

# Global Theme Issue: Poverty and Human Development The effect of poverty on access to oral health care in Nigeria

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### Background

Nigeria is a country with a population of over 140 million people (1). Over 60% of Nigerians live in rural areas. Poverty is especially severe in rural areas where social services and infrastructure are limited or non existent. Africa is the continent where the poorest people in the world live. Nigeria is the most populous black African country where about 70% of the population live under one dollar per day (2). Nigeria has been classified as a poor nation.

In Nigeria, majority of those living in rural areas are poor and depend on agriculture for food and income. Small scale farmers who cultivate tiny plots of land and depend on rainfall rather than irrigation system produce about 90% of the country's food. Women play a major role in the production, processing and marketing of food crops. The poorest group go on subsistence living but are often short of food, particularly during the pre-harvest period. Many poor Nigerians suffer from malnutrition and other diseases related to poor nutrition such as acute necrotizing ulcerative gingivitis (ANUG) and cancrum oris (3-6). The HIV/AIDS pandemic has also taken a heavy toll on the rural population and could be considered an emerging public health problem.

The extremes of poverty in Nigeria are outrageous. The outrage is not just that avoidable deprivation, suffering and death are intolerable; it is also that these situations coexist with affluence. Corruption is endemic in Nigeria and this has impoverished the nation. Intergenerational poverty exists in the country. Fight against poverty is necessary to reduce intergenerational transfer of poverty in Nigeria because most Nigerian children are born into poverty.

The oral health status of underprivileged Nigerians is generally poor. Many Nigerians suffer from oral diseases such as caries, fracture teeth, gingivitis, periodontitis, acute necrotizing ulcerative gingivitis, cancrum oris, malocclusion, tumours and other dental problems (7-15). Non availability of National data on the prevalence of common oral diseases among Nigerians is a major problem and poses a great challenge to the Nigerian Dental Association whose members are major stakeholders regarding oral health care delivery system in the country. Lack of national data has affected planning meaningful oral health care for

This paper identified the barriers to access oral health care and stress the various strategies by which the Nigerian Dental Association and all stakeholders could assist the Federal Government of Nigeria to overcome these barriers and formulate policies that will prevent oral disease and move the nation forward to achieve the millennium development goal.

#### How poverty challenges oral health care

The dental profession recognizes that the key to achieve optimum oral health is improving access to oral health care in particular to deprived, under privileged communities and people. In comparison with developed countries where people seek care from dentist regularly, many underprivileged Nigerians face challenges accessing dental care and suffer a disproportionate share of dental disease. Access challenges include financial constraints, difficulty in locating dental hospitals, cost of transportation, prioritizing dental care among other health care needs, lack of basic awareness of oral health issues due to problems with literacy, cultural barriers, uneven distribution and shortage of dental manpower, inadequate funding of dental research and lack of political will to make policies that favour prevention of oral diseases.

One of the major issues which have come to dominate the Nigerian social, political and economic agenda between 2000 and 2005 relates to poverty alleviation or eradication strategies. The Nigerian government, in her effort to fight poverty established pogrammes such as National Poverty Eradication Programme [NAPEP], Village Economic Development Solution and Conditional Cash Transfer. Some state governments and the federal government through the NAPEP scheme have initiated micro credit projects targeted at the weaker sections and vulnerable groups.

#### **Government funding**

Inadequate funding of health care, and indeed oral health care by the government has contributed to inequalities in access to oral health care. Low priority for funding of oral health care compared with general health care programmes targeted at major killer diseases, such as AIDS, Poliomyelitis, Malaria, Diabetes, Cardiovascular diseases and National immunization against childhood killer diseases will have serious implication on the oral health of Nigerians if the government do not reverse the trend.

Government agencies such as National Agency for the Control of AIDS (NACA), National Agency on Food and Drug Administration [NAFDAC] and National Immunization Programme have well defined national programmes for all these targeted killer diseases and health promotions for iodised salt and inclusion of vitamin in some manufactured food items but no national programme on oral health.

Each year millions of production hours are lost due to dental diseases. Many poor Nigerian children suffer in silence when they are in pain because their parents cannot pay for the cost of treatment. Overcoming the financial constraints by the parents are difficult due to delay in



payment of salaries by the government. This group of Nigerians are denied access to oral health care because of poverty. Serious disparities exist in the access to oral health care, especially among low income Nigerian families. Children and adolescents living in poverty suffer more pain from dental diseases especially tooth decay than their more affluent peers while their diseases may remain untreated. It has been reported that a high proportion of decayed and fractured teeth in Nigerian children were not treated (7,16-18) resulting in complications (19,20) and a lot of burden on these children. Untreated dental disease is a frequent occurrence in African children (21, 22). Adults are not left out; untreated dental caries, periodontal diseases, cancers and other oral lesions are common (9,14,1)

A lot of work hours are also lost by Nigeria adults during dental treatment. On the part of the government, it is therefore not only socially responsible but prudent to step up access to preventive services. The cost of restorative treatment is higher than providing preventive services.

