, indigenous peoples and are accounted for in disaster planning and disaster response. Globally health trained family physicians have the ability to make a powerful impact on disaster planning and preparedness once they have the tools and knowledge about disaster management medicine.

Learning objectives:

- Discover the resources of the ICS (Incident Command System).
- 2. Recognize clinical/medical roles in ICS.
- Prepare a list of opportunities for leadership in different phases of disaster (mitigation, preparedness, response/ recovery).

Thursday, September 17

Session 103: Health Equity

8:05-8:20 a.m.

103-1: GLOBAL HEALTH AND HEALTH CARE DISPARITIES OVERVIEW

Evelyn Lewis, MD, MA, FAAFP, DABDA

The majority of the global burden of disease and the major causes of health inequities, which are found in all countries, arise from the conditions in which people are born, grow, live, work, play, and pray. These conditions constitute the definition of social determinants of health (SDoH), a term that encompasses the social, economic, political, cultural, and environmental determinants that directly impact health. While relevant actions need to be adapted to the specific

need and context of each country, it is critical that family medicine and family physicians have a comprehensive understanding of the conditions to best facilitate the actions needed to mitigate the SDoH across all societies.

Learning objectives:

- 1. Develop a plan to explore and decrease the common issues and barriers related to health equity in medicine.
- 2. Examine steps that involve how physicians can act as an advocate to increase the quality of care.
- Prepare a list to aid in understanding of how each experience impacts the mental emotional state of patients.

8:20-9 a.m.

103-2: ENHANCING THE HEALTH EQUITY LENS FOR PRIMARY CARE PRACTICES

Kim Yu, MD, FAAFP; Viviana Martinez-Bianchi, MD, FAAFP Health equity and inequalities in health care are areas that are pivotal to address in family medicine. From racial and gender disparities to disparities for vulnerable populations around the globe, this session will give an overview of current health equity work internationally, how to address disparity gaps, the business case for health equity, and enhancing the health equity lens for primary care practices using currently available tools.

- 1. Examine the latest updates on health equity and inequalities from around the country.
- 2. Construct a plan for how to enhance your practices health equity lens.
- Develop a strategy for how to evaluate patient data on your population and community to drive innovation and improve care.

9-9:40 a.m.

103-3: ORGANIZATIONAL PRACTICE TRANSFORMATION IN EQUITY

Marie-Elizabeth Ramas, MD, FAAFP

There is growing acceptance of the adverse health effects resulting from systemic biases towards marginalized communities. As individuals begin to appreciate how their own biases impact health and wellness of the patients they serve, the task set forth to create lasting positive change can be daunting. This session will examine the intersectionality between individual commitment in equity as reflected within their organizational structure. Through this session, attendees will gain improved understanding of the historical context that created socioeconomic inequities. We will examine how these systemic biases can create foundational gaps in organizational structure and function, which effect health in communities. By creating buy in with leadership, evaluating and shifting the organizational culture and climate, and collecting data on health outcomes of populations of interest, we will have the tools to start the path towards transformational equity within our organization.

Learning objectives:

- Consider the distinctions of implicit bias and systemic causes of inequity.
- 2. Recognize systemic causes of persistent gaps in health outcomes.
- Implement practical changes in practice, both personally and organizational, that can yield improved access and quality of care for historically marginalized groups.

9:55-10:30 a.m.

103-4: REFUGEE RESETTLEMENT IN THE TRUMP ERA: MORAL PANIC AND IDEAS FOR ADVOCACY

Kristina Johnson, MD

The world is in the midst of a refugee crisis with a record high in the proportion of the global population that has been displaced. Despite this, the Trump administration has restricted the U.S. refugee resettlement ceiling to its lowest point in three decades. While refugees are the most vetted group of immigrants to the United States and make valuable contributions to the economy, they are often maligned and portrayed as the perpetrators of acts of terrorism and contributors to the erosion of American culture. This phenomenon of scapegoating a marginalized group to affect legislation and elections is referred to as moral panic. This session will raise participant awareness of moral panic and highlight opportunities to use that awareness to advocate for refugees.

Learning objectives:

- Describe the current global context of forced displacement.
- 2. Summarize the vetting process for refugees resettled in the United States.
- 3. Define and identify examples of moral panic.
- 4. Compile the highlights of recent changes in refugee resettlement policies in the United States.
- 5. Identify strategic opportunities to advocate for refugees.

10:30-11:20 a.m.

103-5: HEALTH EQUITY ACROSS THE AFRICAN DIASPORA: PANEL DISCUSSION

Evelyn Lewis, MD, MA, FAAFP, DABDA; Kim Yu, MD, FAAFP; Marie-Elizabeth Ramas, MD, FAAFP; Viviana Martinez-Bianchi, MD, FAAFP; Danielle Jones

Health inequalities exist throughout the African Diaspora across developed, developing, and undeveloped nations. The inability to provide access to, and adequate health regardless of national policy or ideology, results in significant disparities stratified by race. For peoples of the African Diaspora, the shared historical and contemporary experiences of systematic racism and oppression is strongly correlated with health disparities. This session will examine the types of disparities experienced by these populations and ways in which family physicians are striving for health equity.

- 1. Describe the characteristics of those who populate the African Diaspora.
- 2. Recognize health disparities and experiences endured by those across the African Diaspora.
- 3. Identify opportunities to deliver equitable care across the African Diaspora.

Session 104: Global Health in Your Backyard

12:35-1:20 p.m.

104-1: SEEING THE FAMILIAR AS FOREIGN: THE HEALTH EQUITY CLERKSHIP

N. Ben Fredrick, MD

While health needs are often more dramatically illustrated in foreign settings, the U.S. context provides a wide range of significant social and economic needs. However, these tend to be out of sight, out of mind for many who would rather view these needs as part of the familiar landscape. As such, it takes more effort to see the familiar in new ways. Global health approaches can assist with this process of making the familiar more foreign. Global health methodologies can be applied to the home context, as well as abroad, and these include travel, noticing, reflection, and debriefing, with the aim of reframing one's experiences. This was applied to the Penn State University's College of Medicine's Health Equity Clerkship. The structure of the clerkship and some results will be shared.

Learning objectives:

- 1. Recognize the challenges of seeing the familiar as foreign in order to pay attention to our own backyards.
- 2. Establish plans to apply global health educational methodologies to the home context.
- 3. Develop a global scavenger hunt to address significant social and economic needs.

1:20-2:05 p.m.

104-2: BORDER HEALTH: NO TICKETS REQUIRED (UNPACKING THE DEFINITION OF BORDER HEALTH)

Natalia Galarza, MD

Border health is an emerging area within global health. Traditionally, work in global health involves moving from a more privileged place to one less privileged. In border health, practitioners often live full time in border communities. Border health is often situated as part of public health and therefore excluded from global health conversations. However, border regions have a long history that transcends geographical boundaries. The area is fluid, dynamic, and has long-established populations and traditions that are not specific to one country or the

other. This session will define border health within global health. To operationalize border health in practice, we present examples of how we conduct border health as a collaborative group of family medicine training programs within the U.S.-Mexico border region. Through defining our collective vision of what border health encompasses, we hope to expand interest in working in this rewarding region.

Learning objectives:

- 1. Define border health in the context of family medicine.
- Review different types of clinical practices in border health.
- Identify practice strategies to account for similarities in, and differences between, border health and global health.

2:20-3:05 p.m.

104-3: GIMME SHELTER: PRACTICAL CONSIDERATIONS FOR WORKING WITH REFUGEES

Benjamin Silverberg, MD, MSc, FAAFP, FCUCM

Over the last few decades, millions of Afghanis, Iraqis, Syrians, Rwandans, and other nationals have fled their home countries due to fear of persecution. Behind these stark numbers are living, breathing individuals who have endured trauma and hardship and are seeking succor abroad. This session will consider how health care professionals can provide effective medical care for refugees with particular attention on mental health and acute and chronic physical illnesses, as well as health literacy and cultural humility.

- Recognize the major causes of morbidity and mortality among refugee populations.
- Consider the elements of overseas and domestic health assessments (screening) and look for ways to fill in the gaps.
- 3. Establish strategies to reduce the barriers to care that refugees confront.

3:05-3:50 p.m.

104-4: USING SIMULATION USE FOR GLOBAL AWAY ROTATIONS (SUGAR) TO ENHANCE PRETRIP PREPARATION

Ann Evensen, MD, FAAFP

Simulation Use for Global Away Rotations (SUGAR) (www. sugarprep.org) is an open-source, standardized, and simulation-based curriculum to allow resident physicians and others preparing for global health electives to experience and debrief common practical and emotional challenges. There are SUGAR cases in multiple disciplines, including pediatrics, obstetrics/gynecology, surgery, emergency medicine, immigrant health, and systems issues developed to mimic the obstacles of working in a setting with limited resources. This session will provide an overview of SUGAR and demonstrate how to engage learners using SUGAR cases.

Learning Objectives:

- Consider the process for accessing the SUGAR program to better prepare resident physicians for common global health emotional challenges.
- 2. Develop a plan for how to facilitate and debrief SUGAR cases.

BREAKOUT SESSIONS

4:25-5:10 p.m.

COVID-19: FROM THE PATIENT PERSPECTIVE IN THE DIARY OF A PHYSICIAN

Anna Pendrey, MD

As we provide care for our communities and prepare to guide our patients through the novelty and uncertainty of COVID-19, this session will share the presenter's personal experience with the illness through her six-week diary.

Learning objectives:

- Describe a timeline of possible personal experiences with COVID-19 as a physician and patient.
- 2. Formulate a strategy to navigate the impact of disease in personal life and clinical practice.
- 3. Communicate examples of the personal and professional impacts of experiences with COVID-19.

MAINTAINING CONTINUITY OF CARE AND GLOBAL HEALTH EDUCATION THROUGH TELEHEALTH IN THE TIME OF COVID-19

Christine O'Dea, MD, MPH; Anne Diaz, MA; Gwen Welsh, DO; Douglas Collins, MD

For more than five years, the Christ Hospital/University of Cincinnati Family Medicine Residency Program has built and maintained a strong relationship with a nongovernmental organization, Wuqu' Kawoq, in Guatemala. The global and underserved health program in the residency has strived to provide quality primary care for patients in a number of indigenous communities with an emphasis on continuity of care through quarterly trips to Guatemala. In response to the new limitations on travel due to COVID-19, residents utilized their scheduled global health rotation time to comb patient databases to identify patients due for follow up, develop telehealth protocols, and deliver primary care through the use of telehealth visits. Patient and resident feedback on the telehealth experience was elicited. This session will provide methods to provide continuity of care during a pandemic, as well as lessons learned from providing telehealth to rural communities in low-resource settings.

