PREFACE

The impact of oral conditions on individuals can be profound. Evidence has shown that oral cavity is the mirror of the individual’s health; poor oral health may add an additional burden to the general health, while good oral health has real health gains in that it can improve general health, social acceptability, self esteem, and quality of life.

In general, citizens of developing countries have been reported to experience difficulty in accessing oral health services where such are provided. Although this is not confined to developing countries, access to oral health services in countries such as Scotland are often limited due to lack of sufficient oral health workers. Namibia is no exception to what seems to be a general feature of developing countries. In Namibia, oral health facilities and services are inaccessible to the majority of the rural population. Currently, oral and dental services are rendered in 15 (44%) of 34 districts. In most of these cases, the scope of oral health services is limited. Specialised procedures, for instance, are rarely given as an option due to shortage of human and other resources.

Equity and access to health care are declared fundamental principles for the transformation of health services in the Alma-Ata Declaration. To realise these ideals and to ensure comparability in the delivery of services, the Primary Health Care approach is still considered the best option to transform the health services in Namibia. Oral Health Services need to be restructured and refocused to address the needs of communities. The main challenges include the redressing of imbalances, transformation of service delivery system and increase in efficiency.

The Ministry of Health and Social Services (MoHSS) aims at promoting awareness on prevention of oral diseases, oral health promotion, as well as curative and rehabilitative care in communities. This entails the use of simple methods and techniques that are acceptable, affordable and appropriate to the local setting and that use the existing local organisations and infrastructure.
The situation analysis of Oral Health Services was conducted in all 13 regions in 2010. It was noted that there is no standardised approach to service provision. It therefore became necessary to develop the guidelines. The results of the analysis were shared with various management teams including the Regional Management Team (RMT), District Coordinating Committees (DCC), and technical teams. The guidelines will:

- Focus on the potential to improve the quantity and quality of Oral Health Services;
- Be clinically relevant and feasible;
- Take account of ethical considerations and acceptability to dental patients;
- Centre on interventions that are accessible to those who need them;
- Propose activities within the scope of those expected to use these guidelines;
- Underscore interventions that are expected in routine dental care; and
- Step up cross infection control measure in undertaking support supervision.

These guidelines are the result of prolonged consultation with practising State oral health workers across the spectrum which aimed at gathering information and supportive background evidence.

Oral diseases and conditions are an interaction of various causative and contributing factors which are also common risk factors or determinants to general health and disease. It is therefore realistic to integrate interventions from all relevant sectors. It is prudent and of pivotal importance to involve line ministries, the private sector, NGO’s, agencies, and communities for the successful planning, implementation, monitoring and evaluation of oral health activities.

I would therefore like to urge all health workers, in general, and oral health workers in particular, to use these guidelines with consistency.
Oral health workers are duty-bound to upgrade their knowledge and skills in order to cope with the ever improving modern and technical know-how in the implementation of the National Programme.

The Ministry of Health and Social Services wishes to extend thanks to all who contributed to the development of this document. Also, special thanks are extended to the members of the dental teams at Regional and District levels for their valuable contribution towards the development of this document.

MR K.S.M. KAHUURE

PERMANENT SECRETARY
# TABLE OF CONTENT

1. Abbreviations 6

2. Introduction 7

3. Situation Analysis 8
   3.1 Magnitude of the problem 8
   3.2 Strength, Weaknesses, Opportunities and Threats (SWOT) analysis 9

4. Programme Framework 10

5. Institutional Framework for Implementation 11
   5.1 Essential services minimal package at each service delivery level 11
   5.2 Specific oral health interventions 15
   5.3 Referral system 18
   5.4 Patients and health provider’s safety 18
   5.5 Training of other categories of staff 19
   5.6 Improving the quality of oral health care in the state dental clinics 19
   5.7 Strategies for oral health at national level 20

6. Resource Implications 20

7. Monitoring and Evaluation 21
   7.1 Oral health indicators 21
   7.2 Tools for monitoring oral health activities in the regions/districts 21

