BOOK REVIEW

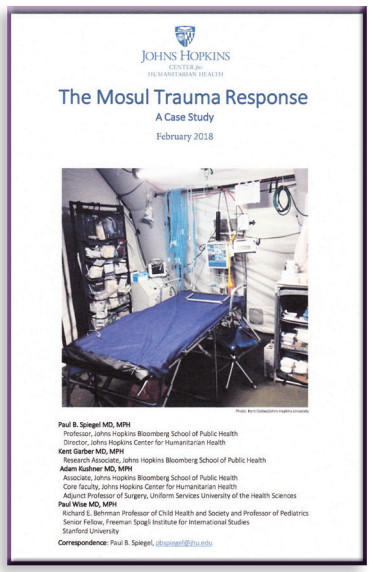
The Mosul Trauma Response

A Case Study

Spiegel PB, Garber K, Kushner A, Wise P. *The Mosul Trauma Response. A Case Study.* The Johns Hopkins Center for Humanitarian Research; February 2018; 140 pages.

Review by COL (Ret) Warner "Rocky" D. Farr, MD, MPH

The Battle for Mosul was probably the largest urban war siege conducted since World War II. Lasting from October 2016 to July 2017, Iraqi and Kurdish forces fought to retake Iraq's second largest city, Mosul, which had fallen to ISIL (Islamic State of Iraq and the Levant; a.k.a., Daesh) in 2014. Backed by US-led coalition military forces, more than 940,000 civilians fled during the siege. Thousands were injured while seeking safety from the fighting. It became obvious early on that the Iraqi government military forces did not have adequate, organic, medical force structure or capacity to provide trauma care, despite the requirements and obligations under several Geneva Convention protocols to do just that. The World Health Organization (WHO) and its partners stepped in to fill this huge and somewhat novel emerging gap, as did a number of contractors and other new 21st century battlefield medical players.



This marks the first time WHO has played the leading role in coordinating care in a large conventional wartime conflict and the first time civilian trauma settings and capabilities were attempted by such medical players at the war's frontlines.

Some of the key findings in the report *The Mosul Trauma Response. A Case Study*, by Paul B. Spiegel and colleagues, are:

- Between 1,500 and 1,800 lives, military and civilian, may have been saved through this novel war trauma response.
- By applying existing Western military standards of trauma care (not including the golden hour) and forward deployment, WHO and its partners challenged existing humanitarian laws and custom principles, particularly those of the complete neutrality and independence of nongovernmental organizations (NGOs) and private voluntary organizations (PVOs). This is just yet one more thing that fills today's battlefield with contractors!
- The Iraqi military did not have medical force capacity to fulfill obligations to protect and care for wounded civilians on the Mosul battlefield, and the US-led coalition did not provide substantial medical care for wounded civilians.
- WHO-supported field hospitals filled many important gaps in trauma surgical care, while postoperative and rehabilitative care needed greater support.
- Successful coordination among local leaders, partners, and civilian and military officials occurred, but field coordination could have been better resourced.
- Deconfliction from all these various new players could have been better.
- What is the real take-home message from this study? It is that battlefield medicine can be outsourced, privatized, contracted, be not neutral or independent, be embedded into combat formations, show up without all levels, roles, or echelons of care and generally not meet the existing mold of medical support we all grew up with and expect in ground combat.

In the report, the authors provide a thoughtful list of recommendations, such as: "Accept a pluralism in the balancing of humanitarian principles among different humanitarian actors; medical teams operating directly with a combatant force should not be identified as humanitarian; frontline medical services could be provided by specialized groups explicitly trained to work directly with combatant forces, possibly contracted as military support services focusing on providing frontline medical services for both injured soldiers and civilians."

The authors also recommend the following:

- "Using private medical organizations to provide humanitarian services in conflict settings needs further study."
- "Humanitarian organizations must be extremely careful to avoid being instrumentalized as part of a conflict strategy by governments, militaries, and armed combatants in the future."
- "Only organizations and professionals with conflict experience, international humanitarian law training, and a strong understanding of the high-risk environments in which they will be working should be deployed near frontlines."

This report not only gives one much to think about the evolving face of medical support in today's changing battlefield but also completely fits in with the ongoing discussion of the problems with the golden hour and its applicability. I can see completing medical contractors bidding now: "I can guarantee

you a golden half hour while my competitor only promises you a golden hour!"

This really complicates the lives of medical planners as access to care becomes more and more one sided. In future conflicts, planners must critically assess key elements to see if and how a trauma referral pathway should be implemented. In Mosul, that meant the abandonment of neutrality; inability of the combatant forces (i.e., the Iraqi government and military) to fulfill their Geneva Convention–mandated role; closely coordinated military-civilian planning; medical teams colocated or embedded in specific military units; US-led coalition support to humanitarians; and, most importantly, sufficient infrastructure and medical personnel to allow for a trauma referral pathway. The NGOs, PVOs, and contractors must have a high tolerance for risk and be backed by strong donors.

Therefore, the bottom line for us is to plan and to prepare for an even more complex medical battlefield footprint, with even more medical contracting opportunities, and with the warning that not everyone with a red cross may be a truly neutral party. The full report is downloadable from the Johns Hopkins website (http://www.hopkinshumanitarianhealth.org/assets/documents/Mosul_Report_FINAL_Feb_14_2018.pdf).

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