Oral Health Challenges for Sub-Saharan Africa.

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INTRODUCTION

Oral Health describes the well-being of the Oral Cavity inclduing the dentition and its supporting structures and tissues.It is the absence of disease and the optimal functioning of the mouth and its tissues in a manner which preserves the highest level of self-esteem[1]. It was observed that the general features of oral health in Afria are:

i. Low to very low caries prevalence and severity with little increase.
ii. Few oral health care personnel and an imbalance between personnel types and population nees.
iii. rural and periubran communities without basic care or with emergency care.
iv. logistics problems and unreliable services partly due to poor working conditions.
v. low priority given to oral health care due to the presence of several general health problems and enormous development needs.
vi. difficulty in adjusting tp the markert economy where demand based private services results in a lower priority for prevention programmes[2].

This presentation will focus mainly on:

1. Oral Disease Burden
2. Policies and Plans
   - Oral Health Polices
   - WHO Resolutions on Oral Health
3. Service Delivery and Manpowr Needs
   - Distribution of facilities and personnel
   - Training
4. Oral Health Research
5. Conclusion
6. Recommendation

Oral Disease Burden

Oral health is an integral part of the general health. Oral diseases generally impact negatively on quality of life and socioeconomic activities of individuals and members of the family. Some "systemic" disease such as HIV/AIDS, Diabetes mellitus may first be deteched through oral examination. The ranking of oral disease burden in sub-Saharan African Countries is as indicated in Table 1 below.

Table 1: Epidemiological basis for making the oral disease burden in low economic status communities in Africa

Oral Disease	Prevelance	Mobidity	Mortality
Cancrum Oris (noma)	High	High	High
Oral manifestation of HIV/AIDS	High	High	High
Oral Cancer	Medium	High	High
Facial trauma	Very high	Medium	Medium
Congenital abnormalities	High	Medium	Low
Harmful practice	High	Medium	Low
Dental Caries	Medium	Low	Low
Chronic pernodontal disease	Medium	Low	Low
Fibrosis	Medium	Low	Low
Benign tumors	Low	Medium	Low
Edentalism	Low	Medium	Low

The ranking of oral disease burden in low economic status in Africa provided that dental caries, chronic periodontal disease, fluorosis, benign and edentulism are not severe major oral health problems as found in other World Health Organisation's regions. Cancrum Oris (Noma), Oral Manifestations of HIV/AIDS, Harmful practice, Congenital abnormalities, Facil Trauma and Oral Cancers are the major oral health problems in Africa. Research conducted in Nigeria and findings published in peer review journals and papers presented at conferences by Officers of the Regional Centre for Oral Health Research and Training Initiatives (RCORTI) for Africa, Jos, Nigeria confirmed the severity of cancrum oris[3-6], Oral Manifestations of HIV/AIDS[7-21], Oral Cancers[22-33], Harmful Practices[34-37] and Chronic Periodontitis[36]. Data collected on flourides in drinking water provided for high fluorides content in the potable water in some communities in the Middle Belt of Nigeri with resultant high prevalence of dental fluorosis in these communities.[39] Fluorosis is said to be endemic among communities in the Rift Valley areas of East Africa.[2]

It is extremely very difficult to collect data during field surveys and from health faciltiies because of some cultural barriers and poor record keeping in health facilities. This led to difficulties in documenting accurate, reliable and up to date data and information for the purpose of meaningful planning. However, from the scanity available data and information, risk factors such as malnutrition, tobacco use, excessive consumption of alcohol, indiscriminate eating of refind surgery foods and severe oral diseases. The high poverty rate level in most of the sub-Saharan communities compounded the oral

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health conditions as there are more serious life threatening health and environmental conditions than oral diseases to contain with by the individuals, families, communities and even the government.

Development of Health Policies and Plans

Most Sub-Saharan African Countries have formulated and developed Health Policies and Strategic Plans. However, most of these health policies do not provide for oral health. It is this context that there is absolute need for countries that have not yet developed oral health policies and strategic plans to formulate such documents.

Oral Health Policies and Strategic Plan

A well articulated Oral Health Policy and Strategic Plan acceptable to the policy makers, political leaders, oral health and other health professionals and members of the communities are needed in order to provide good and improved oral health services. It is very important and essential that prevention and control of very severe oral disease conditions such as noma, oral HIV/AIDS, oral cancers, oral and maxillofacial trauma, congenital malformations and harmful practices are incldued well stated and articulated in any oral health policy and strategic planning document.

A section of the policy and plan should also provide for the introduction and implementation of School Oral Health Programmes. Well articulated School Oral Health Programmes will:

- provide supportive environment for the promotion of good oral health in schools.
- inculcate good oral health habits in children. This may have multiplier effects at family levels
- reduce the oral disease burden in children
- provide conducive atmosphere at early ages in life to control risk behaviours to oral health such as excessive intake of sugary foods and drinks, tobacco use and alcohol consumption.

