Achieving Universal Health Coverage for Oral Health in Nigeria: Prospects, Barriers and Strategies.

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Abstract

The United Nations instituted the Sustainable Development Goals (SDGs) to solve health problems by integrating the social determinants of health in the management of diseases. However, oral health is not one of the issues addressed by the Sustainable Development Goals despite the facts that orodental diseases are on the rise in Nigeria and the diseases are related to neglected lifestyles and socio-economic health determinant factors. The objective of the paper is to provide evidence based facts for the expansion of the scope of dental services in the National Health Insurance Scheme. The barriers to and the strategies to achieving Universal Oral Health Coverage in Nigeria are also discussed.

Keywords: Health Coverage, Oral Health, Nigeria

Introduction

Global health indices and continental responses in the 20th century laid the foundation for the evolution of various UN programmes including the Millenium Development Goals (MDGs) and the more current Sustainable Development Goals (SDGs). The aims of SDGs are to tackle health problems holistically by identifying social determinants of health and incorporating these factors in the management of diseases. Unfortunately, oral health is not one of the health issues addressed by the SDGs. Oral health problems are on the rise in Nigeria and are increasingly constituting general health problems. A report of the national survey of oral diseases in Nigeria indicates that periodontal diseases, oral cancer, dental caries and dental trauma are on the increase in Nigeria[1,2]. These diseases are associated with neglected lifestyle and socio-economic health determinant factors, are entirely preventable and can be effectively minimized within the primary health care system in Nigeria[1].

Nigeria has embraced the Universal Health Coverage (UHC)[3], a key strategy for the achievement of the SDGs, and initiated a National Health Insurance Scheme (NHIS) meant to achieve the key priority areas of the UHC and this scheme also included the provision of dental services.

The 3 main priority areas and goals of universal health coverage include (i) Population Coverage (Who is covered? Extend to the non-covered); (ii) Range of services provided (Which services are covered? Extend to include other services); (iii) Out-of-Pocket Expenditure (What do people have to pay out-of-pocket? Reduce cost sharing and fees). The NHIS was established by an Act 35 of 1999 constitution by the Federal Government of Nigeria and guidelines developed following the call for memoranda and submission of conclusions from various committees, including the Standards Committee. Only one slot was allotted to dentistry, specifically the representative of the Medical and Dental Council of Nigeria (MDCN), on the NHIS Standards Committee Membership[4].

The objectives of the NHIS[4] are to

1. ensure that every Nigerian has access to good healthcare services;
2. protect families from the financial hardship of huge medical bills;
3. limit the rise in the cost of healthcare services;
4. ensure equitable distribution of healthcare costs among different income groups;
5. maintain a high standard of healthcare delivery services within the scheme;
6. ensure efficiency in healthcare services;

7. improve and harness private sector participation in the provision of healthcare services;
8. ensure adequate distribution of health facilities within the Federation;
9. ensure equitable patronage of all levels of healthcare;
10. ensure the availability of funds to the health sector for improved services.

The inaugural guidelines captured dentistry as a secondary provider service and with the fee-for-service payment option for services strictly limited to only amalgam fillings and simple extractions; and diagnostic investigations limited to periapical radiographs. Following a call for memoranda to review its guidelines, the NHIS, in 2012, expanded the scope of dental services covered to include composite fillings, pulp treatment for children, surgical extractions, jaw wiring, tumour excisions; and diagnostic investigations expanded to include occlusal and panoramic radiographs.

The prospect of achieving universal oral health coverage in Nigeria is as summarized below:

NHIS Objectives[4]	UHC Priority Areas and Goals[3]
Ensure that every Nigerian has access to good healthcare services	Population Coverage: Who is covered? Extend to the non-covered.
Ensure adequate distribution of health facilities within the Federation	
Maintain a high standard of healthcare delivery services within the scheme	Range of services provided. Which services are covered? Extend to other services.
Ensure efficiency in healthcare services	
Improve and harness private sector participation in the provision of healthcare services	
Ensure equitable patronage of all levels of healthcare	
Protect families from the financial hardship of huge medical bills	Out-of-pocket Expenditure. What do people have to pay out-of-pocket? Reduce this by cost sharing.
Limit the rise in the cost of healthcare services	
Ensure equitable distribution of healthcare costs among different income groups	
Ensure the availability of funds to the health sector for improved services	

In summary, the objectives of the NHIS are "technically" capable of achieving the goals of universal health coverage in Nigeria. It can work if aligned with the UHC using the established National Health System Policy, i.e. 3-tier health care system. However, the situations on the ground show gaps in the extent of the achievement of these goals of UHC.

