LETTER TO THE EDITOR **DOI: https://doi.org/10.18502/fem.v7i4.14470**

Once in the lifetime experience

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Published online: 2023-12-11

Cite this article as: Mirfazaelian H, Thiruganasambandamoorthy V. Once in the lifetime experience. Front Emerg Med. 2023;7(4):e32.

1. To the editor-in-chief

Emergency medicine (EM) is one of the most difficult fields of medicine, and specialists in this field should handle different tasks, simultaneously. According to some reports, this group has the highest burnout level among different medical specialities (1). It is necessary for the professionals in this field to zoom out once in a while. Sabbaticals are good opportunity for this purpose among academics. This period not only provides a time window to get away from work stress, it also helps to broaden people's view via learning new materials. Over one year, September 2022 – August 2023, I completed my Master of Science in epidemiology degree at the University of Ottawa. In addition, the work at the Ottawa hospital research institute (OHRI) which is well known across the world for its excellence in EM research provided me a unique opportunity to participate in some research studies. I detail a few observations below.

Both the University of Ottawa within its faculty and the OHRI have researchers who are physicians and non-physicians. Non-physicians include other allied health professions such as nursing, physiotherapy, and scientists with expertise in basic sciences.

Hence, the training program includes non-clinical students and physicians who are already certified in different specialities. Interestingly, the number of physicians from different discipline was reflective of their activity in the research institute. For instance, there were more cardiologists, nephrologists, and EM physicians than other specialities. To facilitate research training for those with clinical responsibilities, both the clinical departments within the hospital and the university have made accommodation such as protected time from clinical duties, and scheduling the training program so that clinical duties can be performed and finally even completing the master's degree in one year in an intense fashion, the way that I did. These measures highlights the importance of system level changes to save resources and time as evident in this renowned center.

The OHRI, the research arm of The Ottawa Hospital in the Canadian capital, Ottawa is one of the global scientific leader in several areas of medicine specifically EM. This center is well known for its clinical prediction tools for trauma, neurological and cardiovascular emergencies. (e.g., Ottawa ankle rules (2,3), the Ottawa chest pain cardiac monitoring rule (4), the Canadian syncope risk score (5)) These risk tools are now used widely around the world. This success was achieved by defining set of standards for robust methodology to derive prediction tools (6). The EM research group includes nine career researchers who have received more than 12 million dollars in peer-reviewed funding from different national and international agencies and have published more than 300 peer-reviewed papers, many in high-impact journals. They also have emergency medicine research fellowship that has trained young researchers from around the world (1). During my time in Ottawa, I worked in the research group led by Dr. Venkatesh Thiruganasambandamoorthy whose main research focus is syncope. His team derived and validated the Canadian syncope risk score (CSRS) for risk stratification of syncope patients in the emergency department (5). In general, I found that it is hard work, patience, persistence, and innovative ways of conducting research such as electronic data capture, 24/7 patient enrollment with the help of frontline clinicians, and protected time for research that makes this group successful (1).

Finally, I was an observer during some clinical shifts in the emergency department at The Ottawa Hospital, a large tertiary care teaching hospital. Surprisingly, the clinical practice was similar to my institution in Iran as the evidence stemmed from our common scientific resources. However, there were some differences that were evident. One is an organized, robust, and convenient outpatient referral system that works seamlessly with patients automatically called for follow-up albeit it may take longer than expected. A critical strategic approach is even with human resource shortages in clinical care with wait times in emergency departments approaching 10 hours, their ongoing commitment to research and development.

In summary, accommodating to the needs of the already qualified professionals for educating them in other areas such as research can play a significant role in improving the quality of both their work and the healthcare system. In my point of view, perhaps this step is the next direction for improving the quality of education, research, and management

in Iran.

2. Declarations

2.1. Acknowledgement

None.

2.2. Authors' contribution

HM and VT equally contributed to this manuscript.

2.3. Conflict of interest

None.

2.4. Funding

None.

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