GERIATRIC MEDICINE AND DENTISTRY – PARTS I & II

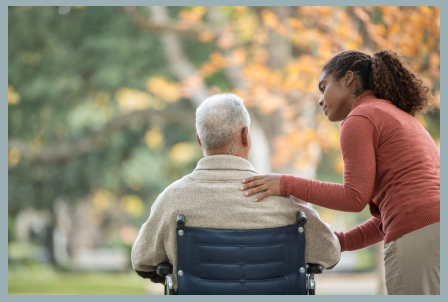
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PART I

LECTURE OUTCOMES – PART 1

- 1. Understand the process of ageing, including the effects on orofacial structures
- 2. Identify common dental conditions in the geriatric population
- 3. Develop rationale and person-centred treatment plans appropriate for individuals at various stages of the ageing process, factoring in medical and social considerations

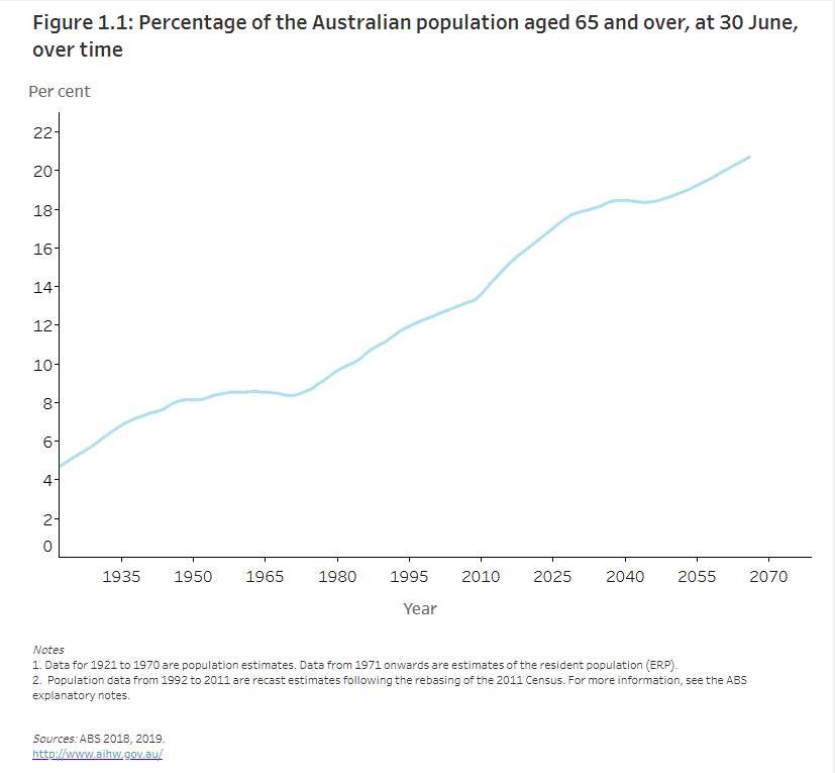
TALK OUTLINE – PART I

- Orofacial structures and ageing
- Dental disorders in the elderly
- Dental treatment approaches ("Rational Dental Care" concept)
- Shortened dental arch

DEMOGRAPHICS

- 1 in 6 Australians are aged >65 yo (16%)
- The number of older Australians ↑ from 1.0 million (8.3% total pop) in 1970 → 2.1 million (12% total pop) in 1995
- Number and % expected to continue and grow. By 2066, projected that older Australians will comprise 21-23% of total population

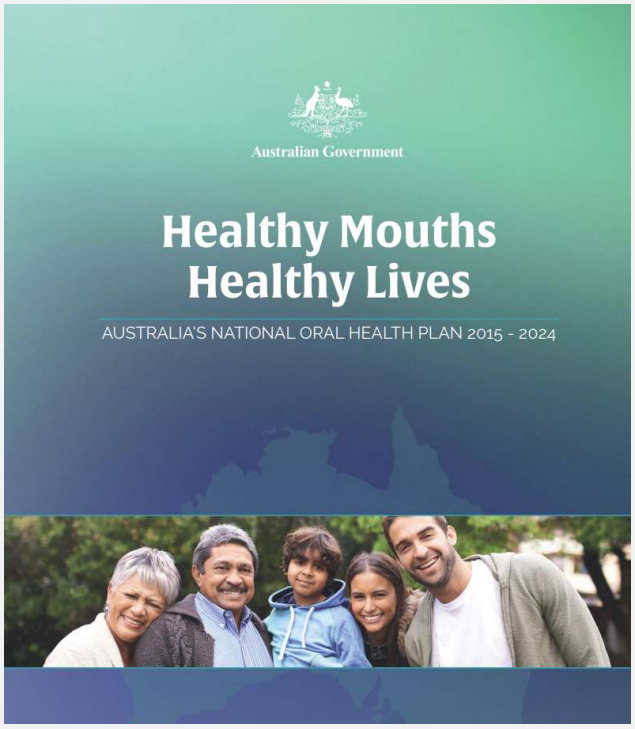
→ You will be seeing these patients!!!



https://www.aihw.gov.au/reports/older-people/older-australians/contents/demographic-profile

CONTEXT

- Healthy Mouths, Healthy Lives: Australia's National Oral Health Plan 2015-2024
  - Priority Population 4: People with additional and/or specialised health care needs – Frail older people



