

Brain Drain Within the Field of Academic Anesthesiology in Texas

Guillermo Saldana¹, Yuli Lim², and Richard Hubbard²

¹The University of Houston College of Medicine

²Baylor College of Medicine

Abstract

Brain drain describes the emigration of highly educated professionals from resource deficient countries to wealthier ones.¹ This phenomenon profoundly impacts healthcare on a global scale, providing much-needed physician workforce to certain locations while depleting healthcare personnel in resource-limited regions.² Our study investigates the effects of this phenomenon on the field of academic anesthesiology in Texas. We hypothesize that the anesthesiology faculties of the state of Texas rely on the work of anesthesiologists that are foreign-trained international medical graduates (IMGs).

Methods

We compiled a list of anesthesiology residency programs in Texas, and identified the locations (countries, nations, and/or states) of faculty anesthesiologists' medical schools and residency programs. The number and residency locations of faculty anesthesiologists who had immigrated to the United States following their medical education abroad was recorded.

Results

Out of 289 faculty anesthesiologists included in the study's sample, 31 physicians (10.7%), are IMGs (Table 1). Asia contributed the largest number of physician faculty members, with 15 individuals (5.2% of total faculty). Of those faculty who attended medical school outside of the US, 23 (74.2%) completed residency outside of Texas (Table 2).³

Conclusion

This study supports the hypothesis that a considerable proportion of the anesthesiology faculty in the state of Texas qualify as international medical graduates. In addition to the experience they bring with them from their nations of origin, they possess diverse training backgrounds from across the United States. These clinicians play a vital role, not only in providing care to patients, but in educating future physician anesthesiologists. Moreover, it must be acknowledged that their contribution to our system comes at the expense of the many nations from which they hail, exacerbating the system of brain drain that further worsens global health inequality.

Country/Region (19)	
Asia	15
Azerbaijan	1
China	3
India	5
Jordan	1
Israel	1
Russia	1
Pakistan	3
Africa	3
South Africa	1
Egypt	1
Nigeria	1
North America	2
Mexico	2
South America	5
Peru	1
Argentina	1
Uruguay	1
Colombia	2
Europe	3
Belgium	1
Greece	2
Caribbean	3
Grenada	2
Sint Maarten	1
total	31
*3 International Medical Graduates were excluded because no information on their medical school was found	

Table 1. Distribution of IMG faculty anesthesiologists

Residency By State	27
New York	3
Louisiana	2
Ohio	3
DC*	1
Massachusetts	1
Florida	2
Arkansas	1
Virginia	1
Missouri	1
Pennsylvania	1
New Jersey	1
Georgia	1
Texas	8
Illinois	1
Residency By Country (2)	2
India	1
UK	1
total	29
*District of Columbia, included as equivalent to a state	
**5 doctors were excluded because no information on their residency was found	

Table 2. Residency distribution of IMG anesthesia faculty physicians

References

1. Pang T, Lansang MA, Haines A. Brain drain and health professionals. *BMJ*. 2002;324(7336):499-500. doi:10.1136/bmj.324.7336.499
2. Hagopian A, Thompson MJ, Fordyce M, Johnson KE, Hart LG. The migration of physicians from sub-Saharan Africa to the United States of America: measures of the African brain drain. *Hum Resour Health*. 2004;2(1):17. Published 2004 Dec 14. doi:10.1186/1478-4491-2-17
3. Anesthesiology residency programs in Texas. Residency Programs List. 2023. Accessed March 2023. <https://www.residencyprogramslist.com/anesthesiology-in-texas>.