

EM in Brazil

Author: Dr. Christina Bloem is a second year fellow in international emergency medicine at George Washington University, where she is also pursuing a Masters in Public Health. She completed her emergency medicine residency at Kings County/SUNY Downstate, where she served as chief resident and was also involved in the development of their international division. Dr. Bloem is of Brazilian descent and has done medical work abroad in Peru, Brazil, Guyana, Côte d'Ivoire, India and Qatar.

Editors: Christopher Doty, MD FAAEM and Andrew C. Miller, MD are both from State University of New York (SUNY) Downstate Medical Center and Kings County Hospital Center in Brooklyn, NY. Dr. Miller is a resident in the Combined EM/IM Residency at Kings County Hospital.

Background

Brazil is a country of amazing complexity and beauty. With an area of 8,547,403.5 km², it is the world's fifth largest country geographically and is the fifth most populous country, estimated at close to 170 million people today. It is neighbor to all of the countries in South America except Ecuador and Chile and has an extensive eastern sea border along the Atlantic Ocean. The country can be divided into five main regions - north, northeast, southeast, south and west central - each with its individual climatic, economic and cultural characteristics. Brazil's major cities are São Paulo, Rio de Janeiro, Brasília, Belo Horizonte, Recife, Curitiba and Porto Alegre. Modern and extensive highways cover the entire country. Racially, Brazilians have three main backgrounds: Natives, Europeans (mostly Portuguese and later immigrants from other European countries) and Africans (brought during the Trans-Atlantic Slave Trade). Due to its recently developed and expanded industrial sector, Brazil is now rated as the world's tenth largest economy at market exchange rates and the ninth largest in purchasing power. In 2003, the government identified the primary burdens of disease as infant mortality, maternal mortality, chronic disease (particularly cardiovascular disease and cancer) and injury due to road traffic accidents, violence and suicide. Brazil has a national healthcare plan called "SUS" (Sistema Único de Saúde) which provides care to the majority of the country's citizens. There are also private insurance carriers available to the more socioeconomically privileged population.

The Emergency Healthcare System

Emergency medicine (EM) is not a new field in Brazil. In 2002, the Ministry of Health outlined a document, the "Portaria 2048," which called upon the entire healthcare system to improve emergency care in order to address the increasing number of victims of road traffic accidents and violence, as well as the overcrowding of emergency departments (EDs) resulting from an overwhelmed primary care infrastructure. The document delineates standards of care for staffing, equipment, medications and services appropriate for both pre-hospital and in-hospital. It further explicitly describes the areas of knowledge that an emergency provider should master in order to adequately provide care. However, these recommendations have no enforcement mechanism and, as a result, emergency services in Brazil still lack a consistent standard of care.

Pre-hospital emergency medical services use a combination of basic ambulances staffed by technicians and advanced units with physicians on-board. No universal phone number exists for emergency calls, and the dispatch center physician determines whether the call merits an emergency transport or not. Pre-hospital physicians have variable training in emergency care, with training backgrounds ranging from internal medicine to obstetrics to surgery.

Similar to the early years of EM in the United States, emergency department physicians in Brazil come from different specialty backgrounds, many of them having taken the job as a form of supplementary income or as a result of unsuccessful private clinical practice. Since 50% of medical school graduates in Brazil do not get residency positions, these new physicians with minimal clinical

training look for work in emergency departments. In larger tertiary hospitals, the ED is divided into the main specialty areas – internal medicine, surgery, psychiatry, pediatrics – and staffed by the corresponding physicians. Still, significant delays in care can occur when patients are inappropriately triaged or when communication between the areas is inadequate. In the non-tertiary care centers, which make up the majority of hospitals in the country, emergency department physicians are largely under-trained, underpaid and overstressed by their working conditions. This has compromised patient care and created an incredible need for improvement in the emergency care system.

Emergency Medicine Training & Academics

Although the specialty is not yet officially recognized by the accrediting medical board (the Conselho Federal de Medicina, CFM), Brazil has two emergency medicine residency training programs. The first residency program was established in Porto Alegre, the capital city of Rio Grande do Sul, the southernmost state in Brazil. They have graduated more than 45 emergency trained physicians and follow the American three-year curriculum model, currently with six trainees per year. The program is well recognized in the state, and its graduates are actively sought out for employment in local emergency departments and ambulance services. The second residency program welcomed its first class of six residents in April of 2008, in Fortaleza, Ceará, and follows the curriculum model of its predecessor in Porto Alegre. The third residency program is planned to start in February 2009 in Curitiba, Paraná. Other residency programs are in planning stages in the states of São Paulo, Rio de Janeiro and Bahia.

