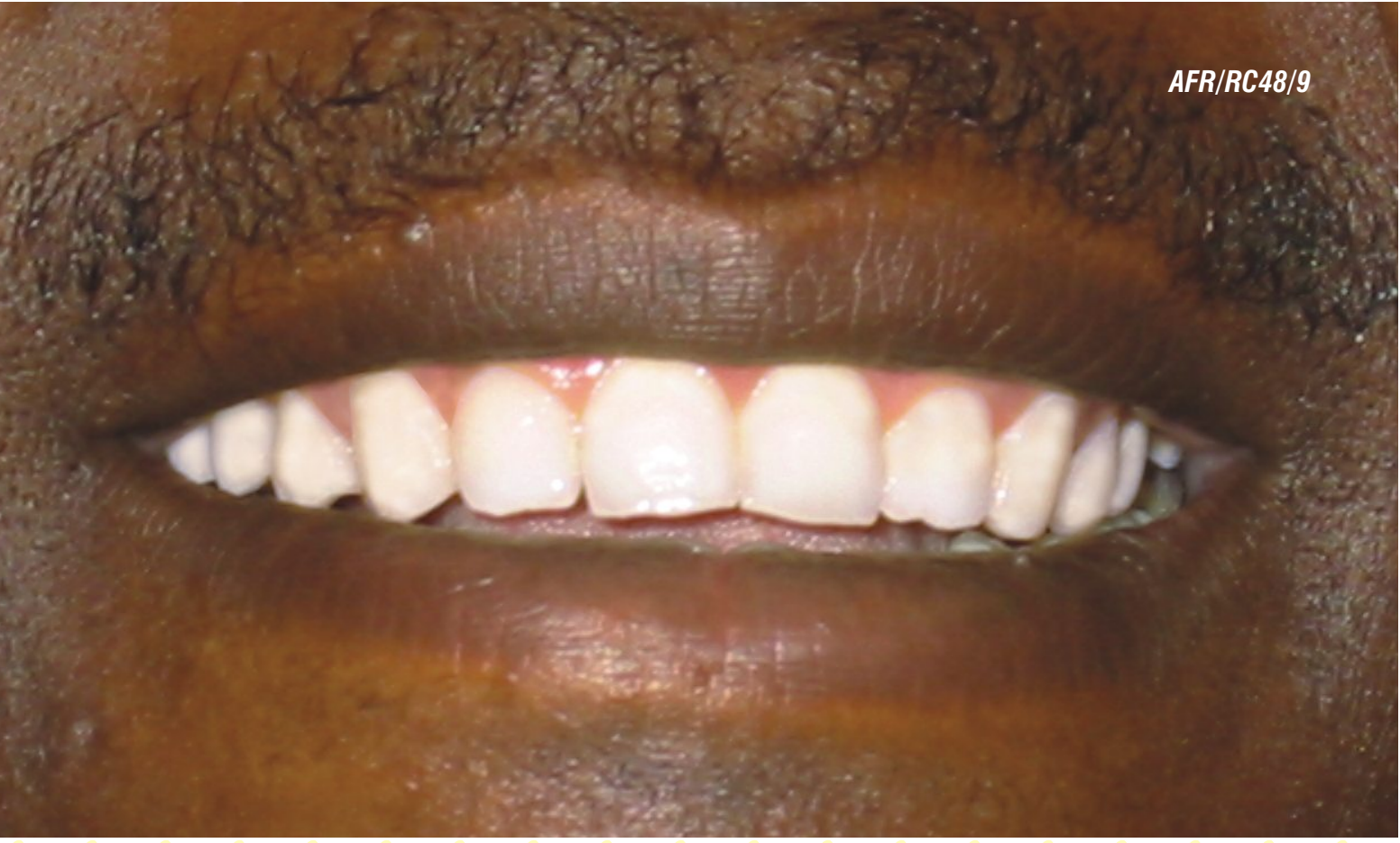
AFR/RC48/9



# Oral Health in the African Region:

## *A Regional Strategy*

## 1999 - 2008

World Health Organization
Regional Office for Africa
Harare, Zimbabwe

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## ANNEXES

## 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, these resolutions have had limited impact.

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 in 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 was 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. In the light of the foregoing, the Regional Committee at its forty-eighth session, reviewed the proposed oral health strategy for the African Region for the period 1999-2008 and provided orientations for the enhancement of oral health in Member States in the Region.