Materials and Methods

The article collected findings from researches conducted by the Intercountry Centre for Oral Health (ICOH) for Africa, Jos on the survey of oral diseases and a survey of oral health manpower, facilities and training institutions in Nigeria[5]. It also involved the use of data from the National Bureau of Statistics[6], Budget Office of the Federation[7], a questionnaire survey of the costs of dental services in states in different geopolitical zones of Nigeria and assessment of the impact of the NHIS on patient attendance at an NHIS-accredited dental clinic[8].

Barriers to Achieving Universal Oral Health Coverage in Nigeria

These barriers would be highlighted along the 3 priority goals of UHC and the NHIS objectives aimed at accomplishing these goals.

1. Barriers to Population Coverage

NHIS Objective 1: Ensure that every Nigerian has access to good healthcare services.

The WHO recommended a 5km distance to the nearest healthcare facility, but the average distance to the nearest available oral healthcare facility in the states of the different zones are as follows:

Table 1: Accessibility of Dental Clinics in Nigeria

Geopolitical Zone	Number of Available Dental Clinics	Required Number of Dental Clinics	Average Distance to nearest available Dental Clinic (km)
North West (NW)	110	2842	14.1 – 42.3
North East (NE)	34	3684	31.0 – 52.4
North Central (NC)	136	2953	6.4 – 37.2
South West (SW)	256	1002	2.7 – 23.2
South East (SE)	53	371	9.0 – 26.1
South South (SS)	90	1089	13.1 – 37.1

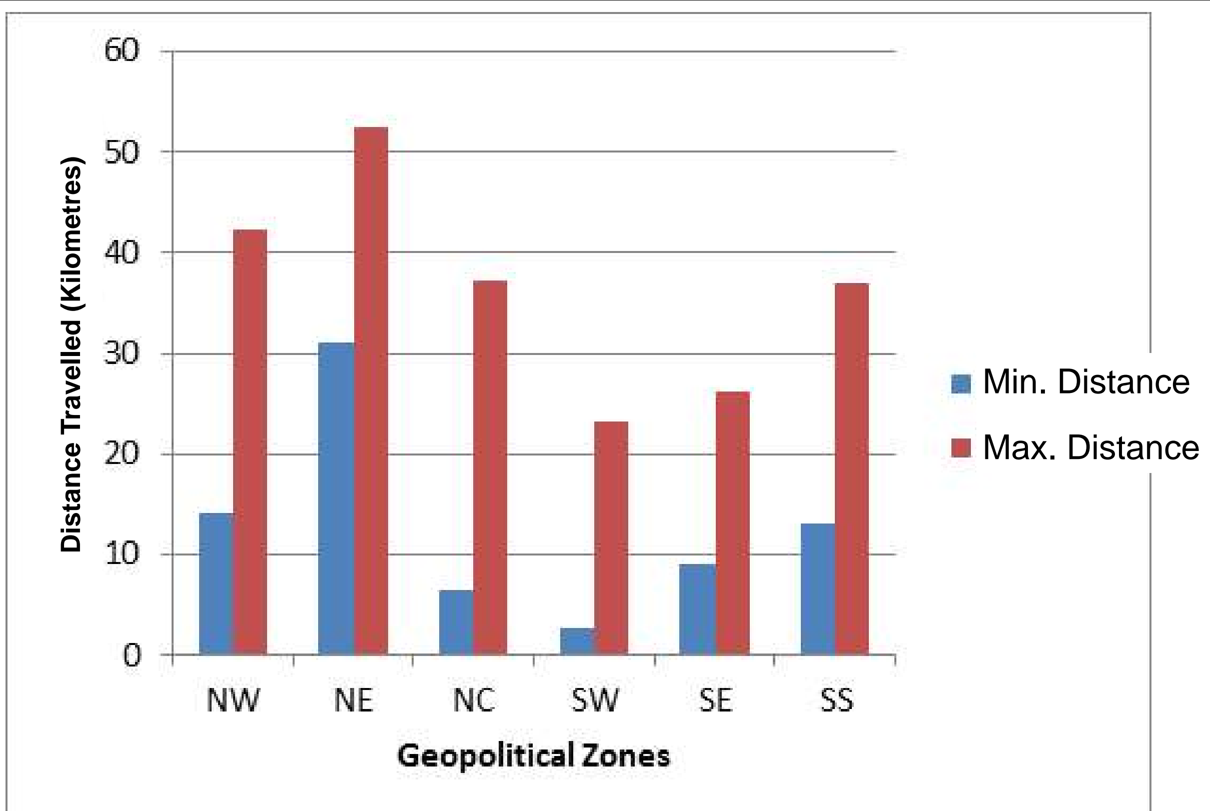

Fig. 1: Accessibility of Dental Clinics in Nigeria (Report of the survey of Oral Health Manpower, Facilities and Training Institutions in Nigeria. ICOH. 2016)

Availability of Dental Services in Nigeria.

