

Oral Health Security in Nigeria: Analysis of the current situation and projections towards 2050

JO Taiwo¹, AO Adisa², OI Opeodu¹ and OA Gbolahan³

Departments of Periodontology and Community Dentistry¹, Oral Pathology² and Oral and Maxillofacial Surgery³, College of Medicine, University of Ibadan, Ibadan, Nigeria

Abstract

Background: Despite the increasing population in the country, only a few Nigerians have access to oral health care, which seems directly responsible for the high prevalence of oral diseases and the high rate of unmet needs in the country. The few dental facilities and personnel in the country are disproportionately located in the urban areas leaving majority of the population without care.

Methods: Internet search was done using PubMed and google scholar. Local library search was done manually to retrieve literature on oral health in Nigeria. Search words that were used include periodontal disease/periodontitis, dental caries, prevalence of dental disease, dental service utilization and Nigeria.

Results: No national study was seen during the search. Almost all the retrieved studies reported a high prevalence of periodontal disease, while a few of the studies on dental caries reported a decline in the condition. However, many of the studies on dental caries reported a gradual increase in the prevalence of the condition. A low rate of utilization was generally reported as many Nigerians utilize dental services only when in pain.

Conclusion: An increase in the population will be accompanied by a corresponding increase in the prevalence of oral diseases and increased need for oral health care, and this will be disastrous without adequate planning.

Keywords: Oral Health, Population explosion, Health security, Utilization

Abstrait

Contexte : Malgré l'accroissement de la population du pays, seuls quelques Nigériens ont accès aux soins de santé bucco-dentaire, ce qui semble directement responsable de la forte prévalence des maladies bucco-dentaires et du taux élevé de besoins non satisfaits dans le pays. Les quelques établissements et personnels dentaires du pays sont situés de manière disproportionnée dans les zones urbaines, laissant la majorité de la population sans soins.

Correspondence: Dr. O.I. Opeodu, Department of Periodontology and Community Dentistry, College of Medicine, University of Ibadan, Ibadan, Nigeria. opeodulanre1971@gmail.com

Méthodes : La recherche sur l'internet a été effectuée à l'aide de PubMed et du Google Scolaire. La recherche dans une bibliothèque locale a été effectuée manuellement pour retrouver la littérature sur la santé bucco-dentaire au Nigeria. Les mots de recherche utilisés incluent maladie parodontale / parodontite, caries dentaires, prévalence de la maladie dentaire, utilisation des services dentaires et Nigéria.

Résultats : Aucune étude nationale n'a été observée lors de la recherche. Presque toutes les études perçues ont fait état d'une prévalence élevée de la maladie parodontale, tandis que quelques-unes des études sur la carie dentaire ont signalé une réduction de la condition. Cependant, de nombreuses études sur les caries dentaires ont signalé une augmentation progressive de la prévalence de la condition. Un taux faible d'utilisation a généralement été signalé, étant donné que de nombreux Nigériens n'utilisent des services dentaires que lorsqu'ils souffrent.

Conclusion : Une croissance de la population s'accompagnera à une correspondante croissance en prévalence des maladies bucco-dentaires et d'un besoin accru de soins de santé bucco-dentaire, ce qui sera désastreux sans une planification adéquate.

Mots - clés : Santé bucco - dentaire, Explosion démographique, Sécurité sanitaire, Utilisation

Introduction

The world health organization defines oral health as a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, oro-facial birth defects, periodontal disease, tooth decay, tooth loss and other oral diseases [1]. The Nigerian population is plagued by various common oral diseases as well as their risk factors resulting in high need for dental care [2,3]. The high unmet oral health needs in the Nigerian population has been previously documented [4]. Also, contemporary studies have implicated certain oral diseases in the etiology of common non-communicable chronic medical diseases [5,6]. The socio-economic impact of oral diseases and its effects on the quality of life of the individual has been expressed in Nigeria [7,8]. The need to focus on improving the oral health of Nigerians is imperative.

Situation analysis

Fewer than 20% of Nigerians have access to oral health care [9-11]. About 15 (0.05%) out of the thirty thousand [11] primary health care clinics in the country, offer oral health care services with no structured unit to reach out to underserved communities. Almost all tertiary and secondary health care centers offer oral health services to a varying degree depending on availability of expertise and facilities. The few oral health care facilities in the country are inequitably distributed with many of them clustered in the urban areas leaving the underserved rural communities without access to basic oral health care [9,12].

There is no national survey describing the extent of the burden of oral diseases in the country, but various reports document increases in prevalence of these diseases. There is a steady increase in the prevalence of dental caries in Nigeria, especially among the younger age groups [13,14]. This may be due to easy access to sugary snacks in the rural areas, lack of access to dental care and low oral health awareness [15]. Periodontal disease has been reported to be high among Nigerians especially among the elderly due to low oral health awareness and poor access to oral health care [2,16]. Children mostly have the acute and aggressive form of this disease. Studies have reported an increasing prevalence of oral cancer due to increasing exposure to common risk factors and with very low survival rate largely due to late presentation [17].