## 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 in 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.

## 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.

### Severe problems

Cancrum 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.

**Other problems**

Maxillo-facial trauma has increased in many countries as a result of interpersonal 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.

## 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.

## 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.

## THE REGIONAL ORAL HEALTH STRATEGY

### 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.

### 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.

### Strategic framework

*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.

*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.

## 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.

**Implementation framework**

*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.

*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.

*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.

## MANAGERIAL FRAMEWORK

### Resource mobilization

*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.

*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.

*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.

*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.

## Monitoring and Evaluation

### *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.

### *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.

## 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.

## ANNEX 1: RESOLUTION AFR/RC48/R5

### ORAL HEALTH IN THE WHO AFRICAN REGION: A REGIONAL STRATEGY

The Regional Committee,

Bearing in mind that health and well-being directly influence oral health;

Concerned about the deterioration of oral health in the African Region;

Recognizing that previous approaches to oral health in the Region have neither taken account of the epidemiological priorities of the Region nor identified reliable and appropriate strategies to address them;

Noting that previous efforts have consisted of an unplanned and ad hoc evolution of curative oral health services which, in most cases, are poorly distributed and only reach affluent or urban communities;

Mindful of World Health Assembly resolution WHA36.14 and Regional Committee resolutions AFR/RC30/R4 and AFR/RC44/R13 adopted in the past; and

Having carefully examined the report of the Regional Director contained in document AFR/RC48/9 outlining a WHO regional strategy for oral health;

1. APPROVES the proposed strategy aimed at strengthening the capacity of the Member States to improve community oral health;

2. CALLS on the Member States to:

(i) develop national oral health strategies and implementation plans with emphasis on prevention, early detection and management of oral diseases;

(ii) systematically and meaningfully interpret oral health epidemiological information by describing oral disease prevalence, severity and age-wise distribution in the population;

(iii) give particular attention to the most severe oral problems that people have to live with (e.g. NOMA, oral cancer and oral manifestations of HIV infection/AIDS);

(iv) develop appropriate and affordable programmes that match the oral health needs of the community;

(v) integrate oral health activities in all primary health care programmes;

(vi) integrate training in essential oral health skills in the curricula of health personnel and others who have the responsibility for oral health promotion;

(vii) strengthen health facilities with appropriate oral health technologies, methods, equipment and human resources;

(viii) undertake operational research on oral health priority problems and needs; and

(ix) integrate oral health in national health management information systems; and

3. REQUESTS the Regional Director to:

(i) provide technical support to the Member States for the development of national oral health strategies and implementation plans;

(ii) provide support to all countries to enable them to strengthen or develop and implement cost-effective oral health care services, particularly at the district level;

(iii) provide guidelines and technical support that will facilitate the proper identification of oral health priority problems and appropriate cost-effective interventions;

(iv) promote and support the development of suitable training programmes for effective delivery of oral health services;

(v) promote and support relevant research activities aimed at providing solutions to oral health problems; and

(vi) report to the 50th session of the Regional Committee on the progress made in the implementation of the strategy.

*Tenth meeting, 2 September 1998*

## ANNEXE 2

### EPIDEMIOLOGICAL BASIS FOR RANKING ORAL DISEASE BURDEN IN LOW-ECONOMIC STATUS COMMUNITY

| | Oral Disease | Prevalence | Morbidity | Mortality |
|---|---|---|---|---|
| 1 | Cancrum oris (Noma) | **High** | **High** | **High** |
| 2 | Oral manifestations of HIV/AIDS | **High** | **High** | **High** |
| 3 | Oral cancer | **Medium** | **High** | **High** |
| 4 | Facial trauma | **Very High** | **Medium** | **Medium** |
| 5 | Congenital abnormalities | **High** | **Medium** | **Medium** |
| 6 | Harmful practices | **High** | **Medium** | **Low** |
| 7 | Dental caries | **Medium** | **Medium** | |
| 8 | Chronic periodontal disease | **Medium** | **Low** | **Low** |
| 9 | Fluorosis | **Medium** | **Low** | **Low** |
| 10 | Benign tumours | **Low** | **Medium** | **Low** |
| 11 | Edentulism | **Low** | **Medium** | **Low** |

ANNEX 3:

## CONCLUSIONS OF THE CONSULTATIVE MEETING ON IMPLEMENTATION OF THE REGIONAL ORAL HEALTH STRATEGY IN AFRICAN COUNTRIES

Brief Summary

In September 1998, the African Ministers of Health attending the forty-eighth session of the WHO Regional Committee Meeting in Harare, Zimbabwe, adopted the oral health strategy for the African Region for a ten-year period (1999-2008). A corresponding resolution was also adopted.