- Royal Commission into Aged Care Quality and Safety
  - Priority Population 4: People with additional and/or specialised health care needs – Frail older people



OROFACIAL STRUCTURES AND AGEING

MUSCULAR CHANGES

- Ageing → general progressive decline in body's total skeletal muscular mass and mechanical performance
- Muscles of mastication:
  - Decreased muscle tone, mass, neuromuscular control
  - → Decreased bite force, masticatory efficiency, dysfunction of tongue motor skills
  - → Difficulties with mastication
  - → Malnutrition

NB: Masticatory performance is not necessarily associated only with age, but other factors associated with the ageing process (systemic disease, loss of dental structure, tooth loss, pathology and pain in the facial musculature)

SALIVARY CHANGES & TASTE

Saliva:

- Increase in proportional volume of salivary gland fat and fibrovascular tissues
- Decrease in acinar cell secretion
- Reduction in taste and olfactory receptors → reduced neuronal saliva stimulation
- Decreased blood perfusion in salivary glands
- Polypharmacy / medication-related
- → Decreased saliva production and alteration in saliva composition (reduced calcium, mucin, lactoferrin & peroxidase)

Taste:

- Decrease in number of taste buds
- Decrease in taste bud sensitivity
- Decrease in saliva
- Disorders or drugs (e.g. antihypertensives esp. captopril, statins, antidepressants), that affect ability to taste

SALIVARY CHANGES & TASTE

Implications of decreased saliva and poorer taste:

- Reduction in oral clearance (food stagnation, "pouching")
- Increased use of salt/sugar as food tastes bland
- Increased risk of dental decay
- Increased risk of opportunistic infections
- Alterations in food intake and malnutrition
- Xerostomia and issues with oral comfort
- Speech
- Reduced tolerance of dentures

➔ *Increased risk of disease + reduced oral-health related quality of life*

BONE, MUCOSA AND DENTITION

Mucosal

- Thinning of oral mucosa → compromised local mucosal immunity and antimicrobial capacity

Dental

- Dental pulp: increasing calcification and degeneration of neurons → decreased pain perception, challenges in diagnosis & treatment of dental problems
- Dentine: increased mineral deposition, decreased fatigue strength & fracture toughness → increased susceptibility to crack propagation
- Enamel: increased mineral density and brittleness → more susceptible to cracks
- Increased enamel wear

Bone

- Reduced jaw bone density and alveolar resorption → mandibular resorption increases susceptibility to jaw fracture

COMMON DENTAL CONDITIONS IN THE ELDERLY

RISK FACTORS FOR DENTAL DISORDERS

- Physiological ageing
- Multiple chronic diseases (e.g. CVD, MSK, diabetes)
- Polypharmacy
- Loss of autonomy and dependency for ADLs
- Reduced sensory function: impaired vision, lower tactile thresholds, reduced dexterity
- Cognitive and movement disorders: dementia, Parkinson's
  - Reduced ability/compliance for oral hygiene

* ulcers or punches
white tongue to brush teeth

DENTAL DISORDERS IN THE ELDERLY

Natural Teeth



Caries

Tooth decay is a diet and oral hygiene related infectious disease which affects the teeth and causes pain.

Check for:

- holes in teeth
- brown or discoloured teeth
- broken teeth
- bad breath
- oral pain and tooth sensitivity
- difficulty eating meals
- changed behaviour.



Root Caries

Gums recede and the surface of the tooth root is exposed.

Decay can develop very quickly because the tooth root is not as hard as tooth enamel.

Check for:

- tooth sensitivity
- brown discolouration near the gum line
- bad breath
- difficulty eating meals
- changed behaviour.



Retained Roots

The crown of the tooth has broken or decayed away.

Check for:

- broken teeth
- exposed tooth roots
- oral pain
- swelling
- bad breath
- trauma to surrounding tissues from sharp tooth edges
- difficulty eating meals
- changed behaviour.

Gums and Oral Tissue



Gingivitis

This is caused by the bacteria in dental plaque accumulating on the gum line at the base of the tooth.

It gets worse and more common with age.

Check for:

- swollen red gums that bleed easily when touched or brushed
- bad breath.



Periodontitis

This causes gums and bone that support the teeth to break down.

This condition can impact seriously on general health and wellbeing.

Check for:

- receding gums
- exposed roots of teeth
- loose teeth
- tooth sensitivity
- bad breath.



Oral Cancers

Oral cancer is a major cause of death. People who smoke and drink alcohol heavily are at higher risk.

Check for:

- ulcers that do not heal within 14 days
- a white or red patch or change in the texture of oral tissues
- swelling
- unexplained changes in speech
- difficulty in swallowing.

Oral Cleanliness





Poor Oral Hygiene

Poor oral hygiene allows the bacteria in dental plaque to produce acids and other substances that damage the teeth, gums and surrounding bone.

Dental plaque begins as an invisible film that sticks to all surfaces of the teeth, including the spaces between the teeth and gums. It forms continuously and must be removed by regular brushing. If dental plaque is not removed, it hardens into calculus (tartar).

Check for:

- build up of dental plaque on teeth, particularly at the gum line
- calculus on teeth, particularly at the gum line
- calculus on denture
- unclean denture
- bleeding gums
- bad breath
- coated tongue
- food left in the mouth.

