

**The burden and management of self-inflicted injuries at a tertiary care hospital in Mwanza, Tanzania**

ALPHONCE B. CHANDIKA<sup>1\*</sup>, PHILLIPO L. CHALYA<sup>1</sup>, KIYETI A. HAULI<sup>2</sup>, PETER F. RAMBAU<sup>3,4</sup>, ADELA A. MWAKANYAMALE<sup>5</sup> and JAPHET M. GILYOMA<sup>1</sup>

*1Department of Surgery, Catholic University of Health and Allied Sciences- Bugando, Mwanza, Tanzania*

*2Department of Psychiatry, Catholic University of Health and Allied Sciences- Bugando, Mwanza, Tanzania*

*3Department of Pathology, Catholic University of Health and Allied Sciences-Bugando, Mwanza, Tanzania*

*4Forensic Medicine unit, Bugando Medical Centre, Mwanza, Tanzania*

*5Department of Community, Faculty of Nursing, Muhimbili University of Health and Allied Sciences, Dar es Salaam, Tanzania* **Abstract**

**Background:** Self-inflicted injuries are a serious but neglected public health problem in developing countries and contribute significantly to the global injury burden. There is a paucity of published data regarding self-inflicted injuries in Tanzania. This study describes the aetiology, patterns and treatment outcome of these injuries in Mwanza, Tanzania.

**Methods:** This was a combined retrospective and prospective study of self-inflicted injury patients who were managed at Bugando Medical Centre in Mwanza between February 2007 and April 2014. Data were collected using a pretested and coded questionnaire and analysed using SPSS computer software version 17.0

**Results:** A total of 136 patients (M: F = 3.3: 1) were enrolled into the study. The median age was 30 years. Psychiatric illness (30.9%) was the most common risk factor for self-

inflicted injuries. Self-poisoning (35.3%) was the most frequent mechanism of self-inflicted injuries. This was followed by cutting/stabbing and jumping from heights in 23.5% and 20.6% of patients, respectively. The trunk was the most frequent (31.9%) body region affected. Open wounds were the most (4.2%) common type of injuries sustained. The majority (72.1%) of patients were treated surgically. The complication rate was 50.7% and it was significantly associated with delayed presentation ( $p= 0.012$ ). The median hospital stay was 12 days. Patients with long bone fractures and those who had surgical site infection stayed longer in the hospital ( $p < 0.001$ ). The mortality rate was 22.8%. Late presentation ( $>24$  hour), severe injuries ( $KTS II \leq 6$ ) and presence of surgical site infections were the main predictors of mortality ( $p<0.001$ ).

**Conclusion:** Self-inflicted injuries are an emerging but neglected public health problem in Mwanza, Tanzania and contribute to unacceptably high morbidity and mortality. Addressing the root causes of self-inflicted injuries may reduce the incidence of these injuries in our environment.

**Keywords:** Self-inflicted injuries, aetiology, patterns, treatment outcome, Tanzania