- Review the current literature related to the use of telehealth in low-resource settings.
- Consider plans for managing telehealth visits in lowresource settings and outline methods for preparing residents to provide care via telehealth.
- Summarize the barriers to implementation of telehealth visits and create methods to overcome these barriers.

Thursday, September 17 4:25-5:10, continued

MISSIONCMECUADOR: OVERVIEW OF THE DEVELOPMENT OF AN IMPACTFUL GLOBAL EXCHANGE PROGRAM

Katherine Walker, MD

MissionCMEcuador is a project currently in development by the presenter. It is being founded through a collaboration with an Ecuadorian non-profit foundation in the capital city of Quito, the dean of an Ecuadorian medical school, and the local Ministry of Health. The goals of MissionCMEcuador are multi-factorial. Overall, the focus is on education. The program involves U.S. physicians committing to a one-week program that will involve working in Ecuadorian clinics prioritized by the Minister of Health while simultaneously teaching Ecuadorian medical students. The U.S. physicians will receive continuing medical education (CME) credits through pertinent programming done both before and during the trip. By working in a collegial manner with the local Ecuadorian physicians, the program will foster increased global insight for all participants.

Learning objectives:

- Devise plans to collaborate with Ecuadorian partners to foster the identification of needs regarding medical education and clinical care.
- 2. Explore how education is a key to creating a sustainable, quality short-term global exchange.
- Evaluate how CME offerings for U.S. physicians can provide valuable insight for a more meaningful experience.

PULLING BACK THE CURTAIN: WHAT COVID-19 REVEALED ABOUT THE VULNERABILITY OF GLOBAL HEALTH PROGRAMS

Esther Johnston, MD, MPH, FAAFP; Bassim Birkland, MD; Anna McDonald, MD, MPH

As word of the emergence of COVID-19 spread across the globe in early 2020, the resultant impacts on staffing, funding, and support available through international non-profit organizations resulted in a wave of unintended consequences for their partners across the globe. The recall of international non-profit organizations' expatriate staff exacerbated existing clinician and educator shortages in many countries where staffing shortages already existed, while both funding shifts and funding shortages resulted in

(at times unintentional) negative impacts. This session will examine some of the ways in which COVID-19 has pulled back the curtain on some of the vulnerabilities and flaws of existing global health programming and offer solutions for creating more durable partnerships and solutions.

Learning objectives:

- Illustrate how COVID-19 has revealed some of the design flaws in our existing global health programming approaches.
- 2. Establish strategies for how improved investment in local capacity can result in durable health systems improvements that last through times of crisis.
- 3. Identify why engagement and ownership of local partners is critical to creating sustainable solutions.

SHIFTING PATHS AMIDST SOCIAL CHANGE: TRAINEES IN GLOBAL FAMILY MEDICINE

Steffano Mottl, MD, and Brett Lewis

This session is for medical students, residents, and new faculty to discuss the changing fields of family medicine and global health in the time of COVID-19 and widespread social change. A quote from a recent article in the Lancet reads, "Global health will never be the same after COVID-19—it cannot be." With the newfound visibility of local and global inequities and racial injustices laid bare by the pandemic, how does the field of global health and global family medicine need to change? How is it already changing? And how can trainees rethink their paths forward in this everevolving work?

- 1. Examine the need for global health programs and practices to respond to the COVID-19 pandemic and widespread social change.
- Identify examples of how institutions are changing their global health programs' mission, vision, and/or operations in order to address the above need.
- Brainstorm ways in which trainees can get involved in global health locally and/or safely and in an ethical and community-centered way.
- 4. Reimagine the ways in which new paths can be created at the intersection of global health and family medicine.

WHY FAMILY MEDICINE: STRENGTHENING HEALTH SYSTEMS FOR HEALTHY COMMUNITIES

Jennifer Walker, MD, MPH, FAAFP

Why family medicine? Literature reviews describe the family medicine training requirements in the United States and other developed nations. They highlight attributes and capabilities assigned to the specialty of family medicine. This session will review various position statements to further communicate the values and benefits of family medicine. Physicians trained in family medicine contribute to the resiliency of resource-constrained health systems and represent one aspect of a whole government approach to communicable and non-communicable diseases that threaten communities and global health security. In contrast to specialty care, family medicine is associated with a more equitable distribution of health in populations. Family physicians understand the effects of community-level factors and social determinants of health. They are trained in communication skills and are experienced in integrating family systems. They participate in disease surveillance programs, serving as the link between care at the individual level and population health.

Learning Objectives:

- 1. Identify common family medicine training requirements in the United States and other developed nations.
- Evaluate the role of family physicians addressing noncommunicable diseases that threaten global health security.
- 3. Discuss the role of family physicians in health promotion and preventive medicine efforts.

Friday, September 18

Session 105: Global Heath Career Paths

8:05-8:45 a.m.

105-1: SIX EASY STEPS TO BECOME A GLOBAL HEALTH PRACTITIONER

Masahiro Morikawa, MD, MPH, FAAFP

This session will break down the process to become a global health practitioner into six steps and discuss each step to help design careers in global health. There is no single path to become a global health practitioner, but family physicians have a tremendous advantage to become one due to our comprehensive scope of practice.

Learning objectives:

- Construct a diagram that outlines the six steps needed to design a career in global health.
- 2. Determine the distinction between levels of engagement in global health.
- 3. Visualize strategic progression trajectories in global health career pathways.

8:45-9:25 a.m.

105-2: STUDENT AND RESIDENT OPPORTUNITIES FOR GLOBAL HEALTH ENGAGEMENT

Inis Bardella, MD, FAAFP

Student and resident interest in global health remains high. Yet, advising and programming to select experiences, prevent harm, address the priorities of partner organizations, and support improved health outcomes when working globally are variable across medical schools and residencies in the United States. Through interactive discussion, this session will provide credible information and practical guidance for students and residents to engage globally. Participants will be challenged to clarify their rationale and motivation, expectations for impact, and long-term vision. Approaches for preparation, experience selection, and facilitating sustainability will be discussed. Participants will create a plan for partner-focused global health engagement.

- Create a plan for engaging globally as a student and a resident.
- 2. Consider rationale, motivation, and impact of engaging globally.
- 3. Prepare a strategy to minimize harm and actions to facilitate sustainability.
- Explore institutional, for-profit, not-for-profit, and self-designed programs for meaningful global health engagement.

Friday, September 18 Session 105, continued

9:25-10:05 a.m.

105-3: ENGAGING IN GLOBAL HEALTH AS A PRACTICING PHYSICIAN

Calvin Wilson, MD

Although there are now a bewildering variety of global health activities available to the practicing physician, many are still asking, "Is this for me?", and "How could I get started without losing my patients or my family?" This session will explore the possible motivations, joys and benefits, and potential risks and difficulties of involvement in global health as a practicing physician. We will focus on identifying one's capacity for involvement and matching this with global health activities appropriate for one's capacity and interest with an emphasis on maximizing the impact and sustainability of the chosen global health activity. Finally, we will discuss the key elements of how one might prepare for global health experiences.

Learning objectives:

- Develop a list of possible motivations, benefits, and potential risks of involvement in global health activities as a practicing physician.
- Apply a general decision-making framework for consideration of becoming involved in global health opportunities.
- 3. Evaluate possible options for involvement in global health activities at varying levels of commitment and availability.
- 4. Prepare a plan to adequately execute chosen global health activities.

10:20-11 a.m.

105-4: WHAT EMPLOYERS LOOK FOR WHEN HIRING PHYSICIANS IN GLOBAL HEALTH POSITIONS

Jeffrey Hall, MD, FAAFP

Global health careers are broad in scope and many younger clinicians find their career planning is less defined than for those pursuing careers within their own nation or culture. Training curricula is similarly broad and may or may not reflect realities of current employment needs around the world. This session will discuss findings from a recent

published survey on career qualifications, as well as results from conversations from employers in the field.

Learning objectives:

- Summarize key global health employment requirements identified through an internet-based systematic review of career opportunities.
- 2. Examine the limitations of identifying global health career opportunities through publicly available search strategies.
- 3. Document additional implications of employer requirements for global health training curricula.

11:40 a.m.-12:10 p.m. 105-5: COMING HOME, MORE DIFFICULT THAN LEAVING

Jerome Koleski, MD

Separations from home and family are difficult, but often, coming back is more difficult socially and emotionally for the trainee and the family physician. Separation can be due to an international rotation or due to guarantine to protect family from secondary COVID-19 exposure. Reentry syndrome occurs after many experiences, including from global health rotations, military deployment, release from incarceration, and even isolation from family after working with patients with COVID-19. The authors' experience is often that the return is more emotionally jarring than leaving. Part of the shock can be that the days to weeks after a reunion are not the "Hallmark moment" that both sides expect. Also, the "leaver" has changed in a way that he or she may not have expected or noticed. The presentation will consist of brief presentations, followed by the audience breaking into small groups to discuss their own experiences with reentry.

- Construct a plan of action to identify various efforts that can help with readjustment syndrome.
- 2. Develop a list resources (official and unofficial) for helping the physician or trainee with readjustment.
- 3. Examine strategies that are designed to help other physicians with readjustment.

Fellowship Fair

12:15-1:15 p.m.

GLOBAL HEALTH FELLOWSHIP OPPORTUNITIES AFTER RESIDENCY — A DISCUSSION WITH GLOBAL HEALTH FELLOWS AND FELLOWSHIP LEADERSHIP

Shelly Verma, DO

New global health opportunities for family medicine trainees after residency continue to emerge. Global health fellowships provide unique opportunities for training and on the ground experiences. This session will include a brief presentation about the fellowship application process, shared core competencies, and career opportunities after completing a global health fellowship. All current global health fellowships based in U.S. family medicine programs will be invited to briefly describe their programs. Fellowships may be represented by current or recently graduated global health fellows, fellowship program directors, or other representatives. Following this general session, there will be the Global Health Fellowship Fair. Participants are invited to ask questions and get to know more about the programs using breakout rooms hosted by individual fellowship programs.

- 1. Discover the various global health fellowship opportunities available after residency.
- Describe the application process, the time commitments in the United States and international settings, and possible career opportunities after completing global health fellowship.
- 3. Discuss program logistics (that is, curriculum and global health experiences), and participant responsibilities of each global health fellowship in breakout sessions.

