

Editorial

The Journey of Orthopedics and Trauma Care in Ethiopia: Challenges, Opportunities, and Lessons Learned at a Tertiary Hospital in Ethiopia

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The history of modern medicine in Ethiopia is a complex and multifaceted one. It dates back to the time of King Libne Dengel in the 16th century, but organized and sustainable modern medical practice began after the battle of Adwa in 1896 (1). The first Ethiopian medical doctor was Hakim Workineh also called Charles Martin who was born in 1865 in Gondar. Subsequently, Negadras Gebrehiwot Baykedagn and Melaku Beyan were two of Ethiopia's earliest formally trained medical doctors (2). To the knowledge of Ethiopian Orthopedic surgeons, Brigadier General Dr. Tadesse Melka is the first formally trained Ethiopian orthopedic surgeon. He did his medical & orthopedics specialty training in Yugoslavia and trauma sub-specialty training in Italy. He served as a combat medic of United Nations (UN) operations during the peak of the Congo crisis in 1962.

Since then, the journey of Orthopedics and Trauma care in Ethiopia has been that of growth despite the numerous challenges and shortcomings. This editorial navigates the journey of Orthopedics and Trauma Care mainly at the nation's largest tertiary hospital and tangentially, the journey of the field in Ethiopia.

Four schools provide training in the major health sciences under the umbrella of the College of Health Sciences (CHS) of Addis Ababa University and contribute for around 60% of AAU's research output- making the College a significant contributor to the University's current high academic status among African Universities. (Consistently ranked in the top 10) (4). The Department of Orthopedics in the School of Medicine (SOM) of the College of Health Sciences at Addis Ababa University was established as an independent department, separated from general surgery on September 25, 1987. For over three decades, it was the only Orthopedic Specialty training department in Ethiopia. To date, 302 Specialists and sub-specialists have graduated and are serving in different parts of the country and abroad. The Department has been contributing a lot in treating injured patients during peace and war over the years. Currently, there are 65 orthopedic residents and over 16 general surgical residents under training. There are also students from neighboring countries. The Department currently has 30 permanent Ethiopian staff with different academic ranks. There are four orthopedic major operation rooms with state-of-the-art C-arm, 125 beds in three wards, Outpatient departments, fracture clinics, casting rooms, physical therapy, and orthotic units. Complex and advanced surgeries are being performed routinely. The department receives complicated orthopedic cases including fractures, trauma, tumors, congenital deformities, infections, Arthritic changes, degenerative diseases, geriatric and post-menopausal issues, and several late presenting musculoskeletal conditions from all over the country. Complex fractures resulting from road traffic, machine injury, conflict, sports accidents, falls, and construction site injuries are the main sources of emergency mass causality to the department. Road traffic accidents are a major contributor to these injuries, with lower limb fractures being the most common type (3).

The Department has strong, long-standing, and impacting collaborations with great international organizations like SIGN Fracture Care International, AO Foundation, Australian Doctors for Africa, World Orthopedic Concern, and more. This has helped the Department to develop orthopedic infrastructure, import expensive implants and equipment, and bring skills and technology into the country.

Apart from training and patient care, several research projects are run in the department to address and solve local orthopedic problems. Publishing an article in peer-reviewed journals is one of the mandatory requirements for the successful completion of residency or fellowship training at Addis Ababa University (AAU). Challenges frequently mentioned are lack of research funds, lack of time to complete and publish two articles while in a busy 2-year clinical training, delays in the review processes of journals, and lack of committed research advisors. Regardless,

these research studies are of paramount importance for generating data that can be translated into evidence-based clinical practice.

Currently, two urgent orthopedic service-related issues demand attention in Ethiopia. First, there is heavy reliance on imported instruments/implants, and second, scarcity of trained biomedical engineers to maintain expensive surgical equipment. Addressing these challenges requires private sector involvement to manufacture basic fracture care instruments/implants locally and to train biomedical engineers in equipment maintenance and operation. The growth of specialized Orthopedic Surgeons and the expansion of service centers are positive developments in human resources and infrastructure. However, there still is a long way to go in terms of making these services readily available and accessible to all Ethiopians.

As a product of its commitment to research, the Department has compiled original research articles covering wide areas of orthopedic practice and clinical service in this special issue. We hope the evidence generated from these research studies will be an invaluable input for making informed decisions to advance the caliber of orthopedic and trauma care in Ethiopia.

References

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