The estimation of the spatial distribution of dental clinics in the country was calculated using the formula:

$$N = \frac{\text{Land Area of Nigeria or Zone or State (Km}^2\text{)}}{\text{Area within a 5km radius (Km}^2\text{)}}$$

Presently, there is a huge discrepancy between the number of available dental clinics and the minimum number of dental clinics required to achieve universal coverage in Nigeria (Fig. 2).

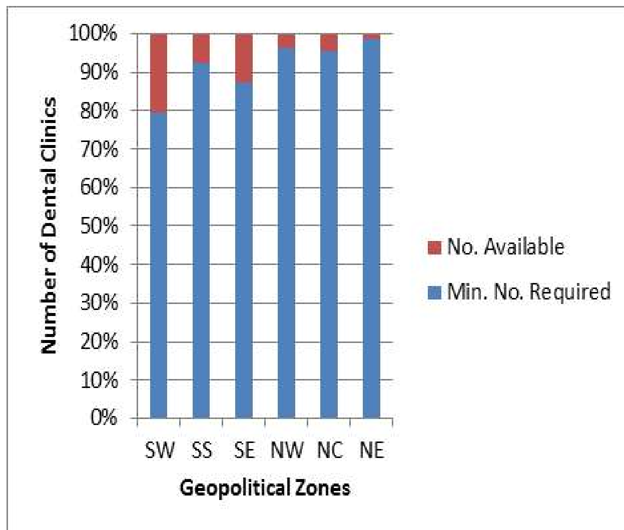

Fig. 2. Dental Clinic Requirements in Nigeria (Report of the survey of Oral Health Manpower, Facilities and Training Institutions in Nigeria. ICOH. 2016)

NHIS Objective 8: Ensure adequate distribution of health facilities within the Federation

Presently, the country's health system is aligned along the principles of primary health care with service providers categorized as primary, secondary and tertiary care providers. Primary care providers are the clinics that are most accessible to the populace and targeted at diagnostic, preventive and palliative levels of management. These are essentially the privately owned and local government-owned dental clinics which should be located within 5 km of the residence of the patients. Secondary care providers are clinics that provide for confirmatory diagnosis and treatments of established cases. These are dental clinics located within state-owned general hospitals. Tertiary care providers are clinics that provide for advanced confirmatory diagnosis and definitive treatments of cases referred from the secondary care providers. These are usually situated in tertiary health facilities like federal and state government-owned teaching hospitals and Federal Medical Centres (FMCs). The initiation of the National Health Insurance Scheme (NHIS) for Nigeria has tried to classify care providers along the existing lines of health services providers' classification. This has been fairly achieved for medical health services, but not for oral health services. The equitable distribution of care providers in an ideal PHC setting is represented by a pyramid with the lower, middle and apical 3rd as the primary, secondary and tertiary providers, respectively. In Nigeria, the distribution of dental clinics is as shown in Fig. 3.

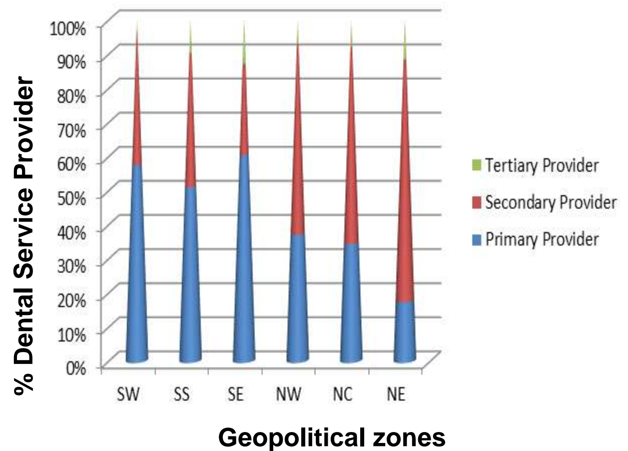

Fig. 3: Health Systems Classification of Dental Clinics in Nigeria (Report of the survey of Oral Health Manpower, Facilities and Training Institutions in Nigeria. ICOH. 2016)[5]

This reflects a fairly equitable distribution in the SW, SE and SS zones. The Northern zones show a need for more primary care facilities. The NHIS Classification of dental service providers should ideally be structured along the pattern above, but what obtains presently is as shown below (Fig. 4):

