

# From Rhode Island to Colombia: Brown University Emergency Physicians Lead a Collaborative Consortium in a Post-Conflict Colombia

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## ABSTRACT

**INTRODUCTION:** Colombia represents a country in transition, from decades of devastating civil war to a post-conflict era of peace building, to the recent management of the influx of thousands of Venezuelan migrants. Brown University, along with Colombian partners, are leading the way in an international, multi-institutional consortium with the goal of emergency medicine capacitation across Colombia.

**PROGRAM IMPLEMENTATIONS:** Through these collaborative efforts, exchange programs for residents and faculty alike have been successfully established. A baseline assessment of emergency medicine education for medical students is underway. By the end of 2019, the Harvard Humanitarian Initiative (HHI) will launch an online tool in multiple languages, including Spanish, to help medical and nursing educators conduct systematic needs assessments of the way in which conflict has impacted medical and nursing schools.

**CONCLUSIONS:** Successful avenues for collaboration and partnership are described between Brown Emergency physicians and Colombian collaborating universities. These programs help to build capacity in Colombia and also provide education and support for residents and faculty at Brown University. Current work will see these programs grow into the future.

**KEYWORDS:** Colombia, emergency medicine, development

## INTRODUCTION

Colombia is a country of both immense progress as well as challenges. Colombia's 5 decades of internal armed conflict between the government, guerrilla groups, paramilitaries and drug cartels has led to the 2nd largest number of internally displaced people (IDP) in the world.<sup>1,2,3</sup> Currently, Colombia has transitioned into a post-conflict era although challenges remain.<sup>4,5,6</sup> Most recently, the Colombian government has opened its border, welcoming over 1 million migrants escaping the regime and famine in Venezuela.

In the context of this changing landscape, Brown emergency medicine (EM) providers have partnered with Colombian

EM physicians to create a multi-institutional, international consortium with the goal of improving emergency care delivery and emergency medicine training. The partnerships have been grown since initial collaboration seven years ago. Students and residents participate for 2–6 weeks during an elective time period with funding from the medical school or residency program. Bogotá offers an ideal setting in Latin America with accessible housing near the universities, no extra immunizations required nor extra security procedures needed. Colombia has become a major tourist attraction in South America and travel to the main cities is safe.

To this end, the consortium has focused on the development and support of exchange programs, the implementation of the WHO Basic Emergency Care (BEC) training targeted at low-resource settings, the creation of community-based public health projects for IDP and ex-FARC (*Fuerzas Armadas Revolucionarias de Colombia*/Revolutionary Armed Forces of Colombia) vulnerable populations, and humanitarian disaster relief work for the Venezuelan migrant population.

## DEVELOPMENT AND GROWTH OF EMERGENCY MEDICINE THROUGH EXCHANGE PROGRAMS

The team, led by Christian Arbelaez, MD, MPH, Vice Chair for Academic Affairs in the Department of Emergency Medicine at Brown, has been aiding in the development of emergency medicine through clinical exchanges, educational programs, academic collaborations, and leadership development.<sup>7,8</sup> Recognizing the educational value of understanding care in different settings and cultures, the team has established bi-directional exchanges. Numerous emergency physicians and trainees from Colombia have completed formal US observerships which include tailored training experiences, providing participants with skills to take back and incorporate into home departments.

Recently, the team has established an exchange between EM residents at Brown University and Universidad Javeriana in Bogotá, Colombia. Since coming to Brown University, Dr. Arbelaez has been able to leverage the unique resources in Rhode Island to continue his international work with local support from Brown Emergency Physicians, Lifespan, and Brown University. Thus, two inaugural Brown residents made the trip to Colombia this past March, working in San Ignacio Hospital, one of the busiest institutions in Bogotá.



Team photo on bridge that previously separated the front line of combat between the Colombian government and the FARC guerilla group.

Through this exchange, the residents gained a broader understanding of healthcare in a global environment. Exposed to new patterns of departmental flow and patient management, they were able to witness excellent quality care ongoing at San Ignacio while sharing their own experiences at Brown. They partnered with the simulation center to assist in teaching, and gained from the knowledge of local faculty who taught them innovative procedural techniques such as subclavian-guided central lines.

In recognizing that language is integral to cultural and interpersonal understanding, the residents also focused on cultural immersion and language development by enrolling in the Language Center of Universidad Javeriana. Their experience led to a deeper appreciation for the work of emergency physicians abroad and the value of international collaboration. The team looks forward to welcoming residents from Universidad Javeriana to Rhode Island Hospital in the near future. In addition, potential exchanges for additional specialties are being explored.

Focusing at all levels of education, the team has also created opportunities for faculty development. Several academic projects describing the state of emergency medicine and of the residency programs in Colombia have been published with faculty from Colombian Universities.<sup>7,8</sup> In October 2019, the team will welcome Dr. Leonar Aguiar Martínez as guest lecturer. Dr. Aguiar learned medicine through the years of conflict in Colombia, with first-hand experience as

a new physician practicing in the Northern city of Cúcuta. As his career progressed, he witnessed the transition of the country into a post-conflict era. Dr. Aguiar became instrumental in the establishment of emergency medicine as a new specialty in Colombia bringing home expertise gained through an advanced fellowship in emergency medicine at the Ronald Reagan Institute of Emergency Medicine at George Washington University in Washington, D.C.

