ORAL HEALTH IN THE AFRICAN REGION: A REGIONAL STRATEGY

Report of the Regional Director

EXECUTIVE SUMMARY

1. The important contribution of oral health to general community health and well-being has been highlighted in resolutions adopted at the World Health Assembly (WHA) and Regional Committees. However the impact of these resolutions had been limited.

2. Previous approaches to oral health in Africa have failed to recognize the epidemiological priorities of the Region or to identify reliable and appropriate strategies to address them. Efforts have consisted of the provision of unplanned, ad hoc and spasmodic curative oral health services, which in most cases are poorly distributed and only reach affluent or urban communities.

3. There is therefore a compelling need to review existing strategies and develop a comprehensive strategic framework to support countries in the Region.

4. This document focuses on the most severe oral problems that people have to live with, like noma, oral cancer and oral consequences of HIV/AIDS infection. It proposes a strategy for assisting Member States and partners to identify priorities and interventions at various levels of the health system, particularly at the district level.

5. The strategy aims at strengthening the capacity of countries to improve community oral health by effectively using proven interventions to address specific oral health needs. It represents a new approach that has the potential to fundamentally improve community oral health in the African Region.

6. The Regional Committee is invited to review the proposed oral health strategy for the African Region for the period 1999-2008 and provide orientations for the enhancement of oral health in Member States in the Region.
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INTRODUCTION

Oral health describes the well-being of the oral cavity, including 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.

Oral diseases affect all human beings irrespective of location, country, nationality, race or colour. In the African Region there is a disproportionate amount of oral disease which has grave and often fatal consequences. Some of these diseases seem to be growing in prevalence as a result of the massive social disruption on the continent. Although many oral diseases are not always life-threatening, they too are important public health problems because of their high prevalence, public demand and their impact on individuals and society in terms of pain, discomfort, social and functional limitations and handicap, and the effect on the quality of life. In addition, the financial impact on the individual and community is very high.

Because oral health is so fundamentally influenced by many of the environmental factors that influence general health, an effective oral health policy or programme must address both generic and specific influences on oral health. Such policy or programme may include:

- support for generic programmes which are effective in reducing poverty and promoting equity in the Region;
- support for generic programmes which are effective in providing clean water, proper sanitation and durable housing for all;
- participation in health promotion and education programmes to control tobacco and alcohol use and promote correct nutritional practices, including prudent use of sugar.

The strategy is a tool for assisting Member States and their partners to more systematically identify priorities and plan viable programmes, particularly at the district level. It aims to strengthen the capacity of countries to improve community oral health by effectively matching proven interventions to specific oral health needs. This in turn will require countries to refocus the education and training of the personnel required to address these new demands on the oral health system.

JUSTIFICATION AND POLICY BASIS

There is a compelling need to review existing strategies and develop a comprehensive strategic framework to support countries, considering that:

- previous approaches to oral health in Africa have failed to recognize the epidemiological priorities of the Region or to identify reliable and appropriate strategies to address them;
- only 14 out of the 46 countries (30%) of the Region have a national oral health plan. Very few countries have made any progress towards implementation and none have evaluated what has been done, which strongly suggests that such plans are fundamentally flawed or too ambitious;
- efforts have consisted of the provision of unplanned, ad hoc and spasmodic curative oral health services. An emphasis on the production of the kind of personnel demanded by this approach has led to a number of African countries creating institutions where students in the oral health sciences receive training in sophisticated, inappropriate forms of oral health care, while in others little or no training at all is available;
the oral health care available in the Region is almost entirely curative and largely directed
towards combating one main problem namely: dental caries. Severe oral diseases such as
noma, oral cancer, the oral manifestations of HIV infection and trauma have been largely
omitted in both public and private care systems in the Region as they have been from the
educational programmes for oral health personnel. These are the diseases which increasingly
have the greatest morbidity and mortality of all oral conditions in the Region.

The important contribution of oral health to general community health and well-being has been
highlighted in resolutions adopted at the World Health Assembly (WHA) and the Regional Committee
(RC) namely:

- resolution WHA36.14(1983), which called on Member States to follow available health
strategies when developing their national oral health strategies;
- 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;
- resolution AFR/RC30/R4 (1980), which called on Member States of the African Region to
integrate oral health into primary health care programmes;
- resolution AFR/RC44/R13 (1994), which called on Member States to formulate 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 district level.