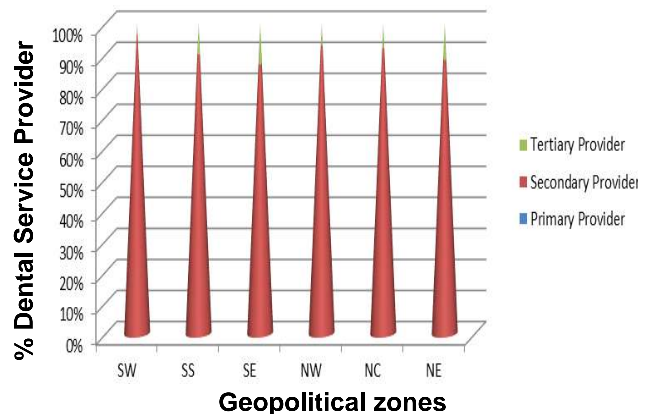

Fig. 4: NHIS Classification of Dental Clinics in Nigeria (Report of the survey of Oral Health Manpower, Facilities and Training Institutions in Nigeria. ICOH. 2016)[5]

Presently, there are no primary oral health service providers in the NHIS in Nigeria. This trend does not encourage the equitable distribution of dental service provider clinics in the country. The National Oral Health Policy has recommended the establishment of a dental clinic in every one of the 774 local government areas in Nigeria[9]. This is a laudable proposal, would entail a very huge wage bill for the local government councils and can be achieved only by encouraging the establishment of private dental clinics in these areas, especially in Northern Nigeria (Fig. 5).

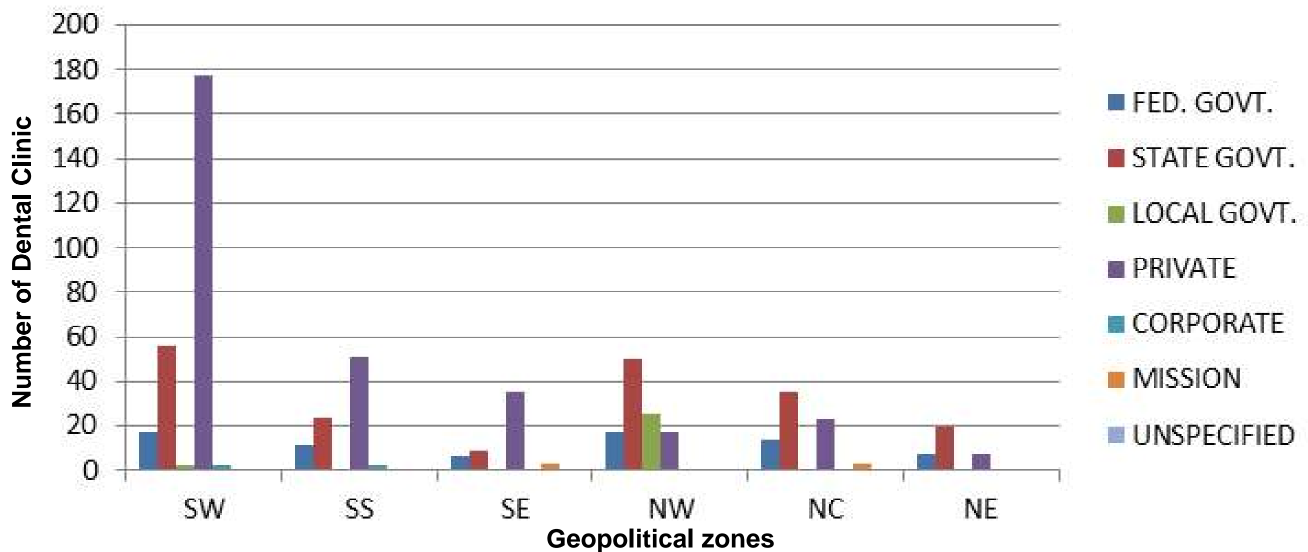

Fig. 5: Distribution of Dental Clinics in the Different Zones in Nigeria (Report of the survey of Oral Health Manpower, Facilities and Training Institutions in Nigeria. ICOH. 2016)

2. Barriers to extensive service coverage

NHIS Objective 5: Maintain a high standard of healthcare service delivery within the scheme.

This can be achieved by a careful evaluation of service delivery by all the stakeholders. The pre-registration assessment of service provider facilities is carried out by the NHIS but post-accreditation evaluation strategies, where existent, are poorly implemented. The achievement of this objective by providers is integrity-driven, e.g. the procurement of appropriate/best materials, without cutting corners in service delivery. This objective is carried out occasionally by health maintenance organizations (HMOs) and mostly driven by the cost of services provided. HMOs want to limit the number of teeth treated and types of treatment, thereby negating best practices among oral healthcare providers.

NHIS Objective 6: Ensure efficiency in healthcare services.

