CONTENTS

WORKING GROUP

Advisors:

1. Datin Dr. Rohani bt. Ramli
   Director of Oral Health
   Ministry of Health Malaysia

2. Dato' Dr. Wan Mohd. Nasir bin Wan Othman
   Deputy Director of Oral Health
   Ministry of Health Malaysia

3. Dr. Norain bt Abu Talib
   Deputy Director of Oral Health
   Ministry of Health Malaysia

Members of the Working Group :

1. Dr. Normala bt. Mohd. Rashid (Chairman)
2. Datin Dr. Nooral Zeila bt. Junid
3. Dr. Looi Lai Leng
4. Dr. Lena Periachee Bok
5. Dr. Rohana bt. Abu Kassim
6. Dr. Hasenah bt. Mod. Zaki
7. Dr. Lawrence Mah Hon Kheong
8. Dr. Norliza bt. Mohamed
9. Dr. Noralaini bt. Ismail

ACKNOWLEDGEMENTS

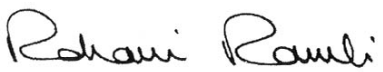
Members of the Working Group wish to express heartfelt thanks to all those who have directly or indirectly contributed to the preparation of these guidelines.

FOREWORD

The lifespan of Malaysians is increasing. Concomitant with this, the elderly population in Malaysia is also on the increase. In this new era, age should not be a limiting factor in terms of appearance and socialisation for the individual. This also hold true for the elderly.

For both these factor, oral health play a major role. Good oral health will help in providing the individual with a nice smile and with it a good disposition, as well as improve his/her functionalities of speech and mastication allowing him/her to have clear enunciation and the ability to enjoy food. As age increases, these simple pleasures mean so much!

To improve quality of life for the elderly through good oral health necessitates laying down planned strategies. These guidelines are an effort in the right direction towards fulfilling these noble aims.



Datin Dr. Rohani bt. Ramli
Director of Oral Health
Ministry of Health Malaysia

1. INTRODUCTION

The number and proportion of the elderly in the world is increasing. Population ageing occurs when the elderly population of a country reaches 7% of the total population. The elderly population of Malaysia is projected to increase from 6.4% in the year 2000 to 7.0% in the year 2005, and subsequently to 12.0% in the year 2020. In order to meet the challenges of the ageing phenomenon, the Government of Malaysia formulated and endorsed the National Policy for Senior Citizens in 1995.

One of the strategies stated in the policy is enabling the elderly access to health care. In line with this, the Ministry of Health (MOH) established the *Majlis Kesihatan Warga Tua* (National Council on Health of the Elderly) in 1997, with action plans for provision of health care to the elderly in Malaysia. The oral health care programme for the elderly has already been in place in the public oral health services (dental services) since late 1993, albeit confined to the elderly in institutions. Guidelines on implementation of the programme were distributed then. It is however felt timely to revise the guidelines, towards a more comprehensive and holistic approach in the provision of oral health care for the elderly in the country.

Treatment needs of the elderly group are high. Many of them are edentulous, however a growing number are retaining their natural dentition into old age. Many of these new elderly are functionally-independent, healthy, active and educated. They are more critical and are more demanding of a wider range of services. As the population ages and the number of frail and functionally-dependent elderly increases, demand for care out of the realm of the normal dental clinic set-up will ensue. It is therefore essential that the variety of oral health needs of the diverse population of ageing patients be addressed and appropriate strategies be formulated, to ensure that both current and future dentists as well as other oral

health personnel are sufficiently equipped to provide essential care for this segment of the population.

In any set-up, be it the dental clinic, the institution for the elderly (private or government-owned), the community or day-care centre, or the residential home, essential oral health care shall be provided to fulfil the seventh challenge of the Malaysian Vision 2020, i.e. "Establishing a Fully Caring Society and a Caring Culture". To this end, and also in the quest to achieve "Health for All" (Declaration of Alma-Ata, 1978), the Oral Health Division, MOH, deems it necessary to ensure that the elderly community not be left out. Thus, it is with these noble intentions that these guidelines are promulgated.

These guidelines shall be used as reference material for oral health personnel to assist them in the implementation of the oral health care programme for the elderly in Malaysia. The body of this book discusses literature review, the goal, objectives, and strategies for implementation of the programme-in-general. Implementation of the programme at specific set-ups, checklists, flow-charts and other relevant information can be found in the appendix.

2. LITERATURE REVIEW

2.1 Definition of Ageing

There are various ways by which ageing can be defined. Ageing can be defined as a natural biological process, a pathological process, a psychosocial or a socio-economic process (Kalk, Baat and Meeuwissen, 1992). The ages of 60 and 65 years have been commonly adopted as the beginning of old age although the definition varies across countries, cultures and time (Sen, 1994).

The World Health Organisation (WHO) defines an ageing population as when the elderly population of 65 years and above (65^+ years) of a country reaches 7.0% of its total population (WHO, 1989). Malaysia has adopted the United Nations definition of those aged 60 years and above (60^+ years) as older persons for

developing countries, into which category ASEAN countries – including Malaysia - belong (United Nations, 1999).

2.2 Categories of the Elderly

There are several ways to categorise older adults. They can be described by chronological age, but the older population shows great diversity. Using descriptions based on functions from the perspective of ability to seek treatment, Ettinger and Beck classified the elderly into three groups. They are the:

2.2.1 Functionally-Independent Elderly

These are the elderly who are healthy, active and live in the community unassisted and make up about 70% of the elderly population.

2.2.2 Frail Elderly

These are the elderly who have lost some of their independence, live in the community but need the companionship of others (20%).

2.2.3 Functionally-Dependent Elderly

These are the elderly who are unable to live independently. They are either home-bound (5%) or institutionalised (5%).

Both the frail and the functionally-dependent elderly normally have chronic debilitating physical, medical and emotional problems. Their management and treatment require special skills.

2.3 Population Ageing

The lifespan of mankind has increased substantially since the beginning of the 20th century. Along with this phenomenon and other factors, globally, there has been an unprecedented growth in the number and proportion of elderly people. Current demographic data based on the 6 billion-world population indicates that those aged 65^+ years comprise 7.0% of the world's population, whilst those aged 60^+ years constitute 10.0% (United Nations, 2002). By the year 2025, 14.4% of the total

population in the Asia-Pacific Region will be 60^+ years and the region will be home to 56.0% of the world's older persons.

At present, Malaysia's population is still considered relatively young. From the Population and Housing Census 2000, the population of Malaysia was 21.9 million with 1.4 million or 6.4% being 60^+ years (Department of Statistics, Malaysia 2001). However, population projections indicate that the country is also experiencing population ageing. The elderly category is expected to constitute 7.0% of the total projected population of 24.2 million in the year 2005 (Department of Social Welfare, 2001). By the year 2020 when the nation is expected to achieve developed nation status as propounded by the Prime Minister of Malaysia in Vision 2020 (Mahathir Mohamad, 1991), it is estimated that this proportion will increase to 3.5 million or 12.0% of the total population of 29.3 million (United Nations, 1999). This rapid ageing of the population requires economic and social strategies when dealing with health problems of old age.

In tandem with population ageing, the average life expectancy is expected to rise. The life expectancy for Malaysian women in 2002 is 75.3 years while for the men it is 70.4 years (Department of Statistics, Malaysia 2002). The life expectancy of the elderly population of Malaysia is projected to increase to an average of 74.7 years in the year 2020 (Department of Statistics, Malaysia 1998).

2.4 Government Policy for the Ageing Population

In 1995, the Government of Malaysia formulated and endorsed the National Policy for Senior Citizens (Ministry of National Unity and Social Development, 1995).

NATIONAL POLICY FOR SENIOR CITIZENS

To develop a society of elderly people who are contented, with dignity and possess a high sense of self-worth by optimizing their self-potential and ensuring that they enjoy every opportunity as well as care and protection as members of their family, society and nation.

One of the strategies of this policy is to enable the elderly to have access to health care so as to assist them in maintaining or restoring their optimum physical, mental and emotional health and in the prevention of infection. In line with this, and recommendations by the World Health Assembly on Ageing: Vienna Plan of Action in 1982, the National Council on Health of the Elderly was established by MOH with action plans for health care of the elderly in Malaysia (MOH,1997).

Even prior to this, the then Dental Services Division, MOH (now known as the Oral Health Division, MOH) had been instrumental in establishing the Oral Health Care Programme for the Elderly. The programme was launched in December 1993 with the aim of providing oral health care to the elderly in institutions. A set of guidelines was distributed to the states to facilitate the implementation of the programme (Dental Services Division, MOH 1993). For the rest of the elderly population, treatment was given on an ad-hoc basis at government dental clinics. It is now felt necessary to revise the previous guidelines.

2.5 General Health Of The Elderly

The majority of the elderly lead a healthy and active adult life in the community, but as the population ages and experiences increased longevity, the risk for the development of systemic diseases increases. Improved living conditions, better hygiene and advances in medical care have helped a greater proportion of persons reach old age but often with multiple, debilitating, chronic mental and physical conditions (Beck, 1982).

2.5.1 Characteristics of Illness in Old Age

A number of characteristics of illness in old age have implications on the health care system. These characteristics include pathological conditions, non-specific presentation of diseases, rapid deterioration if no treatment is provided, high incidence of complications of disease and treatment, and need for rehabilitation (WHO, 1989). These problems generate new

challenges for health policy-makers in making treatment decisions as well as managing logistical problems in the delivery of services to the elderly.