As a follow-up to the adopted regional oral health strategy, a Consultative Meeting jointly organized by WHO/AFRO and WHO/HQ took place in Harare, Zimbabwe from 30 March to 01 April 1999. The purpose of the meeting was to identify concrete actions to assist Member States in implementing the strategy.

There were thirty-nine participants from four main groups, namely: experts on oral health in Africa, chief dental officers (CDOs) from selected countries in the Region, some oral health partners and heads of some WHO collaborating centres for oral health. There were also representatives from WHO/HQ and WHO/AFRO.

In his opening address, the WHO Regional Director for Africa, Dr E. M. Samba noted that previous approaches to oral health in Africa had failed to recognize the epidemiological priorities of the Region or to identify reliable and appropriate strategies to address them.Efforts had consisted of an unplanned, ad hoc and spasmodic evolution of curative oral health services. Dr Samba stressed that the new strategy focused on the most severe oral problems that people have to live with, like noma, oral cancer

and the oral consequences of HIV/AIDS infection. The strategy was a tool for assisting Member States and partners to identify priorities and interventions at various levels of the health system particularly at the district level. He further indicated that the strategy aimed at strengthening the capacity of countries to improve community oral health by effectively using proven interventions to address specific oral health needs. The Regional Director charged participants to identify practical cost-effective ways of implementing the regional oral health strategy.

The following are the main outcomes of the Consultative Meeting.

| PRIORITY PROGRAMMATIC AREA | IMPLEMENTATION FRAMEWORK | | | | |
|---|---|---|---|---|---|
| | STRATEGIC ORIENTATIONS | | | | |
| | **Advocacy and social mobilization** | **Capacity building** | **Information education and communication** | **Equitable access to quality oral health services** | **Promotion of operational research** |
| Development of national oral health strategies and implementation plans<br><br>Objectif :<br><br>*1. To formulate national oral health strategies and plans.* | Raise awareness at policy and political levels on the need for national strategy and plan on oral health.<br><br>Advocate for the implementation and evaluation of the prepared strategy and plan.<br><br>Advocate for multidisciplinary approach.<br><br>Mobilize the private sector and city/town health management to promote oral health. | Ensure there is institutional capacity for training appropriate oral health personnel.<br><br>Assist and encourage the development of appropriate protocols where indicated.<br><br>Include non-oral health workers in training programmes.<br><br>Promote collaboration for regional education and training. | Disseminate and explain the strategy and plan at all levels.<br><br>Ensure that strategy and plan involve opinions and needs at the lowest levels of the system<br><br>Design and disseminate participatory oral health education and promotion materials for use in schools and communities. | Ensure priorities identified are directed at the most vulnerable<br><br>Allocate resources on the basis of need.<br><br>Establish district-focus services.<br><br>Promote use of appropriate technology. | Identify areas where existing data need to be strengthened and devise appropriate research protocols<br><br>Initiate operational research at all levels.<br><br>Develop a simplified revised oral health survey methodology based on the perception of need, resource availability and potential outcome of intervention at the local level.<br><br>Promote research in appropriate technology. |