A 10,000-Foot View: A Spanish Immersion and Clinical Global Health Experience for the Family Medicine Resident in Quito, Ecuador

Samuel Randall, MD

This poster is a review of a four-week Spanish immersion elective in Quito, Ecuador, through Child Family Health International (CFHI) and Northwestern University. Objectives included fostering local partnerships, improving health care access, and increasing Spanish language proficiency. Time was spent providing direct care to patients in clinic, as well as observing in family medicine, inpatient obstetrics, and a rural Indigenous clinic. Daily Spanish lessons and homestay were integral to the program. During the elective, 24 patients were examined in clinic. The resident's medical Spanish competency increased from baseline. All learning objectives were met and, as a summary, a checklist was developed to guide medical residents planning similar immersion rotations. Based on this experience, key considerations for success include an emphasis on local partnership, medical supervision, bioethics, and continuity of care. This case highlights the value of global medical education and helps health care professionals serve patients in increasingly diverse settings.

A Comparison Between Health Care Worker-Collected Nasopharyngeal Swabs and Patient Self-Collected Anterior Nares Swabs in Detecting SARS-CoV-2

Catherine Sendaydiego, MD, MS

Given the shortage of nasopharyngeal (NP) swabs and personal protective equipment (PPE) during the COVID-19 pandemic, patient self-collected anterior nares (AN) swabs are being utilized as an alternative method of specimen collection. Self-collected AN swabs are more comfortable for patients and have the potential to conserve PPE. This study explores whether the patient-collected AN method is noninferior to the health care worker-collected NP method for detecting SARS-CoV-2 in symptomatic and asymptomatic patients. We will obtain both a self-collected AN sample and a health care worker-collected NP sample during the same visit from patients at a Ventura County Health Care Agency COVID-19 drive-thru testing site. We will consider the method of patient self-collected AN swabs noninferior to the method of health care worker-collected NP swabs if at least 90% of patients with a positive result using the NP method are also positive for the patient self-collected AN method, assuming the true sensitivity is 98%.

A Comparison of Management for Hepatitis B Patients Between the U.S. and Chinese Health Care Systems: A Case Study

Thomas Chen

China is considered an endemic hepatitis B virus (HBV) region, with about 100-150 million individuals chronically infected. Given such high volumes of HBV cases, it is important to learn how the Chinese health care system is addressing this public health issue compared with the United States. This qualitative study was done through primary research. Key informant interviews were conducted with U.S. hepatologists (N=10), and Chinese hepatologists (N=5), infectious disease physicians (N=5), and liver surgeons (N=2) at West China Hospital in Chengdu, China. Results showed that the antiviral therapies entecavir and tenofovir continue to be first-line treatments in both countries. Clinical surveillance of HBV is also similar in both countries. The most stark contrast between the two countries is the physician-patient relationship. Due to differences in patient volume, general population size, and cultural differences, the Chinese health care system is much more focused on quantity of patients served rather than quality of services provided.

A Preliminary Analysis of a Maternal Prenatal Egg Supplementation and Education Program in Rural Honduras

Kevin Long; Cynthia Salter, PhD, MPH; Mark Meyer, MD We report preliminary findings from a longitudinal eggbased feeding/education program for low-income pregnant individuals in rural Honduras. Focusing on infants' first 1,000 days, the program includes educational sessions. routine prenatal care, and well-child checks, and provides egg supplies of up to two supplemental eggs per day. Forty people enrolled in the program during pregnancy, and 28 continued through one-year evaluation. Half were first-time parents, and attendance at program activities was high (76% for clinical appointments, 77% for education sessions, 87% for egg distributions). Nearly all participants breastfed their infants (96%). All agreed that breastfeeding was superior to formula, 88% correctly described when to introduce solid foods, and 38% changed their infant feeding practices after the program. Regarding food scarcity, at program initiation, 71% of participants reported having enough food prior to beginning the program. After completing this comprehensive program that encouraged their active participation and investment, 100% said they had enough food.

A Qualitative Study of the Behavioral Determinants of Hand Washing in a Population of Rural Guatemalans

Jack Wells, MD; Breanna Tuhlei

Diarrhea is a leading cause of mortality worldwide for children, especially in low-resource countries. There is a higher risk of illness because unsafe water and poor hand washing are likely. Hand-washing education may reduce the incidence of diarrhea significantly; however, it may not be practiced appropriately. Hand washing is a complex behavior governed by contextual, psychological, and behavioral factors. We studied the behavioral determinants of hand washing for a rural population near Chichicastenango, Guatemala. During a short-term medical service trip providing general medical care at three clinic sites, patients were interviewed to determine attitudes concerning hand washing. Most agreed lack of hand washing was associated with diarrhea in children. Most reported soap was important but not always used. This study is valuable as it will be used to target subsequent education in this population. We will discuss our findings and offer suggestions for further hand-washing education.

Addressing Global Human Rights Violations in Rhode Island: The Brown Human Rights Asylum Clinic

Odette Zero; Marga Kempner; Elizabeth Toll, MD

The Brown Human Rights Asylum Clinic (BHRAC) is a medical student-led organization affiliated with Physicians for Human Rights that collaborates with medical and mental health clinicians, lawyers, and community organizations to provide pro bono medical affidavits to undocumented individuals seeking legal status in the United States. Affidavits can document and corroborate the physical and psychological evidence of trauma alleged by asylum-seekers, leading to better legal outcomes. Since its founding in 2013, the BHRAC has conducted 55 medical evaluations, the majority involving Spanish-speaking, female-identifying individuals from Guatemala, El Salvador, and the Dominican Republic. Thirteen individuals have been granted legal status, one individual was denied status, and the rest of the cases are pending. Asylum medicine offers a space for interdisciplinary collaboration and partnership, experiential learning between family medicine providers and medical students, and the opportunity for international and local impact at the intersection of global health and human rights.

Adrift in a Sea of Stigmas: The Story of a Small Island Community

Sindhu Thevuthasan

On the island of Nevis, nestled in the Caribbean, a population of approximately 11,000 people thrives. Nevisians are a tight-knit community. They are kind, vibrant, resourceful, and incredibly welcoming to those of us who have the opportunity to study medicine in that beautiful environment. Health care resources are scarce. and people travel to neighboring islands for many scans and procedures. I experienced how inadequate access to health care services created a population that mostly did not have basic knowledge of chronic conditions and health maintenance. Lack of primary care resources meant there was little to no promotion of health education, and this had a far-reaching impact. This presentation provides insight into the stigmas surrounding health on the island of Nevis, and how the structure of the community itself contributes to individual perspectives on health. It also discusses effectiveness of efforts encouraging and empowering the population to take control of their own health.

An Exploration of the Emerging Adult Woman's Perceived Value of Primary Care

Melany Rabideau, MPH, DOL

It has been shown that emerging adults demand transactional care and are forgoing relational care. This is often used to justify framing patients as consumers and assuming convenience is prioritized over continuity. This qualitative study explored the lived experiences of emerging adult women. It revealed the essence of primary care's value to these individuals, including their ideal primary care experience. Analysis of individual interviews revealed the following: (1) Emerging adults desire—but struggle to find the human connection of the patient/provider relationship in primary care. (2) Primary care delivered like a business reinforces emerging adults' belief that human connection is not possible, so transactional services are attractive because at least they are convenient and efficient. (3) Emerging adults are asking for high-touch care (e.g., care management services) that is traditionally only provided to insurancebacked, "high-risk" patient panels. Implications of these findings underscore the importance of focusing on empathy while leveraging transactional conveniences that reinforce a patient-provider relationship but are not intended to replace it.

An Interactive Global Platform for Mapping Publicly Funded COVID-19 Research

Anmol Gupta; Jennifer Gia-linh Nguyen, DMD; Sapna Ramappa; Tessa Marshall, B-BMED; Hannah Chang; Varoon Mathur. MSc

Global access to COVID-19 vaccines, therapeutics, and diagnostics is critical to control spread of the disease and achieve a successful reduction in new outbreaks. This project aims to assess the role of public funding behind COVID-19 research on vaccines, therapeutics, and diagnostics and encourage transparency and accessibility in the licensing of publicly funded innovations. Inclusion criteria were university-affiliated projects receiving public funding related to vaccine, therapeutic, or diagnostic development for coronavirus, COVID-19, or SARS-CoV-2. Thus far, the United States alone has invested at least \$907,970,410 in public funds toward COVID-19 research on vaccines, therapeutics, and diagnostics. Projects on related infectious diseases contributing to COVID-19 research were not included, leading to underestimation of the total invested funds. Public funds play an important role in COVID-19 research, and this public investment should be reflected accordingly in the market price when a COVID-19 vaccine, therapeutic, or diagnostic is developed.

Assessment of Barriers to Appropriate Management of Type 2 Diabetes: Patients' Perspectives in Trinidad and Tobago

Keno Carter-Guy, MD; Ruben Hernandez, MD

According to data published by the World Health Organizations (WHO) and the Institute for Health Metrics and Evaluation (IHME) in 2017, diabetes has persisted as the second leading cause of death in Trinidad and Tobago for more than a decade. With the many advancements in management and care of people who have diabetes, it is disheartening to see such a manageable disease persisting as a leading cause of death. During this presentation, we will present study data evaluating possible barriers to appropriate care of diabetes in relation to social determinants of health. This study received institutional review board (IRB) approval from Indiana University. Questionnaires were completed by patients at the diabetes clinic at San Fernando General Hospital in Trinidad and Tobago. All global health ethical research principles were considered, the questionnaire was devoid of any identifying characteristics, and patients were provided with an informed consent form prior to being given the questionnaire.

Assessment of the Maya's Beliefs and Preferences on Bone Fracture Treatment in the Guatemalan Highlands: A Household Survey

Bennett Hartley

Among the Indigenous Kaqchikel population of Sololá, Guatemala, hueseros (spiritual bone healers) play a common role in the treatment of bone fractures. This study was a household survey conducted in four villages. ≥18 years of age with a medical history of bone fractures. Eighty-three out of 108 screened households met the study criteria. The results showed that 37% consulted with a physician/nurse, 75% consulted with a huesero, and 19% consulted with both. Cast immobilization was utilized by 16% of participants. Huesero services include massage, temazcal (sweat lodge), herbal poultice, prayer, and recommended rest. When compared to the group of participants that used cast immobilization, the group that exclusively used a huesero had lower rates of continued pain, lower rates of limited movement, and a higher interest in seeking the same treatment in the future. These results suggest a high preference for hueseros for bone injury treatment and a reduced acceptance of biomedical care and cast immobilization.

