

The decrepit state of trauma care in under-developed healthcare settings

Dania Aijaz Shah,¹ Adil Aijaz Shah²

The escalating number of deaths attributed to injuries in developing countries approximates 90% of trauma-related mortality worldwide.¹ Trauma burdens the fragile economic and health environments of developing nations, especially when survival culminates into permanent disability of individuals that contribute to the workforce.¹ Timely and adequate provision of trauma care determines the survival and functional outcomes of trauma patients — factors which are grossly overlooked in under-developed healthcare settings.

Injuries are difficult to address in developing countries because of undeveloped trauma care facilities, untrained healthcare personnel and dearth of basic life support systems. Few clinical facilities consist of an emergency department, solely dedicated to serve trauma patients.² Absence of multidisciplinary trauma teams and surgeons often deters these hospitals from tending to complex trauma cases.^{2,3} Patients are often transferred to higher-volume facilities which contributes to significant delays in care and increases risk of major complications and poor outcomes.³

Due to a dearth of qualified paramedical personnel, and ambulances that lack basic-life-support systems, pre-hospital care for trauma victims in resource-limited healthcare settings remains non-existent. Moreover, such settings often lack a centralized dispatch center for ambulances, which could serve to provide information to healthcare facilities prior to casualty transfer and to ensure emergency preparedness. In this vein, a retrospective study conducted in Bangladesh exhibited that ambulances were under-utilized for the

transportation of patients with spinal injuries.⁴ In resource-limited settings, spine-boards are scarcely used for the transfer of victims with spinal injuries, in contrast to mandatory spinal immobilization in developed trauma care settings.⁴ In developing nations, trauma-care has received disproportionately lesser attention and even lower funding for research.⁵

In absence of dedicated trauma facilities, it is imperative to train all essential and non-essential healthcare personnel in trauma management by mandating basic-life-support training. Furthermore, traumatology should be incorporated within medical syllabi to cultivate the interest of medical and nursing students, as well as physicians in training to pursue careers in emergency medicine. In order to ensure a modicum of pre-hospital care to patients, ambulance services manned by qualified personnel and equipped with basic life support systems should be established. A centralized dispatch system would provide quick and efficient transportation of patients to nearby healthcare facilities. Resource allocation for the establishment of centralized trauma registry would be extremely beneficial towards the study of determinants of outcomes for different types of trauma occurring in the region.

References

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¹Medical Student, Dow Medical College, ²Aga Khan University, Karachi.

Correspondence: Dania Aijaz Shah. Email: дания.айяз.шах@gmail.com