EDITORIAL

A BOLD IDEA: The "Population" Specialist

Judith E. Tintinalli, MD, MS

University of North Carolina at Chapel Hill, Department of Emergency Medicine, Chapel Hill, North Carolina

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Emergency medicine today is very different from emergency medicine of the 1970s, when our practice was limited to the physical confines of the emergency department (ED) and the ambulance.

So—WHO ARE WE ANYWAY?
Family doctors take care of your family.
Surgeons cut you open.
Pediatricians take care of kids.
Anesthesiologists put you to sleep.
Cardiologists fix your heart.
Emergency physicians......?

The definition of who we are is complicated by the fact that organ-specific specialties do not have discrete 'rights' to diagnostics or procedures that in the distant past might have characterized a specialty. ST segment elevation myocardial infarction) STEMIs are diagnosed by emergency physicians, family practice physicians, internists, cardiologists, and emergency medical technicians. Lacerations are repaired by emergency physicians, plastic surgeons, mid-level emergency care providers, and family practice physicians. And the exponential growth and globalization of emergency care has changed the whole concept of emergency medicine.

A POPULATION-BASED SPECIALTY

Emergency medicine treats all disorders, all ages, any day and anytime. We provide care when prevention and community services fail. In general, the ED patient population reflects the age distribution and/or the prevalence of disorders in the community. For example, Nigeria has one of the highest road fatality rates in the world,² and motor vehicle accidents are responsible for a large burden of ED care.³ In Taiwan from 2000-2009, 25% of ED visits were made by children, with about 22% of the population aged 0-17 for that same time period.⁴ In the U.S., mood disorders are the third most common cause of hospitalizations for adults,⁵ and in North Carolina from 2008-2010, of ED visits related to mental health disorders, about 60% of visits were by patients with mood disorders,

and about 29% of those were admitted to the hospital.⁶ As global population age proportions shift toward the elderly, so do ED visits, and worldwide, the elderly account for at least 12-24% of ED visits.⁷

A UNIQUE CLINICAL PRACTICE

There are several features of emergency medicine practice that are unique when compared to other specialties. We must care for any type of critical illness: for example, STEMI, stroke, sepsis, multisystem trauma, resuscitation, behavioral emergencies, abdominal catastrophe.

We provide care for multiple patients at a time—in the ED, at mass gatherings, and during disasters. This is done through a variety of functions: triage, standing orders, multitasking, rapid decision-making and patient prioritization. Compare our practice to your own visit to a primary care physician: one patient, one doctor in the examining room; one patient, one surgeon in the operating room; one patient, one cardiologist in the cardiac cath lab.

Emergency medicine is an integrative specialty. Core activities are coordination of care across specialty lines, and prioritizing care components between specialties.

Emergency medicine maintains a high sensitivity for illness and injury, whereas organ-specific specialties want high specificity for their own expertise: cardiologists want coronary artery disease, not atypical chest pain; surgeons want appendicitis, not undifferentiated abdominal pain; orthopedists want broken bones, not chronic back pain.

A MANAGEMENT SPECIALTY

Emergency physicians are decision makers above all. We are natural-born managers. We develop standardized and integrated policies and procedures and apply them to daily practice. We define roles and provide supervision for the emergency care system. We focus on operations. We categorize patient complaints into different levels of care (fast track, acute care, etc.) to improve efficiency. We use data analysis to monitor individual and group activity.

SYSTEMS-BASED PRACTICE

Systems-based practice is one of the six core competencies identified by the Accreditation Council for Graduate Medical Education, and applies to all specialties. However, systems-based practice is core to emergency medicine. Consultation, transfer and disposition must be tailored to local and regional healthcare resources. Every step of care must be fit to the patient's socioeconomics, compliance, and access to care. Many of us memorize the Wal-Mart \$4 list so we can give the patient the best shot at affordable medications. We visualize the big picture: the patient's complaint is part of the body system, and the treatment plan is part of the healthcare system.

ANY AND EVERY ENVIRONMENT

No more 'locked-in syndrome.' Emergency medicine has stepped out of the ED and ambulance to manage poison control centers and hyperbaric chambers; incorporate critical care and palliative care into emergency care; practice alongside orthopedists in sports medicine; and develop leadership roles in information technology.

Emergency Medicine: Everything. Everyone. Everytime.©

Address for Correspondence: Judith E. Tintinalli, MD, MS. University of North Carolina at Chapel Hill, Department of Emergency Medicine, Chapel Hill, North Carolina. Email: judith_tintinalli@med.unc.edu.

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REFERENCES

- Rosen P. The biology of emergency medicine. *JACEP*. 1979;8:260-283.
- Why Nigeria's roads can be terrifying. The Economist. 2013.
 Available at: www.economist.com/news/middle-east-and-africa.
- Solagberu BA, Ofoegbu CK, Abdur-Rahman LO, et al. Prehospital care in Nigeria: a country without emergency medical services. *Niger J Clin Pract*. 2009;12(1):29-33.
- Jeng MJ, Lee YS, Tsao PC, et al. A 10-year population-based nationwide descriptive analysis of pediatric emergency care. BMC Pediatr. 2014;14:100.
- Mental Illness Facts and Numbers. National Alliance on Mental Illness. www.nami.org.
- Hakenewerth AM, Tintinalli JE, Waller AE, et al. Emergency departments visits by patients with mental health disorders – North Carolina, 2008-2010. MMWR. 2013;62(23):469-472.
- Fayyaz J, Khursheed M, Mir MH, et al. Pattern of emergency department visits by elderly patients: study from a tertiary care hospital, Karachi. *BMC Geriatrics*. 2013;13:83-90.