8. Annexure 23

9. Glossary 25

10. Bibliography 26
1. ABBREVIATIONS

ANC  Antenatal Care  
AIDS  Acquired Immuno- Deficiency Syndrome  
ART  Atraumatic Restorative Treatment  
CORP  Community Own Resource Person  
CBHW  Community Based Health Worker  
DMFT  Decayed, Missing, Filled Teeth  
DOPD  Dental Outpatient Department  
DSA  Dental Surgery Assistant  
DT  Dental Therapists  
DCC  District Coordinating Committee  
FDI  Federation of International Dental associations  
GRN  Government Republic of Namibia  
HEW  Health Extension Workers  
HIV  Human Immuno-deficiency Virus  
HIS  Health Information System  
I & D  Incision and drainage  
IEC  Information Education and Communication  
IMF  Intermaxillary Fixation  
MoHSS  Ministry of Health and Social Services  
NOHPP  National Oral Health Promotion Programme  
NDA  Namibian Dental Association  
NGOs  Non- Governmental Organizations  
OHE  Oral Health Education  
PHC  Primary Health Care  
PMOs  Principal Medical Officers  
PNC  Postnatal Care  
RMT  Regional Management Team  
RMTs  Regional Management Teams  
SHPa  Senior Health Program Administrator  
UNAM  University of Namibia  
UNESCO  United Nations, Scientific and Cultural Organization  
UNICEF  United Nations Children’s Fund  
WHO  World Health Organization
2. INTRODUCTION

Oral health is defined by the World Health Organisation (WHO) as: “The well-being of the oral cavity including the teeth and its surrounding tissues, absence of disease and optimal functioning of the mouth to the level that preserves the highest self-esteem.” In the past, in most developing countries, oral health was neglected at the expense of other more urgent disease burden. More recently, developing countries are realising the importance of oral diseases in relation to the general well being of the population.

With increasing industrialisation and urbanisation, developing countries have witnessed the shifting in disease burden from highly dominated communicable diseases to non-communicable disease entities. The rapid increase of prevalence and incidence of dental diseases is evidence of this shift. This is mainly the result of the large increase in the consumption of refined sugars, changing eating habits, as well as the increase in alcohol consumption and smoking habits.

Namibia, like most developing countries, has witnessed a rapid increase in dental diseases as observed in Annual Oral Health Monitoring Reports. Although different interventions have been instituted, most patients who attend the dental clinics present too late and, often, the only treatment option is extraction. The majority of the Namibian population resides in the rural areas where the accessibility of oral health services is limited. This indicates the need to formulate and implement National Guidelines on oral health service delivery that will address inequalities and inequitable distribution of current oral health services.

2.1 Methodology for the development of these guidelines

This document emanated from the assessment conducted by the Oral health and dental services programme staff through continuous programme monitoring and evaluation throughout the previous years.
The programme staff conducted consultations with the stakeholders such as WHO, the Federation of International Dental Association (FDI), the Namibian Dental Association (NDA), oral health staff members, DCCs, and RMTs. The Health Information System (HIS) data and programme reports on oral health were reviewed and formed part of the situational analysis. Finally, the document was presented to, and discussed with, the ministerial management before it was printed.

3. SITUATIONAL ANALYSIS

Namibia is facing a rapid change in disease pattern: from highly dominating infectious diseases to a rapid increase in non-communicable diseases including oral diseases. This could be attributed to increase in sugar consumption, excessive alcohol consumption and smoking.

3.1 Magnitude of the problem

The March 2001 Population and Housing Census Report indicates that Namibia has a population of 1,830,330 million; it is not yet known what percentage of the population is affected by oral diseases. However, according to the 2004 HIS report, oral disorders and diseases ranked 9th on the top 10 diseases among the 5 to 17 year olds. The HIS report reflected that the number of gum diseases doubled from 4 167 in 2008 to 8 331 in 2010. The number of dental caries increased from 57 716 in 2008 to 63 577 in 2010 and oral cancer from 178 in 2008 to 507 in 2010. Oral manifestations of HIV/AIDS are the leading signs of AIDS and contributed to the increased number of oral soft tissue lesions from 2 588 in 2008 to 4 761 in 2010.