2.5.2 Diversity of Needs of Medically-Compromised Ageing Patients

A diverse population of ageing patients with a variety of dental needs will place significant stress on dental services. These are the very old and medically-compromised elderly, who are under extensive medication and present with edentulism and related denture mucosal lesions (Beck, 1982). They normally suffer from chronic disabling disorders such as diabetes mellitus, hypertension and heart diseases, and sensory impairment of vision, hearing and others (Beck and Hunt, 1985). In addition, there are the healthier elderly who may have a range of acute and medical conditions but possess some teeth with some dental diseases requiring various ranges of curative and rehabilitative treatment (Beck, 1982).

2.5.3 Xerostomia (Dry Mouth)

Older individuals frequently suffer from xerostomia. For them, this condition is more probably related to systemic diseases or extensive use of medications such as sedatives, analgesic and drugs for cardiovascular diseases that inhibit salivary flow (Thorselius et al, 1988 and Baum, 1986). Normal flow is important for the protection of oral tissues, oral function such as digestion, ingestion of food, speech and retention of dentures (Haugen, 1992). Reduced salivary secretion rate can lead to serious adaptation problems with removable dentures and increased susceptibility to oral epithelial atrophy, periodontal disease and caries.

2.5.4 Health of the Elderly in Institutions

A health system research study conducted in four institutions for the elderly in Sabah, Malaysia reported that 40% of the respondents had at least one underlying systemic disease and 13% had mental disorders that required long-term medication; the latter also had significantly poorer oral hygiene

(Loke ST et al, 2001). Alveolar abscesses were the most common oral mucocutaneous pathology. Drugs such as antihypertensives, psychotropics and antiarrythmias are known to cause xerostomia resulting in reduced salivary flow, thus increasing the susceptibility to root caries. Cognitive and/or functional impairment can limit their ability to care for themselves. Dental awareness was found to be low. A study on the dental needs of the elderly in institutions in Penang, Malaysia revealed that normative needs far exceeded expressed needs. Dental practitioners, whilst competent in managing the dental aspects of the elderly, were not sufficiently confident to handle medical emergencies (Cheah SP, 2000).

Because of the variety of age-related and age-associated psychological, social, biological and pathological changes that occur with ageing, clinical decision-making will vary from one elderly individual to another. Consequently, what is considered appropriate care for a particular condition may vary from one person to another.

2.6 Oral Health of the Elderly

The concept of oral health has been transformed from merely having healthy teeth to include excellent oral function (the ability to speak, smile, chew and swallow competently, and without pain), improvement in general health and increased self-esteem. However, at present, the oral health of elderly people is far from optimal. Their treatment needs are high due to edentulism, missing teeth, caries, periodontal diseases and attrition resulting in impaired oral function and affecting their quality of life. It is expected that the elderly of the future will retain more of their natural dentition than their present cohort. This new elderly will be more critical and more demanding of oral healthcare.

2.6.1 Caries

In contrast to the younger population, the prevalence of primary coronal caries in the elderly is not high but secondary coronal caries and root surface caries do have a high prevalence (Banting et al 1980). Studies report

that about 40% to 60% of the elderly need one or more restorations (Homan et al, 1988). In Japan, the increasing number of the elderly retaining their natural dentition showed a corresponding increase in the number of exposed root surfaces and root surface caries (Yamaga et al, 1994). With advancing age, the prevalence of gingival recession increases and this will increase the risk of developing root caries.

The National Oral Health Survey of Adults in Malaysia 2000 (NOHSA 2000) showed that caries prevalence was 94.9% for the 65-74 years age-group. The proportion of adults with decayed teeth increased sharply from 3.3% for the 15-19 years age-group to 22.9% for those aged 75 years and above (75^+ years). Out of the 22.9% decayed teeth, 75.1% required extraction. The percentage of teeth affected by root caries increased with age ranging from 1.6% in the 50-54 years age-group to 4.3% in the 75^+ years age-group; the highest being 24.2% in the 70-74 years age-group.

2.6.2 Periodontal Diseases

Studies have shown that the prevalence of periodontal diseases increases with increasing age. However, severe periodontal disease only affects a much smaller proportion compared to gingivitis and shallow periodontal pockets. The majority of dentate elderly need some form of periodontal treatment. A study done in Norway to compare the oral health of institutionalised elderly over a span of thirteen years showed that in general, oral hygiene was poor (Jokstad et al, 1996). In Malaysia, only 0.4% of those from the 65–74 years age-group were found to have healthy gingivae (NOHSA 2000).

2.6.3 Tooth Loss and Edentulism

The prevalence of edentulism differs substantially between countries. With increasing age, relatively more teeth are lost. Although many people are edentulous, a growing number manage to retain their natural dentition into old age. Similar to the United Kingdom, the status of edentulism in Malaysia is influenced by the historical pattern of oral health care practised during

the early years, when tooth extraction was perceived as an acceptable, and even among some people, a preferred approach. This has left a legacy of edentulism among the elderly. However, the present scenario has changed from having an attitude that places oral health as low priority to more positive attitudes towards oral health.

Data from NOHSA 2000 shows a trend of declining dentition status as age increases. It was observed in the survey that there was a marked increase in the proportion of edentulism from 3.1% for the 35-44 years age-group, to 40.8% and 50.4% for the 65-74 years age-group and the 75^{+} years age-group respectively. The mean number of teeth present was 8.3 for the 65-74 years age-group and this dropped to 6.8 for the 75^{+} years age-group.

2.6.4 Prosthetic Status

From NOHSA 2000, the proportion of the elderly aged 65^{+} years wearing prostheses was 52%.

2.6.5 Oral Lesions

Oral lesions are not common. NOHSA 2000 indicates the highest prevalence of 9.2% was among those in the 65-74 years age-group. Oral candidiasis and/or denture-induced stomatitis are common among denture wearers. Oral candidiasis can occur with long-term-use medications, such as antibiotics, steroid therapies or chemotherapy. Other factors are diabetes mellitus, head-and-neck radiation therapy and HIV. Nursing home residents are also particularly susceptible to Candidiasis.

2.6.6 Oral Impacts

The quality of life and health of the elderly patient is very closely linked with oral health. Those with inadequate dentition or malfunctioning dental prostheses often complain of difficulty in chewing. It has been reported that 40% of the elderly spent a longer time to eat, 32% had oral discomfort and 30% had difficulty in chewing. This behaviour may lead to embarrassment,

social isolation and depression (Smith and Sheiham 1979). Studies done in Malaysia have found that the major prevalent oral impacts faced by the elderly are difficulty in chewing (53-67%), limitation in type/quantity of food taken, pain and discomfort in eating (Latifah, 1999; Ismail, 1996).

2.6.7 Treatment Needs and Demands of the Elderly

The normative assessment of treatment needs in the elderly is high due to ill-fitting complete dentures, missing teeth, caries, periodontal diseases and attrition. However, demand appears to be much lower than need (Wilson and Branch, 1986). The causes for this discrepancy may be the patients' lack of knowledge, lack of dental awareness, myths, inability to access dental facilities and economic factors (Heyden, 1990). Treatment needs were higher in disabled than non-disabled elderly people (Stiefel et al, 1979).

From NOHSA 2000, it was found that 33.2% of the 75^{+} years age-group required extraction of their teeth. If only decayed teeth were considered, 75.1% of this group required extractions. For periodontal problems, among the 65-74 years age-group, treatment required was found to be 78.3% for oral hygiene instruction, 76.5% for both oral hygiene instruction and prophylaxis, and 9.4% for complex periodontal treatment. The need for prosthesis was observed to increase with age.

It is a fact that the new elderly dental consumers will be better educated and more demanding of health services (Ettinger, 1984). They will request for a wider range of services. Thus, there is a growing requirement for both preventive strategies and complex restorative procedures for them.

2.7 Utilisation of Dental Services

Research indicates that the utilisation of dental services by the elderly decreases with increasing age. Not only is perceived need for oral care less, even when need exists, it is less likely to be translated into action and demand for care. When the

elderly do make use of dental services, it is more likely to be on an emergency rather than a routine basis.

Other research has also indicated that dental visits by older adults are correlated to the possession of teeth, not with age. As long as older adults maintain their dentition, they will continue to seek dental services. Failure to seek dental services often results from a lack of perceived need for services. The edentulous elderly often do not seek dental services because they perceive they have no teeth, therefore are in no need of such services. However, with oral cancer occurring primarily in adults over the age of 65 years, an annual examination to screen for oral pre-cancer and cancer lesions will benefit even the edentulous elderly.

2.8 Oral Health Promotion for the Elderly and their Care-givers

A study by Schou *et al* (1989) on 201 institutionalised elderly residents in Scotland showed that there was a need to develop different educational approaches to oral health promotion for the elderly and care-givers in the institution. Groups of the elderly need to be differentiated so that the medically and mentally-well can participate in the routine oral health promotion programmes, while the less well can receive regular professional support on oral hygiene.

3. GOAL

The goal of oral health care for the elderly is 'Successful Ageing'. An older person is considered to be ageing successfully when he/she is able to maintain healthy oral tissues and natural functional dentition throughout his/her remaining adult life with all the social and biological benefits such as aesthetics, comfort, ability to chew, swallow, taste, speak competently and be free from oral pain.