Efficiency in healthcare services is influenced by early referrals by primary providers; short waiting times at the referring and service providing clinics; qualitative and appropriate service provision at all times; regular audit by the NHIS and the HMOs, with appropriate sanctions for erring providers; geographical distribution of prevalent oral diseases and the reduction in oral disease indices. The situation on ground shows that (i) Primary providers are often "selective or biased" in referring patients to accredited secondary providers, with referrals often NOT based on quality of services or objective assessment of the facilities, but on "gifts" or "returns" or "appreciations" demanded of and received from the secondary providers; (ii) the patients' waiting times at the General Outpatient Developments of the specialist and teaching hospitals is quite demanding on patients. This often makes the patients open to suggestions of "expedited services by quacks in doctors' clothing" within the hospital premises.

NHIS Objective 7: Improve and harness private sector participation in the provision of healthcare services.

There are 3 main categories of private sector participants, (i) Health Maintenance Organizations (HMOs), (ii) Private dental clinics and (iii) the oral health products and dental equipment manufacturers.

The HMOs are not encouraging the involvement of more private dental clinics in the scheme because of the poor knowledge of oral health, delays in fee-for-service payments to providers, unilateral "slashes" in payments to providers, unilateral "limitation" of

accessible services of enrollees under their various health plans. Some HMOs mandatory requirement for the providers to call for confirmation of authorization codes causes delays in service provision and discourages providers.

The participation of private dental clinics in the scheme, though highly essential for effective coverage, is still low. This is as a result of (i) a grossly inadequate number of private dental clinics in Nigeria; (ii) a wide difference between the treatment costs (private and government clinics) and NHIS tariffs and (iii) little or no incentives for dental clinics. Manufacturers of oral health products and dental equipment need a high level of dental clinics manned by trained professionals as clients. The present curriculum of training for dental surgeons does not encourage practice management and as such excludes the option of the fresh dentists going into private dental practice.

NHIS Objective 9: Ensure equitable patronage of all levels of healthcare

NHIS Classification of primary care providers negates this objective by the inclusion of out-patient clinics of secondary and tertiary hospitals. Presently, all government secondary and tertiary hospitals and most private specialist hospitals have been accredited by NHIS as primary, secondary and tertiary healthcare providers (triple accreditation for one hospital). Presently, dental clinics are categorized as ONLY secondary care providers. The high dependence on public institutions "be-devilled" with incessant industrial actions run contrary to the objectives of the NHIS. The long waiting times discourage patient enrolment, causing frustrations and preference for out-of-pocket payment, thus making them susceptible to sharp practices in the hospitals, and ultimately victims of "quacks". Some primary providers often leave no room for patients to patronize secondary or tertiary providers of their choice.

3. Barriers to the reduction of out-of-pocket payment.

NHIS Objective 2: Protect families from the financial hardship of huge medical bills.

Patients incur huge medical bills from the cost of transportation to and from the health facilities and from the actual cost of services. The findings from a questionnaire survey of the treatment cost for a 4-year old child with dental caries affecting the upper maxillary incisor teeth and mandibular deciduous molar teeth among private, government-owned and NHIS-accredited dental clinics is as shown below (Fig. 6):