Gums and Oral Tissue (continued)




Ulcers & Sore Spots

These are caused by chronic inflammation, a poorly fitting denture or trauma.

Ulcers may be a sign of a general health problem.

Check for:

- sensitive areas of raw tissue caused by rubbing of the denture (particularly under or at the edges of the denture)
- broken denture
- broken teeth
- difficulty eating meals
- changed behaviour.

Stomatitis

Usually, stomatitis is caused by a fungal infection.

It is commonly found where oral tissue is covered by a denture.

It may be a sign of a general health problem.

Check for:

- red swollen mouth usually in an area which is covered by a denture.

Saliva



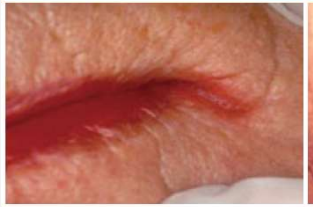
Xerostomia (Dry Mouth)

This can be a very uncomfortable condition caused by medications, radiation and chemotherapy or by medical conditions such as Sjögren's syndrome and Alzheimer's disease.

Check for:

- difficultly with eating and/or speaking
- dry oral tissues
- small amount of saliva in the mouth
- saliva which is thick, stringy or rope-like.

Lips



Angular Cheilitis

Bacterial or fungal infection which occurs at the corners of the mouth.

Check for:

- soreness and cracks at corners of the mouth.

Tongue




Glossitis

This is commonly caused by a fungal infection.

It may be a sign of a general health problem.

Check for:

- a reddened, smooth area of tongue
- a tongue which is generally sore and swollen.

Candidiasis (Thrush)

This is a fungal infection of oral tissues.

Check for:

- patches of white film that leave a raw area when wiped away
- red inflamed areas on the tongue.

Dentures





Requiring Attention

The denture is in need of repair or attention.

Check for:

- resident's name on the denture
- chipped or missing teeth on the denture
- chipped or broken acrylic (pink) areas on the denture
- bent or broken metal wires or clips on a partial denture.

Poorly Fitting

A denture can cause irritation and trauma to gums and oral tissues.

Check for:

- denture belonging to resident
- dentures being a matching set, particularly if the resident has several sets of dentures
- denture movement when the resident is speaking or eating
- resident's refusal to wear the denture
- overgrowth of oral tissue under the denture
- ulcers and sore spots caused by wearing the denture.

EFFECT OF POOR ORAL HEALTH ON SYSTEMIC HEALTH

- Aspiration pneumonia***
- Diabetes mellitus, CVD
- Malnutrition



IMPACT ON QUALITY OF LIFE

- Comfort vs pain
- Ability to chew and eat
- Swallowing
- Hydration
- Appearance, self-esteem and dignity
- Social interactions (avoidance of certain foods, speech, food catching in mouth, avoidance of smiling, concern about oral malodour)
- General behaviour

DENTAL TREATMENT APPROACHES (RATIONAL DENTAL CARE)

AGEING

- **Chronological age**: time passed from an individual's birth to the present date
- **Biological ageing**: physiological process where changes in the body's cell, tissues, organs and systems occur as a result of a progressive accumulation of local effects at the molecular, cellular and tissue level.
  - One of the most significant characteristics: failure to maintain homoeostasis under conditions of physiological stress
- **Functional/physiologic ageing**: cumulative effect of medical and psychosocial stressors (e.g. caregiving or loss of independence) on the ageing process that can affect life expectancy.
  - Ageing at the level of the whole person, incorporating internal factors (biologic) and external factors (diet, environment, psychologic health) and describes how that person functions in daily life.

GERIATRIC DENTISTRY

- The ageing population has usually been defined persons >65 years.
- If chronological age is the only criterion used in dentistry, it is not very useful because of the significant heterogeneity of the aged population.
- People of a similar age may have great differences in physical health, medical problems, neuro-degenerative diseases, mental health, as well as differences in oral health.

- **Geriatric dentistry**: "*the provision of dental care for adult persons with one or more chronic, debilitating, physical, or mental illnesses with associated medications or psychosocial problems*"; that is "*the geriatric dental patient is a biologically compromised adult who may or may not be older than 65". (Ettinger and Beck 1984)*

GERIATRIC DENTISTRY

- Thus, from an oral health care provision perspective, a functional definition of ageing is more useful:
  - Functionally independent older adults
  - Frail older adults
  - Functionally dependent older adults

FUNCTIONALLY INDEPENDENT ADULTS

- **~70% of the population >65yo**
- Live in the community unassisted
- Can access dental care independently using their own private vehicle or public transport
- Many have chronic medical problems for which they are taking a variety of medications
- Providing their dentist understands how the patient's medical issues and medications can influence oral health, treatment will depend on the patients' or significant others' perception of need and financial willingness to pay

FRAIL OLDER ADULTS

- **20% of population >65yo**
- Have lost some of their independence, but still live in the community with help from family/friends or professional support services
- Can no longer access general dental services without assistance
- Oral health needs require a greater understanding of medicine and pharmacology, evaluation of their ability to perform independent daily oral hygiene, and assessment of their ability to tolerate treatment

FUNCTIONALLY DEPENDENT OLDER ADULTS

- **10% of population >65yo**
- Unable to survive in the community independently. Are either homebound or living in institutions.
- Some can access dental services if transported, and many use wheelchairs (require wheelchair accessible dental practices)
- If cannot be transported, services need to be brought to them through mobile programs (mobile dental equipment required)

