



2020

Annual Report

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Introduction

As COVID-19 swept the globe, the Boston Children’s Hospital Global Health Program rapidly shifted from being onsite with our partners to working remotely through online platforms. Our deep pre-existing relationships kept us from missing a beat regardless of the Zoom or WhatsApp format. We were able to exchange ideas with partners on managing the emerging threat of COVID-19, learning and supporting each other in the solidarity that comes with being a healthcare worker during this global health crisis. Because of our well-established connections with local partners, projects and programs were converted to virtual implementation platforms. Local partners stepped up with new and creative ways to conduct educational programs, collect data and continue much needed support to families. The COVID-19 pandemic has given rise to innovation and despite physical distancing, has brought us closer together – entering each other’s homes virtually, talking at all hours of the day or night and sharing in the burden of caring for patients. As a program we are proud to have maintained and even expanded some of our existing partnerships as well as developed new global and domestic partnerships in 2020.



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Boston Children's Hospital
Global Health Program

Ongoing Projects

Partnering to Improve Pediatric Oncology Nursing Education in Ghana



CHALLENGE

Children with cancer in low- and middle-income countries are four times more likely to die of the disease than those in high income countries (World Health Organization, 2018). In Ghana, a lower-middle-income West African country of 35 million people, approximately 1300 children are diagnosed with cancer annually and many die undiagnosed. Only two hospitals in Ghana offer comprehensive pediatric cancer treatment. Expert nurses are critical to a successful pediatric oncology program, yet few opportunities exist for Ghanaian nurses to receive specialized nursing education.

WHERE WE STARTED

Building on previous partnerships with physician and nurse leaders at Korle Bu Teaching Hospital (KBTH) and Komfo Anokye Teaching Hospital (KATH), nurses from the Boston Children's Hospital (BCH) Global Health Fellowship are collaborating with the Ghana College of Nurses and Midwives, local clinical experts and international partners to create an accredited Pediatric Oncology Nursing Specialist program. This curriculum is part of a Center of Excellence in Pediatric Oncology created in 2018 to improve the diagnosis and treatment of childhood cancer across multiple regions of Ghana.



OUR IMPACT

In October 2019, BCH Fellowship nurses delivered a two-week Foundations/Orientation program at KBTH, attended by forty-seven nurses from across Ghana. Content focused on assessment and nursing care of pediatric oncology patients and was delivered as didactic lectures, group work, and clinical mentoring on the wards. Nurses' post assessment and evaluation scores and comments reflected increased knowledge and enhanced engagement in their nursing practice.

The next step was building a formal, college-accredited Pediatric Oncology Nursing Specialist Program. When the pandemic hit, it became apparent that the curriculum must transition to a virtual format. The team collaborated to create interactive educational modules focused on pediatric oncology care, along with a preceptor workshop and sessions on patient safety, team communication and leadership. The semester ran from September – December 2020; eighteen Ghanaian nurses completed the first semester and will resume classes in January 2021.

MOVING FORWARD

BCH fellows and nurse leaders continue to virtually support the specialist program by evaluating course content and scholarly papers from the first semester while developing second semester content. The ultimate goal is to prepare program graduates to serve as leaders for future cohorts of the Specialist program. This initiative aligns with the goals of the WHO Global Initiative for Childhood Cancer to increase prioritization of childhood cancer and expand the capacity of countries to deliver best practice in childhood cancer care.

Liberian Residency Program: Research Project Updates



The Pediatrics Department at John F. Kennedy Medical Center and Boston Children's Global Health Program have over 10 years of partnership for pediatric education and care. With this deep relationship, education was successfully transitioned to Zoom to carry out lectures, case review and virtual rounds at the start of the pandemic. This allowed for residency training to continue, which is required to keep the pipeline of pediatricians for the country functioning. With only 9 Liberian pediatricians at the start of the pandemic, the ability to graduate an additional 4 and enroll 3 new trainees will have significant positive impact on care for the country's children for years to come. With the research collaborations led locally, supported by Liberian Pediatric Research Nurse Mrs. Julia Kamara, research projects were able to continue seamlessly. These include implementing Helping Babies Breathe training, maintaining the pediatric patient registry, and identifying ways to implement new nutrition intervention research and baseline anemia prevalence studies. Similarly, we were able to continue our collaboration with UNICEF Liberia to facilitate teams going into the field safely to test the effect of cash transfers to mothers and subsequent improvements to early childhood nutrition. Continuing research safely despite the pandemic ensures new interventions will reach the bedside of patients and communities in need.