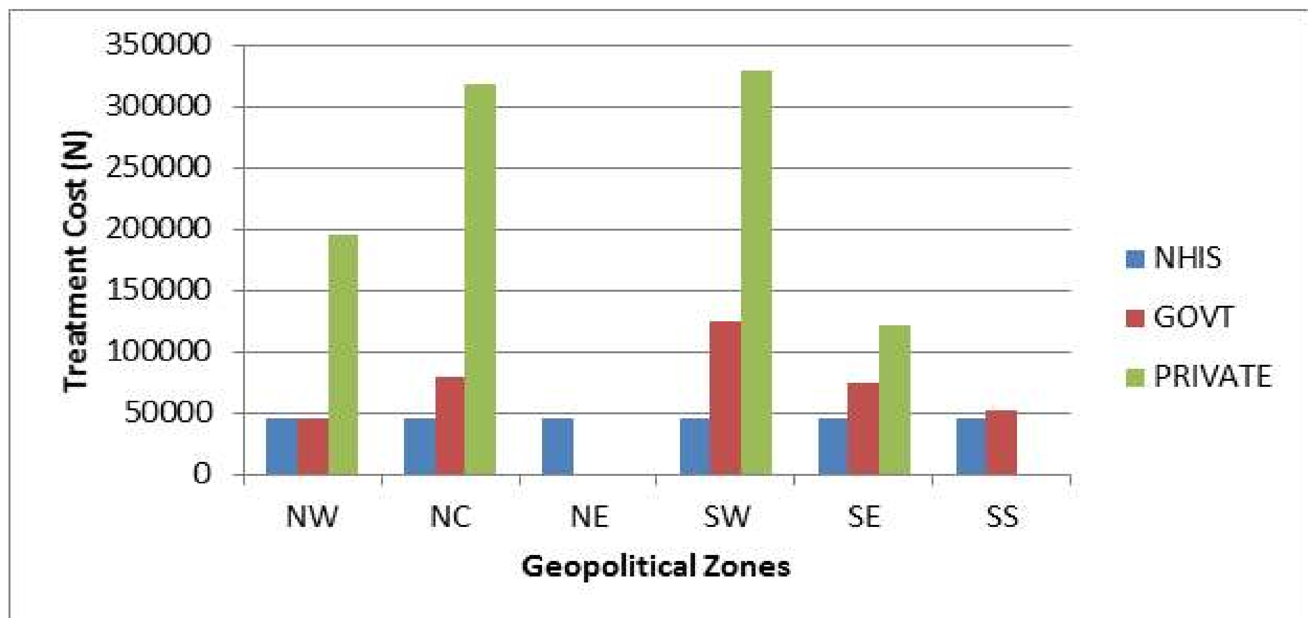

Fig. 6: Comparative Costs of Dental Services

(SW-South-West, SS-South-South, SE-South- East, NW-North-West, NC-North-Central, NE-North-East)

The findings indicate a wide variation in the cost of service provisions between the NHIS and private dental clinics. This variation is as a result of the non-availability of the preventive treatment options like fissure treatments in the list of NHIS-approved treatments and the very low NHIS tariff for dental services which is inimical to the sustainability of the provision of dental services under the scheme.

NHIS Objective 3: Limit the rise in the cost of healthcare services

The cost of healthcare services is determined by essentially by (i) the cost of dental equipment and consumables and the exchange rate of US$; (ii) the availability of incentives for importation of equipment/consumables and (iii) competitiveness between the service providers. The NHIS can influence this factor by encouraging the enrolment of more dental clinics. The current fixed fee-for-service rate for dental services does not encourage enrolment of more private clinics into the scheme (Fig. 7).

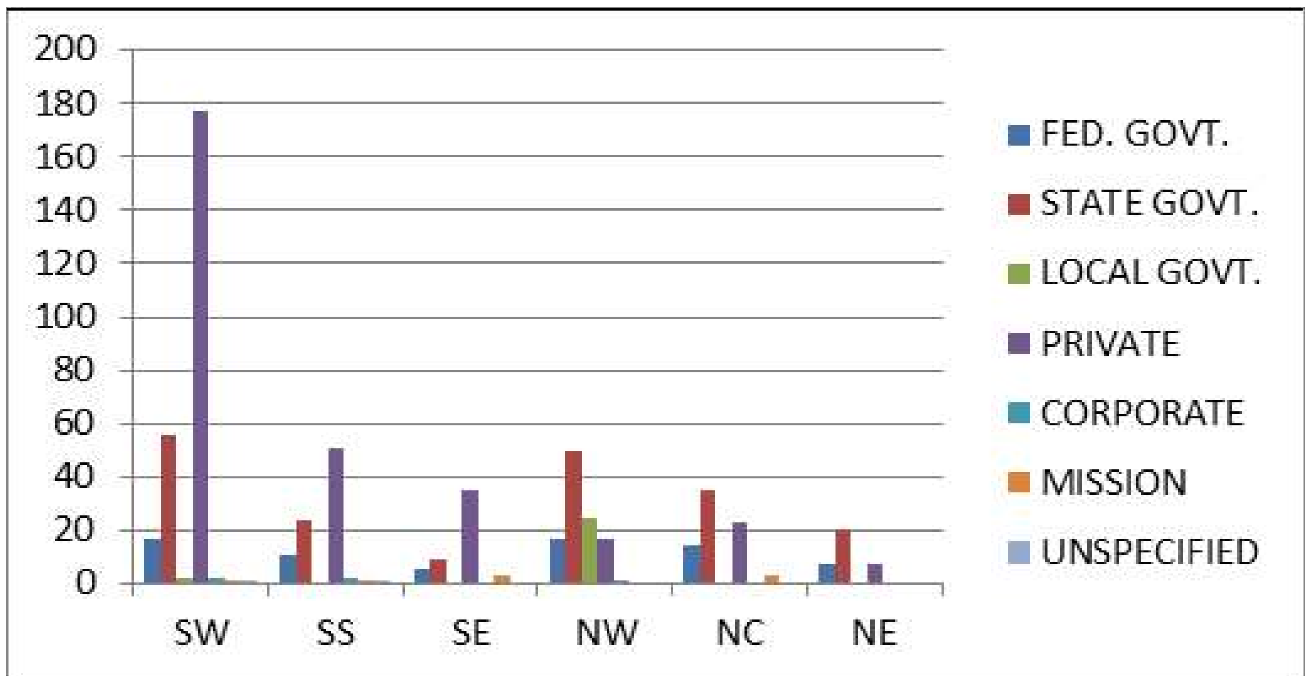

Fig. 7: Ownership of Dental Clinics in the Different Zones in Nigeria (Report of the survey of Oral Health Manpower, Facilities and Training Institutions in Nigeria. ICOH. 2016)

(SW-South-West, SS-South-South, SE-South- East, NW-North-West, NC-North-Central, NE-North-East)

There is a very low level of private dental practice in 90% of states in Northern Nigeria due to the "obstacles" and impediments involved in the registration of dental clinics in these states [5].

