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Letter to the Editor

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Do Urban City Trauma Centers Suffice as Pre-Deployment Training and Post-Deployment Skills Retaining Centers?

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Maintaining the same level of surgical skillset acquired during war zone deployments by surgeons in civilian settings is a concern and challenge to all surgeons at the end of their deployments. It goes without saying the surgical spectrum of high-energy trauma injuries sustained by soldiers in battlefields brings the best out of the attending surgeons. The cliché "he who desires to practice surgery must go to war" by Hippocrates (460–377 BCE)[1] cements this theory.

Civilian trauma centers do not receive a wide and high load spectrum of high-energy trauma patients as those seen in military forward surgical teams and tertiary centers. This potentially has a risk in the training of war bound trauma surgeons in these centers acquiring limited skillsets required in the management of high-energy trauma injuries. High-energy war setting trauma wounds inflicted mainly by improvised explosive devices (IEDs) produce more extensive complex tissue damage. The damage primarily is due to a blast effect, secondarily due to blast effects of flying objects hitting the body, tertiary whole-body displacement, and quaternary effects such as wound contamination with dust or burn injury from the initial explosion. The presentation of the wound is extensive soft tissue damage, bony destruction, extensive contamination from both endogenous normal flora and exogenous agents from the environment such as dust, mud, soil, and clothing, and other foreign bodies to sterile body parts. This increases the risk of local and generalized septicemia with a polytrauma pattern involving vital organ injury and eventual challenging multistage reconstruction procedures.[2]

Documented studies on the workload of civilian versus war zone trauma surgeons in the British deployment in Helmand Province in Afghanistan and the Dutch deployment in Uruzgan concluded that the volume of cases faced by the combat surgeon in the military trauma center for penetrating abdominal injuries was like a 3-year trauma surgical rotation in the United Kingdom. Surgical training by residents in civilian settings had limited exposure to injuries, requiring thoracotomy, craniotomy, nephrectomy, and IVC repair.[3,4]

In conclusion, war-bound trauma surgeon training should be done in war zone trauma centers. "Surgeons in a current war never begin where Surgeons in a previous war left off: they always go through another long learning period." The adage by Dr (Colonel) Edward D. Churchill adds weight to this concept and warns of the limitations that civilian trauma centers offer in maintaining war zone surgical skills. The newly deployed war trauma surgeon from civilian settings must undergo on deployment "acclimatization" to the spectrums of injuries he will manage from his first trauma victim.

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