First Responders

Dylan Badin, Kevin Thompson

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Introduction

- The year of 2015 has left a profound impact on the nation. This was felt on December 2, 2015, when two Islamic extremists opened fire on a Christmas party and left 14 dead, and 22 wounded.
- Victims of the tragedy rely on the work of emergency response personnel, such as firefighters and police officers, to provide them with the life-saving treatment they need following such devastating attacks.
- Unfortunately, active shooter incidents delay the response time necessary to first action and effectively save their lives from preventable deaths. Few studies have been done to investigate the causes of death in such tragedies.
- However, the closest comparable data present to analyze such active shooter incidents comes from military examples from the field of battle open gunfire.
- The most preventable causes of death experienced by these veterans are extremity wound hemorrhage and airway obstruction. TCCC has been shown to save lives on the battlefield with basic training in ...
- Civilian personnel in the public eye are already taught basic first aid, CPR, and automated external defribillators (AEDs) but this is hardly effective in the event of a traumatic scenario
- Incorporating this training into civilian life, could provide the necessary knowledge and save a preventable death

Methods

- Participants of the study were obtained as volunteers from the city of Westminster
- Laypeople include Nursing grads and undergrads, Teachers, city workers, security guards, and students
- Teachers, city workers, security guards and students were randomly placed into 2 groups: trained individuals and untrained individuals

- Medically trained personnel include firefighters, who are pre-trained in disaster scenario in EMS training
- $\bullet\,$ Trained individuals were given a 2-hour TCCC training overview 6 weeks prior to the experiment
- Test participants were pre-screened about their basic knowledge of disaster scenario, with questions including "What is the primary cause of death in population ages 1-44?", "What do you think is the standard response time when 911 is called?", and "What is your primary concern immediately following a disaster or emergency situation".
- Every group was brought individually into a room with the chief of police, who informed them of the situation: At the mall with friends when a magnitude 7 earthquake strikes. There will be debris on the ground and light will be limited. You are tasked with assessing the situation and responding.
- The room was situated to simulate a major earthquake with debris and lighting problems with 4 victims: 1 deceased, 1 arterial bleeding, 1 unconscious but breathing, and 1 healthy individual.
- The participants 1st action times and time to solution were recorded by an observer playing a victim's friend.
- They were graded based off prewritten sheets with questions as follows :
- Data was recorded per each group. Average times of trained, untrained, and professionally trained individuals were compared to both the arterial bleeding and airway stations