

(1161) Multiple Firearm Injury: Case Presentation and Review of Literature on the Burden of Firearm Injuries in Africa

Odhiambo, W

Department of Oral and Maxillofacial Surgery, College Of Health Sciences, Univer
Kenya

Co-authors

Thang'A, Pauline

PROBLEM

The widespread and indiscriminate use of firearms has drawn increasing concern especially in the past decade. Previously considered a problem of the military, the number of civilian casualties has been on the increase worldwide, thus adding to the global burden of disease. Global data on the impact of small arms on the health of individuals is scanty, available data however suggests that over 300 000 are killed annually while millions are left with permanent physical, social and mental disabilities. These puts an enormous demand on the healthcare systems of developing countries in Africa already over-burdened by diseases like malaria, HIV/ AIDS, Tuberculosis and poverty.

OBJECTIVES

To demonstrate the magnitude of the problems connected to firearm injuries and the challenges this poses to the healthcare delivery system in resource constrained countries of Africa and mitigate the case for strict arms control measures in the world

METHOD

Detailed presentation of a patient who survived multiple gunshot wounds to the face, limbs and chest including a bullet in the wall of the left ventricle of the heart and was successfully operated at a Nairobi hospital. Details of the injuries sustained is presented pictorially and in text, demands on the healthcare system is illustrated through the various clinical needs including; pints of blood transfused, duration of stay in the Intensive Care Unit and overall hospitalization period. A critical look at the current literature on the health and global impact of firearm injuries is included.

RESULTS

The patient sustained injuries in three main areas:

- 1) upper limb; compound fracture distal third of the right humerus, radial nerve, median nerve and ulna nerve palsies,
 - 2) face; complex soft tissue injuries compound maxillary and mandibular fractures and
 - 3) chest; right chest wall laceration with right pulmonary contusion, heemothorax and bullet lodged in the left ventricle.
- Thoracotomy and open heart surgery was done to retrieve the bullet, mandibular fracture reduced and rigidly fixed with plate and screws while humerous was grafted with Chron Os. A total of 6 units whole blood and 4 units fresh frozen plasma was transfused. The patient spent 20 days in the intensive care unit and a total of 41 days in hospital.

CONCLUSION

This case presentation illustrates the burden of firearm injury on a health facility and resources, including the need for qualified personnel to perform the delicate surgical procedures. While there is an immediate need to gather data and establish the magnitude of the problem, there is no doubt that the campaign to limit abuse and access to firearms is justifiable