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THE STATUS OF EMERGENCY MEDICINE IN ETHIOPIA, CHALLENGES AND OPPORTUNITIES

Menbeu Sultan, MD¹, Finot Debebe, MD², Aklilu Azazh, MD²

ABSTRACT

Back ground: Emergency medicine (EM) is one of the most rapidly developing medical specialties in Africa. After just 8 years since its introduction in Ethiopia, there were 22 qualified emergency medicine specialists and 2 pediatric emergency specialists in the country. The aim of this study was to qualitatively assess the status of emergency medicine and the challenges and opportunities of working as an emergency physician in Ethiopia.

Methodology: An interview and a videotaped focus group discussion involving 17 selected participants were done in December of 2016. The data was transcribed, translated and analyzed by identifying the most common themes that emerged.

Result: All the participants agreed the field of emergency medicine is rapidly expanding in Ethiopia. Six themes were identified as challenges: The undeveloped state of the emergency medical system, the disorganization prevalent in emergency rooms, an undefined scope of practice, problems with acceptance of the specialty, poor continuity of care, and an unsatisfactory remuneration. Meanwhile, the increasing attention given by the government and the demand for pre-hospital and in hospital emergency care were identified as future opportunities for growth of the specialty.

Conclusion: Emergency medicine in Ethiopia faces multiple challenges as it is a new field in a resource limited setting. The challenges range from problems with acceptance to difficulties of patient disposition. In order to overcome these challenges, government level support and advocacy work among health sectors, physicians, and medical associations is imperative.

Key words: Emergency medicine; new specialty; Ethiopia

INTRODUCTION

In the last 10 years, Ethiopia has enjoyed a growing economy with an increasing health care infrastructure and health coverage. The life expectancy of the population is increasing significantly with consequent changes in disease epidemiology. For decades, the major health problems of the country were preventable communicable diseases and nutritional disorders. But currently, non-communicable diseases and accidents are becoming major concerns (1-5). The government of Ethiopia has tried to tackle these healthcare challenges by increasing the number of hospitals and health care professionals. Specialty and subspecialty services are rapidly expanding, training programs have been introduced with emergency medicine (EM) being one of the most recent additions (6).

Since the introduction of emergency medicine training programs in 2009, twenty two emergency physicians and over 80 EM specialist nurses have completed the program. During the period of this study, two centers comprised of Addis Ababa University and St. Paul hospital millennium medical colleges provided specialty training with around 40 residents in training during the study time. Six hospitals now have emergency centers run by these EM specialists.

Despite the progress made in emergency care since the introduction of the specialty, the status and major challenges to the nascent field of emergency medicine has not been studied. Examining the status, challenges, and opportunities for emergency medicine in Ethiopia will help us learn and better prepare for its future growth. In this study, the authors seek to qualitatively understand the status of emergency medicine during the study period, evaluate the challenges of practicing emergency medicine in Ethiopia, and examine the future opportunities for working as an emergency specialist in Ethiopia.

¹ Department of Emergency Medicine, St. Paul's Hospital Millennium Medical College ² Addis Ababa university

^{*} Corresponding author: smenbeu@yahoo.com

MATERIALS AND METHODS

Study area and design: This study was conducted in Ethiopia where various emergency related illnesses are prevalent, including manmade and natural disasters. In addition the capital city Addis Ababa is a site for multiple major conferences and numerous international organizations including the African union (AU) and the Economic Commission for Africa (ECA). We conducted a qualitative study involving both in-depth interviews and focus group discussions. The study participants included Ethiopian emergency specialists and/or leaders of emergency medicine working in all parts of the country.

Sampling and data collection: An in-depth interview of nine purposively selected key informants and two focus group discussions involving 13 participants were done in December of 2016. The interviewee and participants of the focus group discussions were emergency medicine specialists working in a variety of hospitals in the country and leaders of emergency medicine at both the hospital and ministry of health levels. The interviews and focus group discussions were videotaped. Interview and facilitation of FGD was done by the lead investigators.

Data analysis: The data was transcribed and Amharic versions were translated to English. The findings were analyzed using triangulation and arranged thematically. The themes identified as challenges and possible future opportunities were described. Selected quotes were provided in each section of the identified themes. In this study, emergency medicine specialists were defined as doctors with a degree in medicine who subsequently completed specialty/subspecialty training in emergency medicine or a related field. Leaders are physicians who are government officials in emergency related field or those who took the initiative to establish emergency centers but did not formally receive specialty training in emergency medicine.

Objective of the study: The objective of this study was to qualitatively understand the status of emergency medicine in Ethiopia and examine the challenges and opportunities of working as an emergency medicine specialist in this relatively new specialty.

RESULTS

Demography of participants: A total of seventeen participants were involved in the study. Of the participants, 13 were trained emergency medicine specialists and four were doctors involved in the leadership of emergency medicine at various levels. The work experience of the EM specialists ranged from greater than five years to less than one year. Four of the participants worked outside of the capital city, Addis Ababa. Five (29.4%) of the participants interviewed were females.

