



Commentary

Dental health promotion among Nigerian school children: Why a priority

The term “oral health” refers to the condition of the mouth and includes several vital processes like breathing, eating, speaking, grinning, and socializing. An individual can reach their full potential and participate fully in society if they have good dental health and can do it comfortably and confidently. Oral health is crucial to overall health, well-being and life satisfaction from infancy to old age [1]. Sadly, oral health is addressed with much levity which explains the horrific statistics of dental health diseases. More than 3.5 billion cases of oral illnesses are thought to exist worldwide, the majority of which are preventable. The combined global prevalence of periodontal disease, tooth loss, and dental caries (tooth decay) has remained constant for the past three decades at 45%, which is greater than the prevalence of any other non-communicable disease [1]. Together, cancers of the lip and oral cavity rank as the sixteenth most prevalent cancer in the world, with over 375 000 new cases and about 180 000 fatalities predicted for 2020. Noma (Necrotizing ulcerative stomatitis, gangrenous stomatitis or cancrum oris) is a necrotizing disease that originates in the mouth and is fatal for up to 90% of infected children. It is a sign of extreme poverty [2]. Cleft lip and palate, the most prevalent craniofacial birth defect, affects about 1 in 1500 newborns. Over a billion people are thought to be affected by traumatic dental injury, which is estimated to affect 23% of primary teeth and 15% of permanent teeth globally [3]. While these figures are alarming, it is important to note that children and adolescents are the most susceptible group. Take for example, caries; an oral disease affected 60–90% of school children worldwide [4]. Although conducting a meta-analysis in Nigeria is challenging due to the insufficient amount of research, subjects, and study quality [5], the national data on the prevalence of dental caries amongst children was carried out in 1995 and depicted a prevalence of about 30% in 12 year olds and 43% in 15 year olds respectfully [6]. These figures give an insight into the state of oral health in Nigeria which, to say the least, is appalling. This article thus aims to highlight why promotion of dental health amongst school children and adolescents is such a priority.

In a bid to highlight the problems, we have outlined five areas of focus which may explain the alarming figures. First, according to various primary studies assessing the knowledge, awareness and dental health practices among school children in Nigeria, it was discovered that there is poor dental health knowledge, awareness and practice among school children and adolescents in Nigeria. Given that all of the students in this study frequently consumed foods high in sugar, the students’ lack of understanding on the impact of dental caries and on how they cared for their teeth is quite worrisome [7]. This is obviously no fault of the students as there is failure to formalize school based dental health promotions in Nigeria. Conversely, greater percentages of students were aware of this cause and effect relationship in settings where school oral health promotion is formalized [7].

In low and middle-income countries, such as Nigeria, the expenses of

therapy exceed the available resources. As a result, oral illnesses are frequently left mostly untreated. Chronic untreated dental disorders have serious personal repercussions that can include unrelenting pain, sepsis, lower quality of life, missed school days, disturbance of family life, and decreased productivity at work. Families and healthcare systems have a heavy financial burden due to the expense of treating oral disorders [8]. Unfortunately, the prevalence and complexity of oral diseases and conditions are strongly and consistently correlated with socioeconomic status (income, occupation, and educational attainment). Over the course of a person’s life, oral illnesses and problems disproportionately afflict the weak and vulnerable members of society e. g. children, frequently the poor, the disabled, the undocumented, the incarcerated, and/or socially excluded groups [1].

Despite being mostly preventable, oral diseases nevertheless have a high frequency, which is a result of pervasive social and economic inequality and insufficient support for prevention and treatment, especially in low- and middle-income nations (LMICs). Oral illnesses are chronic and have significant societal patterns, like the majority of non-communicable diseases (NCDs) [8]. They also share a number of risk factors which include; usage of all tobacco products, the human papilloma virus responsible for oropharyngeal malignancies, use of betel nut and areca nut products, dangerous alcohol use, high sugar consumption, and absence of breastfeeding [1]. It is worthy to note that these risk factors are modifiable meaning they can be eradicated hence improving the quality of life of the population.

At the level of the ministry of health, political commitment and funding for oral health care systems are frequently constrained. Usually, the system for providing oral health care is underfunded, highly specialized, and separate from the larger healthcare system. Essential oral health care is typically excluded from non-communicable disease therapies and universal health coverage benefit packages. Primary care clinics typically do not provide oral health services, and oral health insurance coverage is almost non-existent for the average as health care is paid for out of pocket. Furthermore, dental education mostly concentrates on teaching highly specialized dentists rather than community oral health workers and mid-level providers, as well as mothers and teachers who are frequently in contact with the children [1].

The promotion of oral health and the prevention of oral disease are often not included in programs for other non-communicable diseases that share significant socioeconomic determinants and risk factors [1]. Simply put, there are little to no initiatives that promote oral health. In Nigeria, there exists no official program to promote oral health in schools [8]. This is quite worrisome and would provide a fitting explanation to the trend of events as it pertains to oral health around the country.

As analyzed above, global studies suggest that the prevalence of oral diseases is declining in high-income countries but less so in low-income

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countries. This is due to disparities in prevention-oriented oral health systems, the consumption of cariogenic foods, low fluoride exposure, access to oral health services, and lifestyle factors [5].

The solution is simple. The option of primary prevention should be prioritized in low income countries to avoid discomfort, tooth loss, impediment, and to lower treatment costs. Nutritional considerations, dietary analysis, counseling, oral health education, plaque control, recall visits, oral prophylaxis, use of fluorides, fissure sealants, and other approaches such as non-traumatic restorative treatment, use of xylitol, dental caries vaccine, and probiotics are just a few of the many factors that go into oral disease prevention [5]. Oral health education, however, should be of primary focus to establish good oral health habits and knowledge. The importance of this topic should be strongly emphasized in the Primary and Secondary curriculum [9]. The need for oral disease surveillance systems as part of oral health information systems cannot be overemphasized. For effective surveillance that can lead to the creation of community-based preventive initiatives, the World Health Organization Oral Health Country/Area Profile Programme (WHO/CAPP) recommends that country-based and frequent clinical oral health surveys be carried out every 5–6 years [5]. While this seems like a daunting task, it begins one school at a time.

Several literatures have been explored and we conclude that there is an overall poor approach to the promotion of dental health in Nigeria. Nigeria is one of the leading countries with severe neglect to oral health; it thus stands to reason why promotion of dental health should be a priority. Childhood is the stage of growth and reformation of the mind, the ability to ‘catch them young’ will eventually lighten the public health burden in the nearest future.

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Declaration of competing interest

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