Besides the above stated oral disease burden, it was also noted with great concern that there was an acute shortage of dental personnel at all levels of implementation. Most of the regions in the country were only conducting curative actions – mainly teeth extractions and outreach services – no preventive services were being provided. This compromised the quantity and quality of dental services delivered at
different levels of health facilities. Again, there was no consistency in the service provision due to lack of standard guidelines.

### 3.2 Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis

This section will deal with the analysis of dental care services provided in the country with specific focus on analysing the strengths, weaknesses, possible threats, and opportunities available to dental service delivery.

#### 3.2.1 Strengths
- Each region has a regional dentist who is responsible for the planning, budgeting and supervision of oral health services in the region. Oral health services are budgeted at both District and Regional levels. This creates opportunities for implementation of activities. Various interventions have been instituted to improve the quality and quantity of oral health services including the school-based oral health programme (smiling school) which was successfully scaled up after piloting in Windhoek in 1997, and covered most of the primary schools. The project was then extended to other regions. Over 265 schools countrywide are covered with a population of 50,000 pupils.
- All regions are conducting dental outreach services.

#### 3.2.2 Weaknesses
- The implementation of the National Oral Health Promotion Programme Policy and Guidelines had been difficult due to the shortage of financial resources and dental professionals. As a result, there is a skewed distribution of dental services and most of private dentists are concentrated in urban areas. This leaves the majority of the population with no access to oral health services.

#### 3.2.3 Threats
- The shortage of oral health professionals is a concern in the
ministry. Out of 34 district hospitals, only 18 have filled posts of oral health workers. Limited human and material resources are a major challenge. This has resulted in inequitable distribution of oral health services. All these shortcomings restrict the effectiveness and efficiency of oral health service delivery. This is a threat to the programme implementation.

3.2.4 Opportunities
• It is envisaged that the establishment of a medical school in the country will help to train oral health cadres in future. This is in line with the current ministry structure review whereby the current oral health staff establishment in the regions will be reviewed soon so that each district hospital will have full-time stationed dental staff.

4. PROGRAM FRAMEWORK

4.1 Vision
To facilitate the provision of one of the leading oral and dental services in Africa by delivering quality oral health services through Primary Health Care principles. The provision of these will be underpinned by equity, equality, and active community involvement.

4.2 Mission
To render an integrated, affordable, accessible, and quality preventive, curative and rehabilitative oral health care service that is responsive to the needs of the Namibian population.

4.3 Goal
To improve and maintain an impressive oral health status of individuals and communities in Namibia.

4.4 Objectives
The objectives of these guidelines will be to:
• Standardise oral health services delivery at different levels of
implementation;
• Provide strategic direction in the implementation of oral and dental care services;
• Build the capacity of oral health workers;
• Guide oral health workers on how to conduct outreach services;
• guide oral health workers on the procedures to be followed while referring patients;
• Strengthen programme planning, management, implementation, and monitoring and evaluation;
• Develop capacity, support and encourage non-dental personnel to assume their responsibilities as outlined in the National Oral Health Policy and Guidelines;
• Give guidance on partnerships between the MoHSS, other ministries, Non Governmental Organisations (NGOs) and other professional organisations; and
• Provide support, awareness, and mobilisation of resources at all levels.

5. INSTITUTIONAL FRAMEWORK FOR IMPLEMENTATION

This section consists of minimal package for provision of essential oral and dental care services for specific levels of implementation. This will include outreach services, curative, rehabilitative and preventive services provided at each level as well as the human resources required for implementation of such services.

5.1 Essential services minimal package at each level
5.1.1 Outreach point
Dental outreach point shall be visited by a Regional/District oral health team (comprising a Dentist, Dental Therapist and Dental assistant). The number of members in each team will depend on various determining factors such as population size and the availability of staff. The team shall provide the services stated below:

• Health education while consulting patients or attending planned
community meetings
- Health education to the CBHW/HEW
- Manual Scaling and root planning (Gross)
- Temporary filling Atraumatic Restorative Treatment (ART)
- Infection treatment with antibiotics and I&D of abscess; and
- Teeth extraction (except surgical or complex extraction).

