

were managed centrally. Finally, the key factor that helped limit the number of casualties was the acquaintanceship between emergency workers and non-medical teams built during exercises, allowing them to adapt and blend in as one team.

**Discussion:** Lessons from previous attacks were crucial to improve our management of the medical response. These should be shared around, as another attack may always occur anywhere and at any time.

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### Remote Highschool Hemorrhage Control (RHHECON) - Methods of a Randomized Control Trial

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**Introduction:** Uncontrolled bleeding is a leading cause of preventable death in trauma. The "Stop the Bleed" campaign has trained over 130,000 lay people in the US to act to control bleeding. Current hemorrhage control courses, the most well-known being the American College of Surgeon's Basic Bleeding Control (ACS B-con) course, require in-person training.

Scaling this course nationwide is time and resource intensive. Furthermore, groups have advocated that young people, who are disproportionately affected by physical trauma, be universally trained in hemorrhage control.

**Aim:** Compare the effectiveness of teaching the ACS B-con course to high school (HS) students utilizing three different delivery mechanisms: in-person live, video-recorded, and virtual-live training.

**Methods:** 432 students (aged 15-18) will be recruited from two HS settings: 300 from a local HS and 132 from a national online HS platform. Local HS students will be randomized into two arms: a control arm (in-person live training) and virtual training through a pre-recorded lecture. Online HS students will undergo virtual-live training. The primary outcome is correct tourniquet application following training. Secondary outcomes are the acquisition of personal resilience-associated traits using a validated instrument, motivation for further training, and perception of the importance of live training. Tourniquet application data will be assessed using a non-inferiority design using two pairwise comparisons of the intervention arms to the control (in-person). Pre- to post-training survey data will be assessed using paired univariates tests. Sub-analysis of the impact of demographic variables on these relationships will be assessed.

**Discussion:** In addition to integration of cardiopulmonary resuscitation courses into HS curricula, there is momentum to develop effective programs to educate HS students to provide care for the injured and control bleeding before first responders arrive. This trial will help determine the most effective delivery mechanism to teach a hemorrhage control course to HS students at scale.

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