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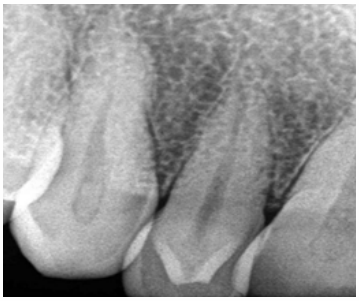
Malocclusion, fingerprints and blood group

Cephalometric measurements and Photogrammetry

Pattern of malocclusion seen at AKTH



Artificial Intelligence in Orthodontics

Talon Cusps: Conservative management

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"DENTISTRY'S FIRST SPECIALTY JOURNAL IN SUB SAHARAN AFRICA"

Editorial

Malocclusion significantly affects individuals' quality of life, impacting nutrition, speech, and psychosocial well-being. In low- and middle-income countries (LMICs), access to orthodontic care is limited—not because of a lack of need, but due to the chronic shortage of trained specialists. At the heart of this problem lies a fragile training infrastructure plagued by underfunding, inconsistent standards, and the relentless loss of talent to more developed nations.

Dental schools in many LMICs operate under tight financial constraints, often relying on outdated equipment and lacking essential clinical tools like imaging systems or modern orthodontic materials. Students graduate with minimal exposure to contemporary practices, which undermines their confidence and readiness for clinical work. Meanwhile, the lack of simulation technologies and hands-on models limits the development of essential skills during training.

This is further complicated by restricted internet access and the high cost of digital resources, which keep many faculty and students cut off from global developments in orthodontics. In an age where digital tools drive education and research, this technological divide deepens inequality and slows the pace of local progress.

Then there's the ongoing loss of human capital. Orthodontists trained in LMICs often leave in search of better working conditions, research opportunities, and financial security abroad. This migration is a major setback, draining already limited health systems of expertise, leadership, and mentorship. In effect, LMICs are subsidizing the specialist workforce of wealthier nations.

Curriculum design also poses challenges. In many institutions, orthodontic training includes excessive rotations outside of the specialty and lacks emphasis on critical thinking, research, and innovation. This creates a generation of clinicians who are technically competent but disconnected from the evidence base and unprepared to contribute to the evolution of care that meets local needs.

To move forward, orthodontic education in LMICs must become more intentional and adaptive. Curricula should be aligned with population needs, focusing on high-impact clinical skills, ethical care, and region-specific challenges. Affordable simulation tools and open-access digital learning can help bridge resource gaps. Equally important is faculty development—training the trainers—to foster leadership, mentorship, and academic growth within local institutions.

National dental associations must also play a more active role in setting training standards, supporting quality assurance, and advocating for investment in dental education. Governments, in turn, must create an enabling environment for professionals to stay and thrive, through better infrastructure, fair compensation, and research funding. International partners can support these efforts by promoting equitable collaboration and respecting ethical recruitment guidelines.

Improving orthodontic training in LMICs is not a luxury—it is a necessity. These countries deserve self-sustaining systems that produce skilled, motivated professionals equipped to meet the needs of their communities. With targeted investment, strong leadership, and strategic partnerships, that future is within reach.

Prof O.O. Sanu
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