CHANGING GERIATRIC POPULATION

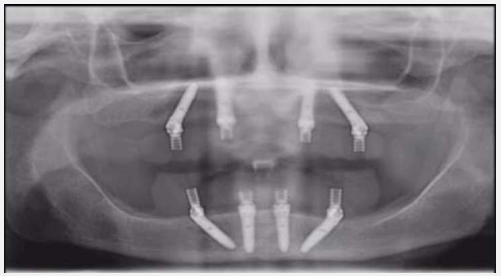
- "**Old elderly**" = high rates of edentulousness, rarely sought dental care.
- "**New elderly**" = better educated, more politically aware, healthier, more demanding of health services, higher expectations about oral health, place great value on dental care, have spent a significant amount of money to maintain their dentition, and the majority not completely edentulous.
  - By 2021, only 3% of the population will have complete tooth loss – *Healthy Mouths, Healthy Lives: Australia's National Oral Health Plan 2015-2024*





CHANGING GERIATRIC POPULATION

- Changing attitudes and utilisation behaviours
- The demand for dental care is increasing
- Wider range of needs than the past emphasis on dentures.
- Geriatric dental care now also includes complex restorative procedures, aesthetic dentistry and implants.
- More chronic diseases and comorbidities (resultant from surviving longer), increasing polypharmacy → extra challenges to maintain their dentition.







GERIATRIC DENTISTRY

In caring for patients with Special Needs, who may be adolescents, adults or elderly, it is essential that consideration is given to not only the patient's oral health but also

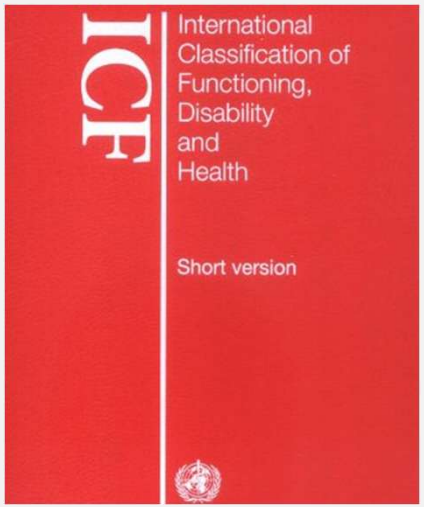
potential environmental, social, medical, physical and cognitive factors

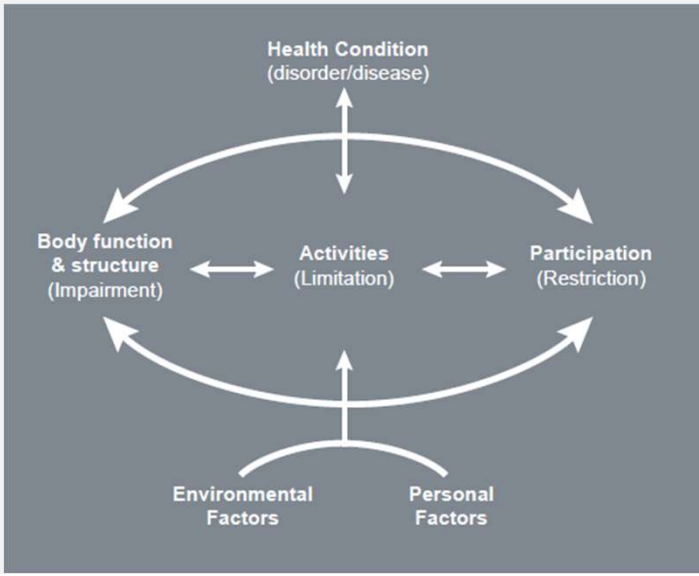
which may have an impact on their

oral health, oral function, ability to receive dental treatment

and also their

oral health related quality of life.





BARRIERS TO MAINTAINING ORAL HEALTH

PATIENT ISSUES

- Medical conditions
- Medical treatment(s) / medications
- Physical/fine motor limitations
- Transport/housing
- Dietary requirements
- Intellectual/cognitive/psychiatric
- Reliance on family/carer
- Prognosis/life expectancy
- Quality of life

MEDICO-LEGAL ISSUES

- Collation of all medical and social information
- Involvement of MDT (GP, specialists, allied health)
- Communication with patient/family/carer
- Consent (patient, NOK, guardianship board)

DENTIST ISSUES

- Dentists diagnostic and treatment planning skills
- Dentists knowledge of health conditions/disorders/medical treatments/medications
- Dentists motivation and capacity to provide 'simple dentistry' under 'complex conditions'
- Equipment available e.g. wheelchair lift, hoist, sedation, hospital access for GA facilities, portable equipment for provision of care off-site

PROVISION OF DENTAL TREATMENT – OTHER CONFOUNDING FACTORS

- **When to treat and when not to
- Use of chemical restraint – LA/N2O/IV/GA
- Use of physical restraint/clinical holding
- Ideal vs achievable treatment plan
- Prognosis of dental treatment/maintenance issues

➔ "Compromise" is not a dirty word

AIMS OF DENTAL MANAGEMENT IN THE OLDER POPULATION

- Aim:
  - Enable them to "eat and talk comfortably, to feel happy with their appearance, to stay pain free, to maintain self-esteem, and to maintain habits/standards of hygiene and care that they have had throughout their lives" (Chalmers 2003).

