



RESEARCH ORAL ABSTRACT PRESENTATION SUBMISSION

Title: Measuring Immediate Responder Knowledge Gained Through Stop the Bleed Education and Training

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Aims/Objectives: Provide participants with standardized hemorrhage control information & determine baseline & post education knowledge assessment.

Design: The study design is a survey format with a 10 item questionnaire administered prior to the didactic presentation & following the competency demonstration.

Setting: The setting is the Kansas City Police Department (KCPD) patrol & academy locations. It is a single hospital project occurring at the decentralized patrol locations.

Sample: Inclusion criteria were all frontline police officers & academy recruits with a goal of 800 participants. There were no exclusion criteria. 767 participants were presented with a pre/post survey prior to & following the didactic portion of the class. Completion of both pre/ post tests for all 10 questions were required for research analysis & 559 were returned as complete.

Method/Procedure: The 10 question survey was designed using information contained in the standardized STB program. A 60 minute didactic portion included hemorrhage control demonstrations. Prior to the didactic portion, the survey was introduced as a method to evaluate baseline knowledge

assessment & determine effectiveness of the instruction in improving knowledge of hemorrhage control principles. The results for each question as well as the aggregate score were compared to determine statistical significance in knowledge acquisition. The outcome evaluation was to determine the utility of the course in improving knowledge or dispelling myths & what additional learning techniques would improve interactive participation or improve knowledge assimilation.

Results: McNemar and chi square tests were conducted to examine the differences between pre to post answers for each outcome variable. Out of the 10 response variables, 9 of them show significant increase from pre to post scores with p values ≤ 0.05 . The remaining question had a p value of 0.2 and therefore was not statistically significant.

Discussion: A standardized course provides information, however demonstrations & return practice reinforce competency. Education with tools provided is more effective than education only.

Implications for patient outcomes include increased scene and in-hospital probability of survival as well as potential to decrease initial blood utilization/ resuscitation. Next steps include: 1. identification of patients arriving at the hospital with active hemorrhage in extremities, 2. identification of patients requiring use of massive transfusion, 3. tracking of patients arriving with tourniquets applied at the scene, 4. correlation of outcomes of the identified subsets of patients above, and 5. evaluating applications of the STB course to the lay public