4. OBJECTIVES

4.1 General Objective

The general objective of oral health care for the elderly is to improve the quality of life of the elderly by improving their oral health status and maintaining a healthy natural functional dentition throughout their remaining life.

4.2 Specific Objectives

4.2.1 To improve oral hygiene of the elderly

4.2.2 To reduce prevalence of caries, periodontal diseases, edentulism and oral lesions

4.2.3 To improve masticatory efficiency and function

4.2.4 To attain and maintain functional efficiency and satisfactory appearance

4.2.5 To improve self-esteem

5. STRATEGIES

The strategies of the oral health care programme for the elderly shall be the promotion of oral hygiene as part of general health, provision of comprehensive care for the healthy and functionally-independent elderly at dental clinics, and essential care with priority treatment for the frail and the functionally-dependent elderly in institutions and homes through an outreach programme. The provision of oral health care shall incorporate the caring concept and address the need to improve the oral health status of the elderly by ensuring that oral health personnel be equipped to give essential care to the diverse population of ageing patients with a variety of oral health needs. Primary oral health care shall be integrated with specialist oral health care. Co-operation and collaboration with other government agencies, non-governmental

organisations (NGOs) and voluntary bodies are essential for the success of the outreach programme. The specific strategies are listed below:

5.1 Promotion of Oral Hygiene as Part of General Health

There is a need to promote oral hygiene as part of general health by encouraging and creating awareness among the elderly to maintain good overall health and personal appearance starting with good oral hygiene. Different educational approaches shall be developed to oral health promotion for the elderly and care-givers in the institutions and homes: the medically and mentally-well shall participate in the routine oral health promotion programmes, while the less well shall receive regular professional support on oral hygiene.

5.2 Provision of Oral Health Care

5.2.1 Provision of Comprehensive Oral Health Care at the Dental Clinic

Many of the functionally-independent elderly may retain their natural dentition into old age. To improve and maintain an optimal number of natural functioning teeth for the remainder of their adult life, it is thus essential that this group of elderly be provided with comprehensive oral health care. This shall be carried out at all dental clinics where at least one permanent dental officer is available.

5.2.2 Provision of Essential Care for the Elderly in Institutions and Homes

Malaysians, in general, are caring people. Often, family members or hired personnel will provide care at home for the elderly. Nevertheless, a very small proportion of the frail and the functionally-dependent elderly are cared for in government or private facilities. Essential care shall be provided to the disabled elderly in the institutions and at home through an outreach programme. In delivering care, the treatment needs of the elderly have to be identified taking into consideration these factors:

(a) Perception and attitude to oral health care

(b) Degree of disability and function

(c) Impact of ill health to the elderly, care-givers, families and community.

5.2.3 Priority Treatment

Priority treatment shall be provided to the elderly patient by ensuring:

(a) Minimal waiting time for treatment

(b) Patient is relieved of pain and discomfort

(c) Appointments are made to suit the patient's daily programme

(d) Ensure early completion of dentures

(e) Provision of reline, rebase and copy dentures, where necessary.

5.3 Provision of Appropriate Facilities at Existing/Future Dental Clinics

Wherever possible, appropriate facilities shall be made available. Such facilities shall include:

5.3.1 Priority registration counters

5.3.2 Wheel chairs

5.3.3 Ramps – for walking and/or for wheelchair use

5.3.4 Lifts for clinics situated above ground level

5.3.5 Hand rails/support

5.3.6 Adequate parking

5.3.7 Special padding for seats

5.3.8 Special toilets

5.3.9 Location of future dental clinics to be on the ground floor.

These elderly-friendly facilities will encourage the elderly to obtain care at regular intervals in the dental clinic set-up.

5.4 Using Appropriate Facilities for Outreach Services

The use of portable and mobile dental units is most appropriate for the delivery of dental services to institutions and residential homes as an outreach programme.

Flexibility attained through the use of mobile equipment allows the dentist to treat the patient at the bedside, if necessary. Mobile dental clinics shall be equipped with lightweight, foldable wheelchairs with removable armrests and detachable footrests.

5.5 Updating Knowledge and Skills of Dental Officers and Support Staff

Educational programmes shall be provided to the dental officers and support staff to update knowledge and skills on the elderly patient with regards to:

5.5.1 An understanding of normal pathological ageing
5.5.2 Recognition of the oral implications of systemic diseases
5.5.3 Knowledge of drug-induced oral conditions
5.5.4 Communicating with patients with sensory deficits
5.5.5 Decision-making skills
5.5.6 Management of the elderly patient
5.5.7 Clinical skills
5.5.8 Prevention of emergencies
5.5.9 Post-basic training e.g. copy denture technique, etc.

5.6 Imparting Oral Health Knowledge to Care-givers

Basic training shall be provided to care-givers on the following topics:

5.6.1 Understanding oral health problems faced by the elderly
5.6.2 Care of the disabled and/or bedridden elderly
5.6.3 Other specific topics on the elderly

5.7 Inter-agency Co-operation and Collaboration

For the success of oral health care activities at institutions and residential homes, co-operation and collaboration with other government agencies, NGOs and voluntary bodies is needed. NGOs and volunteers can help in the care of the disabled elderly, including their maintenance of good oral hygiene. These agencies include**:**

5.7.1 Ministry of National Unity and Social Development for assistance in manpower and facilities/equipment

5.7.2 Ministry of Information for dissemination of information

5.7.3 NGOs such as National Council of Senior Citizens Organisation Malaysia (NACSCOM)

5.7.4 Voluntary bodies such as Rotary Club and Cancer Link Society

5.8 Training of Dental Officers in Geriatric Dentistry

Selected dental officers shall be sent to undertake further studies in the field of geriatric dentistry which focuses on the diagnosis, prevention and treatment of oral diseases in adults who, because of their medical condition or old age, are handicapped or institutionalised and require special management during their dental treatment.

5.9 Establishment of Domiciliary Teams

Domiciliary care shall be delivered by teams established to meet the needs of the frail and the functionally-dependent elderly in residential homes.

6. IMPLEMENTATION

Oral health care for the elderly shall be delivered at different set-ups or locations namely, the dental clinics, institutions (government/private), community or day-care centres, and residential homes. The extent of coverage at these various set-ups shall depend on the capability of oral health personnel, availability of appropriate equipment and facilities, co-operation and collaboration with other government agencies, NGOS and voluntary bodies. The implementation shall be as follows:

6.1 Personnel

6.1.1 National Level

(a) The Director of Oral Health, MOH shall be responsible for the planning, implementation, monitoring and evaluation of the oral

health care programme for the elderly at the national level (at the Oral Health Division, MOH)

(b) The Director shall appoint a co-ordinator at national level to collate and analyse half-yearly and yearly data. Evaluation of the programme shall be conducted every 5 years.

6.1.2 State Level

(a) The State Deputy Director of Health (Dental) shall be responsible for the oral health care programme for the elderly in the state

(b) The Deputy Director shall appoint the Principal Assistant Director (Dental) or a Senior Dental Officer (SDO) to co-ordinate the programme at state level. The data shall be collected from the districts six-monthly and yearly. The data shall be analysed. The state co-ordinator shall be responsible for sending scheduled reports to the national level.

6.1.3 District Level

(a) The SDO shall be responsible for the implementation of the oral health care programme for the elderly in the district.

(b) The SDO shall ensure that the oral health care programme is delivered successfully in dental clinics, institutions, community or day-care centres, and residential homes depending on the capability of personnel and availability of appropriate equipment and facilities.

(c) The SDO shall organise outreach programmes at institutions, community or day-care centres, and residential homes with the co-operation of other government agencies and in collaboration with NGOs, voluntary bodies and care-givers.

6.1.4 Clinic Level

(a) The Dental Officer in-charge of the clinic (DOIC) shall be responsible for the implementation of the oral health care programme at the clinic level.

(b) Where the dental clinic is located in a health clinic, the DOIC, being a member of the Committee of Health Services for the Elderly in the

(c) Health Clinic, shall ensure dental involvement in activities for the elderly organised by the health clinic.

(c) The DOIC shall make sure that the outreach dental services for the elderly be carried out according to schedule

(d) The SDO shall function as the DOIC if stationed in the health centre.

6.2 Training

Training is essential to prepare oral health personnel and other identified health personnel with knowledge and skills in handling elderly patients with diverse problems and needs. The care-givers of the frail and functionally-dependent elderly also need to undergo training to motivate them in long-term care.

6.2.1 In-service Training

Oral health personnel shall undergo training to update knowledge and skills and improve attitude. Courses shall be conducted at national, state or district level taking into consideration the following topics:

(a) An understanding of normal pathological ageing

(b) Recognising the oral implications of systemic disease

(c) Knowledge of drug-induced oral conditions

(d) Enhancing interpersonal skills

(e) Communication with patients with sensory deficits

(f) Decision-making skills

(g) Management of the elderly patient

(h) Clinical skills

(i) Prevention and management of emergencies.

6.2.2 Post-basic Training

Selected oral health personnel shall attend courses as follows:

(a) Dental technologists shall attend post-basic training on the denture copying technique and other denture-making techniques

(b) Dental nurses shall undergo training in advanced operative technique to assist oral surgeons in the provision of care to the elderly

(c) Dental nurses and dental surgery assistants shall be trained on the provision of care to the elderly in institutions and residential homes.

