Collaborative advanced trauma care (CATC): Evaluation of a trauma education program developed in Pakistan in an Ethiopian context

Anna Yaffee[1*], Adeel Khatri[2], Sama Mukhtar[2], Emily Russell[3], Saima Ali[2]

1. Emory University, Department of Emergency Medicine, Atlanta, United States
2. Indus Hospital and Health Network, Lahore, Pakistan
3. Grady Memorial Hospital, Atlanta, United States

Correspondence to: Anna Yaffee

*Emory University, Department of Emergency Medicine, Atlanta, United States

Email: annayaf@gmail.com

DOI: 10.24911/SJEMed.72-1710170294

Introduction:
Trauma globally represents an overwhelming burden of morbidity and mortality. Effective management with trauma teams has proven to reduce time to resuscitation and definitive care. Tikur Anbessa Specialized Hospital (TASH) is a tertiary care hospital in Ethiopia, where we implemented Collaborative Advanced Trauma Care (CATC), a collaborative, multidisciplinary trauma team training program for emergency medicine (EM) physicians, surgeons, and nurses, developed in Pakistan.

Methods:
CATC at TASH included virtual lectures, in person skills and simulation practice. Participants assessment included trauma knowledge post-test, and standardized leadership and teamwork assessment. Participants completed a knowledge, attitudes and practices (KAP) survey and post-course evaluation. Results were evaluated with descriptive statistics and common themes.

Results:
140 participants were trained in CATC (83 physicians, 57 nurses). Nurses increased scores on average by 17%. Physician scores were not significantly changed. Leadership and teamwork assessment scores improved by 22% over a 24-hour period.

On KAP survey, participants universally came in with positive thinking towards trauma teams, rating the importance of these themes on a 5-point scale as 4.9, 4.96, and 4.8 respectively. The post-course positive thinking was maintained, with new rankings as 4.92, 4.96, and 5.

On evaluation of participant exit feedback, a few central themes stood out including importance of team building and simulation, and confidence in trauma care. Common areas for improvement included more time with a relaxed schedule.

Discussion:
Nursing trauma knowledge development speaks to the importance of further bedside provider training in trauma care. The improvement in physician experience came in the form of leadership and teamwork, where throughout the course improved in all assessed areas.

These findings are similarly reflective of evaluation scores of CATC in Pakistan. This demonstrates that CATC can be expanded in settings that share similar medical education and emergency department structure. One unexpected benefit of this course as the opportunity for trilateral partnership and experience sharing.

Conclusions:
These courses represent the first efforts to establish a team-based, systematic approach to trauma patient care in Ethiopia. The outcomes were consistent with CATC courses in Pakistan. We hope that this represents ongoing partnership to improve team-based trauma care across borders.