Attitudes and Practices Regarding Menstrual Health Management in Volta Region, Ghana

Saba Ali; Jenny Liu; Jin Kyung Kim; Nicole Karikari; Molly Vernon; Patrick Murphy; Timothy Yu, MD, FAAFP, CAQSM, RMSK; Victor Agbeibor, MD, MPH, FAAFP

The objective of our study was to assess the factors associated with menstrual health management (MHM) knowledge and practices in rural Ghana. We designed a cross-sectional survey targeting girls aged 13 to 21 in four secondary schools in the Volta Region to assess knowledge, practices, and attitudes related to menstruation. A Spearman rank analysis showed a positive correlation between being taught by physicians or nurses and (a) increased self-perceived knowledge, and (b) subjective beliefs and expectations about avoiding school, church, and home. This highlights the role that health care professionals play in influencing knowledge and practices surrounding menstruation. Future initiatives should focus on the partnership between educators and health care professionals to disseminate MHM knowledge. Future research should account for limitations on data collection in global rural settings, such as access to resources and global contacts. and discrepancies in perception of the Likert scale due to language and cultural barriers.

Barriers and Solutions to Mental Health Care in Primary Care Clinics: An Evaluation of Primary Care Physicians (PCPs) in Jordan

Joebert Rosal; Wael Al-Delaimy, MD, PhD

Globally, one person in seven experiences a mental or substance abuse disorder. The World Health Organization (WHO) Mental Health Gap Action Programme (mhGAP) aims to reduce the mental health treatment gap through integration with primary health care. Studying these challenges in the Middle Eastern country of Jordan can inform strategies to improve global mental health. To understand why 94% of severe mental health problems go untreated, we will identify themes in global mental health research to quantify the most prevalent barriers and important solutions according to primary care physicians. Additionally, we will evaluate strategies for improving health care professional education, which other developing countries have identified as a critical goal.

Characterizing Local Disease Burdens and Prescription Rates in Four Indigenous Communities of Rural Guatemala

Alana Carrasco; Mary Chang, MD, MPH; Kimberly Johnson, MS

Many people in Guatemala lack access to basic health care. The purpose of this study is to characterize medical and pharmaceutical needs of rural communities. This is a retrospective review of patients seen by a nongovernmental organization (NGO) at four clinics in rural Guatemala over a year. The inclusion criterion was patients seen. Exclusion criteria were patients missing data on sex or age. Demographics and disease burdens were analyzed. In total, 1,094 patients were included. The mean age was 32.4 years. Of the included patients, 70.7% were female and 29.4% were pediatric. The most common diagnoses were gastrointestinal (16.9%) and dermatologic (11.8%) overall, and dermatologic (21.2%) and gastrointestinal (18.2%) in the pediatric population. Four percent of prescribed medications were nonsteroidal anti-inflammatory drugs (NSAIDs) and 11.3% were gastrointestinal medications. In pediatric patients, 13.5% of prescribed medications were NSAIDs and 13.5% were vitamins/supplements. Albendazole accounted for 11.0% of prescribed medications in pediatric patients. Health care professionals serving similar communities should be prepared to encounter similar disease burdens and ensure adequate stocks of NSAIDs, albendazole, vitamins, and gastrointestinal medications.

Community Collaboration in the Creation and Distribution of COVID-19 Information to the Latinx Population in Cincinnati, OH, via Supermarkets and Restaurants

Andrea Jaramillo, DO; Andrea Rosado, MD; Christine O'Dea, MD, MPH; Sandra Zoubovsky, PhD; Kamala Nelson

The Latinx community in Cincinnati, OH, has been disproportionately affected by COVID-19. Local organizations identified that Latinx supermarkets, or "supermercados," and restaurants are commonly utilized and trusted. With feedback from local public health officials and community members, residents, medical students, and undergraduate students worked together to develop a curriculum and materials to bring to the supermarket and restaurant owners. Surveys were distributed to staff in Latinx supermarkets and restaurants to evaluate knowledge, attitudes, and perceptions about COVID-19 transmission before and after the education was offered. Data will inform creation of future COVID-19 educational interventions for Latinx supermarkets and restaurants. This project demonstrates how residents and students can come together to increase knowledge and aid vulnerable populations during a crisis, in addition to harnessing the power of community collaboration in health promotion efforts.

Community Health Needs Assessment, Toledo District, Belize

Jacob Wasag, MD

A community health needs assessment (CHNA) of the Toledo population has never been completed, arguably contributing to the poor health outcomes of the district. The purpose of this study was to characterize local health needs based on the lived experience of the Toledo District community members using community-based participatory research (CBPR). Ninety community members were interviewed about community strengths and needs. Data were analyzed using the grounded theory method. Post-analysis review was conducted with local leadership to ensure the accuracy of the findings. The analysis revealed three primary themes: (1) influence of setting; (2) scarcity of opportunity; and (3) health care connections. This CHNA found that the majority of "health needs" were nonmedical (i.e., economic opportunity and transportation). This study also demonstrated that CBPR is an effective method that can be used in low-resource settings to best define the health needs of a community.

Culturally Sensitive DM Education for Hispanic Patients

Natalia Galarza, MD; Kristina Diaz, MD, FAAFP; Steffano Mottl, MD; Kelley Lizarraga, MD

Among the Hispanic population in the United States, the prevalence and incidence of type 2 diabetes are higher than the national average. This is partly due to sociocultural factors, such as lower income and decreased access to education and health care, as well as a genetic susceptibility to obesity and higher insulin resistance. In our town of Yuma, AZ, around half of the population identifies itself as Hispanic. Following national trends, the incidence of type 2 diabetes is high in this population. This population faces obstacles including the lack of understanding of a low-carbohydrate diet and the fact that the typical Hispanic diet is rich in carbohydrates. As physicians, we have identified food alternatives that are low in carbohydrates but still consider staples in the Hispanic/Mexican diet, as well as a way to explain and adapt the Hispanic diet to be more diabetes friendly.

Determining the Need for Free Influenza Vaccinations Among Uninsured Patients

Danling Chen; George Chen

Seasonal influenza continues to impose a substantial health care burden in the United States each year. This study assessed the need for free influenza vaccines among uninsured patients in Suffolk County, NY. Stony Brook Health Outreach and Medical Education (SB HOME) clinic offers free flu vaccinations to uninsured patients living in Suffolk County. All patients visiting SB HOME from October 2018 to February 2019 were offered a survey assessing demographic characteristics and vaccination status. In total, 102 participants were surveyed, 72% of whom reported not receiving the influenza vaccination during the 2017-2018 flu season. During the 2018-2019 season, 60% of participants elected to receive a free flu shot at SB HOME. Only 17% of participants would seek vaccination at the market price of \$30, compared to the 76% who would seek vaccination if the vaccine was free. The mean maximum price participants were willing to spend on a flu vaccine was \$14.62.

Developing a Global Health Curriculum for a Family Medicine Residency Program: An Educational Curricular Initiative

Trent Mazer, MD; Adnaan Edun, MD; Shruti Javali, MD Learning about the problems medical staff face in other countries has become an important topic of interest for a number of medical trainees due to the many advantages in knowledge, skills, and attitudes global health education provides. This has led to increased demand for global health curricula and experiences throughout medical training. There have been many studies on how implementing global health education affects recruitment of future residents into a residency program. However, there is limited evidence on how a global health curriculum fosters interest among residents in international medicine opportunities. In order to explore what effect global health education has on resident interest, the Mercy Health Family Medicine Residency Program in Grand Rapids, MI, implemented a resident-led global health curriculum in its regular didactic teaching. The curriculum consisted of regular readings, clinical cases, and multiple extracurricular global health learning opportunities. We will explore the development journey and exciting results.

Developing a Portable Field Unit to Improve Well-Child Care in Rural Honduras: Implementation of Clinical Decision Support to Address Growth Stunting

Kevin Kindler, MD

Pediatric growth tracking has been identified as a top priority by international health agencies to assess the severity of malnutrition and growth stunting. However, most remote, low-resource settings lack the necessary infrastructure for longitudinal analysis of growth for the purposes of early identification of and intervention for growth stunting. To address this gap, we developed a system capable of identifying a child on repeated visits, adding new anthropomorphic measurements with each encounter. The system was used for two brigades to three schools surrounding a medical clinic in rural San Jose, Honduras, in which a total of 210 children were assessed and 322 measurements were recorded. Analysis of these data through body mass index (BMI) calculations based on age identified 24 instances of moderate to severe malnutrition (BMI-Z < -2.0) with a combined average BMI-Z of -0.32. This initial assessment suggests the portable field unit (PFU) could be an effective means of identifying at-risk children.

Effectiveness of an International, Interdepartmental U.S.-Sino FM Leadership Development Program With Tongji University, China

Jennifer Liu, MD; Jessica Koran Scholl, PhD; Kim Jarzynka, MD; Jeff Harrison, MD

For the past 10 years, the University of Nebraska Medical Center (UNMC) Department of Family Medicine has partnered with Tongji University in Shanghai, China, to develop family medicine to serve the people of China. Chinese physicians have traveled to the United States to participate in a two-week U.S.-Sino FM Leadership Development Symposium, which provides an opportunity for their teaching physicians to build leadership and educational capacity in family medicine; fosters the continued development of family medicine in China; and prepares them to address the health needs of their communities. Family medicine is a relatively new medical specialty in China. Based on direct observation and review of the family medicine curriculum in China, several topics were chosen that would help the Tongji University faculty develop curriculum to nurture principles of family medicine in their learners, particularly the humanistic aspect that is characteristic of the family physician. A post-assessment survey was distributed to evaluate the effectiveness of this program.

Family Medicine Residents as Teachers in a Global Interprofessional Service Learning Project

Anna Pendrey, MD; Ruben Hernandez, MD; Javier Sevilla, MD

Since 2010, family medicine residents from the Indiana University (IU)- Methodist Family Medicine Residency have participated as teachers at IU Student Outreach Clinic (SOC). This endeavor began as a way of serving the Near-Eastside Indianapolis community as a collaborative project between the IU School of Medicine, the Butler University College of Pharmacy, and Neighborhood Fellowship Church. Since then, the clinic has expanded to include three universities and 10 health professions and disciplines as partners, with a tripartite mission of patient care, education, and research. In addition, it serves as a resource for immigrants from all over the world, an important part of the local safety net, and an entry door into the local health care system. Together, we serve to bridge the health care gap for patients who face barriers to health care access, especially immigrants, while helping to educate a generation of health care professionals committed to compassionate and collaborative care with a global health mind.

Global Health E-Learning: A New Age for Technology

Chukwunwike Okafor, MD; Charletta Ayers, MD, MPH; Stephanie Chisom Amaefuna

E-learning revolutionized the delivery of medical education. Multidisciplinary health care learners have benefited from having unrestricted access to high-quality educational materials from experts in the field. The global COVID-19 pandemic has increased the usage of virtual technology worldwide. E-technology can provide high-quality educational materials, promote specialized consultative resources remotely, and maintain a collaborative long-distance relationship between a number of health care entities. By increasing the quality and capabilities of the front-line health care professionals in low-resource areas to establish equity of care, the long-term influence can be immense. In this paper, we will explore the potential of a virtual curriculum created from a needs-based survey to improve and maintain the clinical knowledge of low-resource health care institutions. Secondly, we will examine the impact on long-term health care outcomes.