5.1.2 Clinic/health Centre level
This level shall provide routine oral diseases prevention and oral health promotion services by the registered nurse and enrolled nurses stationed at these facilities as stated below:

- Give oral health education to the patients/clients (IEC)
- Health Education to the CBHW and HEW
- Diagnosis of most common dental diseases including dental caries, gum diseases, cancer, oral trauma and oral opportunistic infections
- Initial management of dental abscess (non-surgical); and
- Refer, on time, to the district level.

5.1.3 District hospital level
With regards to district hospital level, more comprehensive oral and dental services including preventive, rehabilitative and curative practises shall be delivered by the district oral health team consisting of dentists, dental therapists, dental assistants and dental technicians. However, the number of different cadre in each district shall be determined by the size of the hospital, vastness of the district and the population size. The following are different services to be provided:

5.1.3.1 Preventive services
- Conduct outreach services
- Conduct school oral health services
- Organise meetings/sessions with the community on oral health education
- Liaise with other relevant stakeholders in the district like education
department, PHC team, and CBHW and HEW
• Conduct oral health education sessions for relevant stake-holders including teachers and nurses.

5.1.3.2 Restorative
• Emergency pulpotomy
• Root Canal Treatment
• Restoration-amalgam, composite, Glass Ionomer, Partial veneer

5.1.3.3 Periodontics
• Scaling and root planning
• Dietary and oral hygiene counselling
• Splitting of mobile teeth

5.1.3.4 Prosthodontics
• Take impression for partial and full denture, crown and bridge (Dentists)
• Construction of prosthesis (Dental technologists where there is a Dental Laboratory)
• Fitting of prosthesis by dentists

5.1.3.5 Orthodontics
• Perform serial extraction in case of overcrowding diagnosed on time
• Counselling
• Treat with simple removable appliance
• Refer to the Orthodontist for complicated cases

5.1.3.6 Surgical
• Teeth extraction
• Surgical extraction/disimpaction
• Incision and drainage of abscess
• Apicectomy
• Wound repair, suture including non complicated lip reconstruction (without tissue loss)
• Jaw fracture reduction Inter Maxillary Fixation (IMF)
• Alveolar fracture reduction (splinting)
• Management of oral infection including administering Intravenous (iv) and Intramuscular (im) medications
• Management of soft tissue lesions including opportunistic infections, allergic reactions
• Medical-legal assessment: this includes filling of police forms, compensation forms and other relevant documents
• Comprehensive diagnostic procedures including the following:
  o Intra-oral radiography
  o Panorex/extra oral radiography
  o Biopsies for pathologies
  o Blood and other specimen for laboratory analysis for systemic conditions

5.1.3.7 Administrative
• Attend DCC meetings
• Attend therapeutic committee, clinical meetings, morbidity & mortality meetings, and grand rounds
• Collect data for district use as well as national level use.

5.1.4 Referral Hospital/intermediate hospital level
The referral hospital and intermediate level should focus on complex oral and dental services, clinical supervisory and support visits to the lower levels as well as managing referrals by oral health staff team consisting of specialists (Maxillofacial Surgeons, Orthodontists, and Prosthodontists), Dentists, Dental Therapists, Dental Technicians, and Dental Assistants. The number of each cadre will be determined by the population size, work load as well as the size of the hospital. The services at this level should be as follows:

5.1.4.1 Surgery
• Complex/Surgical extractions
• Complex soft tissue injury repair
• Complex soft tissue lesions treatment including cancrum oris (Noma)
• Complex jaw and facial fractures (open reduction)
• Other facial bone fractures including zygomatic bone and arch and maxillary antrum
• Management of benign and malignant tumour including oral cancer
• Management of congenital anomalies including cleft lip and palate
• Panorex/extra oral radiology
• Biopsies for pathologies
• Blood and other specimen for laboratory analysis of systemic conditions