There are eight accredited institutions where dentists are trained in Nigeria, and the regulatory body has placed a limit on the number of dental students that may be admitted by each of the institutions per session due to funding limitation. On the average, Nigerian Universities produce about 200 dental graduates annually, with another ten institutions producing about 500 parodontal staff annually. Oral health financing in Nigeria at present is mainly through out of pocket payment, making many Nigerian not to utilize dental services except when in pain [15].

Forecast (Ensuring oral health security by the year 2050)

The population of Nigeria will most likely be double the present number by the year 2050 and with this increase the oral health needs of the people will also increase. If the reported increase in prevalence of oral diseases is unchecked, then the prevalence of oral diseases will also increase at the same rate as the population.

SWOT ANALYSIS – The present state of the oral health facilities and services was analyzed and presented in Table 1.

PLANNING – Proposed plan of action on the short, medium and long-term basis was analyzed and presented in Table 2.

Proposed sources of funding

- a. Expansion of the pre-existing National health Insurance Scheme (NHIS) to include all sectors represented in the country.
- b. Shared responsibility with employers – employers should be encouraged to make adequate provisions for their employee towards their health
- c. Sponsorship by related companies – corporate organizations should be encouraged to contribute towards the development of the health sector as part of their corporate social responsibility.
- d. Oral health related companies including oral health methods in their advertisements – oral health-related companies should be made to pay some amount of money on their advertisement, while some other companies producing products with proven deleterious effects on the oral cavity should be mandated to pay health tax towards the improvement of oral health in the country.
- e. Non-governmental Organizations should be encouraged to take up some programs towards the improvement of the oral health in the country.
- f. Donations /Sponsorship from Industries, companies and Individuals towards the improvement of oral health in the country should be encouraged
- g. Community Participation – communities should be encouraged to directly participate in the administration of oral health program especially at the primary health care level

Monitoring and evaluation

1. This should be carried out by the collaborative efforts of the Federal, State and Local Governments with the participation of community leaders.
2. A digital oral health data bank should be established to monitor and evaluate oral health in the country, with clear responsibility for individuals concerning data management.
3. Donabedian's principles of quality assurance should be used to evaluate the structure, process, and the outcome of the oral health care systems.
4. Routine surveillance system to monitor disease prevalence in order to determine necessary action to be taken.

Table 1: SWOT Analysis of the Present State of the Oral Health Facilities in the Country

Strengths	Weaknesses	Opportunities	Threats
The presence of existing primary health care facilities (30,000) can facilitate the integration of primary oral health care into primary health care.	Oral health care is not properly integrated into the health care system particularly primarily health care.	Many of the common oral diseases are preventable and if identified early, 90% can be treated in primary health care centers.	Brain drain – many of the Nigerian-trained dentists find their way out of the country on regular basis in search of greener pasture.
Already existing natural tooth cleaning material (Chewing Stick) (Fig.1) will be an asset to oral health and oral health education.	There is an exodus of Nigerian-trained dentist to developed countries in search of better working conditions and remuneration.	Available international collaborative health initiatives, programs and development schemes that oral health care planners and providers can embrace	Decaying health facilities and shortage of instruments
The National Health Insurance Scheme when expanded will improve access to oral health care	Oral health care system that is largely dependent on out of pocket funding.		Industrial disharmony in government institutions
Existing well-organized Sub-specialty training of dental surgeons will be an asset to the referral system	Lack of proper plan for maintenance of infrastructure and equipment		Lack of implementation of oral health care policies
Common risk factor method/approach to prevention will inadvertently include some oral diseases in their prevention during the prevention of some medical diseases.	Poor infrastructure [e.g. poor water and electricity supply and un-favorable environment], inadequate equipment and instruments have contributed to unsuccessful oral health care delivery.		Government bureaucracy, which delays and deters progress.
	Poor man power planning, leading to production of inappropriate proportions of categories of oral health care personnel, has contributed to shortage in some cadre.		Inability to implement research findings
	Oral health care is largely urban based with neglect of the underserved communities.		
	Lack of awareness of oral health among Nigerians.		
	Lack of oral disease surveillance and haphazard oral health care planning		