The Status of Emergency Medicine in Ethiopia: The participants agreed that EM is in its infancy but was progressing rapidly. They stated that the specialty helped fill the emergency care gap in the health care system and had a positive impact on the wellbeing of citizens while augmenting the functionality of the medical system. All of the participants stated that, EM specialists in Ethiopia have improved early appropriate diagnosis, management, and disposition of emergency patients with improved resuscitation of trauma patients.

Some of the achievements mentioned included the incorporation of emergency medicine in most undergraduate medical training curriculums, the expansion of postgraduate programs, and paramedic training. The rapidly increasing number of applicants for residency training was also considered an achievement. The establishment of the emergency medical system and the introduction of emergency and trauma dedicated centers throughout the country were cited as successes since the advent of the specialty.

Challenges: Six themes were identified as challenges.

Challenges as a new field: The challenges identified being a new field ranged from lack of a well-established system to high risk of burnout. Due to its infancy, there are only a small number of EM trained specialists which is a challenge for service delivery and system development. They mentioned that staff were overburdened and faced a high risk for burnout in an attempt to fill the gap. In addition, EM training was found to be unsatisfactory by some of the participants. They mentioned that it lacked organization and clinical focus.

"Currently, unless we focus the distribution of the specialists to a few teaching centers and we improve the quality of the training, there will be a threat to its sustainability as a field."

Undefined scope of practice: The emergency physicians noted that their role in the emergency departments (ED) is poorly defined. Poorly defined roles combined with no intra-or inter-institutional job descriptions make the practice very difficult. They also emphasized the difficulty of practicing in a limited scope while there is a high health care demand in a setting of a shortage of other specialties.

"Scope will depend on the setup where we are practicing."

"We are expected to be generalists, but we cannot be good for all of the practices."

Poor emergency room (ER) situations: Emergency medicine specialists feel that infrastructure and human resources are inadequate and poorly organized. They deliver care with limited resources, under overcrowded conditions, with poorly trained emergency nurses and non-existent social workers. They also expressed concern over combative patients and their families with little security personnel in emergency rooms.

"ED environment is 'harsh and demanding." Lack of adequate infrastructures and resources which make ED practice challenging".

Acceptance:

Within the medical community: Some of the participants noted that the medical community seems comfortable with the old system where there were no emergency physicians. They stated a few specialists who were practicing before EM introduction had resistance in allowing EM specialists to practice in their scope. However, others feel the new graduating general physicians know the role of EM specialists and are more cooperative.

"The medical community has a biased opinion regarding the role of emergency physicians (majority). They think their role can easily be replaced by other specialties. Most doubted the quality of the training and felt the emergency physicians lacked competence".

"They think what emergency physician does is always wrong. Every morning session they want to point out the things that were done wrongly in the ER."

Within the existing system: The participants pointed out the shift in policy at the government level; quality of care has emerged as top of the agenda. The development of emergency medicine and critical care

directorate at the ministry of health and regional health offices were cited as signs of progress. The participants from Addis Ababa agreed there is a better understanding of the pivotal role that emergency and critical care medicine play in achieving high quality care. However, for practice outside of Addis, there is little to no room for emergency physicians to practice. The support from local hospital administrators is claimed to be inadequate.

"Hospitals are neither ready to accept emergency physicians nor to improve infrastructure."

"The system that was developed before the existence of emergency physicians has created a difficult environment of practice. For example in a regulatory body only anesthesiologists were mentioned as prehospital care providers"

Public acceptance: All of the participants agreed that the lay community does not differentiate EM specialists from other specialties and most do not expect specialists to be available in emergency rooms. In the absence of awareness, many felt it difficult to gain community acceptance.

"Most feel emergency room doctors are not specialists."

Problems with continuity of care: The participants stated that underdeveloped prehospital care and inadequate care of critically ill patients at primary emergency centers, along with fragmented inter facility transfer of patients, has made continuity of care suboptimal. The shortage of intensive care and inpatient beds along with a lack of rehabilitation centers and palliative care units made patient disposition challenging from emergency rooms. They felt that the demand for subspecialty services like oncology, cardiology, and neurosurgery could not be met due to scarcity of the fields in the country. As a result, patients are forced to board for prolonged periods in emergency rooms.

Unsatisfactory remuneration system: Some of the participants stated that the compensation for the demanding work of EM was unsatisfactory. EM, by its nature, demands the full time (24hr/7days) coverage of the emergency room. The fixed payment scale for all types of specialties in Ethiopia does not sufficiently address the unique challenges of EM practice. "The underpaid emergency physician cannot moonlight as the discipline requires the physician to stay for long tiresome hours on the floor leading, sooner or later, to burnout".

Opportunities: The focus given at the government level to emergency medicine was cited as an opportunity for future development of the field. Federal ministry of health and regional hospitals have developed dedicated departments for emergency medicine. Assuming leadership roles early, emergency physicians will help determine the future of emergency medicine in Ethiopia. These physicians will be responsible for creating a career path that will serve the future of emergency medicine as a specialty. The recent improvements in prehospital care along with engagement of the private sector, including the aviation industry, may help in the development of the field.