5.1.4.2 Restorative
• Emergency pulpotomy
• Root Canal Treatment
• Restoration-amalgam, composite, Glass Ionomer, Partial veneer

5.1.4.3 Prosthodontics
• Take impression for partial and full denture, crown and bridge
• Construction of Prosthesis by dental technologists
• Fitting of prosthesis by dentists

5.1.4.4 Orthodontics
• Perform complex orthodontics intervention including appliances

5.1.4.5 Periodontics
• Scaling and root planning
• Oral hygiene and dietary counselling
• Splinting of loose teeth
• Gingivectomy (reconstruction)

5.1.4.6 Administration
• Attend Therapeutic committee- and clinical meetings, and do grand rounds
• Collect data for hospital use as well as national level use

5.2 Specific oral health interventions
This section will focus on specific oral health interventions on oral disease prevention, oral health promotion, and rehabilitation.

5.2.1 Oral disease prevention
All State dental clinics should provide primary preventive services appropriate for the target group/population. These are some of the primary dental preventive services:

5.2.1.1 Oral health education
This should include the information like oral hygiene instruction, dietary counselling, trauma prevention, Fluoride effectiveness as well as oral cancer prevention. The National Oral Health Promotion Programme considers the following as target groups:

- Children
- Pre-primary schools
- Primary schools
- The disabled
- Orphans/underprivileged
- Mothers(ANC/PNC) and
- Youth and adults in community development projects/programmes e.g. home-based care.

5.2.1.2 Prophylaxis
Topical application of fluoride which involves application of gels and varnishes for children in kindergarten and in Grades 1, 4 and 6

5.2.1.3 Pit and fissure sealants
Dental examinations and screening of children in Grades 1, 4, and 6 for early carious lesions in order to prevent progression by applying fissure sealant and varnish.

5.2.2 Rehabilitative dental services
Rehabilitative dental services include construction of dentures, crowns, bridges and orthodontics appliances. The dentist will take
the impressions and send it to the dental technician/technologist in the dental laboratory for casting and denture/appliance construction. The procedure of fitting the denture in the patient’s mouth should be done by the dentist. The dental laboratory should keep a register for work done and make sure it is included in the dental services monthly summaries. The register should also indicate the status of patient, whether the patient is edentulous or semi-edentulous, and classification of the orthodontic problem, age, and sex.

5.2.3 Dental outreach services
This section will focus on the systematic steps to be followed when planning a dental outreach visit.

5.2.3.1 Preparation for an outreach point
• The first step is to consider the distance from the health facility and the population size of the outreach point. This will help you to estimate time and number of dental instruments/materials required
• Make your yearly, quarterly or monthly outreach visits programme and send the final itinerary in advance to the clinic nurse and the schedule for the visits
• Prepare a checklist for all the items needed at each outreach point
• Request for transport in advance according to the transport regulation
• Confirm availability of transport from the transport officer or relevant authority
• Prepare for the equipment, instruments and supplies intended for outreach services
• Inform the nurse of your coming and request him/her to prepare the room where you are going to work.

5.2.4 School Health Programme (SMILING SCHOOL)
School Oral Health Programme should be integrated into existing school health promoting initiatives. Oral health personnel should be members of a district school health team and work in collaboration with the rest of the team. The oral health personnel should focus
mainly on empowering the school health team with knowledge and skill for prevention of oral health diseases.

5.3 **Referral System**
Referring officers should state the full medical and dental history before referring to the next level of management by using the referral forms where available. Communication on patient management may be either way: referrals may come from either the lower level – like a clinic – to the higher level – like the district/referral hospital or otherwise. The referring officer should make sure that all the necessary preparations of patient to be referred are done, including necessary investigations like x-rays, biopsy and splinting whenever possible. It is paramount that the staff member who is managing the referred patient should give the written feedback to the referring staff member.

Other referrals may come from institutions such as prisons services, schools by teachers trained/untrained on oral health, as well as other medical personnel. During outreach visits, the oral health personnel may bring along patients with incomplete dental surgical procedures (difficult extractions, attempted disimpactions, maxillary antrum perforation etc.) for further management at the district hospital.

