

Community Engagement and Collaboration for Optimal Oral Health in Nigeria

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Oral health is essential for daily living, is mutually linked with general health and contributes to wellbeing. Optimal health is a state of oral health inclusive of the absence of oral diseases with maximum utility obtained from orofacial tissues in function. Community engagement and collaboration entails working together of individuals, groups and communities with regards to mutually agreed action plans. In health, it usually has a strong preventive component which makes it suitable for resource-disadvantaged settings like Nigeria. Control of health determinants is key for achievement of optimal oral health and this is most effective when carried out in the oral health system. The Nigerian oral health system has certain challenges such as weak governance, inadequate manpower, financing and oral health awareness. Community engagement and collaborations can enhance the strengthening of oral health system. In Nigeria, prioritisation of efforts by community engagement and collaborations in strengthening the oral health system through enhancing leadership, governance, financing, manpower development and behavioural reorientation of the populace favourable to optimal oral health are recommended.

Keywords: Community engagement, collaboration, optimal oral health, Oral Health systems, Nigeria

INTRODUCTION

The functions of the oral cavity are highly vital for daily living, social interactions and survival. The teeth, its supporting structures and specialised tissues such as the tongue, salivary glands and oral mucosa work in synergy to facilitate mastication, appreciation of taste, swallowing, speech, facial aesthetics, self-defence and social interaction (Dolores Correia Miranda Valdivia et al., 2023).

The World Health Organisation (2022) captures the unique role of oral health to daily living through its definition as, '...the state of the mouth, teeth and orofacial structures that enables individuals to perform essential functions such as eating, breathing and speaking, and encompasses psychosocial dimensions such as self-confidence, well-being and the ability to socialize and work without pain, discomfort and embarrassment. Oral health varies over the life course from early life to old age, is integral to general health and supports individuals in participating in society and achieving their potential.' The United States Surgeon General's first report on oral health (2000) marked a significant stride in acknowledging the importance of oral health to general wellbeing and brought to the fore

of public health discuss the concept of oral health and its related issues. The report buttresses that oral health is mutually linked and is inseparable from general health. Its contribution to general health and quality of life cannot be over-emphasised.

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A careful examination of the definition of oral health by the World Health Organisation will reveal that the inclusion of oral diseases is not clearly defined. This may lie in the observation that maximum utility and efficiency with the use of the teeth and its associated tissues can be achieved even in the presence of oral diseases. Gingivitis and caries at its early stage barely interferes with oral health. Optimal oral health should be the ultimate goal at all times with regards to oral health. It is a state of oral health inclusive of the absence of oral diseases (figure 1). Optimal oral health, in view of the life course approach to management of oral diseases should be maintained, if possible, all times to eliminate the cumulative effect of oral diseases on

oral health which become significantly pronounced at the later stages of life (Northridge & Lamster, 2004).

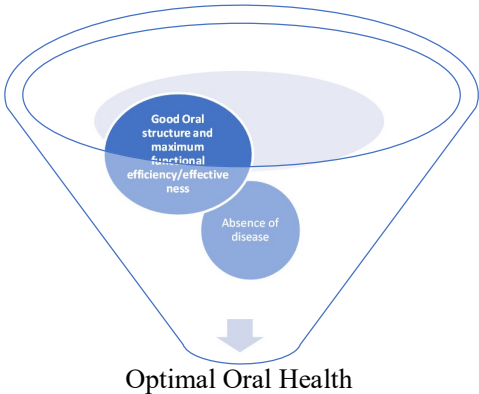


Figure 1: Optimal oral health as a state of oral health with absence of oral disease (Source: Author’s construction).

Health determinants, oral health and System

Certain factors that are not directly linked to a disease, condition, event or phenomenon but its presence influences the occurrence or manifestation of that disease, condition, event or phenomenon. Such factors are referred to as determinants. Dahlgren and Whitehead in 1991 (Figure 2) described the determinants of health (and oral health), the direction of influence and contribution to health with an onion layer diagram. The core of the onion is the age, sex and constitutional factors like genetics. The next layer is the Individual lifestyle factors. Social and Community networks follow next. The outermost layer are the general socioeconomic factors, cultural and environmental conditions (Agriculture and food production, Education, work environment, living and working conditions, unemployment, water and sanitation, health care services and housing)

