



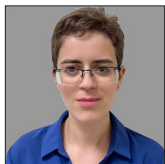
Letter to the Editor

In the land where neurosurgery lost its pride: Can we find redemption?

Zahraa F. Al-Sharshahi¹, Wamedh Esam Matti²

¹Department of Neurosurgery, University of Kentucky, Kentucky, United States, ²Department of Neurosurgery, Dr. Sa'ad AL-Witri Hospital for Neurosciences, Baghdad, Iraq.

E-mail: *Zahraa F. Al-Sharshahi - zfal223@uky.edu; Wamedh Esam Matti - drwamedhesam@gmail.com



*Corresponding author:

Zahraa F. Al-Sharshahi,
Department of Neurosurgery,
University of Kentucky,
Kentucky, United States.

zfal223@uky.edu

Received: 29 March 2024

Accepted: 10 July 2024

Published: 26 July 2024

DOI

10.25259/SNI_234_2024

Quick Response Code:



Dear Editor,

The state of neurosurgery in low- and middle-income countries (LMICs) paints a grim picture, demanding urgent attention and decisive action. In stark contrast to its revered status as a premier medical specialty in high-income countries, neurosurgery in regions like Iraq has plummeted to disheartening levels of disinterest and disillusionment.^[3,4] While in the United Kingdom, North America, and Europe, neurosurgery stands as the pinnacle of medical specialties, attracting the brightest minds and most competitive applicants, in places such as Iraq, it has become a last resort for individuals who are unable to secure positions in other fields. This scenario contributes not only to a deficit in the number of neurosurgeons available but also to a specialty populated by individuals who may not have chosen it deliberately and might lack genuine interest. This issue is particularly concerning in neurosurgery, a discipline renowned for its unforgiving nature and exacting standards.

Let us first confront the stark realities that have precipitated this decline. In LMICs, particularly those marred by conflict and instability like Iraq, neurosurgery embodies a grim narrative of scarcity, trauma, and neglect. Resource deficiencies cripple the ability of neurosurgeons to deliver quality care, with outdated equipment and limited access to essential surgical supplies hindering their efforts at every turn. Compounding this issue is the dearth of subspecialty training programs, leaving neurosurgeons ill-equipped to handle the diverse array of cases that they encounter.^[2,3]

Yet, perhaps the most insidious threat to neurosurgery in LMICs lies in the absence of protection for both physicians and patients. In regions where the rule of law is tenuous at best, neurosurgeons face the constant specter of retribution from powerful factions, making them easy targets for blame when complications arise. Moreover, patients are left vulnerable to exploitation by unscrupulous private hospitals, their well-being sacrificed at the altar of profit margins.^[1,2]

To tackle these challenges head-on, we must adopt a pragmatic and multifaceted approach that addresses the root causes of the issue while fostering sustainable solutions. First, investment in infrastructure and resources is paramount. By partnering with international organizations and leveraging technological innovations, we can equip neurosurgical units in LMICs with state-of-the-art equipment and essential supplies, empowering surgeons to deliver optimal care.^[5]

Second, the establishment of robust training programs tailored to the needs of LMICs is essential. Drawing on the expertise of seasoned neurosurgeons from both local and international contexts, these programs should prioritize hands-on experience and mentorship, cultivating a new

generation of skilled practitioners equipped to navigate the complexities of neurosurgical practice.^[6]

Furthermore, initiatives aimed at bolstering research and academic endeavors must be championed. By incentivizing collaboration between institutions and fostering a culture of inquiry and innovation, we can unlock the potential for groundbreaking discoveries and advancements in neurosurgery, driving progress and improving patient outcomes.^[5,6]

Crucially, the protection of neurosurgeons and patients alike cannot be overstated. Implementing legal safeguards and institutional mechanisms to shield physicians from retaliation and ensure accountability for malpractice is imperative. Similarly, stringent regulations must be enforced to safeguard patients from exploitation and ensure access to quality and affordable care.

In conclusion, the revitalization of neurosurgery in LMICs demands concerted action and unwavering commitment from all stakeholders involved. By addressing the systemic barriers to success and implementing practical, evidence-based solutions, we can breathe new life into the field and reaffirm its status as a beacon of excellence in global healthcare.

Ethical approval

The Institutional Review Board approval is not required.

Declaration of patient consent

Patient's consent was not required as there are no patients in this study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

REFERENCES

1. Alwan NA. The killing of doctors in Iraq must stop. *BMJ* 2011;343:d4467.
2. Hoz SS, Al-Sharshahi ZF, Aljuboori Z, Albanaa SA, Al-Awadi OM. The history and current status of neurosurgery in Iraq. *World Neurosurg* 2020;140:353-6.
3. Hoz SS, Tamer WA, Al-Awadi OM, Al-Sharshahi ZF, Dolachee AA. Neurosurgery training in war-torn countries: A perspective from Iraq and Syria. *Surg Neurol Int* 2020;11:430.
4. Kanmounye US, Lartigue JW, Sadler S, Yuki Ip HK, Corley J, Arraez MA, *et al.* Emerging trends in the neurosurgical workforce of low- and middle-income countries: A cross-sectional study. *World Neurosurg* 2020;142:e420-33.
5. Liang KE, Bernstein I, Kato Y, Kawase T, Hodaie M. Enhancing neurosurgical education in low- and middle-income countries: Current methods and new advances. *Neurol Med Chir (Tokyo)* 2016;56:709-15.
6. Meara JG, Leather AJ, Hagander L, Alkire BC, Alonso N, Ameh EA, *et al.* Global Surgery 2030: Evidence and solutions for achieving health, welfare, and economic development. *Lancet* 2015;386:569-624.

How to cite this article: Al-Sharshahi ZF, Matti WE. In the land where neurosurgery lost its pride: Can we find redemption? *Surg Neurol Int.* 2024;15:266. doi: 10.25259/SNI_234_2024

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of the Journal or its management. The information contained in this article should not be considered to be medical advice; patients should consult their own physicians for advice as to their specific medical needs.