5.4 **Patient and service provider safety**
Patient and service provider safety is important in a dental surgery in order to prevent cross infection and injuries to both health care providers and patients. It cannot be over emphasised that universal precautions on cross infection control should be observed at all times. Below are essential precautions to be followed:

5.4.1 **The service provider**
- Protective clothing should be worn during procedures, i.e. over-garment, face mask, gloves, protective glasses etc.
- Lead aprons should be worn during radiation exposure except when a facility provides a lead barrier
- Dosimeter (x-ray badges) should be worn at all times and reading
monitored.
• Providers should handle with care the amalgam and other toxic materials in the department
• Proper amalgam disposal procedure should be adhered to

5.4.2 The patient
• During conservative procedures and surgical treatment, the patients should wear a Bib/apron
• For all intra- or extra-oral x-ray examinations, patients should wear a lead apron
• Maximum care should be exercised not to spill dental materials on the floor, patients face, and eyes during procedure

5.5 Training of other categories staff
Training is carried out to fulfil the dentist’s/dental therapist’s responsibilities and roles as outlined in the policy. These are: in-service training for doctors, nurses and other health workers on the following topics:

• Oral health education
• Dietary counselling
• Oral hygiene instructions
• Pre- and post-operative instructions to patients and management of minor postoperative pain, bleeding and swelling.

5.6 Improving the quality of Oral Health Care in the State Dental Clinics
This section is aiming to emphasise on good practise of patient care in a dental surgery. The importance of paying full attention to a patient is paramount hence the minimal duration for management of a patient for extraction should be 15 minutes and for restoration is 30 minutes. Below are the steps to be followed systematically:

5.6.1 At the reception
• Welcome the patient and show him/her where to sit comfortably
• Give oral health education while the patients are sitting
• Sort out the record card (if available) and medical or health
passport and record the patient’s name in the dental OPD register.

5.6.2 In the surgery
- Observe when the patient enters and welcome her/him by greeting and let her/him sit comfortably on the dental chair
- Ask the chief/main complaint
- While seated take her/his medical and dental history
- Examine the patient extra orally and intra orally
- Conduct other investigations (e.g. x-ray, biopsies etc.) if necessary
- Involve the patient in the treatment plan
- Give the treatment or appointment for a later date, if necessary
- Give postoperative instructions
- All patients visiting the dental clinics should be in possession of medical passports
- Dental record cards should be used in the dental clinics
- All dental patients should be recorded in the dental registry book
- Records should be filed and stored properly

5.7 Strategies for oral health at National level
Oral health and dental services sub-division at National level should focus on the following:

- Development of guidelines, standards protocols, and regulations to support the implementation of National Programme on Oral Health and National Oral Health Promotion Programme Policy at all levels
- Orientation of all relevant stakeholders on policies, guidelines, standards, protocols, and regulations pertaining to oral health
- Plan, implement, monitor, regulate and evaluate Oral Health Programme performance at National, Regional and Local levels

6. RESOURCE IMPLICATION

In order to implement the essential minimal package for oral health services at each level, there is a need to increase human, financial and
physical resources to meet the demand of quality services as prescribed at different operational level. Each region and district is mandated to analyse its own cost implication of the required resources.

7. MONITORING AND EVALUATION

Monitoring and evaluation of oral health services will be conducted at each operational level and will be focusing on oral health essential indicators as indicated below:

7.1 Oral health indicators

- Ratio of pupils and adults who come for, and are attended to, for dental sealants
- Frequency of dental visits by clients for dental check-up
- Requests for, and/or, actual cleaning of one’s teeth by a professional oral health worker
- Caries and oral hygiene status of children in Grades 1, 4 and 6
  a) Percentage of pupils (of ages 5 to 6 years-old) free of tooth decay
  b) DMFT for 12 year-olds
  c) Percentage of pupils whose oral hygiene status is good (more than 50% of patient’s gum sites are healthy)
- Percentage of adults (ages 35 to 44 and 65 to 74 years)
  a) without natural teeth
  b) with 20 or more teeth present

7.2 Tools for monitoring and evaluation of oral health activities in the regions/districts

These tools will facilitate the collection of essential data for better management and evaluation of programme activities:

- Monthly reports on dental services from monthly summaries of the HIS
- RMTs and DCCs are duty-bound to ensure that reports are submitted to the HIS officer
• Supportive supervisory visits are an important undertaking in the monitoring of oral health activities, projects and programmes
• Periodic oral health surveys and research (health system)
8.ANNEXURE

Table 1. Oral health professionals and sub-professionals available in the country in year 2010.

