## -THE OUTCOMES OF TREATMENT OFHAND INJURIES AT MOI TEACHING & REFERRAL HOSPITAL, ELDORET, KENYA.

BY

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## **ABSTRACT**

**Title:** The outcomes of treatment of hand injuries at Moi Teaching & Referral Hospital, Eldoret, Kenya.

**Background:** The Hand is the most frequent body part injured at work and treated in hospital<sup>4</sup>. Hand injury is associated with significant morbidity and low quality of life<sup>11</sup>. The outcomes of current treatment modalities used for hand injuries in MTRH are unknown. Identification of patterns, mechanisms of injury and outcomes of treatment will help identify reasons why some patients have poor outcomes. This will improve patient care in MTRH and provide information that can be shared with the surgical fraternity.

**Objective:** To determine the outcomes of treatment of hand injuries in patients at MTRH.

**Methodology:** A prospective study was conducted from the 1<sup>st</sup> of January 2010 to 31<sup>st</sup> of December 2010 at MTRH. Consecutive patients presenting with the chief complaint of hand injury were recruited. Data on their demographics, mechanism of injury, injury patterns, treatment and outcomes was obtained.

Results: Hand injuries accounted for 1.3% of all new A/E attendances in 2010. The male to female ratio was 3.63: 1. The mean age was 29 +/- 14.5 years. Most patients (74.3%) were self-referrals. Majority of injuries occurred at home (30.1%). There was an equal distribution of injuries to the right and left hands. Most injuries were due to falls (26%) and assault (25%). The common patterns of injury were: closed fractures 50.3%, Open fractures 22.8% and Deep lacerations 8.4%. The index finger was the most frequently injured finger. 44.4% of the patients were treated for minor injuries, while 55.6% required operative treatment. None of the partial or completely amputated appendages had revascularization or replantation done. The commonest complication was joint stiffness. Most patients (79%) had a DASH score of less than 25. Prolonged rehabilitation was required for 16.4% of the patients.

Conclusion and Recommendations: Hand injuries were common comprising 1.3% of the A/E department workload in 2010. The young active male population is at highest risk of hand injuries. Closed fractures predominated. Focus should be on a small subset of patients with severe injuries and poor outcomes. 79% of patients had good outcomes. There is need for ahand surgery and hand therapy unit at MTRH. It is important to evaluate our long term outcomes. There is need for; structural modifications of the chaff cutter to enhance safety, train farmers on how to safely use farm machinery and safe work environment.