## Annex 3

| PRIORITY PROGRAMMATIC AREA | Advocacy and social mobilization | Capacity building | Information education and communication | Equitable access to quality oral health services | Promotion of operational research |
|---|---|---|---|---|---|
| **Integration of oral health in other programmes.**<br><br>Objectives:<br><br>2. *To integrate oral health in all PHC programmes and in the training programmes of primary and pre-school teachers*<br><br>3. *To deliver optimal levels of fluoride through water supplies or other methods where indicated and feasible, and to introduce defluoridation water systems in areas where fluorosis is endemic* | Advocate for integration of oral health with other programmes.<br><br>Advocate for issues such as food and agricultural policy, tobacco use and alcohol consumption, drink and driving and road safety.<br><br>Advocate for fluoridation and defluoridation where indicated and feasible.<br><br>Raise awareness that oral health arises from the same conditions as general health. | Train all district health personnel and school teachers on oral health education and promotion as well as recognition of oral diseases, their management and referral. | Disseminate information on the determinants of oral health and disease.<br><br>Integrate oral health messages in:<br><br>- MCH clinics and programmes.<br>- curriculum of primary schools.<br>- national nutrition programmes.<br>- programmes for the elderly.<br>- campaigns against violence.<br>- campaigns against tobacco use<br>- campaigns against alcohol consumption. | Expand oral health services within district health services.<br><br>Provide adequate infrastructure for the provision of oral health care.<br><br>Introduce oral health care in safe motherhood programmes. | Support operational research into the provision of oral health services that are integrated into general health services and school programmes (eg. cost-benefit, outcome measures, early diagnosis, etc.)<br><br>Promote research into the effectiveness of education and training for integrated services. |

## Annex 3

| PRIORITY PROGRAMMATIC AREA | STRATEGIC ORIENTATIONS | | | | |
|---|---|---|---|---|---|
| | **Advocacy and social mobilization** | **Capacity building** | **Information education and communication** | **Equitable access to quality oral health services** | **Promotion of operational research** |
| **Delivery of effective and safe oral health service.**<br><br>**Objectives:**<br><br>4. *To ensure equitable population access to quality oral health care through the district system.*<br><br>5. *To ensure district oral health service is adjusted to focus on community oral health needs and that appropriate forms of technology are selected.*<br><br>6. *To establish effective control measures for cross-infection.* | Advocate for the creation of infrastructure necessary to ensure safe and effective delivery of oral health care at district level.<br><br>Mobilize non-health sectors such as local authorities and NGOs to promote oral health.<br><br>Advocate for oral health materials and drugs to be part of the essential drug list (including fluoride toothpaste). | Train all district health personnel on infection control measures.<br><br>Ensure there are trained personnel for maintenance of equipment.<br><br>Train oral health personnel in research. | Disseminate information on infection control.<br><br>Promote the use of evidence-based interventions.<br><br>Promote campaigns against the use of tobacco and alcohol consumption.<br><br>Promote competition among oral health programmes. | Establish or expand oral health services to all districts as part of existing health services.<br><br>Ensure allocation of appropriate resources and infrastructure based on need and vulnerability.<br><br>Ensure availability of appropriate equipment and adequate stock of materials, instruments and spare parts.<br><br>Ensure regular maintenance of equipment. | Promote recording and analysis of data relevant to the processes and intervention used. |

## Annex 3

| PRIORITY PROGRAMMATIC AREA | STRATEGIC ORIENTATIONS | | | | |
|---|---|---|---|---|---|
| | **Advocacy and social mobilization** | **Capacity building** | **Information education and communication** | **Equitable access to quality oral health services** | **Promotion of operational research** |
| **Regional approach to education and training for oral health**<br><br>**Objective:**<br><br>7. *To share common approaches to oral health education for the level and type of care needed in the African region.* | Advocate and mobilize countries of the region to develop common approach to education and training of personnel for oral health.<br><br>Advocate for system of common entry based on needs of both country of origin and the region as a whole.<br><br>Advocate for the education and training of more auxillaries. | Ensure education and training are related to needs and strategies identified. | Inform relevant role-players of advantages of a regional approach. | Assess number, type and distribution of training institutions required.<br><br>Ensure optimal use of existing institutions and their availability to all countries in the region. | Develop measures to assess effectiveness and appropriateness of existing educational programmes.<br><br>Continually assess geographical distribution of personnel found in each institution in the region. |

## Annex 3

| PRIORITY PROGRAMMATIC AREA | STRATEGIC ORIENTATIONS | | | | |
|---|---|---|---|---|---|
| | **Advocacy and social mobilization** | **Capacity building** | **Information education and communication** | **Equitable access to quality oral health services** | **Promotion of operational research** |
| **Effective integration of oral health in national health management information systems**<br><br>**Objective:**<br><br>8. *To gather and coordinate the collection of information needed for planning, monitoring and evaluating oral health activities* | Advocate for the collection of data for planning, monitoring and evaluation at each level.<br><br>Advocate for mapping of geographical areas with endemic fluorosis. | Develop capacity to collect, collate, analyse and interprete data at all levels especially at the district level.<br><br>Develop computer skills where necessary. | Continually assess and define information for planning process.<br><br>Communicate need to collect and use this data to all health workers. | Ensure coordination of information at all levels.<br><br>Ensure relevant information is collected and properly utilised. | Determine the minimum data set.<br><br>Assess appropriateness of the data collected. |

