

included natures of injuries, injury mechanisms, activities being performed at the time of injury and bodily location of injury both as a complete cohort and by employment status. Ethics approval for this project was granted by the Australian Defence Human Research Ethics Committee (LERP14-024) and the Bond University Human Research Ethics Committee (RO1927).

Results: There were 1,479 incidents reported over the two-year period during basic training with 89.5% occurring in ARA and 10.5% in ARES personnel. Of the ARA incidents, 1,192 (90%) were Minor Personal Injuries and 43 (3.2%) were Serious Personal Injuries. In the ARES personnel 147 Minor Personal Injuries were reported (94.8%) and 3 Serious Personal Injuries were reported (1.9%). In both ARA and ARES personnel the most common activity in which injury occurred was Physical Training (ARA=41.5%; ARES=32%). The knee was the most commonly injured site (ARA=13.4%; ARES=14.6%) followed by the ankle (ARA=11.5%; ARES=8.2%) and the lower leg (ARA=10.3%; ARES=11.6%). These injuries were predominately soft tissue injuries (ARA=60.9%; ARES=69.3%) due to muscular stress with no objects being handled (ARA=41.7%; ARES=36%).

Conclusion: These results are in agreement with other published studies which have found injuries during military training are most commonly at or below the knee, that physical training is the highest activity in which injury occurs. The activities in which injuries occur, the anatomical location in which injuries occur, the type and nature of injuries in basic training are similar amongst both ARA and ARES recruits when attending their respective recruit training courses. Therefore, interventions aimed at decreasing injuries in basic training amongst Australian Army Personnel would be beneficial for both service types.

Biography

Ben has experience in officer training with the army reserve to complement his Exercise Science, Doctor of Physiotherapy, and PhD degrees, enabling unique insight into the demands of tactical personnel. He is extensively involved in most aspects of the Bond University Doctor of Physiotherapy program including musculoskeletal physiotherapy and research supervision. He is part of the Tactical Research Unit at Bond University, conducting research with tactical personnel such as firefighters, military personnel and police. He has presented his research both nationally and internationally and continues to be extensively involved with investigation the unique occupational demands of tactical personnel.

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International Military Social Work: A Multi-national Comparative Analysis of Social Work Service with Military Personnel, Veterans, and their Families

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Abstract

Internationally, uniformed and civilian Social Workers are employed by numerous countries to work directly, and indirectly, with military service members, veterans and their families. However until recently there has been little research undertaken that meticulously compares the variety of roles and the scope of social work practice within the international military context. This paper will report on the findings of an exploratory study led by Professor Mary Ann Forgey, Graduate School of Social Services, Fordham University, New York, and her research team to identify and analyze the similarities and differences of military social work practices in all countries that employ social workers to support the military mission. An overview of the preliminary findings of this innovative international comparative study will be presented and the factors found in the analysis to explain the similarities and differences will be presented. A snapshot of the ethical challenges encountered by Military Social Workers will be outlined, with a focus on those that arise from multi-loyalty conflicts to the individual client and organisational mandates.

Biography

Ms Green is an accredited Australian Social Worker with over 25 years of professional experiences in clinical, organisational and executive leadership roles. She holds a Master of Public Health, postgraduate qualifications in Couple Therapy, Research Methods and Design, and management and mental health qualifications. Since 2001, she has specialised in the provision of mental health and well-being services

for military personnel, veterans and their families. Karen is passionate about developing the global and Australian Military Social Work identity and ensuring that the Defence and veteran communities receive the highest quality programs and services. In her role as the Regional Mental Health Team Manager, she coordinates the Australian Defence Force tri-Service Mental Health services in North Queensland for a dependency of over 7,000 Army, Navy and Air Force personnel. Karen has presented at regional, national and international conferences in Canada, United States of America, Paris and Italy on topics relevant to her chosen specialisation. Her career highlights include receiving a 'Commonwealth Endeavour Executive Fellowship' in 2016 which she undertook at Fordham University, New York, and in 2014 she was awarded the Mount Sinai Hospital (New York) 'Enhancement of International Social Work Leadership' scholarship.

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Is the Trauma 'Golden Hour' Really Fool's Gold?

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Abstract

The Australian Defence Force plans its deployed trauma service to meet the NATO '10-1-2' performance standard, by which a patient with life-, limb- or eyesight- threatening wounds is attended by skilled prehospital clinicians in the first 10 minutes, reaches 'non-surgical resuscitation' in the first hour, and surgery in the first two hours after wounding. The appropriateness of this doctrine was first questioned based on military data in 2016, when a retrospective review (1) found US military casualties in Afghanistan had a lower case fatality rate after June 2009, when the 10-1-2 metric was changed to one that aimed to transport combat casualties to initial wound surgery within 60 minutes.

The evidence underpinning the military 10-1-2 metric is obscure, but originates in an era prior to the introduction of several modern features of hospital trauma care such as the 'damage control' approach, haemostatic resuscitation, and sophisticated deployed intensive care and critical care retrieval. Furthermore, systems lacking modern aggressive prehospital care will allow many patients to die

prehospital. These modern potential survivors will have a very different delay / mortality relationship compared to patients in earlier times who survived despite receiving few prehospital interventions. The delay / mortality relationship has particular relevance to the military because unlike civilian systems, military medical and retrieval assets can be placed virtually anywhere – making time to surgery much more open to influence, and time-targets an essential feature of health planning.

The 10-1-2 metric resembles the civilian concept of a trauma 'golden hour'. However, the notion of an inflection point in the relationship between delay in reaching surgical care and mortality, adopted in the 1970s despite an almost complete lack of evidence, is now questioned. What evidence exists suggests that shorter response time and transport time is associated with improved mortality, but paradoxically that longer on-scene time and perhaps even total prehospital time are also beneficial. Most studies find no clear inflection point in case fatality rate at one hour total prehospital time. In part, this is likely to be due to the heterogeneity of trauma patients included in such studies. Logically, time will be critical for some and unimportant for others, with important associations missed when all are grouped together.

Time goals are important for trauma system planners. However, no health system should be complacent simply because it meets any arbitrary metric – 10-1-2, the 'golden hour', or whatever emerges from studying the 'big data' accumulating in military and civilian trauma registries. A better performance goal might be constant improvement in prehospital times as the trauma system develops. Real-time monitoring of the relationship between shorter prehospital times and mortality as a system improves will, at some point, identify a plateau in falling severity-adjusted case fatality rate. Only at this point will a 'golden' metric have been reached.

References

1. Kotwal RS, Howard JT, Orman JA, Tarpey BW, Bailey JA, Champion HR, Mabry RL, Holcomb JB, Gross KR. The Effect of a Golden Hour Policy on the Morbidity and Mortality of Combat Casualties. *JAMA Surg.* 2016 Jan; 151(1):15-24.

Biography

Colonel Reade is an anaesthetist, intensivist and clinician scientist in the Australian Defence Force, seconded to the University of Queensland as the Professor of Military Medicine and Surgery to lead a program of research relevant to military trauma