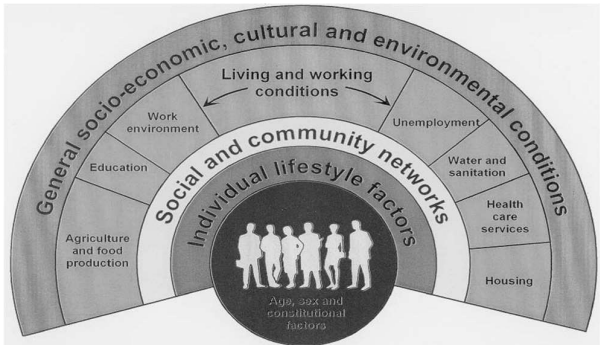


Figure 2: The determinants of health. (Dahlgren and Whitehead, 1991)

They proposed that the direction of influence of the determinants is from the outermost layer of the general socioeconomic factors, cultural and environmental conditions to the innermost layer of constitutional factors, age and sex (Figure 3).

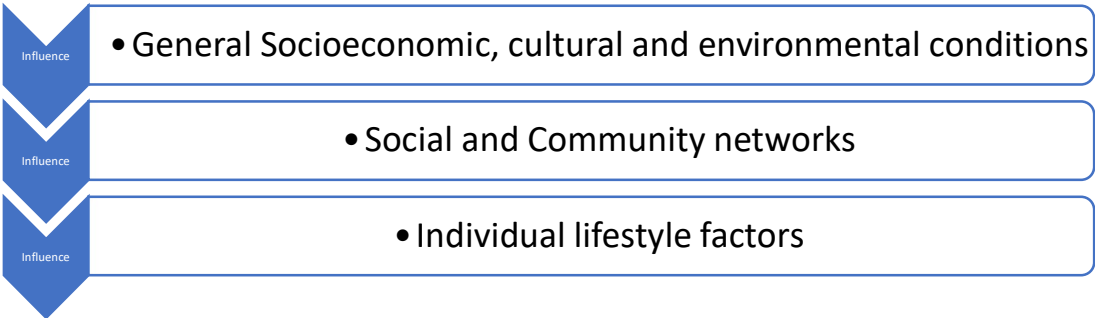


Figure 3: Direction of influence of Determinants on age, sex and constitutional factors (Author’s construction)

Furthermore, they opined that the highest influence to health and longevity, approximately 40 percent of the total, arises from an individual's behaviour. These behaviours include personal hygiene and lifestyle choices. Health care professionals' interventions is about 10 percent of the total. Genetics of which the individual has no control, contributes about 30 percent of the total. The final 20 percent is related to the environment and public health measures, which, in some cases, can be controlled to favour health. Control of these determinants is the core of public health and it is best done in a system. The system whose design seeks to create a favourable advantage to achieve optimal oral health is referred to as the Oral Health system.

Oral health system can be defined as '*...the combination of organisations' flows of finance, workforce training and structure, laws, regulations and accepted practice which are aimed at improving the oral health of individuals and the community*' (Anderson, Treasure and Whitehouse, 1998). It consists of mutual actions of governmental and non-governmental actors which is vital for the preventive oral health of populations. Properly designed oral health systems care have a strong preventive core component which can detect oral diseases/conditions early and facilitate prompt intervention through a combination of action and advice. Identify also factors whose modification could reduce the prevalence of oral diseases and, further, guide on controlling such factors to contribute to preserving a good quality of life.

Oral health system, community engagement and collaboration

Oral health system interacts with individuals, groups and communities in performing its role. A community is a group with a complex network of connections. It is also often depicted as individuals which share similar characteristics. It usually refers to humans living in a geographic area from which they draw sustenance between themselves and from the environment. Communities often elect to facilitate or achieve a specific task. This is possible through engagement between members of the community or aid partners. Engagement is a process which results in agreement and action in relation to a task. Actions resulting from engagements may be multifaceted or unidimensional. These actions can be styled in a manner dovetailing in harmony. This style of carrying out an action by the harmonious working together of individuals whose interests may vary through engagement refers to collaboration.

One of the most significant policy achievements in public health is the Declaration of Alma Ata in 1978. This Declaration was reinforced in 2018 by the Declaration of Astana (Park and Abrams, 2019). Excerpts from this Declaration defines primary health

care as '*...essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through **their full participation** and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.*' The definition of primary health care acknowledges the importance of community participation which can only be procured through engagement and collaboration. Community engagement and collaboration for optimal health is desirable because of obvious advantages. It promotes a communal sense of belonging and ownership of oral health activities or projects thereby delivering a very high chance of oral health programme sustainability; working together enhances efficiency and effectiveness of resource utilization as well as building good/supportive relationships through shared learning experiences between oral health professionals and the community. A key component of control over determinants of health is through individuals' behaviour. Dental clinics settings are less suitable settings for behaviour change. Engagement and collaboration in communities provide better settings for behavioural change as the setting is more realistic. Most oral health activities through community engagement and collaboration have a strong preventive component. Community engagement and collaboration for optimal health also has its challenges. Its early phase is time consuming. Rationale for this stems from dealing with humans with different perspectives about reality, culture, communication barriers, trust, suboptimal oral health awareness, resistance to change etc.

