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## EXPLORING THE DEMOGRAPHIC DIVIDEND FOR DENTISTRY IN AFRICA – AN OPINION PIECE

By 2050, it is estimated that a quarter of the world's population will be African. Please stop and consider this. In 25 years - within my life span - one in four people will be African. 2.5 billion people.<sup>1</sup> Double the current and projected population of China. Moreover, 37% of the population will be under the age of 18, the ideal age for orthodontics.

Sitting through the graduation ceremony of one of Ghana's most elite schools and hearing these statistics, I felt breathless with the awareness of the responsibility and the opportunity that this holds for dentistry in Africa. The dentistry that we teach today will account for a substantial proportion of the dentistry practiced worldwide. It is easy to point to increasing dental diseases, rising awareness of oral health, and advancements in dental technology as the key factors for growth, but as dental practitioners, researchers, and educators in Africa, what are we doing to position ourselves for this avalanche? For example, as an orthodontist, the retention regimes currently prescribed and taught globally are largely ineffective for the African cohort I treat. It is unequivocal that the typical features of an African malocclusion are more prone to relapse from midline diastemas to habit-induced bimaxillary proclination and anterior open bites. My revised retention protocol, whilst appearing significantly more effective clinically in my hands, needs to be researched, published, and shared on an international stage to add to the knowledge base, not to dispel the fact that orthodontics in the aforementioned malocclusion types is inherently unstable, but to give guidance on how to better retain these cases from initial planning to execution. Because in 25 years, a significant number of orthodontic cases worldwide will be in this population grouping. This issue of the Ghana Dental Journal has an intriguing study on retention post orthodontic treatment.

We need to position ourselves to have a greater impact globally. The goal must be a rebalancing of the flow of knowledge amongst continents. The exponential increase in the number of specialists is encouraging, and efforts must be made to ensure they do not fall prey to the brain drain phenomenon. Should we be following the world in jumping on the largely non-extraction clear aligner therapy train when extractions have served us well in our more challenging cases? Alternatively, should we be working diligently with the clear aligner therapy brands to research and refine protocols for this group? I would love to see us explore ways to incorporate charitable aspects into their business model that focus on reducing inequalities in dental health.

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In essence, how African dentists position themselves will become the prevailing image of dentistry globally. Are we strong and united enough to regulate the companies that will sweep in with promises of clinically effective care, utilizing loopholes within our governing systems to bamboozle us with pseudo-science while focusing on profits and numbers rather than clinical standards? Governance, even of ourselves, will become key. How do we reconcile the high entry costs of digital technology with its increased clinical efficiency for populations living in Lower- to Middle-Income Countries (LMIC)? There must be an emphasis on primary prevention in the face of currently low personnel, technological input, and financial constraints, as was adopted with CHILD SMILE<sup>2</sup> in the Shetland Islands, my previous workplace.

The 'cosmetic dentistry' industry is and will boom. Do the accepted norms and 'smile design' software allow for racial variation, or are we favouring a cut-and-paste veneer approach using a largely Caucasian model of aesthetics? And have we abandoned the line between aesthetics and dental health altogether? I, for one, cannot wait until the Japanese concept of wabi-sabi, i.e., finding beauty in imperfection, kicks in. Although I am sure that will still be AI-generated!

During what remained of the graduation, I was intrigued by the degree of skeletal discrepancies, asymmetries, and generally high IOTN (Index of Treatment Need) that had yet to be treated; yet, financing was unlikely to be the principal barrier in this grouping. So, how do we communicate the benefits of treatment and maintain professionalism in a world where clinical success now equates with the number of likes on a social media post?

The world is changing, and the African dental industry as a whole — educators, practitioners, public health practitioners, distributors, and the private sector — are all at a turning point in terms of opportunities to make a difference in how the world perceives dentistry. We will be responsible for caring for the dentition of a quarter of the world's population. You should approach your career with this in mind.

## REFERENCES

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