Domains of Dental Need	
A. Function	Ability to chew and eat an adequate diet
B. Symptomatology	Comfort while chewing, freedom from pain, adequate saliva for taste/swallow/speak/etc. May be influenced by medications, prosthesis fit and form, infection, nutritional changes.
C. Pathology	Not having any oral discomfort or lesions in the mouth. Signs and symptoms of dental caries, periodontal disease, oral cancer, and other soft- and hard-tissue pathologies
D. Aesthetics	Perceived needs to improve their appearance or smile (satisfaction).

- When treatment planning for a patient, the intent is either (or a combination of):
  - (1) Preventive, (2) Curative, (3) Reconstructive, or (4) Palliative.

RATIONAL DENTAL CARE



SPECIAL CARE IN DENTISTRY

Volume 4, Issue 5
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Full Access

Geriatric dental curriculum and the needs of the elderly

RONALD L. ETTINGER DDS, MDS, JAMES D. BECK PhD

First published: September 1984 |
https://doi-org.proxy.library.adelaide.edu.au/10.1111/j.1754-4505.1984.tb00189.x | Citations: 55

Related Information

Clinical Decision Making in the Dental Treatment of the Elderly[1]

Ronald L. Ettinger D.D.S., M.S.D.

Article first published online: 28 JUL 2006

DOI: 10.1111/j.1741-2358.1984.tb00367.x

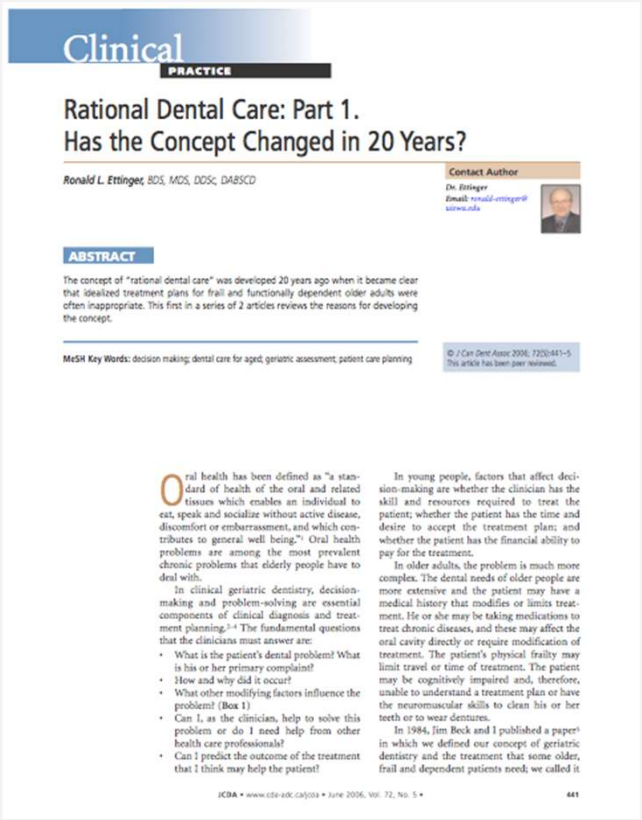
Issue



Gerodontology
Volume 3, Issue 2, pages 157–165, July 1984

The concept of "rational dental care" was developed 30 years ago by Ronald Ettinger when it became clear that idealized treatment plans for frail and functionally dependent older adults were often inappropriate.

RATIONAL DENTAL CARE



Clinical
PRACTICE

Rational Dental Care: Part 1. Has the Concept Changed in 20 Years?

Ronald L. Ettinger, BDS, MDS, DDSc, DABSCD

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ABSTRACT

The concept of "rational dental care" was developed 20 years ago when it became clear that idealized treatment plans for frail and functionally dependent older adults were often inappropriate. This first in a series of 2 articles reviews the reasons for developing the concept.

MeSH Key Words: decision making; dental care for aged; geriatric assessment; patient care planning

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This article has been peer reviewed.

Oral health has been defined as "a standard of health of the oral and related tissues which enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment, and which contributes to general well being."[1] Oral health problems are among the most prevalent chronic problems that elderly people have to deal with.

In clinical geriatric dentistry, decision-making and problem-solving are essential components of clinical diagnosis and treatment planning.[2–4] The fundamental questions that the clinicians must answer are:

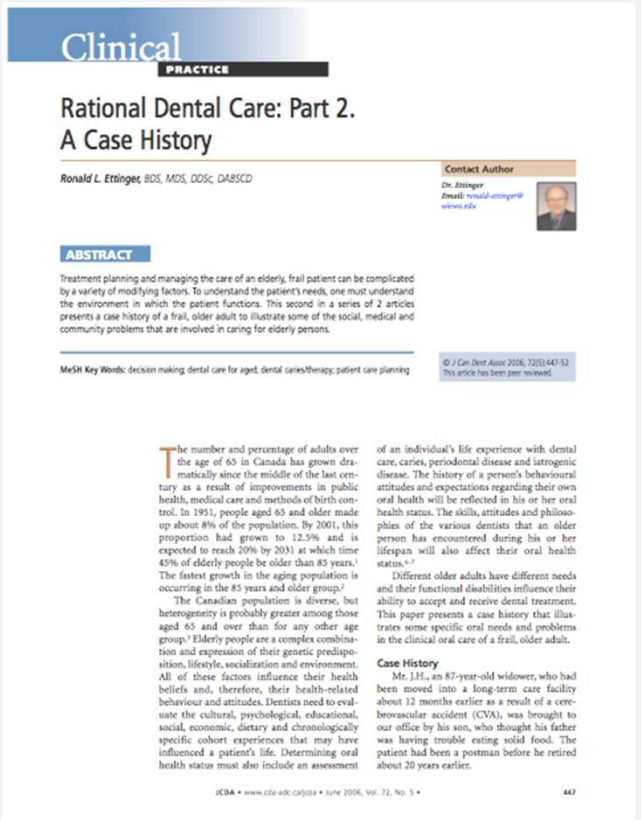
- What is the patient's dental problem? What is his or her primary complaint?
- How and why did it occur?
- What other modifying factors influence the problem? (Box 1)
- Can I, as the clinician, help to solve this problem or do I need help from other health care professionals?
- Can I predict the outcome of the treatment that I think may help the patient?

In young people, factors that affect decision-making are whether the clinician has the skill and resources required to treat the patient; whether the patient has the time and desire to accept the treatment plan; and whether the patient has the financial ability to pay for the treatment.

In older adults, the problem is much more complex. The dental needs of older people are more extensive and the patient may have a medical history that modifies or limits treatment. He or she may be taking medications to treat chronic diseases, and these may affect the oral cavity directly or require modification of treatment. The patient's physical frailty may limit travel or time of treatment. The patient may be cognitively impaired and, therefore, unable to understand a treatment plan or have the neuromuscular skills to clean his or her teeth or to wear dentures.

In 1984, Jim Beck and I published a paper[5] in which we defined our concept of geriatric dentistry and the treatment that some older, frail and dependent patients need; we called it

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Clinical
PRACTICE

Rational Dental Care: Part 2. A Case History

Ronald L. Ettinger, BDS, MDS, DDSc, DABSCD

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ABSTRACT

Treatment planning and managing the care of an elderly, frail patient can be complicated by a variety of modifying factors. To understand the patient's needs, one must understand the environment in which the patient functions. This second in a series of 2 articles presents a case history of a frail, older adult to illustrate some of the social, medical and community problems that are involved in caring for elderly persons.

MeSH Key Words: decision making; dental care for aged; dental caries/therapy; patient care planning

© J Can Dent Assoc 2006; 72(5):447-52
This article has been peer reviewed.

The number and percentage of adults over the age of 65 in Canada has grown dramatically since the middle of the last century as a result of improvements in public health, medical care and methods of birth control. In 1951, people aged 65 and older made up about 8% of the population. By 2001, this proportion had grown to 12.5% and is expected to reach 20% by 2031, at which time 45% of elderly people be older than 85 years.[1] The fastest growth in the aging population is occurring in the 85 years and older group.[2]

The Canadian population is diverse, but heterogeneity is probably greater among those aged 65 and over than for any other age group.[3] Elderly people are a complex combination and expression of their genetic predisposition, lifestyle, socialization and environment. All of these factors influence their health beliefs and, therefore, their health-related behaviour and attitudes. Dentists need to evaluate the cultural, psychological, educational, social, economic, dietary and chronologically specific cohort experiences that may have influenced a patient's life. Determining oral health status must also include an assessment of an individual's life experience with dental care, caries, periodontal disease and iatrogenic disease. The history of a person's behavioural attitudes and expectations regarding their own oral health will be reflected in his or her oral health status. The skills, attitudes and philosophies of the various dentists that an older person has encountered during his or her lifespan will also affect their oral health status.[4–7]

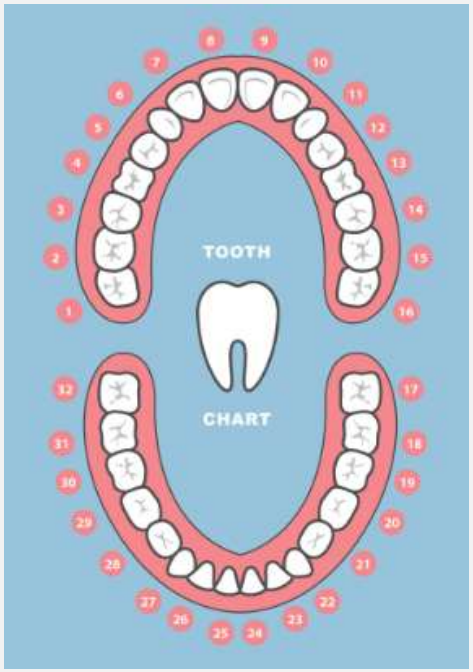
Different older adults have different needs and their functional disabilities influence their ability to accept and receive dental treatment. This paper presents a case history that illustrates some specific oral needs and problems in the clinical oral care of a frail, older adult.

Case History

Mr. J.H., an 87-year-old widower, who had been moved into a long-term care facility about 12 months earlier as a result of a cerebrovascular accident (CVA), was brought to our office by his son, who thought his father was having trouble eating solid food. The patient had been a postman before he retired about 20 years earlier.

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WHAT IS THE IDEAL DENTITION?