6.2.3 Post-graduate Training in Geriatric Dentistry

Training in Geriatric Dentistry is necessary to equip the dental officers in the diagnosis, prevention and treatment of oral diseases in adults who, because of their medical condition or old age, are handicapped or institutionalised and require special management during their dental treatment.

6.2.4 Training for Care-givers

Training modules for the care-givers at institutions shall include the following topics:

(a) Recognising common oral manifestations, oral diseases and disorders affecting the elderly and making appropriate referral

(b) Knowledge on healthy balanced diet

(c) Knowledge and skills for good oral hygiene practice

(d) Oral health care for the bedridden elderly

6. 3 Provision of Oral Health Care

6.3.1 Provision of oral health care at the dental clinic shall be mainly for the functionally-independent elderly

6.3.2 Provision of oral health care and management of patients in institutions, community centres and residential homes shall utilise the outreach approach using the dental mobile team and equipment

6.3.3 Domiciliary visits to residential homes shall be established if the organisation has adequate personnel in terms of number and competency as well as adequate mobile equipment

6.3.4 All relevant information on the treatment card shall be completed at the patient's first visit. It shall be necessary to liase with the patient's medical doctor/physician for information regarding medical conditions and medication

6.3.5 Oral screening shall be conducted on all elderly patients

6.3.6 Individualised treatment programmes for the elderly patient shall be planned. At each visit, the necessary materials and requirements shall be made available. This can only be done after thorough assessment of the patient at the first visit

6.3.7 Oral health messages and self-care skills shall be imparted before commencing routine treatment

6.3.8 The scope of oral health care shall be comprehensive for the functionally-independent, and mainly reparative for the frail and the functionally-dependent elderly i.e. the restoration of teeth and periodontal status to a minimal functional level

6.3.9 Reparative and curative treatment is often neither appropriate nor possible in severely medically-compromised and/or terminally ill patients. In these cases, palliative treatment shall be the treatment of choice

6.3.10 Self-help shall be encouraged; care-givers shall be trained to carry out oral hygiene practices, monitor and modify diets

6.3.11 Tags/Identification labels are recommended for dentures

6.3.12 Continuity of provider of care shall be maintained. The patient shall be followed through for optimal care.

6.4 Follow-up of Patient

The elderly patient needs to be followed up in order to maintain their oral health and to treat any new lesions that may develop.

6.4.1 Follow-up of the patient shall be carried out yearly; a more regular interval of six-monthly or three-monthly follow-ups is suggested for high-risk patients

6.4.2 Medical history of the recall patient shall be updated

6.4.3 Dental treatment shall be provided depending on need.

6.5 Treatment Charge

Financial considerations shall not be a deterrent for the elderly to obtain dental treatment. Even though the Fees Act 1982 has to be strictly adhered to, however this shall be read along with relevant government circulars whereby payment is allowed to be waived. Depending on the ability of patients to pay, payment shall be waived accordingly.

6.6 Monitoring and Evaluation

The programme needs to be monitored and evaluated regularly based on identified indicators. From district level to state level, and henceforth to national level, the data shall be compiled at regular six-monthly intervals and analysed. The Oral Health Division, MOH, shall undertake evaluation of the programme at the national level. The data shall be assessed to identify the strengths and weaknesses of the programme. Evaluation of the programme shall be conducted nationally every 5 years.

6.6.1 Record System

To ensure data is collected properly, a record system shall be maintained. For the elderly, the adult treatment card (LP8) can still be used but the cards shall be filed separately for easy retrieval.

6.6.2 Indicators for the Oral Health Care Programme for the Elderly (refer Appendix 5)

Indicators for the programme shall be monitored at the ages of 60 years, 65 years, 60^+ years and 65^+ years. The indicators are:

(a) Percentage of edentulous patients at age 60, 65, 60^+ and 65^+ years
(b) Average number of teeth present at age 60, 65, 60^+ and 65^+ years
(c) Percentage of the elderly with 20 or more teeth at age 60 and 65 years

The ages of 60 years and 65 years have been selected, as these are ages indicated as the beginnings of elderly life by the United Nations and WHO respectively.

7. CONCLUSION

With the availability of these guidelines, it is hoped that the persons responsible for the oral health care programme for the elderly at the various levels plan strategically, and subsequently implement the programme with success in their areas, districts or states. It must be noted that a caring approach shall always be used when dealing with and handling older persons. It is envisaged that the elderly shall benefit from improved oral health status and enjoy an even better quality of life.

REFERENCES

(1) Banting D.W., Ellen, R.P. Fillery, E.D.: Prevalence of root surface caries amongst institutionalised older persons. Community Dentistry and Oral Epidemiology 8, 84, 1980

(2) Baum BJ. Salivary gland function during ageing. Gerodontics 2:61, 1986.

(3) Beck JD. The Iowa survey of oral health: 1980 Des Moines IA Iowa Dental Association, 1982

(4) Beck JD, Hunt RJ. Oral Health Status in the US: Problems of special patients. J Dent Educ 1985; 49:407-425

(5) Cheah SP. Dental Needs of the elderly residents in institutions of the aged in Penang, 2000

(6) Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978

(7) Department of Social Welfare, Malaysia. National Policy of Ageing and Older Women in Malaysia. A National Seminar on Women and Ageing in Malaysia, May 2001.

(8) Department of Statistics, Malaysia, 1998. *Buku Tahunan Perangkaan Malaysia 1998*

(9) Department of Statistics, Malaysia. *Buku Tahunan Perangkaan Malaysia 2001*

(10) Department of Statistics, Malaysia, 2002. http://www.statisticsdept.gov.my

(11) Ettinger R.L. and Beck J.D. Geriatric Dentistry: is there such a discipline? Australian Dental Journal 1984

(12) Haugen LK: Biological and physiological changes in the ageing individual. Int. Dent J 1992

(13) Heyden G: Critical issures of ageing: the dentist as a supervisor of the general health of the elderly. Int Dent J 1990

(14) Homan B.T., Lam B and Larsen R.G : The oral needs and demands of a geriatric population at Mt. Olive, Brisbane, 1986. Australian Dental Journal 1988

(15) Ismail N. Tooth loss and perception of oral function of an elderly Malay population in Kelantan Master in Community Dentistry research report, University of Malaya 1996

(16) Jokstad A, Ambjornsen E, Eide KE. Oral Health in institutionalized elderly people in 1993 compared to 1980. Acta Odontol Scand 1996 Oct

(17) Kalk W, Baat C, Meeuvissen : Is there a need for gerodontology? Int. Dent. J. 1992

(18) Latifah RJ. Oral Health of elderly Malaysians: a socio-dental study. Ph.D Thesis, University of Malaya 1999

(19) Loke ST, Abdul Jalil N, Giam EH and Lee SHC. Health Systems Research. A study of the prevalence of oral diseases and treatment needs in inmates of the instititutions for the elderly in Sabah, 2001

(20) Mahathir Mohamad (Dato' Seri Dr). Malaysia – The Way Forward. Speech delivered at the Inaugural Meeting of the Malaysian Business Council on 28 Feb 1991

(21) Ministry of Health, Dental Services Division. *Garispanduan Pelaksanaan Program Geriatrik Perkhidmatan Pergigian Malaysia,* 1993

(22) Ministry of Health. *Pelan Tindakan Program Kesihatan Warga Tua, 27 Mac 1997*

(23) Ministry of Health, Malaysia. Oral Health Division. Oral Health Status, Impacts and Treatment Needs of Malaysian Adults, Sept 2001

(24) Population Reference Bureau 2002 http://www.prb.org

(25) Schou L, Wight C, Clemson N, Douglas S, Clark C. Oral health promotion for institutionalised elderly. Community Dent Oral Epidimiol 1989;17(1):2-6

(26) Steifel DJ, Lubin JH, Truelove EL. A survey of perceived oral health needs of home-bound patients. J Public Health Dent 1979; 39:7-15

(27) Thorselius I., Emilson CG, Osternberg T: Salivary conditions and drug consumption in older age groups of elderly Swedish individuals. Gerodontics 1988; 4:66-70

(28) United Nations. World Population Prospects, The 1998 Revision, Volume 2: Sex and Age, New York, 1999

(29) United Nations Report of the Second World Assembly on Ageing, Madrid 2002

(30) Wilson AA, Branch LG. Factors affecting dental utilisation of elders aged 75 years and older. J Dent Educ 1986; 50:673-677

(31) World Health Organisation. Health of the Elderly. Tech Rep Series No 779, WHO: Geneva 1989.

(32) World Health Organisation. Oral Health Survey Basic Methods, 4th. Edition 1997

(33) Yamaga T, Komoda :Y:, Soga K, Ono M, Asada T, Hosaka N, Nokubi T. Root surface caries of denture wearers in middle-age and elderly people. J Osaka Univ Dent Sch 1994 Dec

APPENDICES

IMPLEMENTATION OF ORAL HEALTH CARE PROGRAMME FOR THE ELDERLY AT THE DENTAL CLINIC

1. INTRODUCTION

Elderly patients who seek treatment in government dental clinics are normally the functionally-independent individuals. The programme at the dental clinic shall be tailored to encourage the elderly to obtain care at regular intervals. Appropriate and affordable oral care for optimal health shall be planned and implemented using an integrated approach between primary and specialist dental services.