Inadequate funding of research on oral health by the government also contributes to lack of national data on oral diseases. Nigeria has no regular National oral health survey. In the world Health Organization, world oral health report 2003 there was little or no information on national data regarding Nigeria on oral diseases and disabilities which have constituted burden to many Nigerians (23). Non availability of national data on oral health has resulted in lack of reliable information on the available workforce and epidemiology of oral diseases, thus making it difficult for health authorities to plan cost effective interventions to improve oral health.

## **Dental workforce**

The number of dental schools for training dental professionals in Nigeria is grossly inadequate. Currently Nigeria has four dental schools, and with a growing Nigerian population, there will be acute shortage of dental personnel to cope with the oral health of Nigerians. Presently there is lack of base line data on dental manpower in Nigeria.

Almost all the dental clinics are located in the cities. Dental personnel are not available to render services to poor Nigerians living in rural areas. This has resulted in inequality in the distribution of dental facilities and dental personnel in the country. For the rudimentary comparison of available human resources in Africa, the dentist to population ratio is approximately 1:150,000 against a ratio of about 1:2,000 in most industrialized countries (23). In Nigeria with a population of over 140 million people, lack of data of active dentists in the country poses a challenge to determine the correct dentist - to - population ratio. Reliable data are crucial for planning, without this, neither health authorities nor dental educators can develop sustainable efforts to promote oral health.

While there are more practicing dentists today than ever before in Nigeria, the population is growing faster than the number of dentists resulting in a downswing in the availability of oral health care providers. The demand for dental care is growing steadily, especially due to the aging of the population and the increased likehood of retaining one's teeth into old age.

A solution to shortage of dental manpower in rural areas is to provide incentives for new dentists to spend time practicing in underserved areas. Dental schools should develop programmes that will link dental students to underserved communities to encourage subsequent service in rural and urban areas.

The "Brain drain" of dental professionals to developed countries created problems of training of dental specialists in the country. The burden on the training institutions in solving this problem is enormous. The brain drain problem could be solved if dental providers are gainfully employed and modern dental facilities are provided in the dental hospitals. With the present situation in most of the dental hospitals, government needs to improve on poor and inadequate infrastructure in dental hospitals and dental schools to encourage dental professionals to stay and work in Nigeria. Organized private sector and non governmental organization have a role to play through co-funding of the dental hospitals.

More dentist should be trained to meet the immediate needs of the underserved population, and to provide preventive policies on oral health through oral health promotion and campaigns.

#### The role of dental education in improving oral health

Poor oral health is a silent epidemic that can create a burden on quality of life if neglected. As the gateway of the body, the mouth senses and responds to the external world and at the same time reflects, what is happening in the body (2) The importance of oral health, particularly for children cannot be overemphasized. In adults, neglected oral health can eventually lead to a number of more serious conditions; the implications for children are perhaps even more immediate and can have dire consequences (25)

The consequences of poor oral health can affect a person's appearance, alter speech and adversely affect mastication and other functions. Oral diseases can also have a detrimental effect on self esteem, social interaction, education, career achievement and emotional state (26). For millions of children and adolescents tooth decay and pain associated with it severely interfere with the daily activities of eating, sleeping, speaking, learning, playing and going to school and work. These children struggle through meals, are distracted from play and study and are often embarrassed about how they appear to their peer (27)

Over the past few years, policy makers and other stakeholders have not used innovative approach to improve access to and utilization of dental care for the poor. Traditional oral health delivery system does not work for many segment of our population. The Nigerian Dental Association (NDA) has a major role to play in improving access to oral health care in the country. This is by making a comprehensive approach to increasing dentist participation in public programmes and improving utilization of dental services. NDA should make recommendations to the government laying emphasis on the importance of oral health care as a fundamental component of total health care which is the right of the people.

The recently introduced National Health Insurance Scheme (NHIS) does not favour the poor Nigerians living in the rural areas because of numerous access challenges in such areas regarding dental services. More dental schools should be built to provide adequate personnel that will provide services to the poor Nigerians. The provision of more dental hospitals in rural communities where majority of poor Nigerians live will improve access to oral health care at



the grass roots by reducing the cost of transportation to health centres.

It is this author's suggestion that dental treatment should be free for children and the elderly. The fight against poverty is achievable in Nigeria, if there is good governance, rule of law, honesty and transparency in implementing programmes designed to eradicate poverty in the country. All stakeholders, dental providers and the poor Nigerians should support the government through mass participation in government preventive policy on oral health when implemented. Government on her own part should muster enough political and financial will to move the nation forward in achieving the millennium development goals on oral health.