Global Health Experiences as a Tool for Interprofessional Education and Better Understanding of Health Care Roles

Annabelle Clark; David Mondschein; Madeleine Maras, MD; Emilio Russo, MD

Interprofessional education is recognized by the World Health Organization (WHO) as a critically important strategy to mitigate issues within the global health workforce. While not routinely integrated into health care trainees' clinical education, global health opportunities could serve as a valuable tool for interprofessional education. The purpose of the current study is to examine how global health opportunities affect individual health care workers' understanding of not only their own role, but also the roles of other professionals alongside them in a clinical setting. Of the participants surveyed, 55% reported an improvement in their understanding of their own role and 67% reported an improvement in their understanding of other health care professionals' roles following the same international global health experience. According to respondents, the components of the trip that were most helpful for these improvements were local clinical activities, local cultural experiences, evening debriefings, and post-trip reflection assignments.

Global Health Fellowship Training During the COVID-19 Pandemic: Maintaining Training Competencies at a Social Distance

Daria Szkwarko, DO, MPH; Shelly Verma, DO; Shaunna Escobar, MD, MPH, CPH, MHL; Chelsea Graham, MD In 2017, global health (GH) family medicine (FM) faculty from across the country published a consensus on GH fellowship competencies. Thirty core competencies across six domains (patient care, medical knowledge, professionalism, communication/leadership, teaching, and scholarship) emerged. GH fellowship leaders strive to incorporate these competencies into GH fellowship training. One of the most important ways in which competencies are met is for fellows to spend significant time "on the ground" internationally. The COVID-19 pandemic has not only led to international travel cancellation, but it has also halted in-person clinical training, teaching/precepting, didactics, and research. In this session, GH faculty and trainees from Brown University will share their experience creating several virtual initiatives to maintain fellowship activities and achieve core competencies, including the following: 1) weekly virtual GH fellowship didactics; 2) twice-monthly virtual sessions with Kenyan colleagues: and 3) WhatsApp groups to facilitate communication among the Brown University GH team and with our Kenyan partners.

Global Health Learning With No Excuses

Ruben Hernandez, MD; Jordan Hartkorn, MD

Global health education continues to be an area of special interest in medical education and residency training. Focused electives and track programs have been the most traditional method for delivering both international and local global health experiences. The COVID-19 pandemic has presented a great challenge for face-to-face global health opportunities. During this session, we will share how Indiana University has adapted to the current global health pandemic through the creation of two new virtual electives: a domestic Global Health elective and an International Experience in Latin America elective. The domestic Global Health elective consists of modules that emphasize both travel medicine and refugee health. The International Experience in Latin America elective consists of virtual learning sessions with practicing physicians throughout Latin America and a virtual language course offered through a Spanish school in El Salvador. This presentation will focus on outlining these two virtual electives.

Global Health Partnerships During the Pandemic: A Reflective Description of Our Experience

Javier Sevilla-Martir, MD

For several years, a collaboration between academic programs and a nonprofit organization has been in place to offer global health experiences to family medicine residents in Honduras. Through this partnership, we have coordinated provision of direct care by visiting integrated teams in adopted villages at least two to three times annually. In response to the pandemic, we had to cancel all but one of the scheduled visits. Honduras lacks the infrastructure and resources to manage a potentially devastating outbreak, so the country has been closed for several weeks. In this low-income country, local partners quickly identified acquisition of food as a main problem. Another problem is management of chronic illnesses due to lack of money to seek care and buy medicines. We are focusing attention on those issues to meet the need.

Global Health Through the Lens of a Medical Student

Katie Cox

I remember stepping off a public bus, alone, onto the dusty side streets of a poor neighborhood in Hyderabad, India, and walking to the pediatric ward of MNJ Regional Cancer Center. A few years later, in Grand Rapids, MI, I gave my first vaccines to a 15-year-old boy, who told me he had "walked here" from Honduras. In a public maternity hospital in Quito, Ecuador, I worked closely with an ER physician caring for patients who were suffering alone through a miscarriage out of fear of legal repercussions if information was shared with family. Global health requires that we think resourcefully, act with cultural competence, and understand the biopsychosocial aspects of the patients we treat. Working with immigrants and refugees in this country, along with many patients abroad, continues to challenge my understanding of culture in medicine. These experiences have helped me provide better patient care and shaped my foundation in medicine.

Health Perspectives of Unaccompanied Minor Asylum-Seekers in Nicosia, Cyprus

Mark Humphrey, MD, MPH; Audrey Gleaton, MD, MPH Using qualitative analysis from focus groups, we will discuss unaccompanied minors' perspectives on health knowledge, attitudes, values, and beliefs regarding their current situation compared with their home culture, and future considerations once they "age out" of minor status. Unaccompanied minors can be defined as individuals under the age of 18 years old who are separated from both parents and are not in the care of an adult who is legally responsible for them. This population is doubly vulnerable when they are also asylum-seekers, which are those who have requested sanctuary in a new country but are awaiting processing to be declared refugees. This population represents diverse and unique health concerns and disparities which are usually studied using objective standards such as vaccination rates. Interviews were conducted in the Hope for Children shelter for unaccompanied minor, asylum-seeking males aged 14-17 years old in Nicosia, Cyprus.

Health Care Trends Among Migrant Farmworkers: A Case Study of a Student-Run Free Clinic in Apopka, Florida

Brandon Tapasak; Angie El-Said

The Apopka clinic was established in 2016 by the University of Central Florida (UCF) College of Medicine in collaboration with the Farmworker Association of Florida, UCF College of Nursing, UCF School of Physical Therapy, UCF School of Social Work, and University of Florida College of Pharmacy. The clinic seeks to provide convenient, culturally sensitive care to the medically underserved farmworker population. many of whom only speak Spanish or Haitian Creole. Since the clinic's inception, more than 1,200 patients have been served. Our goal is to review the utilization of specialty services, such as physical therapy, counseling, and other medical specialties, to determine the medical needs of this population. Patient demographics, chief complaints, specialties seen, and diagnoses will be collected from previous charts. The results will inform family physicians of common ailments and referrals needed by this population to best guide their patient interactions.

How to Obtain a Double Win, Thanks to a Mentorship Program

Natalia Galarza, MD; Kristina Diaz, MD, FAAFP Studies have proven that mentorship has a positive impact in medical education. It has been associated with enhancements in education, faculty diversity, and leadership development. It is typically taught by faculty and senior faculty to residents and junior faculty. Unfortunately, residents have limited opportunities to mentor others. However, this is now possible in our residency program through MentorMeMD, our mentorship/pipeline program for high school students in our community. The program was created with the intention to help curve the underrepresentation in medicine (URM) in our community. Pipeline programs have been proven to be a good tool to address URM. This is important because URM physicians are more likely to practice in underserved communities and belong to minority groups themselves, so they are better prepared to understand the communities they serve. MentorMeMD and pre-health pipeline programs represent a unique training opportunity for residents to develop

I Have Night Sweats: CDC Public Health Guidelines on Tuberculosis Tracking

leadership skills through mentoring and help curve URM.

Arminder Johal, MD; Natascia Borsellino, MD; Ruben Hernandez, MD, FAAFP

Tuberculosis (TB) is one of the top 10 causes of death in the world. This case is an example of a patient who immigrated to the United States who faced barriers to care such as language, foreign-born status, and access to care. The patient and her entire family came from the Democratic Republic of Congo, and all of them have been treated for latent TB since immigrating in 2018. This clinical scenario has provided the basis for our report. The case study aims to assist physicians in understanding the common public health services available across the United States. We have outlined TB statistics in the United States, the Centers for Disease Control and Prevention's (CDC's) role in tracking public health services, and the management of multiresistant TB. We also explored the plan to end the epidemic by the year 2030.

Identification and Measurement of Quality Measures in Short-term Global Health Experiences

Christine O'Dea, MD, MPH; Douglas Collins, MD

Over the past 20 years, interest has been growing in short-term experiences in global health (STEGHs). With growing interest has come growing criticism, followed by numerous guidelines regarding best practices in STEGHs. Many guidelines recommend evaluation of the services offered, yet there is little in the literature to suggest the best methods to evaluate services offered during STEGHs. The workshop examines how one program utilized feedback from multiple stakeholders to develop a set of evidencebased quality metrics to evaluate quality of care delivered during a STEGH. On the basis of priorities supported by the communities served, the partner organization in Guatemala, and stakeholders in the sending institution, quality metrics were developed. An infrastructure to assess these quality metrics was also developed. In the future, this infrastructure can be utilized to continue the work of quality improvement within the framework of regular short-term visits to the same communities in Guatemala.

Impact of a Food Access and Education Program on Health Behavior

Peter Mai: Kevin McKenzie

According to the World Health Organization (WHO), 1.7 million deaths worldwide (2.8%) are attributable to the low consumption of fruits and vegetables. More than 525,000 individuals in Cook County are food insecure, which is the largest population in Illinois. Veggie Rx is a program that focuses on the distribution of free bags of produce, nutrition education, and access to low-cost, locally grown produce. The study aimed to identify changes in health behavior during participation in the program. Participants were divided into either a low-dose group (attending 5-9 sessions) or a high-dose group (attending 10 or more sessions). The highdose group reported greater daily vegetable consumption at their fifth visit (p=0.029) and 10th visit (p=0.064), greater willingness to change dietary habits (p=0.037), and the use of more items in the bag (p=0.028). Overall, participants reported decreased challenges in eating fresh fruits and vegetables (p=0.001). These findings support the benefits of this intervention program.

Impact of COVID-19 on Global Health: A Trainee Perspective

Jeffrey Edwards

As the COVID-19 pandemic began to spread more rapidly, many countries restricted travel in an effort to prevent transmission of the virus. Though these actions understandably were taken for the sake of global health security, there are many downstream effects of the travel restrictions, including the restriction of international aid for many resource-limited regions. Applying the ethical principles of reducing unintended consequences while facilitating effective support of global communities, a nuanced discussion of how aid can be administered in the midst of a pandemic can enlighten our approaches to future infectious threats. In this reflection, the author examines his prior global health experiences in light of a recently cancelled international clinical rotation. Further, he ponders the effects of the COVID-19 pandemic on training for individuals interested in practicing global health responsibly.