NHIS Objective 4: Ensure equitable distribution of healthcare costs among different income groups.

Presently, over 90% of the Nigerians are living without health insurance[10]. The NHIS started with Federal Civil servants and has since widened the scope of enrollees to the private sector and students in tertiary institutions. Presently, 10% consolidated basic salaries of Federal Civil servants ONLY, with the higher earners paying more. Most states are yet to embrace the scheme as the NHIS Act makes it optional for states to adopt the scheme.

NHIS Objective 10: Ensure the availability of funds to the health sector for improved services

The annual budgetary allocation of funds by every administration is often a reflection of the priority goals of the said administration for the year. Over the years, different governments have allocated less than the 15% recommended by the UN and WHO[7] (Fig. 8).

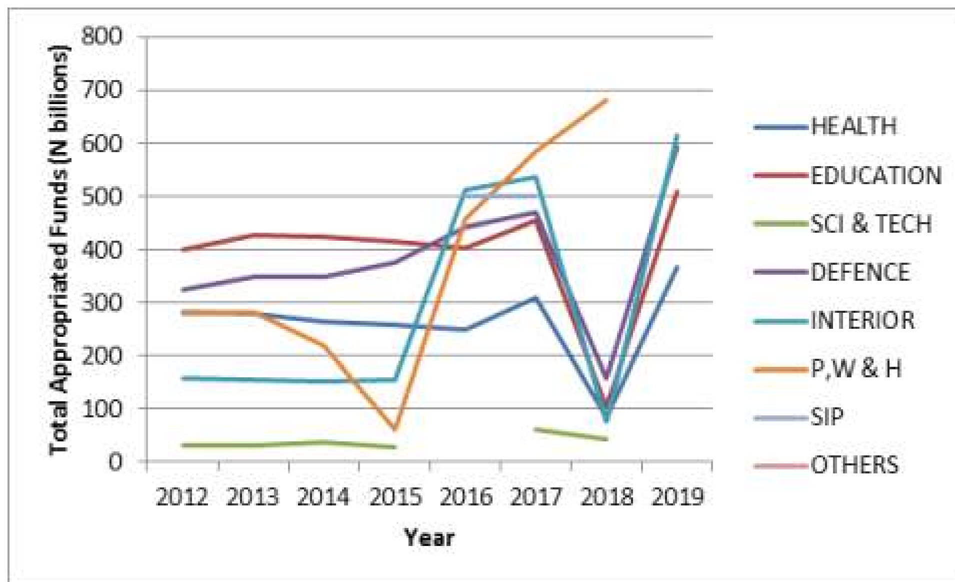

Fig. 8: Total Appropriated Funds in National Budget (Budget Office of the Federation (www.budgetoffice.gov.ng).

(Sci & Tech – Science and Technology, P, W & H- Power, Works and Housing, SIP- Special Intervention Programmes)

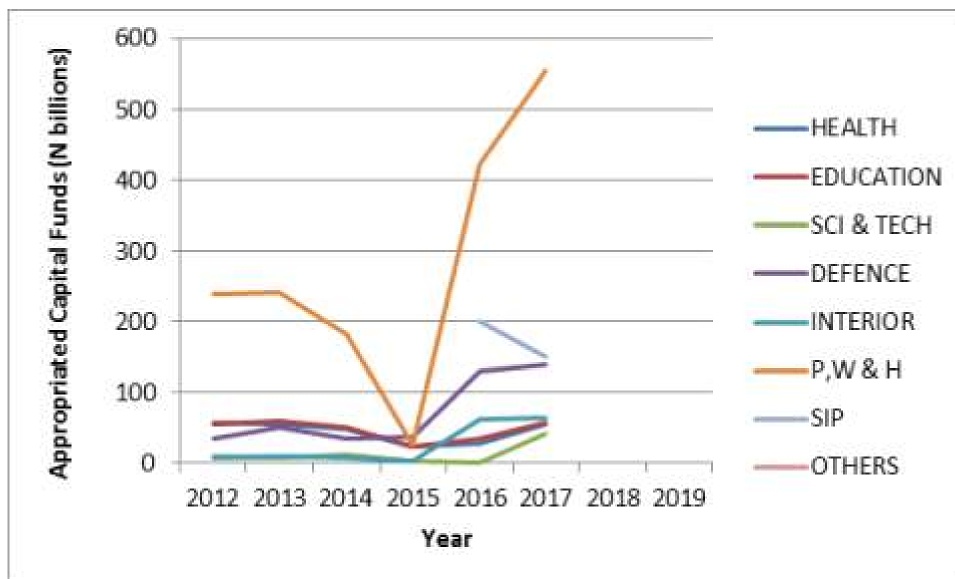

Fig. 8:Appropriated Capital Funds in National Budget (Budget Office of the Federation (www.budgetoffice.gov.ng).