DETERMINING LEVEL OF CARE

- **Ideal treatment plan**:"*that leading to the best dental prognosis without taking modifying factors into account*" (Barsh)
- Traditionally has been based on morphologic concepts, i.e. the dentist views the dentition and proceeds technically to evaluate how many teeth can be saved or replaced without evaluating any other limiting factors

Determining level of care

Berkey DB, Berg RG, Ettinger RL, Mersel A, Mann J. The old-old dental patient: the challenge of clinical decision-making. J Am Dent Assoc. 1996 Mar;127(3):321-32.

Determining Factors

- Patient desires and expectations
- Type and severity of dental need
- Impact on quality of life
- Probability of positive outcome
- Reasonable treatment alternatives
- Ability to tolerate stress of treatment
- Capability to maintain oral health
- Financial and other resources
- Dentist capabilities
- Other issues

Care Level

- Very extensive
- Extensive
- Intermediate
- Limited
- Very limited

ASSESSING TREATMENT NEEDS

O = Oral	Evaluate the teeth, prostheses, periodontium, pulpal status, oral mucosa, occlusion and saliva
S = Systemic	Evaluate normative age changes, medical diagnosis, pharmacological agents and interdisciplinary communications
C = Capability	Evaluate functional ability e.g. self-care, oral hygiene, caregivers, and need for transportation and mobility
A = Autonomy	Evaluate the ability to give informed consent or dependence on others
R = Reality	Evaluate the prioritisation of oral health care, financial limitations, and anticipated life span

Shay (1994)

ASSESSING TREATMENT NEEDS

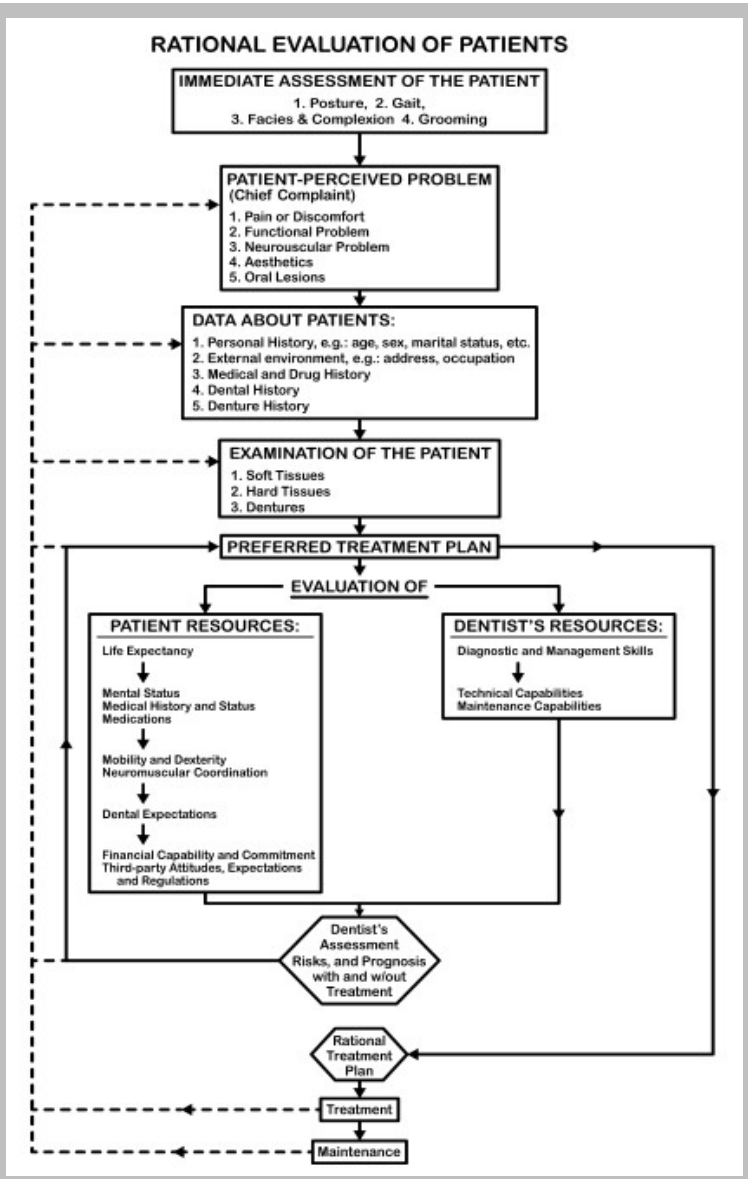
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DETERMINING LEVEL OF CARE