## Annex 3

**FRAMEWORK TO ADDRESS PRIORITY AREAS OF PREVENTION AND OTHER INTERVENTIONS AT COUNTRY LEVEL**

PREAMBLE : The situation of each country and the nature of the oral health problem each country has to deal with are different. This means that each country needs to begin the process of oral health strategy development by identifying and prioritizing those problems that are particularly important to them. The framework provided below should assist in sifting through the available options for intervention that each country wishes to select, based on the resources they have and an assessment of which option is likely to work best for them. It is not a prescriptive list that countries should feel obliged to adopt in its entirety. For example, with noma, different countries/districts will require different levels and

| | SURVEILLANCE | PREVENTION AND PROMOTION | DISEASE MANAGEMENT | RESEARCH | CAPACITY BUILDING/ TRAINING |
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| **Cancrum Oris/Noma** | (i) Establish a surveillance system based on identifiable records from all available sources of data.<br><br>(ii) Include demographic, sociological, intervention and other outcome variables. | (i) Improve environmental and personal hygiene and dietary practices.<br>(ii) Early detection and referral (of precursor conditions) using existing social and health structures.<br>(iii) Participation in national programmes and campaigns on improved nutrition and immunization. | (i) Primary care : Arranging for health services to treat patients. Make sure necessary drugs and nutritional supplements are available.<br>(ii) Specialized oral care - surgery and rehabilitation : referring patients who have sequelae for surgical treatment setting up specialized centres for treatment.<br>(iii) Complex cases management of social and psychological effects, including social integration after surgical treatment. | Promote basic and operational research. | Formulate targets for training at all levels for health personnel and other types of resource person (parents, teachers, heads of villages, leaders of opinion) in:Identification of high risk groups detection of intra-oral lesions, and management at all levels of the disease. |

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| **HIV/AIDS Oral Manifestations** | (i) Establish surveillance systems to monitor prevalence, severity and intervention outcomes for oral mucosal lesions associated with HIV/AIDS.<br>(ii) Set up selected additional surveys where necessary. | (i) Participation of oral health personnel in national programmes and campaigns on prevention and control of HIV/AIDS.<br>(ii) Highlight transmission risk in health care services among health personnel.<br>(iii) Prepare manuals for patients and health workers on self care and prevention of HIV. | (i) Emphasis on careful and continuous oral hygiene/mouth care at home and treatment centres to maintain a healthy oral environment.<br>(ii) Utilize oral antiseptics and traditional medications.<br>(iii) Write treatment protocols. | (i) Research on the most predictive value of oral manifestations of HIV/AIDS, laboratory saliva tests, infection control etc.<br>(ii) Set up collaborative research with other countries. | (i) Devise a specific country plan for training.<br>(ii) Get a focal person to co-ordinate training.<br>(iii) Collaborate with AIDS units and other groups.<br>(iv) Train all oral health and general health personnel in identification and management of these conditions. |
| **Oral Cancer** | (i) Establish similar record-based surveillance systems as for HIV to monitor the prevelance of oral precancer and cancer.<br>(ii) Establish a cancer register. | (i) Engage with national campaigns against tobacco and alcohol etc.<br>(ii) Dietary advice on antioxidants and use of areca nut.<br>(iii) Promote systematic examination of the whole mouth. | (i) Appropriate referral.<br>(ii) Management of cases in national and regional treatment centres.<br>(iii) Campaign for indigenous training of maxillo-facial oral surgery staff. | (i) Research on behaviour and lifestyles.<br>(ii) Kola nut investigations.<br>(iii) Link between viral infections and cancer.<br>(iv) Evaluate interventions | (i) Train health personnel at district level in the early diagnosis of oral cancer and referral for appropriate management.<br>(ii) Teach recognition of suspicious lesions. |
| **Facial Trauma** | (i) Develop a record-based surveillance system to monitor the prevalence of facial trauma and its causes | (i) Participation of oral health personnel in campaigns against all forms of violence and its consequences. | (i) Draft protocol for treatment at primary care level.<br>(ii) Early diagnosis and referral to appropriate hospitals.<br>(iii) Establish network of centres to share expertise for all types of reconstructive surgery. | (i) Research on behaviour and lifestyles, vehicles and road safety etc. | (i) Train the community in first aid and health personnel in emergency management of facial injuries. |