(Sci & Tech – Science and Technology, P, W & H- Power, Works and Housing, SIP- Special Intervention Programmes)

The nation's recurrent budget is relatively high along all sectors, while the lower capital allocation shows undue emphasis on infra-structural development, defence, interior and special intervention programmes (SIP), with poor emphasis on infra-structural developments in the health, education, Science & Technology sectors.

This could be as a result of the poor justification for funding for oral health due to poor feedback mechanism to policy makers on national morbidity status and economic burden of oral diseases obtained through research.

Strategies for Achieving UHC and Improving Oral Health Indices in Nigeria. The NHIS has been making positive changes over the years, such as (i) regular calls for memoranda; (ii) expanding enrollee

base to include students; (iii) non-formal sector enrolment; (iv) mobilization for community health insurance scheme; and (v) gradual mobilization of states to participate in the scheme. In addition to the above, the following strategies are recommended for achieving universal oral health coverage in Nigeria:

- Increase the enrolment of the populace into the NHIS by inclusion of civil servants in the state and local government public service;
- Increase the membership of Standing Committee to include dental surgeons in both the private and public sectors.
- Review the Act establishing the NHIS which made enrolment of states optional for compulsory enrolment at all levels of government.
- Advancing certain preventive therapies to payment by capitation for oral and medical healthcare providers. This would encourage the establishment of more standard dental clinics all over the Federation.
- NHIS to give the option of only one level of accreditation for every healthcare provider.
- NHIS should increase the number of accredited dental clinics by creating appropriate incentives to stimulate the establishment of these clinics.
- The NHIS classification of dental clinics as only secondary providers does not encourage the equitable distribution of dental service provider clinics in the country and can be remedied by the re-classification of local government-owned and privately owned dental clinics as primary care providers, dental clinics in state-owned general hospitals and privately owned specialist dental clinics as secondary care providers and dental clinics in tertiary hospitals as tertiary care providers. This would greatly encourage the setting up of clinics outside the economic capitals of the zones and outside state capitals.
- Private and primary health care (PHC) dental clinics should also be open to accreditation as either primary or secondary or tertiary care providers.
- The NHIS should ensure an upward review of approved charges for dental service in line with inflationary trends in the country.
- The payment for preventive dental services should be by capitation.
- States and local governments should encourage "Rural Pipeline" by actively engaging in infra-structural development at the local government level.
- Primary Health Care clinics at the local government headquarters should have a dental clinic to be manned by a dental therapist and a visiting dental surgeon.
- Dental Nurses/Dental Technicians should be posted to the other PHC clinics to diagnose and give oral health education and refer to the PHC clinic at the local government headquarters.
- The undergraduate training curriculum for dental students should include practice management as a course of study.
- Provide loan incentives for dental surgeons for the establishment of dental clinics, by accessing facilities from the Bank of Industry (BOI), Central Bank of Nigeria (CBN) Anchor Borrower Scheme, etc.
- Rural posting allowance should be paid to dental surgeons and dental auxiliaries engaged in the States and LGA on visiting postings to primary health care clinics.
- HMOs and the NHIS should regularly evaluate and objectively assess the provider facilities. The payment of re-accreditation fee is not enough!
- Every health care provider in the NHIS should have ONLY one level of accreditation, either primary, secondary or tertiary. The correction of this discrepancy would greatly reduce the running costs of government secondary and tertiary hospitals, with a greater, re-directed use of funds for the sustenance of secondary and tertiary services.
- Regular audit of providers and HMOs by the NHIS is highly advocated.
- The NHIS fee-for-service rates should be reviewed in line with the inflationary trends in the cost of dental accessories/consumables over regular specified periods to be determined by the NHIS and stakeholders in the oral health sector;
- Payments for disease-preventing oral health services (fluoride varnish application, fissure treatment, minimum intervention dentistry and scaling and polishing) should be by capitation. This would help guarantee the active involvement of stakeholders in the provision of well-equipped, standard dental clinics IN ANY geopolitical location in the country.

- The provision of comprehensive services in a standard setting based on best practices at an acceptable NHIS rate would eventually drive down the costs of similar services in non-participating dental clinics, or help such clinics home-in more on their specialist services.
- There is the urgent need for the federal government to diversify its economic base towards production, as the alternative of reducing the appropriation to recurrent budget in order to boost the capital allocation of health, education, science and technology could be catastrophic at this time.

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