"EM can bridge the gap amongst the public, policy makers and professionals. It opens the opportunity for research, policy advisory, academic medicine and any combination thereof".

The way forward: Participants proposed different mechanisms, subdivided into four themes:

Policy and Advocacy: Emergency physicians believe that creation of awareness should be made at various levels of the health system and during different national conferences. They stated that working with the Federal Ministry of health and health bureaus to establish both a pre- and in-hospital emergency system as very important first steps. Hospitals should be required to provide adequate infrastructure for emergency medicine services. There should be regulations that mandate the private sector to have adequate infrastructure. Emergency physicians should increase their engagement in consultancy services. They also pointed to the need for research to show the impact of incorporating context appropriate functional emergency system.

"Emergency specialists need to be equipped with activist inclinations to help them see themselves through such challenges".

Training: The training of emergency physicians should be further strengthened. The quality of the training should be improved. Study participants clearly outlined the need to start emergency medicine residency programs in different institutions. It was also felt that fellowship programs should be launched promptly to advance the career of emergency physicians.

"The training for EM should be more clinically focused to meet the demands of society."

Working Environment: Most agreed that the work load is disproportional to the number of physicians. Introduction of shorter duration of shifts will hopefully help to overcome this burden. They stated that the number of support staff is inadequate. Therefore, emphasis should be given to increase the number of support staff.

DISCUSSION

This study has shown that, despite emergency medicine being a new field in Ethiopia, it has progressed rapidly with a tangible impact. The study also identified the challenges of practicing emergency medicine in Ethiopia primarily due to being a new field in a resource limited country. Challenges also include having an undefined scope, underdeveloped emergency facilities, and poor continuity of care. As in most countries worldwide, routine emergency care demand will increase with population growth and development. Hence, emergency medicine is not a luxury for Ethiopia but a necessity.

The increased burden of road traffic injuries and non-communicable diseases along with unresolved infectious, nutritional, and pregnancy related illness in Ethiopia underscore the importance of emergency medicine in the country. These problems necessitate that emergency rooms should evolve to meet the increasing demand. In addition, Addis Ababa is the seat of many international organizations. Several international meetings and workshops are conducted in Addis Ababa and other large cities of Ethiopia. Emergency rooms need to handle these periodic surges in demand for quality emergency care. If the country cannot meet this demand, it will adversely affect the chances of hosting these international conferences.

Our study also identified some of the opportunities of emergency care in Ethiopia. Government support for the field of emergency medicine is one of the opportunities. This focus had helped the specialty to fill the emergency care gap in the medical system. The growth of emergency medicine was also reported as a cause for optimism for the future of the field. The recognition of emergency care as a crucial service in the hospital, the development of pre-hospital services in Addis Ababa, and the expansion to all regions with 1 ambulance for 100,000 populations was reported with due focus given by the government. However, as there is huge emergency care demand, there should be more focus and investment.

At this early stage of emergency medicine, there is a huge challenge of meeting the demand for emergency services in the country. The difficulty of showing the direct impact of emergency medicine specialists on patient care may have contributed to the difficulty in its gaining acceptance. Similar experiences were reported by most emergency specialists in other countries when emergency medicine was instituted as a new specialty (7-10). Better effort needs to be made to demonstrate the importance of emergency medicine in the delivery of acute and critical care that will ultimately improve the efficiency and quality of healthcare of the country as a whole (11-12). In addition, published literature of EM on efficiency, cost of care, public health or preventive medicine, radiology, trauma, airway management, ultrasound use and other fields and procedures can be used as an advocacy tool (13-14).

In this study, focus on training was also identified as a challenge. The training mainly concentrated on critical care, and other inpatient service care may have diverted the focus of the specialty. This problem has been reported from the Netherlands and other similar studies which partly can be solved with focus of training in emergency room patient management and improving patient disposition. In addition, training for context appropriate specialty and primary emergency care providers training and for improving lower level emergency care can improve the continuity of care and chain of survival (15-17). As the problems are to be solved by current and future emergency specialists, development of leadership and management skills in addition to the specialty train-

ing will be required. Working as a group and setting a minimum scope of practice and distributing it to all levels of health care providers and leaders is mandatory.

Limitation: The fact that the study involved mainly emergency physicians with limited involvement of the public, policy makers and other health care providers may limit the completeness of the study. Since the physicians are working in a limited number of public hospitals it will be difficult to generalize the finding.

Conclusion: Emergency medicine is rapidly expanding in Ethiopia with challenges and opportunities. These challenges stem largely from it being a recent specialty and from resource limitations. In order to overcome these challenges, government focus on strengthening the capacity of the already established centers, increasing availability of new centers, improving remuneration of those working in EM, and increasing the number of professionals trained in EM is needed. In addition, the identified opportunities such as huge emergency care demand and government focus should be addressed.

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