Pediatric Resuscitation Initiative in Palestine



Resuscitation training in the West Bank and Gaza was completed just prior to the start of the COVID-19 pandemic at two partner hospitals. As the pandemic began, data collection on the impact of that training was ongoing. As the pandemic began, data collection on the impact of that training was ongoing and, fortunately, data collection plans and processes were able to be modified to allow this work to safely continue. While scaling of the resuscitation program was not possible as planned in March 2020, this knowledge of advanced life support and resuscitation was immediately useful during the pandemic and will be able to be scaled up in the future.



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COVID-19 – Rising to the New Local, National, and Global Health Challenge

Supporting Boston Public School Nurses



Caring for over 54,000 students in 123 schools, Boston Public School (BPS) nurses play a critical role in the health and well-being of the Boston community.¹ Many students have unique social and health considerations, such as non-communicable diseases (like diabetes), economic disadvantage, language barriers, physical disability and learning challenges.¹ As the COVID-19 pandemic surged and impacted the 2020-2021 school year in the city, BPS nurses rose to the challenge to overcome obstacles and learn new skills to care for their students remotely as well as helping develop and implement safe reopening plans.

In partnership with BCH's Community Health Program and BPS nursing leadership, the GHP led a collaborative program to support the unique and critical needs of BPS nurses on the front lines. Beginning in August 2020, the GHP facilitated the COVID-19 content of BPS' nursing orientation followed by weekly or biweekly learning and mentoring sessions throughout the 2020-2021 school year. These sessions were facilitated by the GH fellows and nursing staff on topics ranging from PPE, environmental safety in the nurses' offices, providing mental health and resiliency support to students, families and school staff as well as educating on COVID-19 vaccines.

As students returned to school, the GHP team continued to support learning sessions to help BPS nurses navigate COVID challenges as they arose. Sessions were adapted based on the needs of the BPS nurses and the community they serve, in partnership with BPS leadership and BCH's Community Health Program.

Citation: 1. Boston Public Schools, Facts and Figures: <https://www.bostonpublicschools.org/domain/238>

World Health Organization Global Health Cluster



As the COVID-19 pandemic spread around the world, the World Health Organization has played a key role in the international response in humanitarian settings through its COVID-19 Task Team (TT). The role of the TT includes understanding and supporting the response needs for countries, health clusters and response agencies. In August 2020, the GHP supported the TT by performing a study in humanitarian settings to understand gaps or challenges in contextualizing and the operational challenges for COVID-19 response faced by front-line humanitarian workers, as well as to capture good practices or innovations that have been developed. This study was completed in some of the world's most challenging settings: Cox's Bazar, Bangladesh; Burkina Faso; Chad; Iraq; North Eastern Nigeria; and Yemen. Results from this study have since been used by the WHO and by country leaders to guide their COVID-19 response.

Rosebud Indian Health Service Rural Health Project



Since 2012, Sicangu Oyate members of the Rosebud Sioux Tribe in Rosebud, South Dakota, have partnered with the Massachusetts General Hospital Rural Health Fellowship to support an academic tribal-centered model of care. The partnership aims to improve access and care quality as well to collaborate on health system strengthening for the Rosebud Sioux Tribe. The Rosebud Service Unit is a 35-bed hospital and the primary source of healthcare for the tribe. Health disparity is stark; in 2015, the median age for life expectancy for South Dakota residents is 80, whereas it is 56 for American Indians living in South Dakota. (South Dakota Department of Health, 2015). Longstanding social, structural and political determinants of health as well as the trauma and oppression faced by American Indians have compounded the challenges of the COVID-19 pandemic in the Indian reservations.