The processes of polices and strategic plans should have clearly defined and well stated sets of objectives, goals and time framed targets. This is to provide parameters for mointoring and evaluation of the successes or otherwise of the polices and plans. The policies and plans should incorporate both preventive and curative programmes with more emphasis on the prevention and control of the disease burden. These necessary working documents i.e. oral health polices and plans, are virtually not available in most of the Sub-Saharan African Countries. As at 2006 only about 32% of the Countries in WHO African Region had oral health policies and plans?

In most of these countries, the policies and plans developed have not been implemented due to other more life-threatening conditions and in some cases because of lack of support by the policy makers to have the programmes/Activities implementated. Nigeria developed an Oral Health Policy and Strategy in 1994, but unfortunately the document is never implemented. Currently the Federal Ministry of Health in collaboration with the WHO Office in Nigeria is developing a new Oral Health Policy and Strategy for the country. It is a challenge for the Chief Dental Officers and those Oral Health Professionals in responsible public and private positions to ensure that oral health policies and strategies developed for the delivery of better and improved oral health care services are implemented.

WHO resolutions

World Health Organization from time to time passes resolutions to advise and support Member Countries on the delivery of good health care services in respective member countries. Most of the resolutions passed on Oral Health emphasized and focussed on Oral Public Health. These resolutions encouraged and advised member Countries oral health activities and programmes. Some of these resolutions are:

i. Resolution WHA 36,14 (1983), on oral health in the strategy for health for all.
ii. Resolution AFR/RC24/R9 (1974), which requested the WHO Regional Director for Africa to provide for the establishment of dental advisory services within the Regional Office;
iii. Resolution AFR/RC30/R4 (1980), which called on Member States in the African Region to integrate oral health into primary health care programmes;
iv. Resolution AFR/RC44/R13 (1994), which called on the Member States to formulated a comprehensive national oral health policy and plan based on primary health care (PHC) and to develop appropriate training programmes for oral health care workers at all levels, particularly at the districts level.
v. Resolution WHA22.30 (1969), WHA28.64 (1975) and WHa 31.50 (1978) on fluoridation and dental health.
vi. Resolution WHA 42.39 (1989) on oral health.
vii. Resolution WHA56.1 (2003) and WHA 59.17 (2006) on the WHO Framework Convention Tobacco Control.
viii. Resolution WHA 58.22 (2005) on Cancer Prevention and Control.
ix. Resolution WHA 57.14 (2004) on scaling up treatment and comprehensive response to HIV/AIDS
x.. Resolution WHa 57.16 (2004) on hhealth promotion and healthy lifestyles.
xi. Resolution WHA 57.17 (2004) on the Global strategy on Diet, Physical Activity and Health.
xii. Resolution WHA 58.16 (2005) on strengthening active and healthy ageing.
xiii. Resolution WHA 58.26 (2005) on Public-Health problems caused by harmful use of alcohol.
xiv. Resolution WHA 51.18 (1998) and WHA 53.17 (2000) on prevention and control of non-communicable diseases
xv. Resolution AFR/RC48/R5 (1998) on Oral Health in the African Region: A Regional Strategy.

The WHO Health Assembly also passed a resolution: Action plan for promotion and integrated disease prevention in 2007. This resolution included oral health.

Service Delivery and Manpower Needs

Oral health services are mostly curative in the African countries. These services are mostly located in urban communities and are haphazerdly established and poorly

coordinated. This is aggravated by the capital intensive nature of establishing curative dental services and the non integration of Oral Health Services with the mmain stream Primary Health Care (PHC) delivery services. Consequently only the privileged ellites and well to do in the communities benefit from such oral health services. This results in the lopsided and non equitable oral health care delivery in the region. Well articulated implementable oral health polices and strategic plans with emphasis on prevention and control of oral diseases will provide good basis and guidelines for the provision of better and improved Oral Health Care delivery services.

The challenges before the policy formulators and oral health professional are to ensure the integration of oral health with main stream Primary Health Care Services and to emphasize prevention of such common risk factors like tobacco use, malnutrition, consumption of alcohol, indiscriminate consumption of sugery foods and drinks and to promote good oral hygiene habits as well as good general body hygiene and good sanitary environment.

Training

There were only twenty three accredited Dental Institutions and University Dental Schools training Dental Surgeons as at 2000. Table 2 below showed the country by country distribution of such institutions. The training in these institutions is focused on specialized, urban-based curative care with little emphasis on community oral health and prevention programmes. It is not based on oral health needs of the majority of the members in the communities and is not subject to systematic planning and evaluation[2]. Dental Auxiliaries are also trained by health training institutions. The types of Dental Auxiliaries trained in various Countries in Sub-Saharan Africa are showin in Table 3 below.