<table>
<thead>
<tr>
<th>Professionals</th>
<th>State</th>
<th>Private</th>
<th>Total</th>
<th>Projected for State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxillofacial surgeons</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Dentists</td>
<td>19</td>
<td>97</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Orthodontists</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Dental Therapists</td>
<td>19</td>
<td>7</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Dental Technicians</td>
<td>4</td>
<td>20</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Dental Assistants</td>
<td>20</td>
<td>122</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>TARGET GROUP</td>
<td>INTERGRATION</td>
<td>PLACE</td>
<td>ACTIVITY</td>
<td>PROVIDER</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Households</td>
<td>Home visits</td>
<td>Home Community</td>
<td>OHE</td>
<td>CBHW/HEW</td>
</tr>
<tr>
<td></td>
<td>Community visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>Reproductive health (ANC &amp; PNC)</td>
<td>Clinic</td>
<td>OHE</td>
<td>Clinic</td>
</tr>
<tr>
<td>Pre school children</td>
<td>Immunisation(polio booster)</td>
<td>Clinic</td>
<td>OHE Screening</td>
<td>Clinical nurse. School health team.</td>
</tr>
<tr>
<td>Primary school children</td>
<td>Health promoting school program.</td>
<td>Primary school</td>
<td>OHE, Screening Treatment</td>
<td>Teachers, Oral health monitors, School health team.</td>
</tr>
<tr>
<td></td>
<td>Natural science and health education school curriculum</td>
<td>Primary school</td>
<td>OHE</td>
<td>Teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dental clinic</td>
<td>Treatment</td>
<td>Dental personnel</td>
</tr>
</tbody>
</table>
### 9. GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alveolar fracture</strong></td>
<td>Fracture of a bone which supports the teeth</td>
</tr>
<tr>
<td><strong>Apicectomy</strong></td>
<td>Surgical removal of the root apex of the tooth</td>
</tr>
<tr>
<td><strong>Cancrum oris/noma</strong></td>
<td>Gangrenous disease leading to tissue destruction of the face especially the mouth and cheek</td>
</tr>
<tr>
<td><strong>Cleft lip/palate</strong></td>
<td>Birth defect (congenital) of the upper part of the mouth which creates an opening in the upper lip and or the palate.</td>
</tr>
<tr>
<td><strong>Crown and bridge</strong></td>
<td>Appliances used to restore the coronal part of teeth</td>
</tr>
<tr>
<td><strong>Denture</strong></td>
<td>Artificial teeth</td>
</tr>
<tr>
<td><strong>Dental caries</strong></td>
<td>Tooth decay</td>
</tr>
<tr>
<td><strong>Orthodontics</strong></td>
<td>The branch of dentistry concerned with correction of teeth alignment and their related tissues</td>
</tr>
<tr>
<td><strong>Panorex</strong></td>
<td>Is an extra oral full-mouth x-Ray that records the teeth and the upper and lower jaws on one film.</td>
</tr>
<tr>
<td><strong>Pulpotomy</strong></td>
<td>Surgical removal of coronal part of pulp tissues</td>
</tr>
<tr>
<td><strong>Prosthodontics</strong></td>
<td>Branch of dentistry which deals with replacement of missing teeth and related mouth or jaw structures by dentures or other artificial devices</td>
</tr>
<tr>
<td><strong>Root Canal Treatment</strong></td>
<td>A dental procedure to fix a tooth by removing the pulp and filling it with suitable materials.</td>
</tr>
</tbody>
</table>
10. BIBLIOGRAPHY