Community engagement and collaboration with a broad coalition of individuals and groups such as governmental and non-governmental organisations, traditional institutions, policymakers, opinion leaders, influencers, members of the community have been a good strategy in achieving significant outcomes to optimal oral Health (Nghayo *et al.*, 2024). In Nigeria, examples of success stories using this strategy include projects for full integration of oral health into primary health care in Barkin Ladin, Plateau State; Ipetumodu, Osun State; Udo, Edo State; Ile-Oluji, Ondo, Katsina State etc. Katsina State at the turn of the millennium, had the best oral health system in the country with all local government areas having a functional dental clinic. Similar stories were recorded in policy formulation like the launch of the National Oral health policy and Noma control policy and strategic plan (Etiaba *et al.*, 2015). Deserving of mention also is the use of community engagements and collaborations to ensure incident cases of Noma and orofacial clefts are identified and assisted with access to care as well as the

'Talk to a Dentist' dental outreach programs in underserved Nigerian communities.

Strengthening Oral health system, Community engagement and collaboration actions

The health system creates an environment for control of determinants. Community engagement and collaboration actions for optimal health is best served on improving and strengthening the health systems to make them more favourable for oral health. The World Health Organisation's Building Blocks framework (de Savigny and Adam, 2009) and World Bank/Harvard's Control Knobs framework (Roberts *et al.*, 2003) provide the theoretical framework to identify key areas for evaluating and improving health systems to promote optimal oral Health. The World Health Organisation's Building Blocks framework was first introduced in 2007. Improvement was made on the model in 2009 by including 'people and interconnectiveness' (Figure 4). It recognises six building blocks of Service delivery; Health workforce (human resources); Information (data and data systems); Medical products, vaccines and technologies; Financing and Leadership/governance (stewardship). Strengthening these six blocks in a health system will enhance access, coverage, quality and safety as short-term goals while improving health; responsiveness (how well the system reacts to changing health needs

or other changes in the system); social and financial risk protection; and improved efficiency as long-term goals. In a collaborative effort by the World Bank Institute (WBI) and the Harvard University School of Public Health, five key control knobs (areas) and six outcome measures were identified for evaluating and monitoring a health system to ensure it is fit-for-purpose (Figure 5). The five key control knobs are Financing (mechanisms which mobilise money to fund healthcare); Payment: for health providers and motivations to influence output; Organization: structure and management of health care delivery systems; Regulation: imposed by the state to influence health care providers and organisations; Behaviour: influencing the major players such as providers and consumers through population-based interventions within acceptable social and cultural structures. This control knob recognises the role beliefs, perceptions, attitudes and cultural norms play in the health care system. Six outcome measures are divided into intermediate measures (efficiency, quality and access of the health system) and long-term measures of health status, consumer satisfaction and risk protection of the target population. A blend of the two systems is advocated to ensure recognition of key pillars of a health system with the context of culturally appropriate beliefs and norms favourable to health.



Figure 4: The World Health Organisation's Building Blocks framework (de Savigny and Adam, 2009)