Furthermore, the Conference of Heads of Dental Health Services in the African Region (1969) and
the Regional Experts Committee on Oral Health (1978) recommended the establishment of oral health
services based on the public health approach. Various international conferences on oral health and other
related initiatives have also endorsed the need for a comprehensive approach to oral health.

3. ORAL HEALTH PRIORITIES

Dental caries and periodontal disease have historically been considered the most important oral
health problems around the world. However, in African countries, these appear to be neither as common
nor of the same order of severity as in the developed world. The oral health profile of Africa today is
very different from that perceived previously. This profile of oral disease is not homogeneous across
Africa. Thus, oral diseases known to exist in each community need to be individually assessed in terms
of the basic epidemiological criteria of prevalence and severity. This is a prerequisite for the meaningful
ranking of community needs and the development of intervention programmes with which to address
them.

There is no doubt that the African Region has to urgently address a number of very serious oral
conditions, either because of their high prevalence or because of the severe damage or death that can
arise from them.

3.1 Priority problems

Cancerum oris (NOMA) and acute necrotizing ulcerative gingivitis (ANUG) with which it is
known to be associated is still common among children in Africa. The most recently available annual
incidence figure for NOMA is 20 cases per 100 000. About 90% of these children die without receiving
any care. With increasing poverty and given the fact that many children are malnourished or
undernourished and have compromised immune systems, the prevalence of conditions such as NOMA is likely to increase. The prevalence of oral cancer is also on the increase in Africa. Annual incidence figures for oral and pharyngeal cancer are estimated at 25 cases per 100,000 in developing countries. Rapid urbanization and increasing use of tobacco and alcohol are considered to greatly increase the incidence of oral pre-cancer and cancer. The highest prevalence of infections by Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) is found in Africa. Studies have shown that oral manifestations of HIV/AIDS are very widespread, and most commonly include fungal infections such as those caused by candida, necrotizing gingivitis or oral hairy leukoplakia. National surveys and smaller studies in Africa have shown the prevalence of dental caries to be quite low but with substantial regional variations. Most of these cases (90%) remain untreated.

3.2 Other problems

Maxillo-facial trauma has increased in many countries as a result of inter-personal violence, motor vehicle accidents and war. Chronic destructive periodontal disease is known to occur in a small proportion of most populations, regardless of location or socioeconomic status. Harmful practices such as the removal of tooth germs of deciduous canines, extraction of upper and lower anterior teeth and the trimming or sharpening of upper anterior teeth still prevail. Fluorosis is very common in certain parts of Africa such as the Rift Valley area of East Africa. The presence of malnutrition is known to increase the likelihood of fluorosis in children. Edentulism, congenital malformations and benign tumors occur but little prevalence data is available.

The African Region also faces an acute lack of recent, reliable and comparable data and the relative absence of processes for converting data into information for planning.

3.3 Determinants of oral health problems in Africa

Poverty is an important determinant of health and ill-health. The prevalence of oral diseases closely mimics prevailing levels of social deprivation. In a continent where the majority of the population are desperately poor, preventable oral diseases such as NOMA and oral cancer are rife. High levels of bottle feeding in the urban parts of the Region have been associated with high rates of baby bottle tooth decay. Increasing urbanization has also been shown to lead to observable increases in the prevalence of oral disease. Greater access to alcohol is associated with higher levels of interpersonal trauma and oral cancer.

The presence of widespread poverty and underdevelopment in Africa means that communities are increasingly exposed to all the major environmental determinants of oral disease.

By adopting a predominantly Western model of oral health care, African health systems have failed to address these important determinants of oral health. Oral health systems are characterized by the predominance of dentists, most of whom are in private practice in urban settings. Where public or private oral health services do function, they are treatment-oriented, mainly providing for the relief of pain and sepsis and occasionally other curative forms of care.

3.4 Development needs

It is clear from this analysis of oral health in the African context that a successful approach to oral health in the Region needs to take account of these circumstances to effectively focus on the real determinants of oral disease.

The needs to be addressed using this strategy include equitable and universal access to affordable and appropriate quality oral health services through:
community involvement in identifying oral health problems, needs and interventions;
proper planning, administration and evaluation of services;
prevention-oriented services and multisectoral action especially in relation to participatory
health education and promotion;
proper balance between personnel types and population needs.