2. SPECIFIC OBJECTIVES

2.1 To create and increase awareness amongst the elderly to maintain good overall health and personal appearance starting with good oral hygiene

2.2 To reduce the prevalence of oral diseases and problems of the elderly by oral screening and providing comprehensive oral health care

2.3 To improve masticatory efficiency and speech function by providing appropriate and affordable restorative, prosthetic and periodontal therapy

2.4 To attain and maintain functional efficiency, satisfactory appearance and self-confidence through the provision of care

2.5 To impart skills on oral self-examination and preventive care to the elderly

2.5 To achieve a good quality of life.

3. STRATEGIES

3.1 Promotion of oral health and hygiene as part of general health

3.1 Identifying treatment needs through oral screening on patient's first visit

3.2 Prioritising treatment, especially to relieve pain and discomfort

3.3 Provision of comprehensive oral health care for the healthy elderly

3.4 Imparting skills to the elderly on oral self-examination and self-care

3.5 Provision of educational programmes for dental officers and support staff to update knowledge and skills on managing the elderly

3.6 Provision of appropriate facilities at dental clinics to enable and make them more accessible to the elderly for treatment

3.7 Integration and co-ordination with health clinic counterparts for ease of referral

3.8 Establish and improve integration and coordination between primary and specialist oral health care, for ease of referral to the specialists

3.9 Provision of training for dental officers in geriatric dentistry

4. IMPLEMENTATION

3.10 Provision of adequate funding for the programme to be operational.

4.1 Personnel

4.1.1 The SDO or DOIC of the clinic shall be responsible for the implementation of the oral health care programme for the elderly

4.1.2 He/She shall also be a member of the Committee of Health Services for the Elderly in the health clinic

4.1.3 All staff shall be involved to ensure the success of the programme.

4.2 Delivery of Oral Healthcare

4.2.1 **Clinic Day for the Elderly**

4.2.1.1 Oral examination and charting shall be carried out in the dental clinic on the same day as the health clinic day for the elderly in order for ease of referral

4.2.1.2 For health clinics that adopt the open system, the dental clinic day shall be adjusted according to the local setting

4.2.1.3 The elderly with dental problems shall be attended to on any working day

4.2.1.4 The elderly shall be encouraged to undergo dental examination once a year

4.2.1.5 The elderly who visits the dental clinic shall be examined, treated, and given further appointments, if necessary. He/She shall then be referred to the health clinic for further general health screening

4.2.1.6 The elderly referred from the health clinic shall have oral screening and be given treatment and further appointments, if required

4.2.1.7 The elderly who requires specialist treatment shall be referred to the dental specialist for further management.

4.3 Activities

4.3.1 **Oral Health Promotion**

Promotion of oral health at the dental clinic through informative talks, newsletters, magazines, posters, newspapers, radio and TV.

4.3.2 Prevention

4.3.2.1 Full oral examination and charting for new attendees

4.3.2.2 Oral screening mainly to detect caries (particularly root caries), periodontal disease, abrasion cavities, edentulousness, masticatory problems as well as to detect oral pre-cancerous and cancerous lesions

4.3.2.3 Demonstration of oral health measures and self-examination to detect dental problems

4.3.2.4 Counselling, including dietary needs, if necessary.

4.3.3 **Treatment**

4.3.3.1 Clinical treatment such as restorations, scaling, prophylaxis, minor oral surgery, denture construction and others

4.3.3.2 Patient-friendly dental appointments (to suit the elderly patient's requirements)

4.3.3.3 Advisory service for the elderly and care-givers/companions

4.3.3.4 Referral for specialist treatment

4.3.4 **Rehabilitation**

Treatment to improve masticatory function, general appearance and enhance self-confidence through dental procedures such as routine dentures, copy dentures, reline and rebase of dentures, implants and others.

4.4 Training

4.4.1 In-service training

In-service training for oral health personnel shall be carried out to update knowledge and skills on management of the elderly patient, and prevention and management of emergencies

4.4.2 Post-basic training

Post-basic training shall be arranged for selected personnel to learn the Copy Denture Technique, Advanced Operative Techniques, etc.

4.4.2 Training on Geriatric Dentistry

Training for dental officers on geriatric dentistry shall be considered.

4.5 Improvement of Present Dental Clinics and Plan for Future Dental Clinics

4.5.1 Provide elderly-friendly facilities like ramps, hand rails/support and treatment rooms on the ground floor

4.5.2 Expand clinics to include counselling and dental health education rooms

4.5.3 Build special registration counters for the elderly.

4.6 Treatment Charge

Shall be based on the Fees Act 1982, with consideration for waiving of fees following relevant government circulars.

4.7 Monitoring and Evaluation

Data shall be collected and reported six-monthly for district compilation.

5. CONCLUSION

Using a systematic and caring approach, the elderly person attending the dental clinic shall achieve an acceptable level of oral health, free from pain and discomfort, with a dentition that is functionally and cosmetically acceptable.

IMPLEMENTATION OF ORAL HEALTH CARE PROGRAMME FOR THE ELDERLY AT THE INSTITUTION

1. INTRODUCTION

The family is acknowledged as the most fundamental source of care for both its young and old members. However, the urban extended family is on a gradual decline. Malaysia, being generally a caring society, the family members or hired personnel will provide care at home for the elderly. Nevertheless, a very small proportion of the elderly are cared for in institutions and nursing homes, mainly because their next of kin are unable/unwilling to take care of them.

In general, the elderly in the institutions have poorer oral hygiene and the mean number of teeth present is less compared to those living independently. Treatment needs are higher in the disabled than the non-disabled elderly people.

2. SPECIFIC OBJECTIVES

2.1 To create awareness amongst the elderly on good oral hygiene

2.2 To create awareness among the elderly and their care-givers on denture care, preventive care and self-examination

2.3 To relieve the elderly from oral pain and discomfort

2.4 To reduce prevalence of oral diseases and problems by oral screening and providing essential care

2.5 To improve masticatory efficiency and speech function by providing appropriate restorative, prosthetic and periodontal therapy

2.6 To attain and maintain functional efficiency, satisfactory appearance and self-confidence

2.5 To improve quality of life

3. STRATEGIES

3.11 Promotion of oral health and hygiene as part of general health

3.12 Identifying treatment needs through oral screening at the first visit of the dental officer to the institution, taking into consideration:

3.12.1 Perception and attitude,

3.12.2 Degree of disability or dysfunction,

3.12.3 Impact of illness on the elderly person

3.12.4 Impact of illness to the society

3.13 Prioritising treatment, especially to relieve pain and discomfort

3.14 Provision of essential oral health care, whenever possible

3.15 Provision of palliative care for bedridden or terminally-ill patients

3.16 Provision of educational programmes for officers and support staff to update knowledge on management skills

3.17 Provision of appropriate portable facilities for the outreach programme

3.18 Integration and coordination with health counterparts especially for team activity and ease of referral

3.19 Inter-agency co-operation towards a common goal.

3.20 Establishment and improvement in integration and co-ordination between primary oral health care and specialist oral health care for ease of referral to the specialists

3.21 Provision for training of dental officers in geriatric dentistry

3.22 Provision of adequate funding for the programme to be operational

4. IMPLEMENTATION

4.1 Personnel

4.1.1 The SDO or Dental Officer in-charge shall be responsible for the implementation of the oral health care programme for the elderly

4.1.2 All staff shall be involved to ensure the success of the programme.

4.2 Delivery of Oral Healthcare

4.2.1 Plan and schedule visits to the institutions to provide immediate, practical and appropriate oral health care

4.2.1.1 Contact the relevant institutions or agencies to obtain the list of institutions

4.2.1.2 Draw up programmes for visits

4.2.1.3 Inform the person in-charge of the institution regarding the scheduled visits

4.2.2 Visit to Institution

4.2.2.1 Dental team visits the institution according to schedule at least once a year for oral screening and treatment of dental problems

4.2.2.2 Assess medical history and dental treatment needs of the patient at the first visit

4.2.2.3 Plan and modify treatment realistically taking into consideration the life expectancy and the benefits that the patient will derive from the treatment

4.2.2.4 Plan the treatment programme for the individual patient for each visit and ensure necessary materials are available.

4.2.2.5 Give talks and demonstration on oral health practice to the elderly and care-givers

4.2.2.6 Utilise mobile dental equipment for patient management

4.2.2.7 Refer complex cases to the dental clinic or specialist clinic.

4.3 Activities

4.3.1 Oral Health Promotion

4.3.1.1 Promote oral health through talks, pamphlets, posters, exhibition etc at the institution

4.3.1.2 Involve the community/industries in sponsoring oral hygiene aids such as toothpaste and toothbrushes

4.3.2 Prevention

4.3.2.1 Screen new cases in the institution

4.3.2.2 Demonstrate and provide advice pertaining to oral health and methods of self examination in recognizing for oral diseases

4.3.2.3 Develop and improve skills on self-care

4.3.2.4 Counsel the elderly and care-givers on diet and food preparation

4.3.2.5 Counsel the elderly on maintenance of denture hygiene

4.3.3 Treatment

4.3.3.1 Treat the elderly on-site at the institution. Types of treatment may be restorative, scaling, prophylaxis, minor oral surgery and denture construction

4.3.3.2 Give appointments according to patients' schedules

4.3.3.3 Refer complex cases for specialist treatment.

4.3.4 Rehabilitation

~~a.~~4.3.4.1 Restore masticatory function, personal appearance and confidence through new dentures, copy dentures, reline and rebase of dentures, and others

4.3.4.2 Palliative treatment is the treatment of choice when reparative and curative treatment is often neither appropriate nor possible in the severely medically-compromised and/or terminally-ill patient.