It Takes a Village: How a Novel Prenatal Education Program was Shaped by, and Shaped the Lives of, Women in Vanuatu

Michelle Woodcock; Amina Alio, PhD

Vanuatu is a small South Pacific island nation that lacks resources for maternal and child health care. A novel, community-based group prenatal education program was successfully adapted, implemented, and piloted. The 11week program consisted of culturally tailored topics on pregnancy management, labor and delivery preparation, and newborn care. Attendees were interviewed pre- and post-participation to obtain data on changes in health behaviors, health knowledge, and psychosocial wellness. Process evaluation consisted of focus groups, observation, feedback from program facilitators, and participants' stories. This presentation will provide results of evaluation assessments, merging qualitative and quantitative data to describe the striking effects of the community-engaged program development process and the resulting impact on women's empowerment, knowledge, and health behaviors. The person- and community-centered strategies used to involve women in the adaptation of the educational program may provide insights for effective and efficient implementation of similar programs seeking to improve maternal and child outcomes.

Keeping a Family Medicine Global Health Track Alive Without Travel – Go Glocal

Kristina Diaz, MD, MBA, FAAFP; Natalia Galarza, MD

Many family medicine programs throughout the United States have implemented some form of global health training, if not a formal track. With the current times of uncertainty and change in the new COVID-19 pandemic, executing this training has become difficult. Through this session, the global health track leaders at Yuma Regional Medical Center provide several options for participating locally while having an impact globally. The participants will understand key concepts that should be included in a family medicine global health track, identify ways they can participate glocally (globally and locally), and identify a targeted approach for implementation through the use of group exercises, case studies, and personal reflection.

LEOPARD Syndrome Diagnosis in Rural Malaysia

Alec Zamarripa, MS; Brian Ford, MD, FAAFP

Noonan syndrome with multiple lentigines (NSML), formerly known as LEOPARD syndrome, is a rare multisystemic genetic disorder with unknown prevalence and only around 200 cases reported globally. Each genetic variant confers a distinct disease course and prognosis. One case of a 5-foot-2-inch, 41-year-old, Malaysian male presented to a global health fair for evaluation of a skin condition that had been progressively spreading for a period of two years. An exam showed hyperpigmented macules diffusely located on the skin of the face, torso, and extremities, including the palms, soles, and groin-without any discernible lesions on mucosal membranes. The patient was also noted to have lifelong deafness, ocular hypertelorism, and hypospadias. Family medicine physicians are uniquely suited to identify genetic anomalies throughout life. When a genetic syndrome is queried, further examination for associated anomalies and symptom clusters should be pursued with whatever medical resources are available.

Long-term Outcomes of an International, Interdepartmental U.S.-Sino Family Medicine Leadership Program With Tongji University in China

Jennifer Liu, MD; Jessica Koran-Scholl, PhD; Kim Jarzynka, MD; Jeff Harrison, MD

For the past 10 years, the University of Nebraska Medical Center Department of Family Medicine has partnered with Tongji University in Shanghai, China, to develop faculty in family medicine which provides an opportunity to build educational and leadership capacity in family medicine, foster the continued development of family medicine in China, and prepare their faculty to address the health needs of their community. Topics include basic interviewing skills, public health leadership, and physician leadership. Participants were selected due to their interest in becoming future leaders in education and care delivery models. We have had 79 participants since the program began. We administered a survey to assess how they have integrated these topics into their clinical practice and teaching, and analyzed long-term outcomes of the participants' subsequent educational and leadership capability.

Nutrition Assessment of the Bateyes in La Romana, Dominican Republic

Min Seok Chae; Dana White, MS, RD, ATC

The bateyes in the Dominican Republic contain a population of Haitian migrants that supply a labor force to the sugarcane industry. This study compared the nutrition status of children two to five years living in the bateyes (n=59) with children from a La Romana pediatric clinic as the control population (n=20). The wasting (weight for height), stunting (height for age), and underweight (weight for age) status were obtained. Caretakers were surveyed on the child's diet and food sources. Data showed that the prevalence of wasting, stunting, and underweight in the bateyes was critical (15%), medium (29%), and high (20%) respectively, when compared with World Health Organization (WHO) standards. Children in the bateyes also had significantly less meat, vegetables, and milk in their diet. Families reported a lack of nutritional diversity in local batey stores and prohibitive travel costs to distant towns. The high levels of malnutrition necessitate additional research and public health intervention.

Optimizing Malaria Prevention Strategies with Medical Prophylaxis

Teena Dcruz, MD

Insurance companies often do not cover the prescribed amount of malaria medicines. Investigation at Mount Carmel St. Ann's Family Medicine Center showed discrepancies between the quantity of malaria medicines dispensed by the pharmacy and the quantity limits set by the patient's insurance company in Medicaid patients but not private insurance or Medicare patients. Medicaid patients were sometimes prescribed a limited amount of medicines and amounts less than the typical 30-day supply limit despite the absence of a quantity limit per the insurance company's drug formulary. These discrepancies suggest that a significant population of patients outside our practice is likely vulnerable and better coverage of malaria medications by insurance companies is necessary. We have also described different methods physicians can use to override quantity limits. If limits cannot be lifted, then alternative strategies to obtain medications must be employed to prevent malaria- and treatmentassociated morbidity and mortality.

Organizing Data in a Remote Clinical Location: A Portable Electronic Health Records System

Meghana Ganapathiraju; Eduardo Gonzalez, MD, FAAFP; Karim Hanna, MD

A major challenge on medical mission trips is keeping data on clinical statistics in remote locations. We have updated a partial electronic health records (EHR) system capable of being run without internet access and compatible with all devices that are able to run a modern web browser. Our updates aim to improve the system's maintainability, customization, and future extensibility. As seen on previous deployments of this system, a barrier to adoption is a lack of consistent and reliable use among service providers at clinic locations, leading to incomplete and/or inaccurate data collection. To address this, we have developed instructional materials and simulations to increase familiarity with the EHR system for all participants. Having reliable and complete data on past clinics will help organizations plan subsequent trips to be successful and impactful. As a system with low-cost maintenance and high customizability, this software can be useful to many international medical mission organizations.

Parasitology I: Malaria

Mark Huntington, MD, PhD, FAAFP

This series of lectures on parasitology has become a regular feature of the AAFP Global Health Summit. Although global health involves more than exotic infections, infectious diseases remain common in much of the world. Malaria is one of the most important infectious diseases in the world today and throughout history. Pathophysiology, clinical presentations, diagnosis, transmission, treatment, and prevention for both locals and expatriates will be covered.

Patient Perceptions Regarding Health Care Received at Mobile Clinics in the Dominican Republic

Karim Hanna, MD; Eduardo Gonzalez, MD, FAAFP; Brennan Ninesling; Amanda Pitre

International outreach is increasingly popular within health professions. Our student-run organization has provided health care and supplies to an area in central Dominican Republic for 19 years. While our annual trip is informally deemed a success by patients and local leaders, a more formal assessment is necessary. We analyzed clinical data and an end-encounter patient survey, including overall experience, understanding of encounter, and availability of medical follow up. The survey response rate was 66.4% (n=527) from 794 patients at 10 clinics. Of those surveyed, 91.3% (n=481) indicated an excellent clinical experience, and 87.7% (n=462) indicated excellent encounter understanding. Access to local physicians ranged from 41.1% to 87.9%. It is essential to critically examine whether medical outreach programs are effectively meeting the needs of the communities served. Our survey indicates patient satisfaction with medical care, willingness to return to future clinics, and variable access to local physicians.

Patient, Provider, and Administrator Perspectives on the Implementation of Screening and Treatment for Depression and Alcohol Use Disorder in Colombian Primary Care Clinics

Chelsea Shannon, MD; Sophie Bartels, PhD; Magda Cepeda, MD, MSc, PhD; Leonardo Cubillos, MD, MPH; Miguel Uribe, MD; Makeda Williams, PhD, MPH; William Torrey, MD

Depression and alcohol use disorder (AUD) greatly contribute to the burden of disease worldwide and have a large impact on Colombia's population. In this study, a qualitative analysis evaluates the implementation of a technology-supported model for screening, decision support, and digital therapy for depression and AUD for patients in Colombian primary care clinics. Patient, provider, and administrator interviews were conducted, exploring attitudes towards depression and AUD, attitudes towards technology, and implementation successes and challenges. Researchers used qualitative methods to analyze interview themes. The model improved provider capacity to diagnose and manage patients, helped patients feel supported, and provided useful prevalence data for administrators. Challenges included stigma around depression and AUD, limited provider time, and questions about sustainability. The model implementation facilitated identification, diagnosis, and care of patients with depression and AUD. There is an ongoing need to create stronger networks of mental health professionals and transition intervention ownership to the health care center.

Patterns of Food Allergy Among Hispanic Children of Central New Jersey

Samantha Cheng; Scheherazade Elkeshk; Karen Wei-Ru Lin, MD, MS; Catherine Monteleone, MD

Food allergies are a growing health burden in the United States, and immigrant populations are disproportionately affected. Even though Hispanics comprise 18.3% of the U.S. population, characterization of food allergies in this group has been relatively neglected in literature. Through a cross-sectional survey of 86 guardians of Hispanic children with food allergies, our study found that Hispanic children have a higher rate of egg allergies than would be expected of children with longer nativity status in the United States (23.26% vs. 9.8%, p<0.0001). Egg allergies were also unexpectedly severe among Hispanic children, as 40% of egg allergies elicited respiratory reactions. Among Hispanic children with food allergies, fruit (22.09%), pork (11.63%), and vegetable (9.3%) allergies were also uniquely represented, as these are not common food allergies otherwise in the U.S.

Perceptions of the Osteopathic Profession in New York City's Korean Communities

Justin Chin, DO; Haeinn Woo; Diane Choi; Christine Lomiguen, MD

The purpose of this study was to assess knowledge of, and barriers to, osteopathic medicine in Korean communities in New York City. A culturally appropriate survey in Korean and English versions was administered anonymously to measure community perceptions and knowledge of osteopathic medicine. Community members were selected using convenience sampling from high-density areas to participate. A total of 105 surveys were conducted with 47 males and 58 females with an average age of 66. Only 14% (n=15) indicated knowledge about osteopathic medicine and 9% (n=9) indicated knowledge of doctors of osteopathic medicine. Compared to research of the general U.S. population, a general lack of knowledge of osteopathic medicine exists within New York City's Korean community. Although this difference may be ascribed to linguistics and ethnosociological factors, greater outreach and education is needed in urban minority communities to make immigrants aware of all health care resources in the United States.

Physician Burnout and Strategies (Including Medical Mission Work) to Move Toward Physician Well-being

Katherine Walker, MD

Physician burnout affects more than 50% of family physicians. Much like COVID-19, it has become epidemic. It impacts physicians personally and also has a negative impact on patient care. This presentation outlines causes and effects of burnout. More importantly, it explores methods that can be used to move toward physician well-being. One of the ways to do this is through volunteerism. One study supports the idea that medical mission work can serve as an avenue to achieve this goal. Medical brigades foster a global perspective, a sense of gratitude, and much-valued patient appreciation. They can make physicians remember why they got in to medicine in the first place.

