

Katherine Albutt, Emma C Svensson, DeoDarius Balumuka, Peter Kayima, Samuel Shikaro, **Joseph Ngonzi**, Stephen Ttendo, Paul G Firth, Deepika Nehra: Boda Bodas: An Emerging and Neglected Public Health Crisis, 2018, Journal of the American College of Surgeons, Volume 227, Issue 4, Pages e147-e148

## **ABSTRACT**

**INTRODUCTION:** Motorcycle injuries constitute an emerging and neglected public health crisis in low- and middle-income countries, but high-quality data is scarce. The aim of this study was to analyze the epidemiology, treatment, and outcomes of motorcycle (boda boda) injury in Uganda.

**METHODS:** We conducted a retrospective observational study of patients admitted with a boda boda injury to Mbarara Regional Referral Hospital in western Uganda between August 2013 and January 2017. Records were abstracted from the Surgical Services Quality Assessment Database, a validated electronic surgical database. Descriptive statistics were used to characterize the population and multivariable logistic regression was used to identify factors associated with mortality.

**RESULTS:** A total of 1,498 patients were admitted with boda boda injuries. Most patients were men (85.8%) with a mean age of 37.1, 12.2 years. Polytrauma was common (33.8%) and the most commonly injured body parts were the head (60.7%), lower extremities (30.6%), and face (17.7%). The average Glasgow Coma Scale (GCS) on admission was 12.7 3.2. In total, 16.6% of patients underwent operative intervention, most (66.1%) on an urgent/emergent basis. The overall mortality was 11.3% and mean length of stay was 7.0 11.9 days. On multivariate analysis, age ( $p < 0.001$ ) and lower GCS ( $p < 0.001$ ) were identified as independent predictors of mortality.

**CONCLUSIONS:** To our knowledge, this is the largest single-institution case series of motorcycle trauma in sub-Saharan Africa. In Uganda, boda boda injuries contribute significantly to trauma morbidity and mortality, particularly among young adult males. A detailed understanding of motorcycle injury is essential to facilitate primary prevention and strengthen trauma capacity.