In January 2021, internal medicine and pediatric trained global health faculty at Boston Children's Drs. Leah Ratner and Shela Sridhar MD, MPH, joined the MGH Rural Health Team at Rosebud to support the response to the COVID pandemic surge among adults. Looking ahead, they will continue to collaborate with the Sicangu Oyate community and to continue to stay involved with future clinical care and project needs both for COVID-19 and beyond. This collaboration has also identified the opportunity for work in the future of pediatrics that will be led by Boston Children's Hospital.

POPCoRN



As the United States began to feel the impact of the COVID-19 pandemic, pediatric physicians across the nation were called upon to care for adult patients. Stepping outside of their comfort zone, these pediatricians were challenged with providing safe, equitable care to patients across the age spectrum.

Leah Ratner, MD, MS, then a second-year global health fellow and now GH faculty and Young Adult Program Attending Physician was studying tropical diseases in Lima, Peru, when she was evacuated due to COVID-related travel restrictions. After returning to Boston, she refocused her efforts to support the COVID-19 response in the United States. In collaboration with a team from Cincinnati, Dr. Ratner developed the [Pediatric Overflow Planning Contingency Response Network \(POPCoRN\)](#) to help increase adult-care capacity by pediatric providers and for children's hospitals providing adult care across the country.

As the network as continued to respond to the pandemic and the needs of the network's community, Shela Sridhar MD MPH, also global health faculty and Assistant Program Director for the BCH Global Health Fellowship stepped up to take on a leadership role within the network, alongside colleagues from other institutions. A needs assessment at the beginning of the nation's "second surge" allowed the network to form around four pillars of action: operational learnings, COVID-19 education, health equity and resiliency and wellness..

Since its inception, POPCoRN has provided a dynamic platform for pediatric physicians and hospitals to collaborate and problem-solve. In addition, this national network has developed numerous educational materials and webinars to further aid health systems as they adapt to the medical needs of their communities. Dedicated to promoting health equity, POPCoRN's justice-oriented approach highlights the necessity of supporting vulnerable populations, both during and after the pandemic.

POPCoRN has grown into a multi-institutional collaborative with the involvement of a spectrum of healthcare professionals. The network plans to continue to support the changing needs of physicians and to prioritize an equitable approach to care throughout the pandemic and into the future.

Implementing COVID-19 Response Indian Health Service



Located in western Montana on the Flathead River, the Flathead Reservation in Montana is home to the Bitterroot Salish, Kootenai, and Pend d'Oreilles tribes with a population of over 30,000 people with limited healthcare infrastructure spread across the 1.3 million acre reservation. As COVID-19 spread across the globe, one reservation hospital had no emergency preparedness preparations in place for an infectious disease outbreak like COVID-19.

One of Boston Children's Global Health faculty member, Ned Palmer, MD MPH, was working clinically on the reservation through ongoing projects and COVID-19 swept the nation, inching its way to Montana. Ned was able to leverage both his academic studies in humanitarian medicine from the Harvard T.H. Chan School of Public Health, and also his research on disaster resiliency, to take an active role in the development of emergency preparedness plans at the hospital.

Plans were created and implemented that covered the major pillars of outbreak response needs for this small hospital. These plans were wide-ranging, and included infrastructure, staffing, supplies, pharmaceuticals, and ethical guidelines on triage and rationing. Training modules were developed to expand the capabilities of the staff, allowing critically ill patients be taken care of locally when regional referral centers filled and could no longer accept transfers. Following the first and second waves, the hospital is now transitioning into the control-phase of the response with a growing vaccine distribution program in which the hospital acts as the logistical hub with spokes penetrating into smaller communities. Looking forward, Ned will continue to collaborate with members of the hospital leadership to respond to new developments in the pandemic, support clinical demands, and engage with regional public health leadership.



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