Piloting the WHO Community First Aid Responders Course in the Southwestern Region of Guatemala

Andrew Levy; Daewoong Kim; Emilie Calvello-Hynes, MD The World Health Organization (WHO) Community First Aid Responder (CFAR) is a standardized course designed to teach medical volunteers to provide medical care within their own communities in emergency situations. The program, previously piloted in several countries in Africa, was piloted in southwestern Guatemala with a basic quantitative and qualitative educational assessment in the form of a practical and written exam, as well as surveys and informal interviews. Initial results showed appropriate quantitative improvement following the course with valuable context, as well as general constructive feedback from both students and teachers of the course. These results will help to shape the future development of this course and similar community-level programs. They also provide context as to the importance of community education and empowerment.

Psychological Burden in Health Care Workers in Frontline Hospitals During the COVID-19 Pandemic

Sungyub Lew, MD; Anna Mohammad, MSc; Manes Prahbjot, MD; Natasha Bhalla, MD

A three-part survey, including COVID-19 pandemic-related demographic and clinical information, Patient Health Questionnaire-9 (PHQ-9) for depression, and Impact of Event Scale-Revised (IES-R) questionnaire for post-traumatic stress disorder (PTSD) assessment were given to health care workers who have high daily exposure to COVID-19 patients: medical doctors (MDs), registered nurses (RNs), and patient care assistants (PCAs). All MDs, RNs, and PCA showed a higher incidence of depression and PTSD than the pre-COVID-19 era. RNs and PCAs showed a higher degree of the sign of depression compared to MD: PHQ9 mean 9.2 versus 5.2, p=0.02. RNs and PCAs also showed a higher degree of the sign of PTSD compared to MDs: IES-R mean score 41.2 versus 24.1, p=0.05. Being older and being symptomatic without COVID-19 testing were independent risk factors associated with a higher level of PTSD symptoms. Larger studies with multimodal intervention are needed to find effective ways to alleviate the psychological burden in health care professionals during the COVID-19 pandemic.

Sectioning Off the Odds: Retrospective Study of Cesarean Section Rates in the Somali Population in Omaha, Nebraska

Christopher DeAngelo; Katherine Pattee; Charles Oertli; Justin Brill

Among the Somali population in the United States, there has historically been dissatisfaction regarding the birthing process. In 2018, it was discovered that uneasiness was growing among the local Somali community in Omaha, Nebraska, and with it, a perception that admission to the local Catholic Health Initiatives (CHI) Health hospitals carried a higher likelihood of a Cesarean section (C-section). A retrospective analysis of the rates of C-section in Somali patients versus non-Somali patients was performed in order to evaluate the validity of this negative perception. The results of this study suggest that there is no statistically significant difference in rates of C-section between Somali and non-Somali patients, nor did groups differ based on the use of an interpreter during the birthing process. This study is intended to act as a starting point in a larger project aimed at improving perceptions within the Omaha Somali community regarding their local health care options, especially obstetrical care.

Sitagliptin and Simvastatin Interaction Causing Rhabdomyolysis and Acute Kidney Injury (AKI)

Qurratulain Elahi, MD

This case describes a patient who developed rhabdomyolysis and acute kidney injury (AKI) soon after sitagliptin was added to his medical therapy. He had tolerated simvastatin therapy well for many years with no recent change in the dose, suggesting that rhabdomyolysis and AKI was precipitated by initiation of sitagliptin therapy. A comprehensive literature review revealed six previous reports of rhabdomyolysis due to drug interaction between sitagliptin and statins, including simvastatin, lovastatin, and atorvastatin. The mechanisms proposed for this drug interaction include nephrotoxicity of sitagliptin causing reduced renal excretion of simvastatin and subsequently dose-related muscle breakdown. Other mechanisms suggest an interaction of statin and sitagliptin at the level of hepatic cytochrome P450 3A4 (CYP3A4) as both are metabolized by the same enzyme and can potentially compete for it, resulting in increased serum statin levels precipitating statin-induced rhabdomyolysis.

Social Determinants of Health Affecting the Elderly Population: A Local and Global Matter

Anna Pendrey, MD; Ruben Hernandez, MD; Javier Sevilla, MD Social determinants of health (SDoH) present in the elderly population play a significant role in management and control of disease and its comorbidities, health care utilization, and cost. SDOH, as defined by the World Health Organization (WHO), are conditions in which people live, learn, work, and play and are determined by their income, social status, employment, education, social and physical environments, child development, genetics, personal behaviors and health practices, access to health care, social support networks, geography, gender, and culture. The main objective of our study is to determine the SDoH most significantly affecting the elderly population at a major outpatient primary care center located in Indianapolis, Indiana, and selected international sites. Furthermore, we aim to understand how SDoH are affecting our patient population's management of disease and comorbidities, as well as their health care utilization locally and abroad. We will seek collaboration with global health projects to conduct protocol at their sites.

Social Determinants of Health in Migrant Farm Workers in the Southwest

Natalia Galarza, MD; Kristina Diaz, MD, FAAFP; Steffano Mottl, MD; Kelley Lizarraga, MD

Yuma, Arizona, is a highly-known agriculture town, which grows 95% of the U.S. winter lettuce, along with other crops. These are harvested by migrants and/or seasonal workers. Since they are seasonal, many are not eligible for health insurance or are unable to accomplish requirements by the Medicaid program. This study explores barriers to health care access faced by farm workers. We designed this project in collaboration with a farm workers occupational medicine agency. We will inspire health access in this vulnerable population by increasing health screenings; promoting and encouraging them to establish care with a primary care physician; expanding awareness of health conditions that require their attention; providing point-of-care testing; and coordinating specific educational programs. We will also do surveys to identify the main social determinants of health (SDoH) in this vulnerable population. Along with the results of the health screenings, these measures will help us develop customize recommendations for health care.

Systematic Review to Assess the Role of Culture on Antidepressant Use in Latinx with Depression: Quantitative Data

Maria Santos; Beatriz Manzor Mitrzyk, PharmD, BCPS, BCACP; Jacqueline Freeman, MLIS; Karen Farris, PhD

Primary care providers are the most common prescriber of antidepressants for Latinx patients seeking treatment for depression. We conducted a systematic review to assess the role of culture in adherence to antidepressants in Latinx adults with depression. Two independent reviewers conducted the title and abstract screening, as well as study selection from five scientific literature databases. Of the 1,044 articles identified, six qualitative and 12 quantitative studies were included. We present the quantitative data analysis. Based on the systematic review analysis, various cultural factors, such as language proficiency, health beliefs, and acculturation may be associated with adherence to antidepressants. Measures of these cultural factors varied and were not comparable between studies. Therefore, a meta-analysis could not be conducted. Primary care providers should consider cultural factors when interacting with Latinx adults, as this review of quantitative data suggests that culture may have a role in the adherence to antidepressants in this population.

The Female Prisoners of Quetzaltenango, Guatemala: Unexpected Medical Complaints and a Plan for Intervention

Meredith Hosek; Cynthia Jiang; Claire Schenken, MPH; Vanessa Trivino; Keerthi Thallapureddy; Mark Nadeau, MD, MBA; Maria Montanez, MD

Since 2011, a team of family medicine physicians and medical students have provided clinical care to communities around Quetzaltenango, Guatemala. In March 2019, the team interviewed female prisoners in Quetzaltenango to fill a gap in research regarding women's health in Central American prisons. The objective was to evaluate medical complaints, perceptions of illness, and treatments used among prisoners. The 109 female prisoners were interviewed over two days. A retrospective data analysis was later conducted. Of all prisoners interviewed, 58.7% complained of headache, 38.5% complained of gastritis, and 35.8% complained of allergies (described as itchy skin). Among prisoners, 17.1% had visited a provider in the past year and 16.2% had access to medication refills. Results may prepare and encourage others to partner with similar underserved subpopulations. The high prevalence of headaches, gastritis, and itchy skin among prisoners provided the groundwork to design an investigation into diet, sanitation, and women's health at the prison.

The Impact of Global Health Experiences on Family Medicine Residents' Professional Identity Formation

Neubert Philippe, MD; Shara Steiner, DO; Alice Fornari, EdD/RD; Maureen Grissom, PhD

Global health experiences present opportunities for development of trainees' professional identity and a subsequent desire to advocate for underserved patients, volunteerism, and work abroad. We surveyed residency programs graduates of the Northwell Health Family Medicine department's global health section. Of those that responded, 80% worked regularly with underserved population, 60% volunteered regularly in community activities, and 20% participated in global health activities after graduation from residency. International medical graduates were more likely to provide care regularly in developing nations (25% versus 0% for U.S. medical graduates). International medical graduates worked regularly with underserved patients (91% versus 67%) for U.S. medical graduates). The overall theme that came out of the analysis of residents' reflections is "professional identity formation." Residents with global health experiences are likely to choose a post-residency position that provides opportunities to work with underserved populations. Guided self-reflection was identified as an effective teaching/learning tool in the development of professional identity.

The Impact of Poverty, Environment, and Familial Asthma on Infant Wheezing in Rural Honduras

Jeanne Shi; Elizabeth Smith

Infant wheezing in urban settings has been linked to maternal smoking, familial asthma, and environmental pollution. This study examines the impact of environmental factors, household assets, and familial asthma on infant wheezing in low-income, rural Honduras. Study participants (n=112) reported that 23% of infants wheeze in their first year of life. Dust and a higher number of siblings (aOR 3.80, 3.06) were found to be significant risk factors for infant wheezing and mold/mildew was found to be a strong risk factor (aOR 3.51). Dust, mold/mildew, and a higher number of siblings may increase risk of wheezing due to allergen/pathogen exposure or to resource limitation and poverty. The interplay of environmental factors and fewer resources in rural Latin America is distinct from the effects of such factors in urban environments and should be further studied to develop preventive health measures.

The Influence of Alcohol on Trauma Cases in Nanyuki, Kenya

Traci Bourne

In Kenya, alcohol is one of the leading avoidable risk factors for disability and death with the prevalence of injuries related to alcohol use rising each year. We conducted a cross-sectional study at the Nanyuki Teaching and Referral Hospital to determine the proportion of injuries and assess the socioeconomic factors related to alcohol use and trauma among acute injury patients in the emergency department. Our research found that the most common trauma-related injury was due to road traffic accidents. Of the patients with a positive blood alcohol content, 88.9% were employed males and 33% denied alcohol use, indicating that history from patients regarding alcohol consumption may be unreliable. Longitudinal data collection will need to be completed to obtain a more comprehensive analysis, as our study was limited. This information will aid in development of future intervention protocols for health care in the area.

