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Establishing Emergency Medicine in Iran: a Post-implementation Perspective

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INTRODUCTION

In the 1990s, a comprehensive evaluation of national emergency care (EC) system was performed by the Iranian Ministry of Health and Medical Education (I-MOHME) to identify gaps in timely and proper EC delivery. It was then concluded that a refurbished patient-centered specialty, namely emergency medicine (EM), could reduce or close these gaps.

At its implementation planning phase, there were two major and entirely different models of Emergency Medicine (EM) namely the Anglo-American and the European referred to in the literature as “Franco-German” (Arnold Paper). I-MOHME took it upon itself to implement the Anglo-American version of EC as seeing it was a better fit with the well-developed national pre-hospital Emergency Medicine Service (EMS), already in existence since 1978. The Anglo-American model was also more compatible with the educational curricula of Iranian medical students and residency trainees. In 1999, a collaboration between Iranian and American medical universities was established.¹ Professor James Holliman and Jeffrey Smith played an important role in the implementation of EM in Iran. In 2000, I-MOHME sent six Iranian faculty members from different specialties to George Washington University as part of a short-term faculty exchange program with the aim of learning the steps on how to start a national

EM residency training program.

It is evident that designing a new specialty program with an overlapping curriculum requires a rigid transformational change across different residency programs. More so, it would need the strong support of I-MOHME who facilitated the process.

The first EM residency training program appeared in 2001 at the “Iran University of Medical Sciences”. In 2018, the number of medical universities with approved EM residency training program reached 25.²

Iranian physicians undergraduate medical education lasts seven years: 2 years pre-medical course in basic sciences, 1 year of pathophysiology of diseases, 2.5 years of externship and 1.5 years of supervised internship period. Afterwards, these graduating Medical Doctors (MD) are essentially General Practitioners (GPs) who are required to perform 2 years of community service in low resource provinces or rural areas around the country. Towards the end of this service, graduates participate in a national residency written entrance examination; if they achieve adequate scores, they can apply for residency programs, such as EM. The EM residency curricular matters are devised uniformly across universities by I-MOHME. The residency program is a 36-month post-graduate training program.

The Iranian Society for Emergency Medicine is a non-profit national EM organization that was established in 2006 and is dedicated to improving the national EC system.

In the first few years post-implementation, the main challenges for EM specialists centered around the lack of recognition of their specialty not only by the population but also by specialists in other fields. After 2002, annual key performance improved the

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EC quality within Emergency Departments (EDs) with assigned EM specialists on a full-time basis, 24 hours/7 days a week. Such a realization led I-MOHME to increase the number of EM residents accepted into the national program. This posed a major threat to the quality of education delivered to EM trainees since the decision was not matched by an increase in dedicated and qualified program sites, educators or administrators that can oversee or guarantee the quality and adequacy of the training.

DISCUSSION

Eighteen years after the initiation of the first EM training program, the recognition of EM as a distinct profession has seen higher levels understanding and tolerance. In fact, the genesis of the practice's development lies in the acknowledgment that emergency medicine entails a characteristic body of knowledge requiring specialized practitioners or physicians.³ However, new challenges are facing EM physicians today. The greatest challenge is what's referred to as "burn-out." In 2013, a relevant survey was administered on EM residents and physicians by Jalili et al. (Maslach Burnout Inventory) study.⁴ This research laid out an average burn-out score for emotional exhaustion, depersonalization and personal accomplishment and the scores came as follows: 22.94, 9.3 and 31.47; respectively. Fifty-six percent of surveyed participants had emotional exhaustion, 66% experienced depersonalization, and 78% endured problems with personal accomplishment. Inadequate and limited access to the necessary medical equipment, improper ED design and interaction with actors in other specialties were frequently reported as causes for burnout. In 2016, Vaziri et al. reported that the mean burnout score amongst Iranian EM residents for emotional exhaustion, depersonalization and personal accomplishment were about 40.25, 22.04, 30.25; respectively.⁵

In 2016, Farahmand et al. performed a qualitative study on EM physicians who had at least 2 years of work experience. The purpose of the study was to explore and assess their take on EM as a career path.⁶ The study revealed that insufficient income, poor recognition of the specialty by the population, inadequate organized medicine and/or government

support, working in an insecure, overcrowded and stressful workplace with a lot of night shifts are major challenges confronting Iranian EM physicians. It was also mentioned that faculty members and consultants at medical universities are more optimistic about their careers than EM physicians who work in non-academic settings.

Nowadays, lack of continuous system support and encouragement is another challenge facing EM physicians. Sometimes the latter are confronted with unreasonable ill-prepared directives or protocols that limit their private sector practice or force them to work in poorly paid governmental or public hospitals.

On another note, a national health transformation plan (HTP) has been in place in Iran since 2014 with the aim of improving patient care.⁷ The goal was ideally to decrease out-of-pocket (OOP) health expenditures and enhance fairness in financial contributions. In 2015, one year after developing HTP, the analyzed data revealed a reduction for OOP health expenditures about 33% on inpatient health services per person (capita). Simultaneously, household catastrophic health expenditure decreased from 2.9% to 2.1%.⁸ Due to this national healthcare transformation plan, EDs faced a surge in the number of patients seeking medical treatment for the less emergent chief complaints. As a result, Iranian EDs became overcrowded. Understaffed EDs coupled with a relatively high ED provider workload and a significant drop in physician income became another major source of frustration.

Pursuing a career in a stressful, overcrowded and poorly paid working environment led to a decrease in the number of practicing EM residents. Today, young Iranian medical physicians prefer to continue their study in a less stressful and alternatively well-paid specialties instead of EM - a new challenge that should be promptly addressed.

CONCLUSION

Burnout and quality of training issues are facing Iranian emergency medicine physicians and compromising Iranian Emergency Care. Solutions include securing proper EP compensation in the public sector or by authorizing the establishment of

private practice settings (e.g., Urgent Care Clinics.), starting fellowship programs as a motivation for EM physicians to increase the depth of their knowledge and their practice skills and the initiation of well-being programs. Additional solutions include collaboration with international societies, starting physician exchange programs such as visiting physician electives, sabbaticals, jointly organized workshops or research to reinvigorate the interest of talented young medical physicians in EM as a specialty.

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