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## **BRIDGING THE GAP: ADDRESSING THE BURDEN OF MALOCCLUSION IN SUB-SAHARAN AFRICA**

The World Health Organization recently reported that oral diseases ranked among the most common non-communicable diseases globally, affecting an estimated 3.5 billion people.<sup>1</sup> Also, malocclusion, as an integral part of the oral health burden, constitutes a significant portion of oral health disease that affects over 56% of people worldwide without relevant gender differences. Its prevalence and ranking may vary across different regions and populations, depending on factors like access to orthodontic care, cultural beliefs, and attitudes toward oral health, with the highest prevalence in Africa.<sup>2</sup> Such important epidemiological data on malocclusion, especially from systemic reviews and meta-analysis in primary, mixed and permanent dentition, helps to determine, direct and prioritize orthodontic treatment needs, especially in low and medium-income countries with limited access and resources. The most appropriate approach to nipping this oral health challenge in the bud, especially in the African sub-region, may involve prudent resource management, training low to high-level dental professionals with clinical work capacity, competent skills, and the right working environment.

Apart from the physical impact of malocclusion traits [e.g., crowding, increased/reverse overjet, open and deep bite, and posterior cross-bites], which include the development of dental caries, periodontal loss, traumatic dental injuries, and cranio-mandibular disorders, the negative psycho-social stereotyping like low self-esteem, teasing, name-calling and bullying on the overall health-related quality of life cannot be overemphasized. Beyond this, the economic challenge of malocclusion in terms of accessibility and affordability to orthodontic care could also pose a serious impediment to oral health-related quality of life, especially in low or medium-income countries.

In order to bridge the gap of unmet orthodontic treatment needs in the African sub-region, early diagnosis of malocclusion traits at the primary and mixed dentition stages with adequate preventive and interceptive measures should be promoted to avoid any future costly treatment. Eruption guidance of teeth and development of occlusion could hold the key to achieving long-term goals of stable occlusal harmony, oral functions, and acceptable dentofacial aesthetics. The elimination of other oral health problems, such as dental caries that could lead to the shortening of the dental arch and oral habits, should be addressed. This will drastically reduce the cost of orthodontic care, which is usually paid out of pocket.<sup>3</sup>

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Governments at the basic level are encouraged to promote and integrate fully oral healthcare policies into primary healthcare in low and medium-income countries. This will bring orthodontic health care to the grassroots level.

The worldwide high prevalence of malocclusion and its early onset in children should provoke stakeholders in African countries to devise a time-tested approach to mitigate this oral health challenge.

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