4.4 Training

4.4.1 Personnel

4.4.1.1 Basic training to all oral health personnel and identified health personnel

4.4.1.2 Post-basic training for relevant personnel such as on the copy denture technique, advanced operative techniques, etc.

4.4.1.3 In-service training to all dental officers and other staff to increase knowledge and improve skills in management of the elderly patient

4.4.1.4 Training on geriatric dentistry for dental officers.

4.4.2 Training for Care-givers at the Institution

4.4.2.1 Recognising common oral manifestations, oral diseases and disorders affecting the elderly and making appropriate referral

4.4.2.2 Knowledge on healthy balanced diet

4.4.2.3 Knowledge and skills on good oral hygiene practice

4.4.2.4 Oral hygiene care for the bedridden elderly.

4.5 Treatment Charge

Shall be based on the Fees Act 1982, with consideration for waiving following relevant government circulars.

4.6 Monitoring and Evaluation

Data shall be collected and reported six-monthly for district compilation.

5. CONCLUSION

Delivery of oral health care at the institution shall aim at maintaining and improving quality of life of the elderly through individualised oral health maintenance, relief of pain and discomfort, and appropriate efforts in maintaining masticatory function. As the institutionalised elderly are dependent on their care-givers, the latter shall be guided, motivated and made to be fully committed to ensure the success of the programme.

IMPLEMENTATION OF ORAL HEALTH CARE PROGRAMME FOR THE ELDERLY AT THE COMMUNITY OR DAY-CARE CENTRE

1. INTRODUCTION

Social facilities such as community centres, day-care centres, community rehabilitation corners, counselling centres and home help services are some of the facilities available to establish a support system to care for the elderly. These can act as co-ordination and management centres to respond to the needs of the elderly through direct action or referral to other agencies. They can also be the main resource centres for family members and become a first point of reference when family members have no one else to turn to.

The Department of Social Welfare has begun the construction of 19 day-care centres throughout the country (Department of Social Welfare, 2000). Besides these, there are other community centres managed by NGOs and voluntary bodies.

As the government can no longer provide all the services and care to the elderly through welfare commitments, there is a need to shift the emphasis of policies and programmes from a welfare-oriented to a more contributory and participatory approach. Self-help programmes need to be developed which shall include oral health care for the elderly. Hence, a multidisciplinary and holistic approach to health care of the elderly is emphasised.

2. SPECIFIC OBJECTIVES

2.1 To create and increase awareness amongst the elderly to maintain good overall health and personal appearance starting with good oral hygiene

2.2 To create awareness on denture care, preventive care and self-examination

2.3 To reduce prevalence of oral diseases and problems by oral screening and providing the necessary care

2.4 To improve masticatory efficiency and speech function by providing appropriate and affordable restorative, prosthetic and periodontal therapy

2.5 To provide relief from pain that causes distress to the elderly

2.6 To attain and maintain functional efficiency, satisfactory appearance and self-confidence

2.7 To achieve a good quality of life

3. STRATEGIES

3.1 Promotion of oral health and hygiene as part of general health

3.23 3.2 Identifying treatment needs through oral screening on the first visit of the dental officer to the community or day-care centre, taking into consideration:

3.23.1.1.1 3.2.1 Perception and attitude,

3.23.1.1.2 3.2.2 Degree of disability or dysfunction,

3.23.2 3.2.3 Impact of illness on the elderly person

3.23.3 3.2.4Impact of illness to the society

3.24 3.3 Prioritising of treatment, especially to relieve pain and discomfort

3.25 3.4 Provision of essential oral health care, whenever possible

3.26 3.5 Provision of educational programmes for dental officers and support staff to update knowledge on management skills

3.27 3.6 Provision of appropriate facilities for the outreach programme

3.28 3.7 Integration and co-ordination with health counterparts especially for team activity and ease of referral

3.29 3.8 Inter-agency co-operation towards a common goal

3.30 3.9 Establishment and improvement in integration and co-ordination between primary oral health care and specialist oral health care for ease of referral to the specialists

3.31 3.10 Provision for training of dental officers in geriatric dentistry

3.32 3.11 Provision of adequate funding for the programme to be operational

3.33

4. IMPLEMENTATION

4.1 Personnel

4.1.1 The SDO or Dental Officer in-charge shall be responsible for the implementation of the oral health care programme

4.1.2 All staff shall be involved to ensure the success of the programme.

4.2 Delivery of Oral Healthcare

4.2.1 Plan and schedule visits to the community or day-care centres to provide immediate, practical and appropriate oral health care

4.2.1.1 Contact the relevant agencies to obtain the list of centres

4.2.1.4 4.2.1.2 Draw up programmes for visits

4.2.1.5 4.2.1.3 Inform the person in-charge of the scheduled visit.

4.2.2 Visit to the Community or Day-Care Centre

4.2.2.1 Dental mobile team visits the community or day-care centre according to schedule, at least once a year for oral screening and treatment of dental problems

4.2.2.8 4.2.2.2 Assess medical history and dental treatment needs of patient on the first visit

4.2.2.9 4.2.2.3 Plan and modify treatment realistically taking into consideration the life expectancy and the benefits that the patient will derive from the treatment

4.2.2.4 Plan treatment programme for the individual patient for each visit and ensure necessary materials are available

4.2.2.5 Give talks and demonstration on oral health practice to the elderly and care-givers

4.2.2.6 Utilise mobile dental equipment for patient management

4.2.2.7 Refer complex cases to the dental clinic or specialist clinic.

4.3 Activities

4.3.1 Oral Health Promotion

4.3.1.1 Promote oral health through talks, pamphlets, posters, exhibitions, etc. at the community or day-care centre

4.3.1.2 Involve the community/industries in sponsoring oral hygiene aids such as toothpaste and toothbrushes.

4.3.2 Prevention

4.3.2.1 Screen new cases in the community or day-care center

4.3.2.2 Demonstrate and provide advice pertaining to oral health and methods of self-examination in recognizing oral diseases

4.3.2.3 Develop and improve skills on self-care

4.3.3.3 Counsel the elderly and caregivers on diet and food preparation

4.3.3.3 Counsel the elderly on maintenance of denture hygiene.

4.3.3 Treatment

4.3.3.4 4.3.3.1 Treat the elderly on-site at the centre. Types of treatment may be restorative, scaling, prophylaxis, minor oral surgery and/or dentures

4.3.3.4.1 4.3.3.2 Give appointments according to patients' schedules

4.3.3.4.2 4.3.3.3 Refer complex cases for specialist treatment.

4.3.4 Rehabilitation

~~a.~~Restore masticatory function, personal appearance and confidence through routine dentures, copy denture, reline and rebase of dentures, and others.

~~b.~~

4.4 Training

4.4.1 Personnel

4.4.1.1 Basic training to all oral health personnel and identified health personnel

4.4.1.2 Post-basic training for relevant personnel such as on the copy denture technique, advanced operative techniques, etc.

4.4.1.3 In-service training to all dental officers and other staff to increase knowledge and improve skills in management of the elderly patient

4.4.2 Required Training for Care-givers at Day-care Centres

4.4.2.5 4.4.2.1 Recognising common oral manifestations, oral diseases and disorders affecting the elderly and making appropriate referrals

4.4.2.6 4.4.2.2 Knowledge on healthy balanced diet

4.4.2.7 4.4.2.3 Knowledge and skills on good oral hygiene practice.

4.5 Treatment Charge

Shall be based on the Fees Act 1982, with consideration for waiving following relevant government circulars.

4.6 Monitoring and Evaluation

Data shall be collected and reported six-monthly for district compilation.

5. CONCLUSION

Delivery of oral health care at the community or day-care centre shall aim at maintaining and improving quality of life of the elderly through individualised oral health maintenance, relief of pain and discomfort, and appropriate efforts in maintaining masticatory function. Oral health activities emphasising self-care shall be drawn up to enhance the older person's physical and social well-being so that they shall continue to lead a productive and dignified life. Community participation shall be very much encouraged for the success of the programme.

IMPLEMENTATION OF ORAL HEALTH CARE PROGRAMME FOR THE ELDERLY AT THE RESIDENTIAL HOME

1. INTRODUCTION

Advances in medical science are enabling people to survive more illness and disability. As people live longer, physical or mental disability and chronic diseases often reduce their mobility and/or ability for self-care. It may become unreasonable or impractical for them to access mainstream dental services. Thus, oral care for the disabled elderly in non-institutionalised settings may pose a challenge. These disabled elderly may have to rely on domiciliary care services for their oral health care. Methods of bringing dentistry into the homes include utilising fully-equipped dental vehicles used as walk-in dental surgeries for delivery of care, and mobile dental equipment that can be set up on site in the individual's home.

Domiciliary dental care needs to be developed to improve access to dental services for the elderly who are unable to receive care in a conventional dental setting, and to make these services acceptable to the patients, their caregivers, and their families. Teams should be established for this purpose. Elderly people who can benefit from domiciliary dental care include individuals with mobility problems due to physical disabilities or incapacitating medical conditions, as well as individuals with mental illnesses such as Alzheimer's disease or Parkinson's disease.

2. SPECIFIC OBJECTIVES

2.6 To create awareness among care-givers on denture care, preventive care and oral examination

2.7 To reduce prevalence of oral diseases and problems by giving the necessary prioritised treatment

2.8 To improve as much as is possible, masticatory efficiency and speech function by providing appropriate restorative, prosthetic and periodontal therapy

2.9 To provide relief from pain that causes distress to the elderly. Palliative care to the bedridden or terminally-ill elderly may be the only choice.

