DENTAL PUBLIC HEALTH IN NIGERIA: ISSUES, CHALLENGES AND PROSPECTS

[1]Sofola O. O.

[1]Department of Preventive Dentistry, University of Lagos, Nigeria

Corresponding Author: *Dr. Sofola O. O.*
Address: Department of Preventive Dentistry, University of Lagos, Nigeria
Telephone: +2348033031483
E-mail: osofola@unilag.edu.ng

KEYWORDS

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ABSTRACT

Oral health in Nigeria faces persistent challenges, including a high prevalence of untreated diseases, shortages in the dental workforce, and limited access to care. Priority conditions such as dental caries, periodontal diseases, oral cancers, noma, and orofacial anomalies contribute substantially to the national disease burden. While the recorded prevalence of caries is relatively low, most cases remain untreated, and periodontal disease remains widespread. Data on oral cancer and noma are insufficient due to weak surveillance systems.

The absence of recent national epidemiological data, with the last survey conducted over three decades ago, limits effective planning. Oral health services are concentrated in urban centres and private facilities, leaving rural populations underserved. Efforts to integrate oral health into primary health care, as outlined in the National Oral Health Policy, have been slow, with minimal funding and poor inclusion in the Basic Health Care Provision Fund. Insurance coverage is low, and reliance on out-of-pocket expenditure is common.

To address these gaps, Nigeria should conduct a national oral health survey, expand integration into primary health care, develop a trained primary oral health workforce through community health workers, and strengthen policies for equitable access and financial protection, aligning with global universal health coverage strategies.

Introduction

Oral health problems are regarded as public health issues because while they may not be life-threatening, they have the potential to impact overall health and quality of life of affected persons.[1] Nigeria like most of Sub-Saharan Africa is characterized by high prevalence of untreated oral disease coupled with few oral health personnel and inequitable distribution between urban and rural communities. Consequently, most rural and peri-urban areas are without emergency and basic oral care.

Oral disease burden in Nigeria

There are seven priority oral diseases and conditions that represent the largest part of the disease burden in the Africa Region. These include dental caries, periodontal diseases, oral cancers, noma, oral manifestations of HIV and AIDS, oro-facial trauma, and cleft lip and palate.[2]

Studies in Nigeria put the prevalence of dental caries between 4-30% in different parts of Nigeria. While it appears that the prevalence is low, between 77.3-98.6% of carious permanent teeth are untreated[3-5]; thus, affirming the low utilization rate of oral care in Nigeria. Concerning early childhood caries, studies in Nigeria report a prevalence of between 6.6 - 23.5% with a reported doubling of the prevalence from age 12-23 months.[6]

Globally, severe periodontal disease defined as presence of periodontal pocket more than 6mm is widespread, with a global prevalence of about 19% in people aged greater than 15 years, representing more than 1 billion cases worldwide. Case numbers are highest in lower-middle-income countries (437 million) and lowest in low-income countries (80 million). Development of severe periodontal disease starts in late adolescence, peaks around 55 years of age and remains high until old age.[7]. In Nigeria, a prevalence of 15-58% was given for deep periodontal pockets in Nigerians older than 15 years with prevalence increasing with e [8]. According to the WHO Oral Health Country Profile, a prevalence of 26.1% was reported for Nigeria in 2022.[9]

The burden of oral cancer in Nigeria is unknown. The country has 11 cancer registries, located in tertiary hospitals, which report only hospital-based data. The reported prevalence of oral cancer ranges from 2.7%-36.8% across the Nation[10]. Given the illness seeking behaviour of Nigerians, a notable proportion of cases are not reported.

Noma, a disease which has been described as a marker of absolute poverty is part of the priority actions of the WHO regional Oral Health Strategy 2016-2025[11]. WHO estimated an annual incidence of more than 140000 cases worldwide in 1998. However, recent epidemiological data are not available due to lacking surveillance systems and high mortality at early ages combined with stigma, so that affected children are hidden by their families. In addition, awareness and capacity to recognize the first signs of noma are low among health workers and the general population.

The prevalence of orofacial clefts is estimated at estimated 1 per 1000 live births globally[12] and a prevalence of 0.5 per 1000 live births in Nigeria[13].

Challenges of Oral Health Care Delivery in Nigeria

Probably the biggest challenge to providing qualitative public health planning for oral health care in Nigeria is the absence of recent national data on prevalence of oral diseases. A previous Nigerian study identified the lack of a coordinated system for collecting oral health data as a factor that makes an accurate assessment of oral health care system in the country difficult[14]. The last published National data for oral diseases in Nigeria is about thirty years old[15]. This is obviously very outdated and grossly unreliable for planning purposes. It is crucial that the country develops a coordinated system of monitoring oral health indicators and adequately funds such system.

One of the most challenging problems of oral health in Nigeria is access. Access to health care is a multidimensional term that includes physical, economic as well as socially accessible services for the population. It involves accessibility in terms of geographical location of the facilities, which still remain a challenge in many rural areas in Nigeria as well as accessibility in terms of the ability to afford such services. In an appraisal of oral health care in Nigeria, it was reported that oral health care services are provided mainly at the secondary and tertiary hospitals with about 50% of providers in the southern zones belonging to the private sector, and about 50% of these private providers are based in Lagos State. The implication is that access to publicly funded oral health services is unavailable to a sizable number of the Nigerian population. A solution to this is the integration of essential oral health care into the Primary health care (PHC) services in line with the National Oral Health policy which was re-launched in 2024. The concept of basic oral health care, as defined by the WHO within the framework of primary health care, emphasizes universal access, preventive measures, affordability, and sustainability. This includes managing oral pain, treating dental decay, and promoting oral health to prevent disease; all these services that can feasibly be delivered at the PHC level.

