CHRHS Training Seed Grant – Final Report: A Training of Trainers Course for Hemorrhage Control in Traumatic Injury

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Project Overview: The objective of this project was to reduce trauma-related morbidity and mortality in Rwanda by teaching basic skills in hemorrhage control. Content for trainings was drawn from Stop the Bleed (STB), an educational course developed by the American College of Surgeons (ACS). Trainings took place with two community groups: Healthy People Rwanda (HPR) and the Rwandan Emergency Care Association (RECA). These groups were selected due to their respected position in the community and their ability to further disseminate knowledge associated with the course. As such, this project aimed to serve as a "training of trainers." Participants in the training courses took a Knowledge, Attitudes, and Practices (KAP) survey before the course, immediately after the course, 3 months after the course, and 6 months after the course.

Project Outcomes: A total of 64 people were trained in Stop the Bleed (STB) during June 2021. This cohort consisted of 23 members of Healthy People Rwanda (HPR) and 41 members of the Rwandan Emergency Care Association (RECA). A second group of 20 people were trained in Stop the Bleed during February 2022. This cohort consisted of 10 members of HPR and 10 members of RECA. Overall, a total of 33 members of HPR and 51 members of RECA were trained in STB.

The cohort trained in June 2021 completed a Knowledge, Attitudes, and Practices (KAP) survey before the STB course, immediately afterward, and then at 3-months and 6-months following the course. Response rates were 100% for the pre-survey, 99% for the post-survey, 36% for the 3-month survey, and 47% for the 6-month survey.

Overall, participants saw in increase in knowledge related to hemorrhage control that remained intact 6-months after trainings were completed. Participants also expressed confidence in their abilities to practice skills associated with hemorrhage control, including direct pressure, wound packing, and application of tourniquets. Finally, participants expressed more confidence that they could act appropriately if they encountered another person with life-threatening bleeding.

Six months after the course, participants reported that they used knowledge and skills to control severe bleeding a total of 24 times. While most of these reported encounters were by members of RECA, about 17% were by non-healthcare members of HPR. Direct pressure was used in all 24 encounters with tourniquets used in 19.

Participants were given the opportunity to provide open-ended feedback on the 3-month and 6month surveys. This feedback mentioned the importance and helpfulness of the course along with a desire to share this training with others. Participant also expressed that they would like an annual refresher course and additional trainings in first aid/trauma care. In regards to improving the sessions, participants expressed that they would like funds to help cover the cost of transport to the course and that the course should be longer to allow participants more time to practice their skills. **Next Steps:** The objective of this project was to train members of Healthy People Rwanda (HPR) and the Rwandan Emergency Care Association (RECA) in Stop the Bleed, a basic hemorrhage control course, so that they could serve as trainers for future coursess. Nearly 100% of participants indicated a plan to teach the knowledge from this course to others. HPR recently received a large grant from the European Union to help improve road safety. As part of this grant, members of the organization will teach STB to the Rwandan Police. HPR is also planning to work with a moto taxi cooperative in Kigali to offer courses on STB for moto drivers. Members of RECA are planning to spread knowledge from STB to healthcare professionals throughout Rwanda, including those at Community Health Centers and District Hospitals.