3. STRATEGIES

3.34 Establishment of domiciliary teams and provision of portable dental equipment for the outreach programme

3.35 Promotion and demonstration of preventive care to care-givers

3.36 Encouraging priority treatment, especially to relieve pain

3.37 Provision of palliative treatment for the bedridden or terminally-ill patient

3.38 Provision of educational programmes for officers and support staff to update knowledge on skills on managing the elderly patient

3.39 Integration and co-ordination with health counterparts and dental specialists for ease of referral

3.40 Collaboration with health counterparts, other agencies, NGOs and voluntary bodies for home visits.

3.41 Training of dental officers in geriatric dentistry

3.42 Adequate funding for the programme to be operational.

4. IMPLEMENTATION

4.1 Personnel

The SDO or DOIC shall be responsible for the implementation of the oral health care programme for the elderly. All staff shall be involved to ensure success of the programme.

4.2 Delivery of Oral Healthcare

4.2.1 Plan and schedule visits to the home to provide immediate, practical and appropriate oral health care

4.2.1.1 Contact the relevant health centres, social welfare offices and village chiefs to obtain the list of residential homes of persons who are housebound

4.2.1.2 Draw up programmes for visits and inform the care-givers at home.

~~3.2.1~~4.2.2 Visit to the Home

4.2.2.1 Dental mobile team ~~team~~visits the patient's home according to a schedule

4.2.2.2 Identify treatment needs taking into consideration the degree of disability and degree of dysfunction

4.2.2.3 Plan and modify treatment realistically taking into consideration the life expectancy and the benefits that the patient shall derive from the treatment

4.2.2.4 Plan the treatment programme for the individual patient for each visit and ensure the necessary materials are available. This can only be done after having seen the patient on the first visit to assess the medical history and dental treatment needs

4.2.2.5 Discuss and demonstrate oral health practice in the language understood by the patient and care-giver

4.2.2.6 Utilise mobile dental equipment for patient management

4.2.2.6 Refer complex cases to the specialist, if necessary

4.3 Activities

4.3.1 Oral Health Promotion

~~a.~~4.3.1.1 Promote oral health through discussions, demonstrations and pamphlets to the elderly and the care-giver

4.3.1.2 Involve the community/industries in sponsoring oral hygiene aids such as toothpaste and toothbrushes

4.3.2 Preventive

4.3.2.1 Demonstrate oral hygiene practice to the care-givers

4.3.2.2 Demonstrate how to identify dental problems through examination

4.3.2.3 Develop and improve skills on oral care especially for the disabled and/or bed-ridden patient

4.3.2.4 Advise the care-giver on relevant topics (e.g. food preparation)

4.3.2.5 Emphasise maintenance of denture hygiene

4.3.3 Treatment

4.3.3.1 Treat the elderly on-site at home. Provide treatment for abrasion cavities, root caries and periodontal problems

4.3.3.2 Complete dentures early

4.3.3.3 Prioritise treatment, especially for relief of pain and discomfort

4.3.3.4 Emphasise palliative treatment for the terminally ill. Refer for further treatment if necessary

4.3.3.5 Follow principles of infection control e.g. local guidelines for the disposal of medical wastes in homes shall be complied

4.3.3.6 There must be availability of a minimum emergency backup service.

4.3.4 Rehabilitative

~~a.~~4.3.4.1 Restore masticatory function through routine dentures, copy denture, reline and rebase of dentures, and others, when necessary

4.3.4.2 Palliative treatment is the treatment of choice when reparative and curative treatment is neither appropriate nor

possible in the severely medically-compromised and/or the terminally ill patient.

~~3.~~4.4 Training

4.4.1 Personnel

4.4.1.1 Basic training to all oral health personnel and identified health personnel

4.4.1.2 Post-basic training for dental technologists, such as on the copy-denture technique

4.4.1.3 In-service training to all dental officers and other staff to increase knowledge and improve skills in managing the elderly patient

4.4.1.4 Training in geriatric dentistry for dental officers

4.4.2 Required Training for the Care-giver at Home

4.4.2.1 Recognising the common oral manifestations, oral diseases and disorders affecting the elderly and making appropriate referral

4.4.2.2 Knowledge on healthy balanced diet

4.4.2.3 Knowledge and skills on good oral hygiene practice

4.4.2.4 Oral health care for the disabled and/or bedridden elderly

4.5 Treatment Charge

Shall consider waiving of fees on an individual basis following the relevant government circulars.

4.6 Monitoring and Evaluation

Data shall be collected and reported six-monthly for district compilation.

5. CONCLUSION

The elderly who are housebound may also be bedridden. Delivery of oral healthcare shall give special emphasis on palliative treatment, especially relief from pain. However, the needs and demands of patients shall be considered

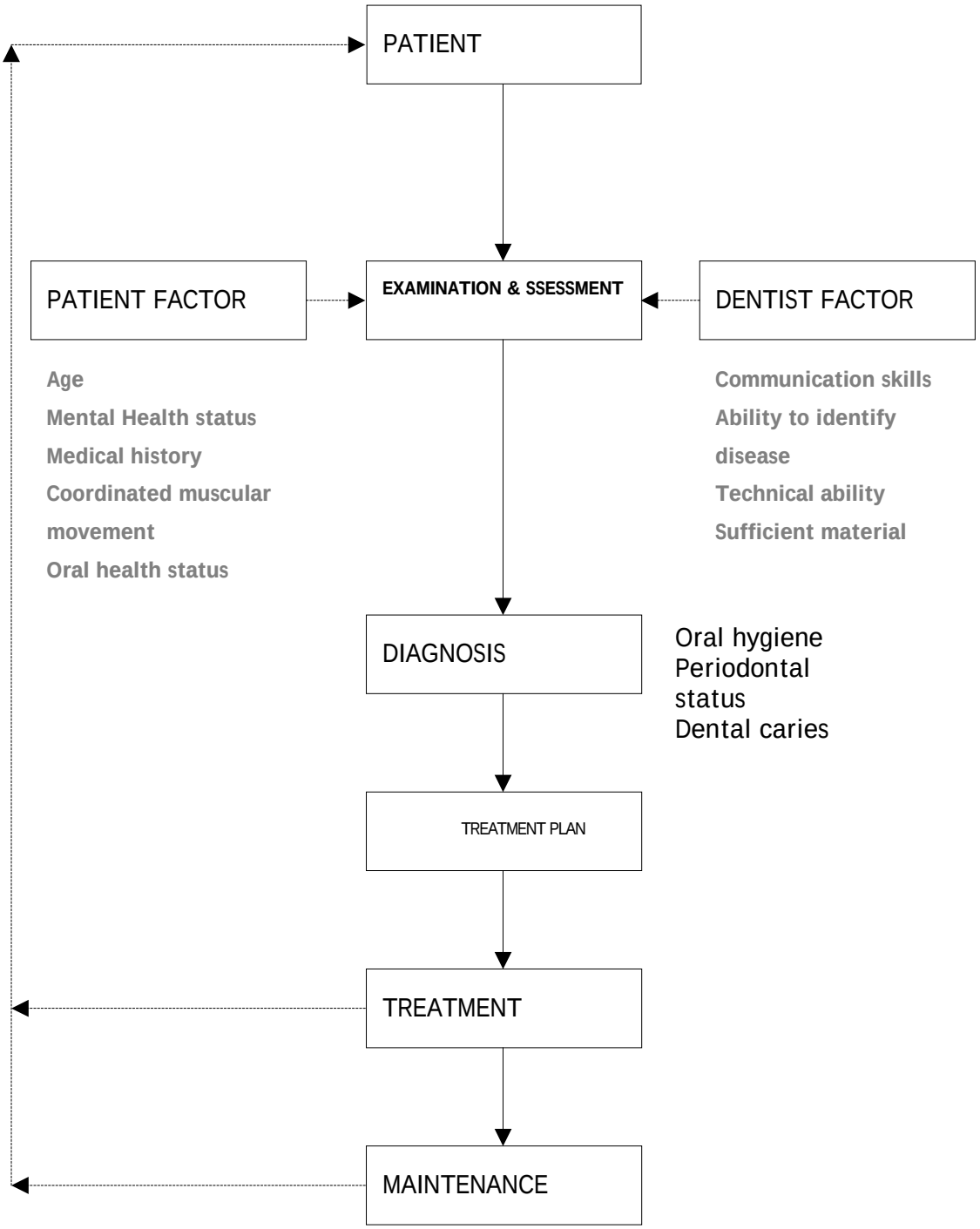
accordingly. Care-givers shall be guided, motivated and made to be fully committed for the benefit of the elderly at home.