In terms of manpower development, Nigeria is among the countries with 0.1-1.5 dentists per 10000 population, specifically 0.2/10,000 (WHO 2022). Currently, there appears to be no known strategic plan for oral health workforce planning in Nigeria and, while there has been an increase in the number of training institutions for dental practitioners with about 16 institutions training dentists spread across Nigeria compared to when the appraisal was carried out, there is still a gross inadequacy in the required number of dentists for the population. There are also disparities in the distribution of oral health workforce in Nigeria with a concentration of dental manpower in the urban areas. To fulfil the global strategy for universal oral health coverage in Nigeria, there is a need to plan for adequate and innovative manpower for basic oral health care services and also plan for retention of the trained manpower within the oral health care system in Nigeria while ensuring equitable distribution of same. One way to ensure this is a restructuring of our oral health workforce. The development of a dedicated cadre of health professionals capable of delivering basic oral health care at the Primary Health Care (PHC) level will greatly contribute to the achievement of universal oral health coverage. Community health workers present a workforce resource for integrating oral health in to the PHC system. Various efforts have been made in Nigeria to train this group of health workers as primary health care providers with remarkable success rates[16,17] . A pilot study of a comprehensive training for community health workers was conducted in 2024, focusing on preventive counselling, disease detection, and referral protocols. Post-training evaluations showed significant improvements in participants' knowledge and capabilities, leading to increased referrals and integration of oral health into maternal and child health services.[18] An upscaling of such training and the development of a certificate course will make integration of oral health into the PHC system attainable. Moreover, a national policy is needed to formalize the development of this cadre of oral health professionals, marking a critical step towards an innovative oral health workforce in Nigeria.

Central to the issue of access to oral health care is affordability of oral health. Funding for oral health in the public sector in Nigeria derives from allocations by the Federal Ministry of Health (FMoH), the National Health Insurance Scheme (NHIS), private insurance schemes and out-of-pocket payments. Budgetary allocation for health is low and there is competition for these scarce resources from the other diseases such as malaria and other Non-communicable diseases (NCDs). The budget for health for the year 2024 is 4.6 trillion which is 4.6 % of the total budget and oral health is a meagre proportion of this. The NHIS covers slightly over 5% of employed Nigerians, mostly Federal workers and does not cover several essential oral health services and emergency care. Private health insurance covers only about 3.9% of Nigerians. This leaves most of the population paying out of pocket.

Corresponding Author: Dr. Sofola O. O. Phone: +2348033031483 E-mail: osofola@unilag.edu.ng

The enactment of the National Health Act (NHAct) 2014 and the establishment of the Basic Health Care Provision Fund (BHCPF) represents a watershed moment in the journey toward providing equitable access to health care and universal health coverage (UHC) for Nigerians. The BHCPF is derived from (a) an annual grant from the Federal Government of Nigeria of not less than one per cent (1%) of the Consolidated Revenue Fund (CRF); (b) grants by international donor partners; (c) funds from any other source, inclusive of the private sector. The overall objective is to ensure the provision of a basic minimum package of health services, strengthen primary health care (PHC) and provide emergency medical treatment.[19] However, looking through the Basic Minimum Package of Health Services (BMPHS), dental health was listed only once under primary-level care precisely under health education and disease prevention. There was neither primary dental care nor any dental care listed under secondary care. Clearly, this fund did not capture essential dental care and does not reflect that oral health is an integral part of general health. Neither does it align with the goal of the National Oral Health Policy to integrate oral health into primary health care.

This probably reflects the poor perception of the importance of oral health by the policy makers as well as other health care providers which has led to the isolation of oral health care from the mainstream health system[20]. The Division of Dentistry, at the Federal Ministry of Health responsible for stewardship of the oral health of the population is situated under the Department of Hospital services. This does not reflect the importance of oral health as an integral part of general health and it is imperative that mindsets are shifted to the effect that oral health cannot be treated outside the general health of the population given the inextricable link of oral health with other non-communicable diseases.

Indeed, recognizing the global public health importance of major oral diseases and conditions, the World Health Assembly adopted a resolution on oral health (WHA74.5) in May 2021, requesting that oral health be embedded within the non-communicable diseases (NCD) and Universal Health Coverage (UHC) agendas of member States.[21]

It is thus important that Nigeria, being a member State takes necessary steps to implement the resolution of the WHA.

RECOMMENDATIONS

1. The FMOH should prioritize oral health care in her agenda and facilitate the integration of oral health into all health and health-related policies, including the National Primary Health Care Development Agency and the National Health Insurance Scheme

2. The basic package of oral care (BPOC) should be adequately included in the basic minimum package of health services to ensure financial protection for basic oral care

3. It is imperative that a National Oral Health survey be carried out to provide credible data for proper strategic planning for oral health in Nigeria.

4. The development of a primary oral health care workforce should be included in the oral health policy.

5. Government needs to decisively tackle the problem of brain drain so that we can retain a sizeable proportion of trained manpower within the workplace in Nigeria.

6. Incentivize workers who practice in the rural areas to increase access to the population

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Corresponding Author: Dr. Sofola O. O. Phone: +2348033031483 E-mail: osofola@unilag.edu.ng

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Corresponding Author: Dr. Sofola O. O. Phone: +2348033031483 E-mail: osofola@unilag.edu.ng