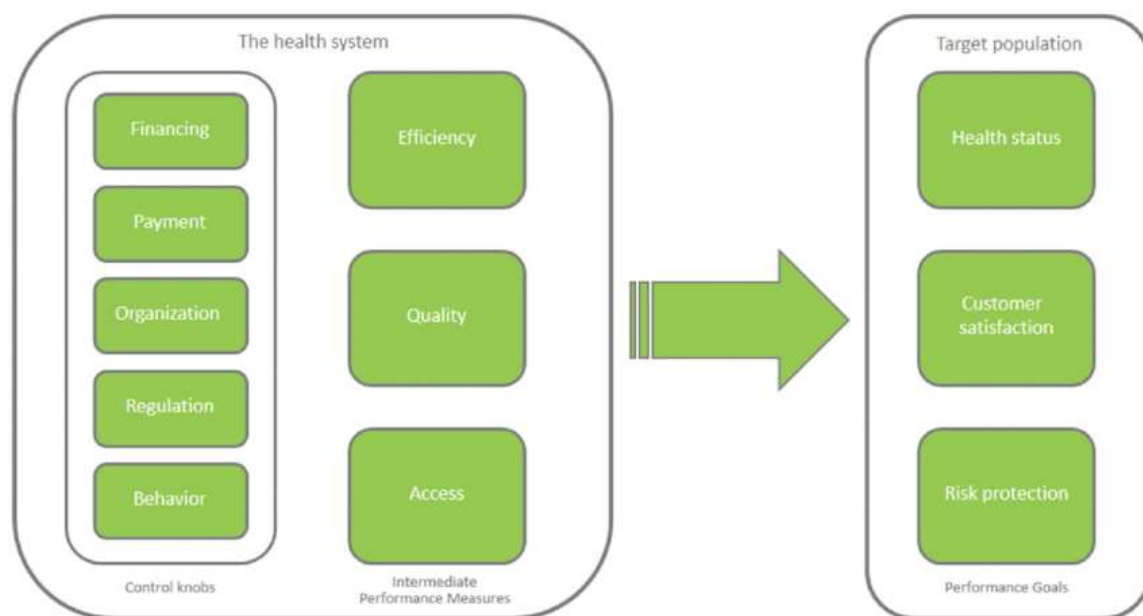


Figure 5: World Bank/Harvard's Control Knobs framework (Roberts et al., 2003).

The Nigerian Oral Health System is in dire need of strengthening. This is because the system is characterised by poor financing, relatively lower pay and job satisfaction for its workers fuelling migration of health worker access. There are non-existent oral health systems in nearly all the primary health centres, weak regulation and governance, scanty and outdated national oral health data. The Nigerian population is in no better shape oral health wise as majority of oral diseases are untreated amidst poor oral health behaviour and beliefs among the Nigerian populace (Amedari *et al.*, 2022).

Recommended targets that can be facilitated by community engagement and collaboration for optimal oral health through strengthening the oral health system include;

The capacity of the Federal Ministry of Health of Nigeria needs to be upgraded. Presently, governance/stewardship in oral health is under a Division in the Department of Hospital services. This Division of Dentistry needs to be upgraded to a department with better funding. This will greatly improve its capacity to meet its responsibilities with regards to the contemporary demands in Nigerian Oral Health.

Despite the incorporation of Oral health into the components of Primary Health Care in the early 1980s and the acceptance of the Basic package of Oral care as the minimum standard of oral health care (Koirala *et al.*, 2022), the Nigerian Basic Minimal Package Health Services (NBMPHS) only captures oral health education as the oral health service to be made available at the primary health care level. There is an urgent need to review the NBMPHS as this document provides the information on the list of health services and their

scope at the primary health care level. This document greatly influences the activities of Nigerian Government agencies in Primary Health care such as the Nigerian Primary Health Care Development Agency, National Health Insurance Authority (NHIA) and the National Emergency Medical Treatment. The nearly neglect of oral health including its funding at the primary health care level is linked to the NBMPHS. Currently, oral health services are categorised as secondary level of care in the NHIA. This is a major impediment to access to universal oral health care and attainment of the Sustainable Development Goals in 2030 by millions of Nigerians.

Community engagement and collaboration is vital to improve the dental manpower training and job satisfaction especially for Nigerian Dentists in the light of poor dentist to population ratio of approximately 1:54,000 against the recommended ratio of 1:5,000. Similar efforts should be extended to establishing a National Oral Health Data Bank especially at the primary health care level for advocacy, surveillance, planning and evaluation of Oral health promotional activities. Regular updates of the Data Bank must also be ensured. In addition, ease of access to loans to engage the entrepreneurial zest of young dentists and activities geared towards reorientation of perceptions and beliefs favourable to optimal oral health must be prioritised and effectively executed through community engagement and collaboration.

CONCLUSION

Community engagement and collaboration entails working together of various individuals, groups and communities to with mutually agreed action plans. In health, it usually has a strong preventive component

which makes it suitable for resource-disadvantaged settings like Nigeria. In promotion of optimal oral health which is a state of good oral anatomical structures and maximum functional efficiency/effectiveness in the absence of oral diseases, community engagement and collaborations is vital for strengthening oral health system. In Nigeria, prioritisation of efforts by community engagement and collaborations in strengthening the oral health system through enhancing leadership, governance, financing, manpower development and behavioural reorientation of the populace favourable to optimal oral health are highly recommended.

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