Table 2: PLANS – Short, Medium and Long-Term action plans

Plan	Action Plan	Target
Short term	<p>Integration of oral health education into general health education and intensification of oral health awareness in schools at all levels and to general out patients in the hospitals.</p> <p>Equipping the available primary oral health care centers with mobile dental services to reach out to underserved communities.</p> <p>Workshop training for community health extension workers (CHEWs) and community nurses on identification and referral of common oral diseases.</p> <p>Sponsorship of the above programs should be sought from industries and NGOs as part of corporate social responsibility (CSR).</p>	Achievable by 2020
Medium term	<p>Establishment of oral health care facilities at all the primary health care clinics across the country.</p> <p>Introduction of oral health care in the training curriculum of other health care personnel to enable them to identify diseases and to imbibe the common risk factor approach in the prevention of diseases.</p> <p>Integration of oral health into the general medical consultation/practice-oral health talk should be included in the general health talk, in screening for non-communicable diseases, and in general physical examination.</p> <p>Establishment of an oral health surveillance system and introduction of indicators of oral health in medical surveillance questionnaire will improve monitoring of oral health.</p> <p>Increasing the number of trained oral health care personnel in the right proportion across all categories to meet the demand of the increase in oral health care facilities</p> <p>Expansion of National health Insurance Scheme (NHIS) to have a wide coverage to include non-cooperate and non-government participants.</p>	Achievable by 2025
Long term	<p>Rapid development of oral health-related industries to satisfy increasing oral health demands.</p> <p>Improvement of basic infrastructure (water, electricity, ICT schools) in less developed areas of the country to attract health workers.</p> <p>Building up health infrastructures to attract medical tourism from other countries into Nigeria, which will also discourage medical tourism by Nigerians to other countries.</p> <p>The NHIS should be expanded to include more treatment options in oral health care.</p> <p>Regular national health survey to include oral disease surveillance should be carried out routinely.</p> <p>Establishing a robust dental emergency service.</p>	Achievable by 2030

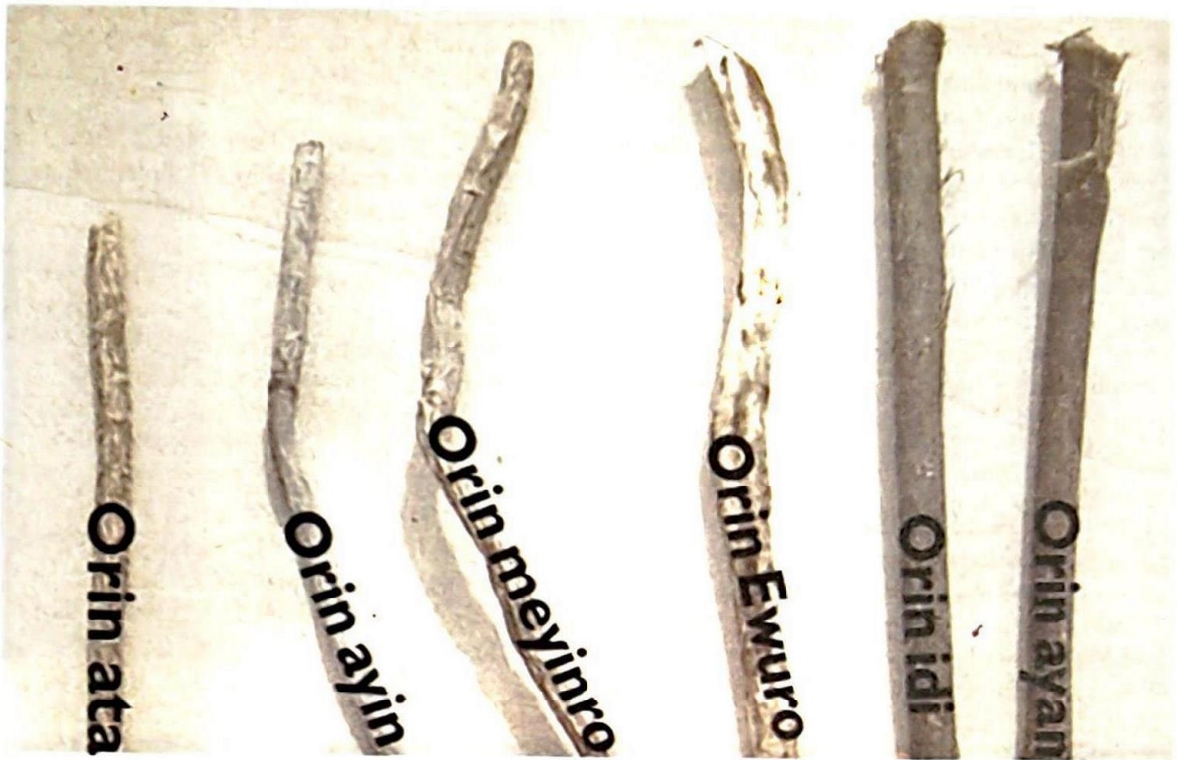


Fig. 1a: Pictures of some commonly used chewing sticks in Nigeria [19]



Fig. 1b: Picture of one of the commonly used chewing sticks demonstrating the proposed way of proper use of chewing stick

Conclusion

There is abundant evidence supporting the increasing prevalence of oral diseases. The non-implementation of previous policies on oral health coupled with neglect of oral health has retarded the progress in the oral health of the people in Nigeria. Integration of oral health into health programs as an immediate short-term plan whilst increasing the number of trained oral health care workers and training centers as well as incorporating oral health care into the training curriculum of other health workers will contribute to the improvement of oral health of Nigerians.

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