

PARALLEL SESSIONS

SUBTHEME: SUSTAINABLE & SCALABLE INTEGRATED CARE

1. Evaluating the Impact of a Training Program in Prehospital Trauma Care and Mental Health for Traffic Police in Arusha, Tanzania

Authors: Peter Mabula, Rupa Joshi, Stephen Dunlop, Tim Kummer, Godfrey Kisigo, Jaymie Hansen, Christine Klein, Alec Bunting, Brandon Knettel, Nathan Koranda

Affiliations: Same Qualities Foundation, NSK Hospital, Arusha Lutheran Medical Centre, KOPI Medical, Hennepin Healthcare, KOPI Medical, Hennepin Healthcare, Mwanza Intervention Trials Unit, Duke Global Health Institute

Background: Tanzania does not have a formalized prehospital Emergency Medical Services (EMS) response. Often, police officers are the first professionals to arrive at the scene of an accident or injury. As a result, the Arusha Regional Traffic Police play an integral role in the emergency system.

Aim: To examine the impact of training on effective responses to prehospital trauma and mental health, including potential improvements in knowledge among police officers in the Arusha region, Tanzania.

Methodology: We provided 12 hours of prehospital EMS training to 47 police officers. The training syllabus focused on conducting a primary survey of the accident scene, managing common airway, spinal cord, and bleeding emergencies, and coping strategies for mental health stressors related to this role. Participants completed surveys and knowledge tests before and after the training (before, N=30; after, N=44). The primary outcome was the mean change in knowledge score analyzed by Wilcoxon Rank Sum test.

Results: Among the 47 police officers, the majority (n=38, 81%) were certificate holders and half (n=24, 51%) had prior EMS training. At baseline, police officers with previous training scored significantly higher than those without prior training (mean=14.0 vs. 11.3, p=0.003). From pre- to post-training, the mean score for the knowledge test significantly increased from 12.7 to 15.5, with a mean difference of 2.8 (95% CI 1.4-4.3, p<.0.001). Police officers with previous training had higher post-training scores (mean=16.4 vs. 14.7), but this difference was not statistically significant (p=0.198).