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| **Fluorosis** | (i) Selective epidemiological studies on the extent of cosmetically disfiguring flurosis that requires professional intervention and on skeletal fluorosis | (i) Develop appropriate education programmes.<br>(ii) In areas where fluorosis is endemic, identify alternative water supply (and other fluoride sources). | (i) De-fluoridation of available drinking water in small communities.<br>(ii) Appropriate restoration of affected anterior teeth. | (i) Into de-fluoridation technology.<br>(ii) Fluoride exposure<br>(iii) Fluoride mapping<br>(iv) Sources of fluoride<br>(v) Utilization of fluoride | (i) Train the community and health personnel on identification of dental and skeletal fluorosis and referral for appropriate management of cases. |
| **Dental Caries** | (i) Selected pathfinder-type epidemiological studies on prevalence where existing data is inadequate. | (i) Integrate effective oral health promotion materials.<br>(ii) Promote mouth cleaning using indigenous and other oral hygiene aids, including chewing sticks.<br>(iii) Integrate dietary measures with existing nutrition programme efforts to ensure avoidance of frequent excess sugar intake.<br>(iv) Promotion of affordable fluoride toothpaste.<br>(v) Consider viability of water fluoridation. | (i) Emergency treatment for pain relief (extraction, temporary fillings etc)<br>(ii) Preventive fillings using ART technique. | (i) Simplified revised oral health survey method.<br>(ii) Effectiveness of community oral health education.<br>(iii) Process evaluation.<br>(iv) Quality of care assessment.<br>(v) Research effectiveness of traditional methods of oral health promotion and protection. | (i) Train authority members of the community such as teachers, MCH aids, nurses, PHC workers in oral health matters as part of general health education.<br>(ii) Train appropriate health workers in screening and extraction during their pre-professional courses.<br>(iii) Train district oral health workers in ART technique. |

| | SURVEILLANCE | PREVENTION ET PROMOTION | PRISE EN CHARGE DES MALADIES | RECHERCHE | RENFORCEMENT DES CAPACITES/FORMATION |
|---|---|---|---|---|---|
| **Edentulism** | (i) Records based surveillance as for oral cancer | (i) Promote healthy smile and other caries and periodontal disease prevention strategies | (i) Denture provision where infrastructure and resources permit | (i) Cultural and professional determinants of tooth loss.<br>(ii) Rapid cost-effective procedures production. | (i) Same as for other conditions above. |
| **Periodontal Diseases** | (i) Utilize existing data and record systems to monitor these conditions. | (i) Develop effective oral health education and promotion materials with strong messages on mouth cleaning.<br>(ii) Promote use of effective traditional methods of oral care (See caries above)<br>(iii) Integrate oral hygiene practices with environmental hygiene promotion efforts by local health workers. | (i) Referral to the next level of care.<br>(ii) Emergency treatment for pain relief.<br>(iii) Selected use of scaling and other forms of treatment aimed at preventing plaque retention.<br>(iv) Complex treatment such as periodontal surgery. | (i) Effectiveness of community oral health education.<br>(ii) Aetiological and risk factor research.<br>(iii) The interaction between systemic and other conditions related to periodontal diseases.<br>(iv) Factors that cause progression of gingivitis to periodontitis and ANUG to noma.<br>(v) Traditional methods of prevention and self care. | (i) Train PHC workers and school teachers on oral health education and promotion activities (see caries list above). |
| **Harmful Practices** | | Deal with as for trauma above. | | | |
| **Benign Tumours** | | Deal with as for oral cancer above depending on nature of the tumour. | | | |
| **Congenital Malformations** | | Deal with as for destructive facial conditions such as noma and other conditions requiring reconstructive surgery. | | | |

**Traditional (indigenous) interventions**

Traditional (indigenous) interventions are well-understood and accepted by many people in the region, but the systematic evaluation of their benefits has yet to be completed. The table above reflects the need for research into the utilization of these practices known to work. Further research is needed and a data base developed which records the practices and the scientific evidence that exists in support of their use. This work will be initiated by the WHO Regional Office for Africa (AFRO).

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