#### References

- Nigeria National Population Census 2006. Available: demography matters. blogspot.com/2006/12/ nigeria-population-census-result.html.
- United Nations Human Development reports 2006. Available: http://web.ng.undp.org/reports/nigeriahdr- report.pdf
- Enwonwu CO. Nutritional disease in the tropics. In. Prabhu SR et al (eds). Oral diseases in the tropics. Oxford University Press 1992, 309 - 324.
- Falkler WA Jr, Enwonwu CO, Idigbe EO. Microbiological understanding and mysteries of noma (cancrum oris). Oral Dis 1999;5:150-155.
- Okolo SN, Chukwu GA, Egbuonu I, Ezeogu FA, Onwuanaku C, Adeleke OA. et al. Oral hygiene and nutritional status of children aged 1-7 years in a rural community. Ghana Med J 2006;40:22-25.
- Oyedeji OA, Esan TA, Elemile PO, Oyedeji GA. An unusual complication of malnutrition in an African child: acute necrotizing ulcerative gingivitis - A case report. The Internet J Nutr Wellness 2007,3. Available :http://www.sipub.com
- Adekoya-Sofowora CA, Nasir WO, Taiwo M, Adesina OA. Caries experience in 12 year old suburban Nigerian school children. Afr Hlth Sci 2006; 6: 145 -150.
- Adekoya-Sofowora C, Sote E, Odusanya S, Fagade O. Traumatic dental injuries of anterior teeth of children in Ile-Ife, Nigeria. Pediatr Dent J 2000; 10:33-39
- Ayanbadejo PO, Savage KO, Jeboda SO. Awareness of periodontal diseases amongst Nigerian diabetics. Odontostomatol Trop 2004; 27:13-16.
- 10. Oredugba FA, Savage KO. Anthopometric finding in Nigerian children with sickle cell disease. Pediatr Dent 2002; 24:321-325.
- 11. daCosta OO. The prevalence of malocclusion among a population of northern Nigerian school children. West Afr | Med 1999: 18:75-80
- 12. Otuyemi O, Ogunbodede O, Adetunji J, Olusile A, Folayan M. A study of acute necrotizing ulcerative gingivitis in Nigerian children. Pediatr Dent J 1998:8:133-137.
- 13. Oginni FO, Oginni AO, Ugboko VI, Otuvemi OD, A survey of cancrum oris cases seen in Ile-Ife, Nigeria. Int J Paed Dent 1999;9: 75 - 80.

- 14. Otoh EC, Johnson NW, Olasoji HO, Danfillo IS, Adeleke OA. Intra oral carcinomas in Maiduguri, North Eastern Nigeria. Oral Dis 2005; 11: 379 - 385.
- 15. Ugboko VI, Ajike S, Olasoji H, Pindinga H, Adebiyi E, Omoniyi-Esan G, Ayanbadejo P. Primary orofacial squamous cell carcinoma. A multi center Nigerian study. The Internet J Dent Sci 2004;1:2. Available: http://www.ispub.com
- 16. Adekoya-Sofowora CA, Braimah R, Ogunbodede EO. Traumatic Dental injuries experience in suburban Nigerian adolescents. The Internet | Dent Sci 2005:3:1 Available: www.is pub.com.
- 17. Agbelusi GA, Jeboda SO. Traumatic fracture of anterior teeth in 12-year old Nigerian children. Odontostomatol Trop 2005; 28:23 - 27.
- 18. Adekoya Sofowora CA, Nasir WO, Taiwo M, Adesina OA. Caries experience in the primary dentition of nursery school children in Ile Ife, Nigeria. Afr J Oral Hlth 2006:3:19-25.
- 19. Adekoya-Sofowora CA, Nasir WO. A case of broomstick in the root canal extending beyond the apex causing epistaxis. Nig Dent J 2007;15:39-42
- 20. Adekoya-Sofowora CA, Nasir WO, Ugboko VI, Oziegbe E. Bilateral Periapical cyst complicating traumatized permanent teeth: A case report. Nig | Hlth Sci 2007;7:21-23.
- 21. Van Wyk PJ, Louw AJ, Du plessis JB. Caries status and treatment needs in South Africans. Report of the 1999 2002 National Children Oral Health Survey. South Afr Dent J 2004;59:238 - 244.
- 22. Kiwanuka SN, Astram AN, Trovik TA. Dental Caries experience relationship to social and behavioural factors among 3-5 year old children in Uganda. Int J Paed Dent 2004; 14:336-346.
- 23. World Health Organization. The World Oral Health Report 2003. Continuous improvement of oral health in the 21<sup>st</sup> century The approach of the WHO Global Oral Health Programme. Geneva: World Health Organization 2003: Available: www.who.int/oral\_health/media/en/orh\_report 03\_en.pdf.
- 24. United States Department of Health and Human Services [DHHS]. "Oral Health in America". A report of the Surgeon General, Executive Summary U.S. Department of Health and Human Services, National Institute of Dental and Cranio facial Research, National Institute of Health Rockville MD 2000, 10.
- 25. Ryan J. Improving Oral Health: promise and prospects. National Health Policy Forum [NHPF]. Background Paper 2003. Available: http://www.nhpf.org
- 26. Access to Oral Health Care for Florida's citizens with Developmental Disabilities. The University of Florida College of Dentistry and Nova Southeastern School of Dental Medicine 2002. Available : www.dental.ufl.edu
- 27. Edelstein BL. Pediatrc Dental Care in CHIP and Medicaid: Paying for what kids need: Getting value for state payments" 1999. Available: http://www.milbank.org/990716 mrpd.html.