Now, he practices as an attending physician within the Emergency Department at San Ignacio Hospital. During a lecture series for health professionals, students and the community, Dr. Aguiar will share his expertise on both the clinical practice of emergency medicine in the changing landscape of a post-conflict Colombia, as well as the development of emergency medicine as a specialty in Latin America.

#### **IMPROVEMENT OF EMERGENCY CARE DELIVERY IN RURAL AREAS THROUGH WHO BASIC EMERGENCY CARE (BEC) TRAINING**

Initial results from WHO BEC rollouts in Africa indicate that providing basic emergency medical training in a low-resource setting results in a significant increase in knowledge of such care.<sup>9</sup> Currently involved in the course translation, the team is planning to pilot a novel application of the BEC in Bogotá by integrating a training-of-the-trainers course into the medical school curriculum. This will arm new graduates

both with the knowledge and ability to teach acquired emergency skills across rural Colombia. Despite great strides, most emergency care in Colombia is provided by medical graduates with no residency or specialty training. This is especially true in rural, limited-resource settings. Introduced in May, a national longitudinal survey is currently following new physicians during their first six months out of medical school to assess their confidence and knowledge of emergency care. Using this information, the team will assess how to best support emergency medicine education during medical school for these future general practitioners.

### **CREATION OF COMMUNITY-BASED PUBLIC HEALTH PROJECTS FOR IDP AND EX-FARC VULNERABLE POPULATIONS AFFECTED BY THE CONFLICT**

In conjunction with colleagues from the Harvard Humanitarian Initiative and the Open Hands Initiative (OHI), Drs. Arbelaez and Patiño crossed cultural barriers to bring students from the Harvard School of Public Health and the Universidad de Antioquia together. OHI is a non-profit foundation that is based in New York City. Using a public health lens, their innovative course guided students through an examination of the reforms in education, transportation and urban design that led to the transformation of the city of Medellin, Colombia. It also asked students to assess current healthcare hurdles faced by the city's internally displaced population and create solution-driven recommendations and briefings, which they presented to stakeholders in Bogotá. Some of the students became involved in public health projects in an IDP settlement through connections they established during the course. Universidad de Antioquia and Brown University Faculty remain in touch.

In 2017 Universidad de Antioquia hosted the 3<sup>rd</sup> National Congress of Emergency Medicine in Colombia, with participation of Drs. Arbelaez and Patiño, who also came back in July 2018 to visit Universidad de Antioquia as part of their work as Ambassadors of the American College of Emergency Medicine to Colombia.

The Harvard Humanitarian Initiative, in close collaboration with the team, has conducted a survey to understand the impact of conflict on medical and nursing education in Colombia during the period of 1990–2016. Preliminary findings included the major socioeconomic and mental health impacts on medical and nursing students from rural and conflict-affected areas. Severely restricted access to medical education within these communities exacerbated the lack of local health care providers. The importance of shifting attitudes in the classroom towards students who may have formerly been combatants emerged as a theme, as did the profound need for soft skills such as conflict resolution and patient advocacy training for students of medicine and nursing who participate in a year of governmental social service

(Servicio Social), practicing in resource-limited settings.

Conflict-related social trauma has affected faculty, students, and patient populations, and the struggle to embrace coexistence in disparate parts of Colombian society extends to patient populations. In order to help promote a cadre of healthcare providers for low-resource areas, it will be necessary to improve access to medical and nursing education for a wider range of low-income students; it will also require thoughtful incentives to promote graduates to work in these areas past the 6–12 month of Servicio Social. Most medical and nursing faculty report that graduates participating in the Servicio Social program – especially when they are assigned to conflict-affected areas or “Red Zones” – lack adequate mental and emotional preparedness to succeed at providing healthcare. Possible interventions were suggested, including mental health and security trainings for those interested in the Red Zone or active conflict area work. New cross-disciplinary research related to the growth of post-conflict studies in Colombia may pose multiple opportunities for addressing healthcare needs.

### **HUMANITARIAN DISASTER RELIEF WORK FOR THE VENEZUELAN MIGRANT POPULATION: FUTURE DIRECTIONS**

Looking forward, the team is examining how to best aid in the current Venezuelan crisis.

As part of the Ministry of Health, Health Cluster, Brown emergency physicians have been participating in regular meetings with the local Pan American Health Organization office to identify the best way to support ongoing efforts to provide emergency care to Venezuelan immigrants. To this end, the team is working to finalize a concept note for emergency medicine training of providers along the Northern border and secure external funding.

### **SUMMARY**

After a signed peace agreement, Colombia entered into an era of rebuilding and reconciliation. It is now facing new challenges with the arrival of over 1 million migrants due to the humanitarian crisis in Venezuela. Colombia's healthcare sector, considered one of the most advanced and robust in the region,<sup>5,6</sup> is now faced with the difficult challenge of providing care to a large migrant population settling throughout the country.

Brown Emergency Medicine is currently spearheading a multi-institutional, international collaborative team dedicated to supporting emergency providers across Colombia as they continue face new challenges. However, the benefit is mutual, as students, residents and faculty come together across cultures and institutions to share, learn, and collaborate from Rhode Island to Colombia.

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