4. THE REGIONAL ORAL HEALTH STRATEGY

4.1 Long-term vision

Within the next 25 years, all people of the region should enjoy improved levels of oral health and
function through a significant reduction of all oral diseases and conditions that are prevalent in the
Region, equitable access to cost-effective quality oral health care and adoption of healthy lifestyles.

4.2 Guiding principles

The effective implementation of this strategy and its sustainability will be guided by the following
principles:

– high priority to promotion of oral health and prevention of oral diseases;
– focus of oral health interventions on the district and its communities with particular emphasis
  on children, pregnant women and other vulnerable groups;
– use of only interventions which have proven efficacy;
– integration of oral health programmes across all appropriate sectors;
– participation of communities in oral health activities that affect them.

4.3 Strategic framework

4.3.1 Strategic objectives

Country targets: It is expected that by 2008, all countries of the African Region would have:

– developed national oral health strategies and implementation plans focusing on the district
  and the community levels;

– integrated oral health activities in other health and related programmes and institutions (e.g.
  maternal and child health, nutrition, schools, water related programmes);

– strengthened their health facilities with appropriate oral health technologies, methods,
  equipment and human resources;

– integrated training in essential oral health skills in the curricula of health personnel and
  others who have the responsibility for oral health promotion;

– set up effective oral health management information systems;

– begun to carry out essential research on oral health priority problems and needs.

Regional objective:

To assist countries develop and implement oral health strategies and plans that will ensure
equitable and universal access to quality oral health services through the district health system.
4.3.2 Priority programmatic areas

Based on the oral health priorities indicated earlier, the following programmatic areas and objectives have been identified.

(a) Development of national oral health strategies and implementation plans

Objective 1: To formulate national oral health strategies and plans.

(b) Integration of oral health in other programmes

Objective 2: To integrate oral health in programmes for vulnerable groups and in the training programmes of primary and pre-school teachers.

Objective 3: To deliver optimal levels of fluoride through water supplies or other methods where indicated and feasible, and introduce defluoridation water systems in areas where fluorosis is endemic.

(c) Delivery of effective and safe oral health services

Objective 4: To ensure equitable population access to quality oral health care through the district system.

Objective 5: To ensure that district oral health service is adjusted to focus on community oral health needs and that appropriate forms of technology are selected.

Objective 6: To establish effective control measures for cross infection.

(d) Regional approach to education and training for oral health

Objective 7: To share common approaches to oral health education for the level and type of care needed in the African Region.

(e) Development of effective oral health management information systems

Objective 8: To gather and coordinate the collection of information needed for planning, monitoring and evaluating oral health activities.

4.3.3 Strategic orientations

(a) Advocacy and social mobilization

Implementation of the strategic orientations must be sustained through continued advocacy for oral health. This will involve using social marketing and participatory methods to mobilize support from policy-makers, political and community leaders, training institutions, NGOs, professional associations, business and social groups and industry.

(b) Capacity building

This will involve the development of human resources through appropriate training and re-training programmes related to the priority oral health problems. Training needs and processes should be coordinated and standardized as far as possible, and draw upon the combined expertise and resources of the Region.
(c) **Information and education**

Appropriate information should be provided to individuals, families and communities for the promotion of healthy oral health behaviour and lifestyles. People should be involved in all stages of developing oral health education, promotion and information materials.

(d) **Equitable access to quality oral health services**

This requires the achievement of greater equity in oral health and access to quality oral health services particularly for rural, peri-urban and underserved communities. Recent advances in oral health and available technical excellence must be adapted in the forms that are economically, technologically and culturally appropriate for the African Region.

(e) **Promotion of operational research**

In order to strengthen research capacity and promote relevant research that responds to the oral health needs of communities, a research culture should be developed within national oral health programmes and the findings widely disseminated and used for planning purposes.

### 4.4 Implementation framework

#### 4.4.1 At country level

The district remains the location with the greatest potential for successful integration of oral health programme planning and implementation with other health and development programmes. An implementation matrix which illustrates a framework for planning priority interventions will be developed.

#### 4.4.2 At intercountry and regional level

Mechanisms to secure the exchange of experiences in implementing the oral health strategy need to be established between countries in the Region, in the spirit of Technical Cooperation among Developing Countries. Maximum use will be made of the expertise and resources of WHO collaborating centres for oral health, particularly in the areas of capacity building and research promotion. In collaboration with international partners, WHO will provide technical support to Member countries in the following areas:

- development of comparable national data systems on oral health and disease trends for use in planning, including the identification of suitable indicators with which to evaluate progress;
- development of effective interventions for the promotion of oral health;
- development of national oral health strategies and implementation plans;
- estimation of personnel needs and development of suitable training programmes for the effective delivery of oral health programmes.

