ABSTRACT

Background: Battlefield first responders (BFR) are the first non-medical personnel to render critical lifesaving interventions for combat casualties, especially massive hemorrhage where rapid control will improve survival. Soldiers receive medical instruction during initial entry training (IET) and unit-dependent medical training, and by attending the Combat Lifesaver (CLS) course. We seek to describe the interventions performed by BFRs on casualties with only BFRs listed in their chain of care within the Prehospital Trauma Registry (PHTR).

Methods: This is a secondary analysis of a dataset from the PHTR from 2003-2019. We excluded encounters with a documented medical officer, medic, or unknown prehospital provider at any time in their chain of care during the Role 1 phase to isolate only casualties with BFR medical care. Some patients met inclusion criteria, yet lacked coded interventions based on our query.

Results: Of the 1357 encounters in our initial dataset, we identified 29 casualties that met inclusion criteria. Pressure dressing was the most common intervention (n=12), followed by limb tourniquets (n=4), IV fluids (n=3), hemostatic gauze (n=2), and wound packing (n=2). Bag-valve-masks, chest seals, extremity splints, and nasopharyngeal airways (NPA) were also used (n=1 each). Notably absent were backboards, blizzard blankets, cervical collars, eye shields, pelvic splints, hypothermia kits, chest tubes, supraglottic airways (SGA), intraosseous (I/O) lines, and needle decompression (NDC).

Conclusions: Despite limited training, BFRs employ vital medical skills in the prehospital setting. Our data show that BFRs largely perform medical interventions within the scope of their medical knowledge and training. Better datasets with efficacy and complication data are needed.