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Letter to the Editor

Societal challenges facing neurosurgeons in low- and middle-income countries: Iraq as an example

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Dear Editor,

INTRODUCTION

Neurosurgery is a delicate specialty requiring excellence in patient care, patient safety, and a positive hospital experience.[4] It demands the greatest surgical precision, dealing with many life-threatening cases, and is associated with various complications estimated to be more than 14% of those cases; therefore, neurosurgeons have the probability of facing patients and their relatives' complaints.[4,6] Violence against doctors and individuals in the health-care system is a rising global issue; it is difficult to measure its extent since the under-reporting of violent incidents is common, and it is probably influenced by social rules and cultural factors.[5,11]

These issues are more pronounced in low- and middle-income countries (LMICs), where extended conflicts, political and social instability, inadequate medical resources, in addition to violence, and kidnapping are all common issues facing individuals in the medical field. These complications are becoming the cornerstone factors for the depletion of the health-care system's resources and accelerating a steady emigration rate of medical faculties and even recent graduates.[7,9]

In Iraq, the deficit of law enforcement and the insufficient central governmental control leads to the increased burden on Iraqi doctors and the exposure to situational risks not commonly encountered in other societies. These include specific tribal system-based conflict, a common practice in Iraq that might force Iraqi doctors to deliver financial compensation to the patients' families if any complication occurs. This defining characteristic is named "Tribalism," and it is most prominent in disasters, conflict situations, and pandemics, as what has happened in the era of COVID-19.[8,10-12] In this paper, we describe the social challenges that vascular neurosurgeons encounter in LMICs, with Iraq as an example.

THE CHARACTERISTICS OF NEUROSURGERY IN IRAQ

Given the complexity of the clinical course, psychosocial, operative, and postoperative nature, and the accompanying significant rates of morbidity and mortality associated with the

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neurosurgical specialty, neurosurgeons have increased jeopardy of receiving patients' complaints compared to other physicians and surgeons.[4]

In LMICs, taking Iraq as an example, patient care and significant decisions such as surgery will not be taken by the patient individually as seen in developed countries; however, this decision largely depends on the patient's family and clan. Sometimes in rural areas, the participation of the patient in those decisions is little to none. As a result, surgeons and individuals working in the health-care system in Iraq are constantly exposed to violence (whether verbal or physical) in their workplace by patients, their relatives, and their larger family.[7] Based on some studies, the percentage of doctors who encountered threats during their practice in Iraq reached 53.4%. This percentage can vary between specialties regarding the complications that might accompany different types of surgery.[2]

EXAMPLES OF HIGH-RISK SITUATIONS FACED BY NEUROSURGEONS IN IRAQ

The vast majority of surgical operations include life-and-death situations daily and have adapted to operate under the strictest environment with limited resources area and social challenges, making it a unique yet, challenging experience. Being a vascular neurosurgeon in Iraq may encounter various situations. Due to the immaturity of the primary health-care situation in Iraq, some patients can present late to the hospital with a poor prognosis or even brain death. However, in most instances, their relatives would not accept it and demand constant care and monitoring of the patient with ongoing threats to the involved doctors and residents. This can lead to the persistent depletion of already insufficient health-care resources. Other cases are related to unexpected intraoperative or postoperative complications or more commonly seen complications. Examples include intraoperative vasospasm during endovascular procedures, aneurysmal rupture during open surgical operations, and pulmonary embolisms that can occur following surgeries. These examples are usually not well accepted among the patient's family, even if they are informed before the procedures of the risks. Frequently, considerable financial compensation is demanded from the surgeon, which is usually paid, avoiding more immense consequences.

Furthermore, some patients demand more payments for possible future treatments if there is no improvement in their situation, even if there is a complete refund for the previous treatment. Case-related complications are not the only reason for threats, but specific "person-related" issues are also included in the study. For example, there are some cases in which the patient is an essential figure to a specific society, like "the head of the tribe," for whom any complication would result in rage and instant death threats if the surgeon or the physician does not pay their claimed penalty.

Similar scenarios for other cases are all over Iraq and are encountered by surgeons at substantial rates. The claimed penalties against the surgeons in such instances and the compensatory financial payments vary in their amounts. However, they range from 15,000$ to 80,000$ or even more in situations similar to the mentioned examples.

Based on the above, most doctors and surgeons, in particular, are seeking to emigrate from Iraq and are unlikely to return, which may lead to a significant shortage in health services. In addition, there are significant challenges in staff recruitment and adequate resource provision. The quality of training has been affected because even medical students are considering emigration from early stages in their careers.[1,3,9]

Further, one of the possible solutions is the need to focus on society as a whole by enhancing the public's perception of Iraqi doctors in general. This may be accomplished with the assistance of programs run by the government and with the help of media operators. Furthermore, we need to safeguard the doctors by boosting security support and ensuring legal assistance. The institutes need to take part in lessening the impact of such problems on their doctors. Another suggestion is to work together as a team and make decisions regarding treatments through an intra-institutional committee for each institution. Teamwork and quality assurance of the dynamic process of the team would enhance performance and ensure a better outcome. Furthermore, such approaches would reduce the personalization of the arising social problems and improve the patients' trust regarding management decisions.

Furthermore, detailing additional aspects of neurosurgery practice in such settings cannot be presented since they may be dangerous to explain and document. In addition, quantitative and systematic reviews are not feasible for the same reason that doctors will avoid disclosing their experiences, as doing so could pose a threat in the future due to a lack of trust in the system and cultural background that considers discussing such topics a taboo that should be avoided. Such a situation is currently encapsulating the societal aspect of the neurosurgery practice in Iraq, and to some extent, it also may involve other fields of surgery in the country.

Such situations represent a call out for the local and international communities to understand the risk associated with practicing such a life-saving yet, complex job. At the same time, it appreciates those performing extremely risky surgeries in neurosurgery in Iraq and all surgeons with similar situations.

CONCLUSION

Violence against individuals in the medical field is not uncommon, yet, it is significantly increased in LMICs.

Certain socioenvironmental challenges are peculiar to specific areas and are more pronounced in specialties that deal with high-risk surgeries like vascular neurosurgery. This should attain attention from local and international levels to alleviate the pressure associated with such unique practice.

Declaration of patient consent

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

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Conflicts of interest

There are no conflicts of interest.

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