

Overview of the Dynamics in Fracture Management in the developing world

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Introduction

- Injury data in Africa
- Presentation
- Key issues
- Take home message

Injuries - causes

- Farming activities
- Tribal conflicts
- Unprotected foot in very physical activity
- Road traffic accidents
- Fall from heights – wine tappers, carpenters
- Traditional attributes.....may include stress fractures
- Sports

Personal Experience working in West Africa – injuries

- Crush injuries
- Long bone fractures
- Ankle fractures
- Wrist fractures dislocations
- Spinal injuries
- Head injuries
- Gun shot / bow and arrow injuries.

Data on foot injuries in West Africa

Survey of participants

- No reliable data
- Personal stories from colleagues
- More data by medical staff on TBS than orthodox practitioners.
- The traditional bone setters (TBS) do not record fractures and dislocations but all of them see orthodox bone treatment as rivalry.

Data on traditional bone setters in the developing world

- 10 to 40% of all fractures- unorthodox practitioners
- Male preponderance -3:2
- Educational status of patients – no influence
- Accessibility to hospital facilities – partial influence

How fractures present in West Africa – data from Nigeria and Ghana

- A. Direct presentation to hospital
- B. Traditional bone setters
- A then B
- B then A
- Patient referral systems:-self, family, friends and other patients

Motives for going to the A&E- Ghana

- Stayers chose hospital care for diagnostic reasons and emergency care.
- Leavers and returners particularly mentioned the availability of diagnostic facilities and emergency care at the hospital.
- Some patients left immediately after the X-rays had been taken.
- Others departed after stabilization of the vital functions

North Central Nigeria

Agerigbe et al

- 46 patients with a radiological proven fracture were interviewed at different moments during their diagnostic or treatment process.
- 5 patients went straight to the bonesetter after the accident.
- 41 patients, who first visited the emergency department (A&E)
- 24 of them decided to leave the A&E immediately for treatment by a bonesetter. They explained their motives for choosing (initial) fracture management by a bonesetter and the returners reported about the received treatment there.

North Central Nigeria b

- 32 patients received hospital treatment and explained their motives to choose fracture management in the hospital immediately or after initial treatment by a bonesetter
- 17 patients who only received hospital treatment ('stayers'),
- 14 patients only treated by a bonesetter ('leavers'), and
- 15 who opted for hospital treatment after initial treatment by a bonesetter

How they arrive in hospital a.

Courtesy of Henry Holdbrook Smith



How they arrive in hospital .

Courtesy of Henry Holdbrook Smith



Traditional surgeons in sub-Saharan Africa: images from south Sudan

Author: [A. M. Udosen](#); [O. Otei](#); [O. Onuba](#) Issue Date: 23-May-2007

- Traditional bone setters perform many procedures
- They command respect for their treatment of fractures in many African countries.
- The safety and efficacy of traditional methods are sparsely evaluated, with the main focus being on treatment complications
- Most of the clients choose TBS - poverty, ignorance and superstitious beliefs.

Medicinal bulbous plants of South Africa and their traditional relevance in the control of infectious diseases Louw et al
82,–3, October 2002, Pages 147–154

- A rich heritage of floral biodiversity is found in developing countries. South Africa, a country with a strong history of traditional healing, hosts a variety of around 30 000 plant species. Indigenous bulbous plants of importance to South African traditional healers
- A number of these plants have particular uses as disinfectants and anti-inflammatory agents, although there is still a lack of scientific research regarding their unique pharmacological compounds.

Fracture treatment by bonesetters in central Ghana: patients explain their choices and experiences. Marcel et al
Tropical Medicine & International Health
Volume 12, Issue 4 April 2007

- 94% of the 34 interviewed people preferred to present a ‘simple’ fracture to a traditional healer,
- 57% were determined to treat even a ‘complicated’ fracture in the same way. By contrast, nearly all interviewees would take a person wounded by a cutlass to the hospital
- In the period March to May 2005, Over a period of 3 months, 14 patients with a proven fracture left hospital for treatment by a bonesetter
- Patients opting for bonesetter treatment are guided by the severity of the fracture, availability of the service, their financial status and past experiences.
- **Conclusion** Fracture treatment can serve as a model for respectful and efficient co-existence of traditional and biomedical medicine.

Author: A. M. Udosen; O. Otei; O. Onuba **Issue Date:** 23-May-2007

Publisher: Annals of African Medicine Society

- **Conclusion:** It may be difficult to stop traditional bone setting in the developing world but may be easy to stop the complications by drawing the TBS together for the purpose of basic education and restriction. Training of more specialists in the area of Orthopaedics and Traumatology and provision of adequate basic equipment/appliances in our health institutions may reduce the rate of "Leaving hospital to the Traditional bone centres against medical advice".

Key difficulties in the developing world

- Inadequate data on trauma
- Inability to provide effective orthodox treatment
- Insufficient experience to deal with the injuries – multifactorial
- Key concern--- inadequate radiological exposures and patient education.

Radiology e.g. -Adult Foot xrays

- **Region View**
 - Medial Oblique
 - Lateral Oblique
 - Lateral
 - DP Weight Bearing
 - Lateral Weight Bearing
 - Composite Dorso-plantar

Chasing the injury



Radiology 2 - paediatric

- Paediatric Foot
DP
Medial Oblique

Radiological exposure

Different views



Details revealed



Different views

Almost innocent



More revealed



Calcaneal fractures



©RedDot

Closer look reveals more



Resolving the issues

- We must get our own practices right and efficient as a useful message to those who would like to weigh their options properly

Thank you

- Any Questions?



References

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