The Need For Standardized Medical Mission Evaluation Criteria: A Systematic Review

Madalyn Nelson, MD; William Dolan, MD, FACS

There is a scarcity of documentation and a lack of standardized evaluation criteria for global health medical missions. In order to create standardized evaluation criteria, it is necessary to compile currently used criteria. The objective of this research was to determine what criteria are currently being used and present suggested criteria based on the findings. A total of 24 articles fit within the inclusion and exclusion criteria. Among them, 17 evaluation criteria were identified. The two most commonly used criteria were official mission reports (including location, size, duration, and number of patients treated) and patient data (including patient risk factors, patient labs, procedures, and outcomes). This review demonstrates that there is a need for better documentation and consensus about the most important evaluation criteria. Based on the criteria compiled in this review, we present the M.D. NELSON medical mission evaluation criteria, which include general medical mission concepts and specific evaluation criteria.

The State of Family Medicine in Lesotho: Moving Toward Sustainability

Benjamin Bryden, MD, MPH; Mariel Bryden, MD

The Lesotho Boston Health Alliance (LeBoHA) Family Medicine Specialty Training Program is the first and only accredited medical residency program in Lesotho. The program was started in 2008 as a partnership of LeBoHA with Boston University and the Lesotho Ministry of Health to address the human resource and HIV crisis facing the country. The program is unique in the region in that it uses a non-university-based, decentralized model with residents working in rural hospitals throughout the country participating in the program on a part-time basis. The program was successfully accredited in 2015 and is moving toward sustainability with absorption into, and financial support by, the government of Lesotho. This presentation outlines developments and challenges facing the program over the last three years, including graduation of the first class of qualified family medicine specialists in Lesotho, consistent recruitment, assessment strategies, and new career paths for family physicians in Lesotho.

Timeline in Pictures of Oral Aphthae as a Presenting Symptom for Behcet's Disease

Adam Ramsey, MD

Behcet's disease (BD) is a chronic, relapsing, inflammatory vascular disease with no pathognomonic test. Named after the Turkish scientist who first discovered it, BD is believed to be an autoimmune over-reaction to either an infectious or environmental insult in a subset of patients that is genetically predisposed with a HLA-B51 genetic risk factor. BD typically presents in the third and fourth decade of life with no specific sex predilection. The case is a 62-year old Turkish male who presented with a history of recurrent oral ulcers and penile ulcer.

Tuberculosis Resistance Around the World

Ani Bodoutchian, MD, MBA; Luis Caceres, MD

Tuberculosis (TB) is an infectious disease associated with the highest mortality rates worldwide. It actually exceeds the HIV/AIDS and malaria mortality rates. In 2017, the World Health Organization (WHO) estimated that 4,000 people die of TB every day. Despite TB being a treatable disease, the new development of drug-resistance TB has become a global public health issue. The major challenge for treatment and eradication is the mutation of TB becoming a multidrug resistant infection. An estimated 558,000 new cases of rifampicin resistant TB (RR-TB) was reported by the WHO in 2017. Almost half were in three countries: India (24%), China (13%), and Russian (10%). Among the RR-TB cases, an estimated 82% had multidrug-resistant TB (MDR-TB). Globally, 3.5% of new TB cases and 18% of previously treated cases had MDR/RR-TB, with the highest proportions (>50% in previously treated cases) in the countries of the former Soviet Union.

Understanding of Human Papillomavirus Disease Etiology, Prevention, and Vaccination Amongst Women Living in the Dominican Republic Batey Communities

Elizabeth Cammett; Ann Dozier, PhD; Kachenta Descartes, MBS

The health status of women living in the impoverished batev communities in the Dominican Republic is limited regarding infectious agents like human papillomavirus (HPV). This mixed-method study assessed understanding of HPV disease etiology, prevention, and vaccination among bateyesresiding mothers. Participants (n=59) included women <24 months postpartum and 18 years and older. Interviews were conducted with a trilingual interpreter. Analyses was quantified and researchers identified themes. Thirty participants (50.8%) reported familiarity with HPV. Of those, 50% (n=15) reported that HPV was sexually transmitted, 30% (n=9) reported possible clinical sequelae, and 40% (n=12) reported condoms prevented transmission. Only 11.9% reported receiving at least one HPV vaccine, 18.6% were unsure, and 69.5% reported never being offered the vaccine. Among participants 21 years and older, 52.2% (n=46) reported never undergoing pap smear screening. Few women in the bateyes reported knowledge of HPV or availability of vaccination and pap smear screening. Additional clinical and educational initiatives may benefit this population.

Utilization of Traditional Versus Western Medicine in the Maasai of Southern Kenya

Sarah Pederson, MS; Amanda Andersen; Austen Anderson, MS

While the accessibility and efficacy of Western medicine has advanced worldwide, there remain populations both in the United States and globally that have deeply rooted and well-developed systems of traditional medicine. In our Rocky Vista University College of Osteopathic Medicine (RVUCOM) global track outreach trips to Native American reservations, Ecuador, and Guatemala, we observed that patients sought treatment through traditional healers in the form of prayer and medicinal herbs, in addition to receiving care from a Western medical professional. This raised the question of utilization rates of traditional medicine versus Western health care. We have since expanded our study to the Maasai in Kenya, a community with deep-rooted culture and traditions. We hypothesize that the Maasai are more likely to rely on their sources of traditional medicine than contemporary Western medicine for conditions that are more difficult to treat and/or quantify, such as cancer, depression, and fatigue.

VeggieRx: Addressing Stress Through Access to Fresh Produce and Peer-learning Nutrition Discussions

Kevin McKenzie: Peter Mai

Food insecurity affects 829 million people globally. Among other detriments, food insecurity increases the risk of poor emotional well-being over time. Cook County has food insecurity prevalence higher than the national average, with limited access to fresh produce. VeggieRx is an organization that focuses on distribution of free produce, nutrition education, and access to low-cost locally grown produce. This study measure self-reported stress, self-reported health. and clinical data for VeggieRx participants. Higher stress was correlated with lower food access, lower self-reported health, and increased challenges to eating fresh fruits and vegetables. After participation in VeggieRx, average Perceived Stress Score decreased and self-reported health median response improved. Programs such as VeggieRx can improve food access, increase access to fresh produce. lower stress, increase perceptions of health, and benefit food insecure populations.

Vision Care Delivery in India: An Eye Opener

Sam Karimaghaei; Cina Karimaghaei

Our global health experience at Venu Eye Institute and Research Centre in New Delhi, India, was culturally and clinically educational. India houses one-third of the world's blind population but only has 3.3 qualified allopathic doctors per 10,000 population. We witnessed strategies the hospital used to efficiently manage high-patient volume in a low-resource setting and expand health care access. The eye hospital's workflow involved seeing an optometrist for refraction, followed by an ophthalmologist for ocular examination. The distribution of responsibilities amongst professionals of each discipline allowed the hospital to expand health care access and avoid overburdening. Our experience was enhanced by patient interactions with interpreters, educational sessions with trainees, and understanding global health needs from local physicians. We also worked with the mobile health unit, which integrated community health with hospital-based practice to provide free primary and surgical care to limited access locations. New discoveries and lasting friendships are an invaluable experience.

We Screened for Social Determinants of Health: Now What?

Natalia Galarza, MD; Kristina Diaz, MD, FAAFP; Palak Satija, MD; Tamara Sanderson-Dissanayake, MD

Clinicians understand that improving social determinants of health (SDoH) are important for patients to have better health outcomes. We know that approximately 20% of all children in the United States belong to families that live in poverty, and in rural, urban, and suburban settings. Thus, all primary care physicians need to be familiar with the effects of poverty on health and to understand other associated, preventable, and modifiable SDoH. It is not enough to screen patients only in clinical settings. To really help our patients, we need to get them to the resources in our communities that will help them curve the negative impact SDoH have on them. Past studies show barriers to screening most commonly identified were lack of time to ask and lack of resources to address any social needs identified. So finding a system that will help clinicians with referrals for patients with negative SDoH is important.

When Cries Become a Calling

Alana Carrasco

Creative writing testimonial—a baby cries in the background. The cries and laughter of little ones could be heard throughout the clinic all day long, but this time is different. This time, there is a baby on the verge of death. A child whose mother carried him through our doors as the sun was setting and the clinic was empty. A little boy struggling to breathe against the inflammation and infection that was likely raging in his lungs. With every cry, my heart sinks, but my heart nearly stops beating every time the cries stop because I fear the worst. The clinic is not equipped to handle an infant this sick. Nonetheless, our team hastens to do what we can to stabilize the child. An IV is inserted into this seven-month old's tiny arm and pure oxygen is blasted in his face in hopes that it will reach his lungs.

When Global Health Knocks on Your door in New York. How Global Health Disaster Medicine Played a Role

Neubert Philippe, MD; Keasha Guerrier, MD; Lisa Schoenberg, DO; Barbara Keber, MD

Global health experiences present useful opportunities for redeployment of resources and design of new didactic curriculum during the coronavirus epidemic at a New York academic institution. We were able to rapidly transition from in-person didactic sessions to virtual ones because of knowledge previously gained from our virtual didactic sessions with our international partners. Previous training in disaster medicine due to H1N1 and Ebola virus outbreaks were valuable in the redeployment of staff and materials to care for patients with COVID-19. Residents and faculty with experience in global health and disaster training adjusted quicker to the new realities of health care delivery during the COVD-19 pandemic. We anticipate a surge in demands for the vital services offered in our ambulatory centers as an aftermath of the pandemic. We designed protocols for workforce distribution in response to this anticipated crisis. We will incorporate residents' resumption of rotations to maximize educational benefits and health care delivery.

Who is the Hero of This Story? Communicating About Global Health in the 21st Century

Esther Johnston, MD MPH; Patricia Egessa

Communication about global health programs is critical to the success of these same efforts. Yet both formal and informal messaging about global health efforts to donors, the media, and even academic writing, has a troubled history. Often, this messaging is unintentionally exploitative of the very people the same efforts are designed to aid. Careful thought and conscious attention to the construction of communications may help prevent the unintentional perpetuation of stereotypes about populations abroad, as well as work to mitigate historical themes of racism and colonialism that have influenced global health programming itself. This session will review historical pitfalls in global health communication, discuss existing guidelines to help family medicine physicians better share publicly their work abroad, and use the example of Seed Global Health (a nongovernmental organization) to discuss how we might better prepare our colleagues working abroad to better speak about their service in a variety of contexts.



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