



A broken bone no longer a burden to carry: a destination in sight

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INTRODUCTION

Worldwide the third leading cause of death among persons under 40 years is attributed to trauma (1). According to the 2013 Global Burden of Diseases study, injuries continue to be a significant cause of morbidity and mortality. About 973 million (uncertainty interval (UI) 942 to 993) people sustained injuries that required hospitalisation and 4.8 million (UI 4.5 to 5.1) people died from injuries.(2) Research predicts that by 2030, trauma related deaths will be the third leading cause of death ahead of malaria and HIV(3). In Ghana, road traffic accidents have a case fatality rate of about 17 % (4). Low and middle-income countries (LMIC) are more burdened with complications of trauma. (5) This may be attributed to the lack of adequate expertise, appropriate technology and inadequate funding. Over the years, with interventions and policies by AO Alliance, the burden and morbidity following trauma especially road traffic accidents have reduced. (6)

AO Foundation (Arbeitsgemeinschaft für Osteosynthesefragen – Association for the Study of Internal Fixation) was inaugurated in 1958 by 13 Swiss surgeons who had experienced the benefits of internal fixation in the management of orthopaedic trauma. The foundation aimed at disseminating information on the management of trauma to health practitioners across the world. The AO Socio-Economic Committee (AO SEC) was set up in 1999 to address the trauma related burden on LMICs. Over the past 15 years, the organization has provided education and training courses to health practitioners in local facilities via visiting surgeons mainly in sub-Saharan, Asia Pacific and Latin America(7).

Following the achievements of AO SEC, it was imperative that to improve fracture care in LMICs, a more targeted approach was necessary and as such, AO Alliance was founded(7). Under the AO Alliance Foundation, a 3-year initiative, Fracture solutions for Africa was set up (3). This harnessed human and physical resources available locally in the provision of training programs for trauma and orthopaedic residents, and operation room personnel to provide a safe and clean operation theatre.

In Ghana, the AO Alliance established the Ghana Country Initiative (GCI) and the Paediatric fracture solutions for Ghana (1). The paediatric fracture solutions, a 4-year initiative, was launched in 2016. It was aimed at reducing the disability, morbidity and mortality from paediatric musculoskeletal trauma by providing education in trauma prevention and management to primary care givers, traditional bone setters and healthcare workers. In partnership with Ghana College of Physicians and Surgeons (GCPS) and AO Alliance, the GCI was founded. The GCI aimed to improve the nation's capacity to manage fractures through education for trauma and orthopaedic residents, operation room personnel, technicians and research into national fracture care programme(8).

Following these tremendous initiatives by AO Alliance, the future is indeed bright for fracture care and trauma in Ghana. As of 2010, Ghana's surgeon-to-population ratio was 0.001 per 100,000(4). However, following the accreditation of 3 additional hospitals for training of trauma and orthopaedic surgeons, there has been doubling of the uptake of residents. (4) In addition, the paediatric fracture solutions for Ghana has provided grants for research over the years. In a country where majority of our population is younger, about 37.36% of population between 0-14 years paediatric trauma has been a significant contributor to trauma morbidity and mortality.(9) The role of traditional bonesetters and primary care givers has been explored in diverse ways over the years with research funding by Paediatric fracture solution for Ghana. (10)(6). The data from trauma registries which are currently established in tertiary hospitals provide trends in trauma and serve as grounds for making the necessary policies especially those involving fractures irrespective of mechanisms.(11)

The AO program in Ghana is assuring as it offers a timely, accurate, and comprehensive data, appropriate curriculum and well equipped workforce to meet the national demand for trauma care.



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