Appendix 4

Indicators for the Elderly Programme

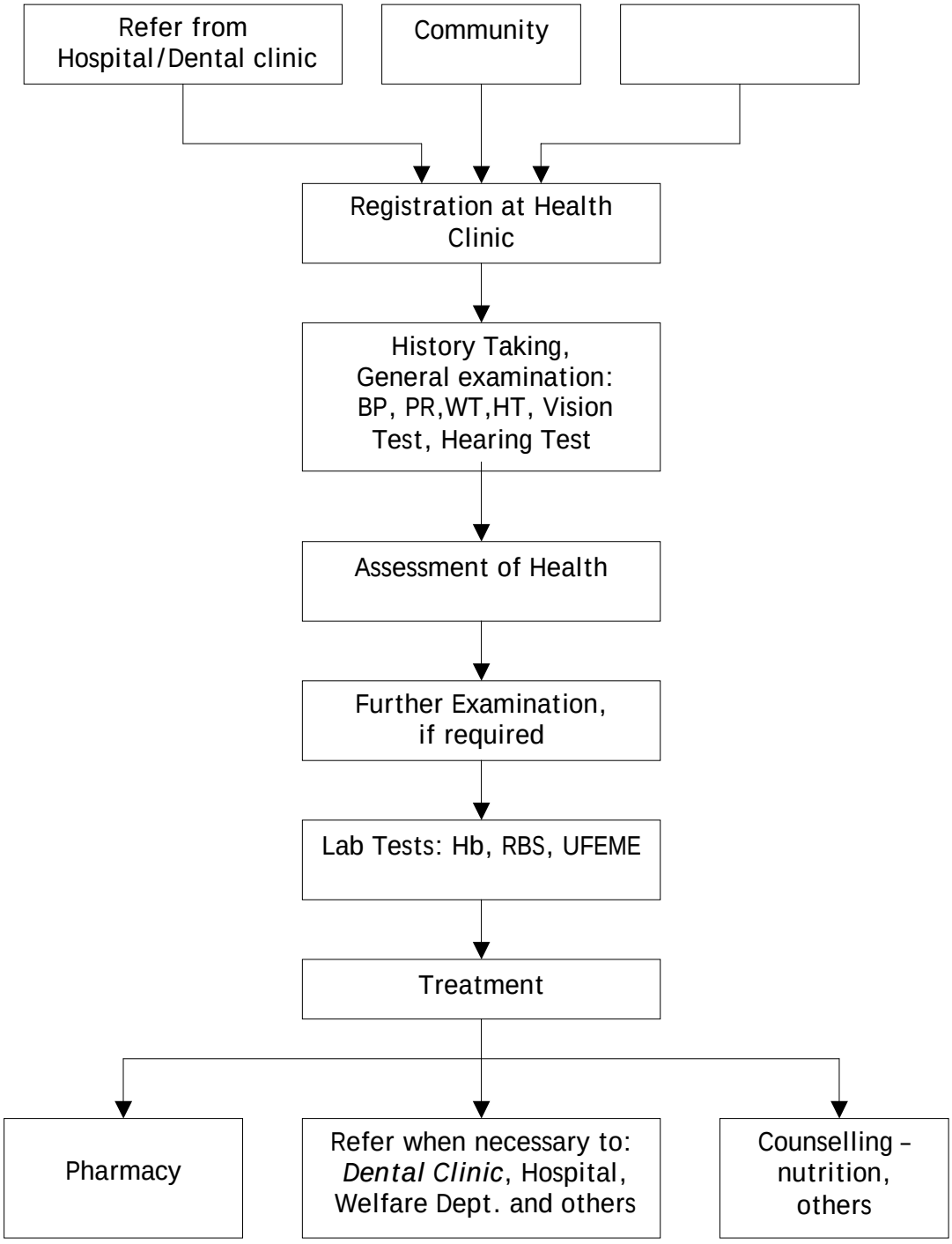
NO	INDICATOR	FORMULA	*TARGET 2010*
1	Percentage of edentulous patients		
	a) at age 60 years	NO. OF EDENTULOUS PATIENTS AT AGE 60 YEARS X 100 No. of patients at age 60 years examined	≤ 30%
	b) at age 65 years	NO. OF EDENTULOUS PATIENTS AT AGE 65 YEARS X 100 No. of patients at age 65 years examined	≤ 35%
	c) aged 60 years and above	NO. OF EDENTULOUS PATIENTS AGED 60 YEARS AND ABOVE X 100 No. of patients aged 60 years and above examined	≤ 35%
	d) aged 65 years and above	NO. OF EDENTULOUS PATIENTS AGED 65 YEARS AND ABOVE X 100 No. of patients aged 65 years and above examined	≤ 40%
2	Average no. of teeth present		
	a) at age 60 years	TOTAL NO. OF TEETH PRESENT AT AGE 60 YEARS No. of patients at age 60 years examined	≥ 18
	b) at age 65 years	TOTAL NO. OF TEETH PRESENT AT AGE 65 YEARS No. of patients at age 65 years examined	≥ 12
	c) for ages 60 years and above	TOTAL NO. OF TEETH PRESENT OF PATIENTS AGED 60 YEARS AND ABOVE No. of patients aged 60 years and above examined	≥ 15
	d) for ages 65 years and above	TOTAL NO. OF TEETH PRESENT OF PATIENTS AGED 65 YEARS AND ABOVE No. of patients aged 65 years and above examined	≥ 10
3	Percentage of elderly with ≥ 20 teeth present		
	a) aged 60 years and above	No. of patients aged 60 years and above with ≥ 20 teeth present x 100 No. of patients aged 60 years and above examined	≥ 10%
	b) aged 65 years and above	No. of patients aged 65 years and above with ≥ 20 teeth present x 100 No. of elderly patients aged 65 years and above examined	≥10%

RATIONALE FOR DYNAMICS IN ORAL HEALTH CARE



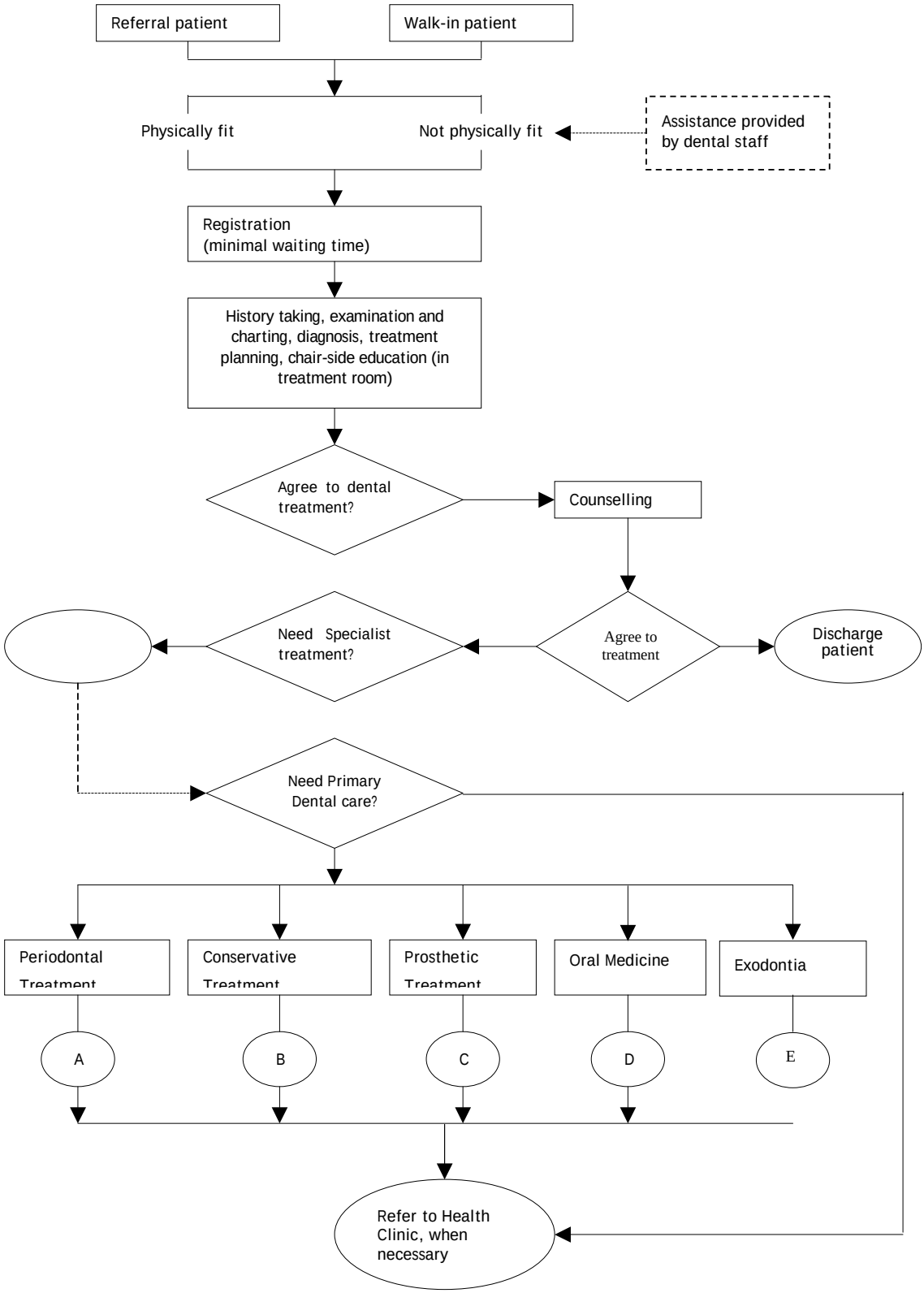
Appendix 7

FLOW CHART FOR THE ELDERLY IN THE HEALTH CLINIC



Appedix 8

FLOW CHART FOR THE ELDERLY IN THE DENTAL CLINIC



Appendix 9

FLOW CHART OF ELDERLY PROGRAMME IN THE INSTITUTION