As a way around the complex politics of changing the medical community's specialty structure, in 1992 the University of São Paulo (USP) created the "Departamento de Emergências Clínicas," which focuses on medical, non-surgical emergency training for medical students and residents. The USP emergency department attends to almost 300,000 patients annually within a large, public, tertiary care hospital complex. They have a dedicated clinical and academic core faculty, primarily trained in internal medicine, who has published emergency literature in the form of both research studies and textbooks.

Brazil also has a national emergency medicine association, ABRAMEDE (Associação Brasileira de Medicina de Emergência) and a few state societies, including AMERS (Associação de Medicina de Emergência do Rio Grande do Sul) and SOCEMU (Sociedade Cearense de Medicina de Urgências). The First Brazilian Emergency Medicine Congress took place in Gramado, Rio Grande do Sul in September of 2007, and the Second Brazilian Emergency Medicine Congress is scheduled for September 2009 in Fortaleza, Ceará. Porto Alegre also hosted the WINFOCUS 4th World Congress on Ultrasound in Emergency and Critical Care Medicine in March of 2008.

Emergency Medicine as a Specialty

continued on page 11

The leaders in emergency medicine in Brazil have worked for many years to obtain specialty status without success. Emergency medicine is considered a sub-division of internal medicine by the accrediting board of medical specialties (CFM). Resistance to paradigm shifts in the entrenched specialty structure in Brazil continues to impede emergency medicine from breaking off into its own independent field.

Despite these barriers, the movement of emergency medicine in Brazil is now gaining significant speed, particularly given the headway made by the establishment of new residencies and the academic conferences of 2007 and 2008. The First Brazilian Emergency Medicine Congress produced a petition letter signed by hundreds of congress participants, sent to the CFM as a demand for specialty status. In June of 2008, leaders in emergency medicine from Porto Alegre, Fortaleza, and officials of emergency management from the State Ministries of Health joined in a meeting in the nation's capital of Brasília to emphasize the importance of adequate emergency training and the need for the specialty of emergency medicine. The Minister of Health, the Minister of Education and the Secretary of the National Medical Association of Brazil were all audience to these critical discussions.

The Future of Emergency Medicine in Brazil

Emergency medicine clearly has a growing presence in Brazil. Information exchange and development work are occurring through international collaboration, integrating Brazil ever more into the worldwide emergency medicine network. The residency programs are open to educational exchange rotations for physicians, and researchers at the University of São Paulo have expressed interest in performing joint studies with other institutions. Brazil's economic development not only brings about a "double burden" of communicable and chronic diseases, but also draws increased international attention, putting pressure on country officials to respond appropriately to the healthcare system's new demands.

The attention has reached critical mass, prompting leaders, both political and medical, to focus more on the rapidly developing field of emergency medicine, showing significant promise for achieving specialty status.

References

- Ministry of Health of Brazil. SUS from A to Z. <http://dtr2004.saude.gov.br/susdeaz/introducao/introducao.php> (accessed on July 2, 2008).
- Ministry of Health of Brazil. Portaria No2048. http://www.academiabarro-preto.com.br/portaria_2048_B.pdf (accessed on July 2, 2008).
- Bloem CMCP, Bertuzzi BD. Medicina de Emergência no Brasil e no Mundo, in: Martins HS, Damasceno MCT, Awada SB e colaboradores. Pronto-Socorro: Diagnóstico e Tratamento em Emergências. Editora Manole, Barueri-SP, 2^a edição, 2008, páginas: 3-9. (Emergency Medicine in Brazil and the World, in a Brazilian textbook entitled "Emergency Departments: Diagnostics and Treatment of Emergencies").
- Associação Brasileira de Medicina de Emergência (ABRAMEDE). www.abramede.com.br (accessed on July 3, 2008).
- Associação de Medicina de Emergência do Rio Grande do Sul (AMERS). www.amers.mapamedico.com.br (accessed on July 3, 2008).
- Ministério do Planejamento, Orçamento e Gestão. Radar Social – Principais Iniciativas do Governo Federal (Social Radar – Main Initiatives of the Federal Government). http://www.planejamento.gov.br/arquivos_down/spi/radar_social/Radar_social_completo.pdf (accessed on July 1, 2008).
- Pan American Health Organization (PAHO). Country Health Profile – Brazil, September 2002. http://www.paho.org/English/DD/AIS/cp_076.htm (accessed on July 1, 2008).
- The World Bank. Brazil Country Brief. <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEEXT/BRAZILEXTN/0,,contentMDK:20189430~pagePK:141137~piPK:141127~theSitePK:322341,00.html> (accessed on July 1, 2008).