The curricula of oral health training institutions need to be reviewed to refocus the training syllabus to provide promotion of preventive and community oral health services. Nigeria besides training Dental Therapists, Dental Hygientists (this cadre has been phased out in Nigeria) and Dental Technologists also trains Dental Nurses and Community Health Extension Workers.

Table 2: Dental institutions and university dental schools training dentists 2000

Country	Number
Algeria	5
Cote D'Ivoire	1
Ghana	1
Kenya	1
Madagascar	1
Nigeria	4
Senegal	1
South Africa	5
Tanzania	1
Uganda	1
Zaire (DRC)	1
Total	**23**

Source: Replies from questionnaires sent to the World Health Organization Regional Office for Africa, Brazaaville, Republic of Cango.

Table 3: Institutions training dental auxillaries 2000

Country	Category of Autxiliary
Botswana	Dental Therapists
Cameroon	Dental Technicians
Comoros	Dental Assistants
Kenya	Dental Laboratory Technicians Community Oral Health Officers
Malawi	Dental Assitants
Nigeria	Dental Therapists, Hygeinists Dental Technologists

Distribution of Oral Health Personnel and Facilities

There were about 10,078 Dental Surgeons, 2,576 Dental Auxiliaries and 682 other oral health personnel in 1999 in Sub-Saharan Africa as indicated in Table 4.

Table 4: Oral health personnel in Africa

Catagories	1971–81	1990	1999
Dental Surgeons	1,624	2,602	10,078
Dental auxiliaries	600	1,242	2,576
Other oral health personnel	376	551	682
Total	**2,600**	**4,395**	**13,336**

Source:

These oral health personnel are inequitably distributed in most sub-Sharan African Countries. The more socio economically advantaged urban areas, regions and communities have more oral health personnel at their services than the poor underserved communities. Recent research findings in Nigeria by RCORTI for Africa, Jos showed that more than 75% of the oral health personnel are in the urban areas. Abut 87.5% of Dental Surgeon training institutions are in the Southern part of the Country. The Southern part has more oral health facilities than the Northern part of the Country. There are 2,422 practicing oral health personnel in Nigeria. This gives a ratio of 1:56,803. The number of practicing Dental Surgeons is 886. This gives a ratio of 1:158013[40].

Research for Oral Health

Research is the systematic process for generating new knowledge generated will provide the necessary data and information to formulate good oral health policies and plans to improve and strengthen oral health services and assist in solving some disease conditions. There are several factors that contribute to poor oral health research promotion and capability in the WHO African Region. For instance in Nigeria there is:

- poor funding
- very poor collaborative research culture
- very poor dissemination of research findings
- very low research culture
- very difficult to collect data for research purposes due to poor record keeping and several cultural barriers.
- very poor appreciation of recommendations derived from research findings with the resultant non implementation of such recommendations by the relevant authorities
- high competitiveness in the processes of sourcing international research grants.

- non inclusion of oral health and poor implementation of the formulated national health research policy.

The challenges before the oral health researchers are to create high profile awareness of the importance of oral health research among the policy makers, politicians and political leaders, industries, non-government organizations, academicians and professional associations. Oral health researchers should also collaborate with their colleagues, develop high sense of research culture, ensure that their research topics and the subsequent reports and recommendations are important, essential, relevant and contribute positively to better and improved oral health services and reduction of the oral disease burden in the communities.

CONCLUSION

Oral diseases are major public health problems in sub-Saharan African Countries. They cause pain, disfiguring, discomfort, anxiety, suffering and man-hour loss and in some more severe oral diseases even result to death. Most oral diseases are preventable. The current oral health delivery services focusing and given more preference to surative dentistry will not solve the worsening oral disease burden in the region. However, promotion of preventive and control activities/ programmes to reduce the common risk factors to oral diseasesm such as malnutrition, unhealthy dietary habits, tobacco use, alcohol consumption, poor oral and general hygiene and poor environmental sanitation wil reduce the oral disease burden in the region.

RECOMMENDATION

Sub-Saharan African Countries need to radically review the present oral health care delivery review the present oral health care delivery whereby curative dentistry is more emphasized than preventive and community baed oral health services if the region is to reduce the burden of oral diseases in the communities. To achieve these radical changes the followings are recommended:

1. Formulation and development of Oral Health Policies and Strategic Plans peculiar to the individual Country's oral disease burden.
2 Review of the curricula of Oral Health Training Institutions to emphasize Preventive and Community Oral Health Syllabus.
3. Integration of Oral Health with the Primary Health Care Services. Emphasis should be given to promotion of preventive and control programmes of common risk factors such as malnutrition, tobacco use, alcohol consumption, poor oral and generral hygiene, poor environmental sanitation and excessive eating of sugary foods and drinks.
4. Development of Oral Health Research Policy to promote good oral health research culture and strengthen collaborative reserach netweork.

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