#### 4.4.3 Partnerships

Partners who can assist the process should be identified as early as possible. A wide network of interested parties must be established at country level to facilitate implementation of the strategy and mobilization of resources.

The district health management team has the primary responsibility for implementing the programmes, strategies and interventions. It is here that interaction and partnership between community interest groups, health and development workers occur in order to successfully operationalize district oral health plans. Districts will also benefit from sharing information, experiences and problems with one another and from collaborating in programmes of mutual interest to them.
Partners that may be engaged at the national level include professional associations, commerce, industry, dental, medical and allied professions, NGOs, aid agencies, WHO and other UN agencies. The national level must ensure that good communication occurs between all levels of the health system and various partners. It should therefore be well equipped to facilitate partnerships and collaboration.

5. MANAGERIAL FRAMEWORK

5.1 Resource mobilization

5.1.1 Financial resources

Mobilization of internal and external resources is essential for the execution of national oral health programmes. Oral health programmes should be adjusted to the funds that are actually available. The oral health sector should also set aside a share of the general health care budget allocated to fund integrated health programmes and activities in which oral health is a component. Ministries of health and NGOs will be encouraged to mobilize extrabudgetary funds for oral health. Other cost-sharing initiatives must also be explored to support oral health interventions.

5.1.2 Human and institutional resources

At country level, Government needs to support the training of adequate numbers of appropriate personnel to support the delivery of the oral health strategies it has selected. Negotiations with training institutions, Government and other stakeholders to establish appropriate post structures, career paths and job descriptions, etc. for staffing public oral health services will be necessary. At regional level, WHO will facilitate the training of experts who can provide technical support to the oral health strategy process and assist in the monitoring and evaluation of programmes. These experts will also support the development of country research capacities in collaboration with the International Association for Dental Research (African Division), World Dental Federation, Commonwealth Dental Association, Aide Odontologique Internationale and others.

5.1.3 Material resources

All efforts should be made internally and externally to generate funding for oral health programmes. Development and acquisition of appropriate and robust equipment that suits the African environment should be promoted. Whilst bulk purchases of equipment and supplies should be undertaken where appropriate, more efficient ways of making available low cost toothpastes, toothbrushes, chewing sticks and other items should also be explored.

5.2 Coordination

The setting up of coordination mechanisms among partners is crucial for the implementation of the oral health strategy. Emphasis should be placed on the coordination of activities instead of structures and extend well beyond the mere sharing of information. Where a regional or provincial level exists in a country, it has the responsibility for providing support to district health activities and for coordinating programmes that extend across district boundaries. It has to provide the link between district and national levels of activity. It can help districts with coordination of tender processes, information collection and analysis activities, planning processes and resource allocation. The national level is primarily responsible for coordination, as opposed to programme or service delivery and must be properly equipped for this role. Existing subregional development organizations should also be involved in coordination efforts. At the regional level, implementation will be coordinated by the Division of Health Protection and Promotion in collaboration with existing WHO structures and governing bodies.
5.3 Monitoring and Evaluation

5.3.1 Monitoring

It will be important to monitor the process of negotiating acceptance, adoption and dissemination of the strategy by WHO structures, country chief dental officers and their respective ministers of health. After this, the strategy must reach the provincial and district structures responsible for its implementation. This process must be monitored against the proposed time frame. After this, it will be important to monitor outcome indicators that reflect the extent to which the strategy and priority programmatic areas have been responded to and implemented. The indicators to be assessed include the country targets selected.

5.3.2 Evaluation

WHO has a particularly important role in facilitating the implementation process as well as monitoring and evaluating the progress of the strategy as a whole. Periodic reviews and evaluations will be undertaken and regular reports will be made available in accordance with WHO resolutions.

6. CONCLUSION

This document has set out a process that WHO plans to follow to assist countries improve and sustain the oral health of their communities. It provides technical and managerial orientations that countries can use to streamline oral health services to efficiently and effectively deliver interventions that are affordable and that match the oral health needs of the community. This strategy represents a new approach that has the potential to fundamentally improve community oral health in the African Region.