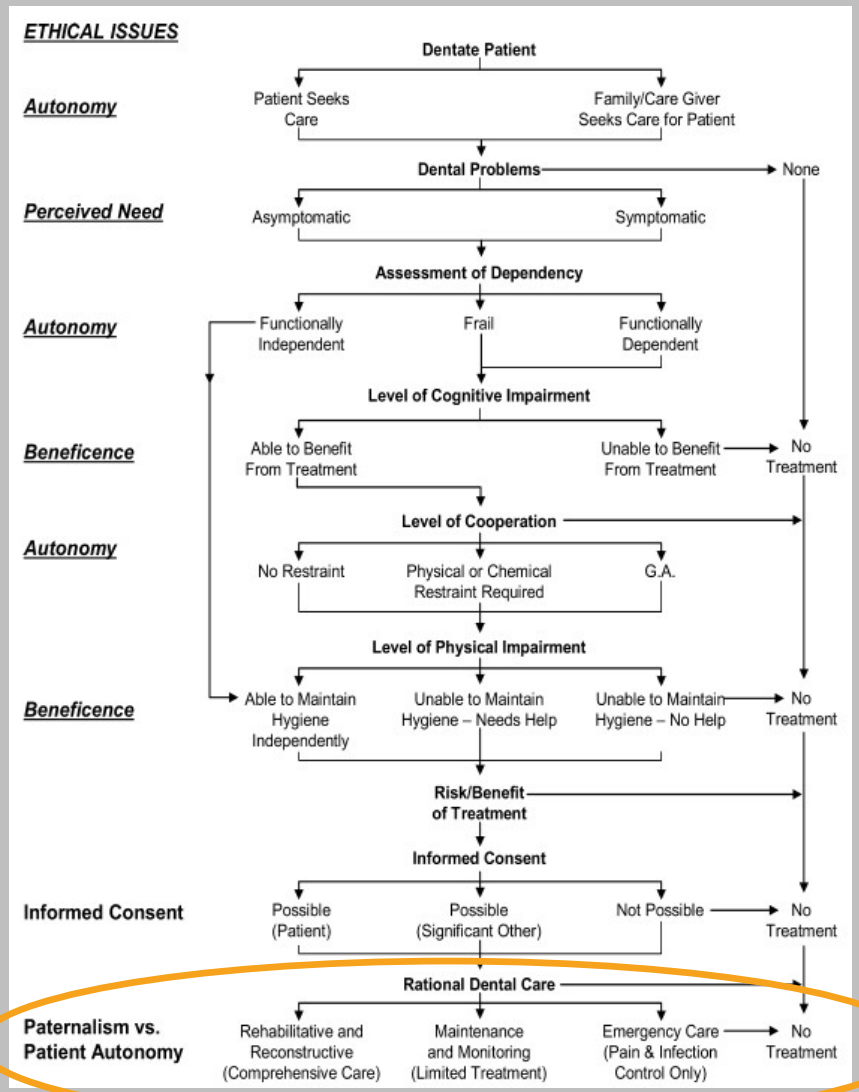
Rational dental care model

Ettinger (1990, 2015)



DETERMINING LEVEL OF CARE

Decision Tree



Ettinger 2006, 2015

DETERMINING LEVEL OF CARE

No. 1	Very extensive care with complex needs, including rehabilitation of the dentition with fixed prosthodontics or surgical therapies. Pressing functional and/or pathological needs, have ability to accept this care, strongly positive determining factors, and favourable prognosis.
No. 2	Extensive care with substantial physiological needs, which may be solved by a combination of fixed and removable prosthodontics and the ability to withstand the care.
No. 3	Intermediate care, which requires some alternatives to traditional therapies. Benefit is adjusted for risk, may require more basic therapies (e.g. removable and fixed protheses, basic surgical procedures).
No. 4	Limited care; these patients cannot tolerate extensive time in the dental chair and need short appointments and a simplified treatment plan. Projected risk of care limits the potential benefit from it. Provide durable care to minimise future dental problems.
No. 5	Very limited care; these patients should be treated for pain relief and infection control only. Patients have limited resources to cope with interventions.

Berkey et al (1996)

SHORTENED DENTAL ARCH

Healthy occlusion (Ash & Ramfjord)

- Absence of pathology (dental, periodontal, osseous, muscular components)
- Orthopaedically stable centric position
- Axial loading of the dentition
- Guidance from centric to eccentric positions

Ash MM, Ramfjord SP: Occlusion (ed 4). Philadelphia, PA, Saunders, 1995

SHORTENED DENTAL ARCH

Traditional concepts (Beyron, 1969)

- Determinants of a healthy dentition = "maximum number of bilateral centric stops"
- Replacement of all lost occlusal units, including in the molar region



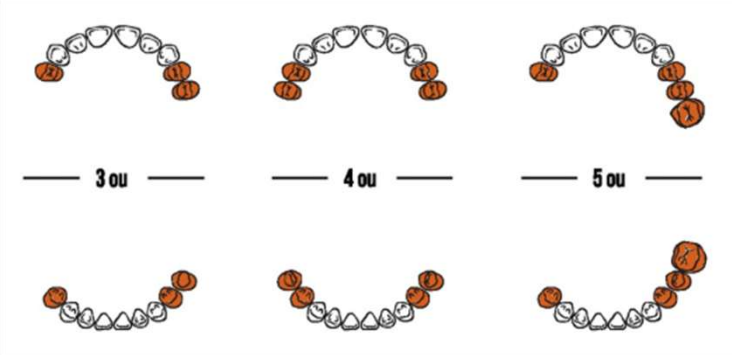


Beyron H. Optimal occlusion. Dent Clin North Am 1969;13:537–554.

SHORTENED DENTAL ARCH

Shortened dental arch (Käyser, 1981)

- Research related to older adults → applies to other populations too
- 118 patients
- "that there is sufficient adaptive capacity to maintain oral function in shortened dental arches when at least four occlusal units are left"



1 occlusal unit = 1 pair of occluding premolars

2 occlusal units = 1 pair of occluding molars

Käyser AF. Shortened dental arches and oral function. J Oral Rehabil 1981;8:457–462
Aukes JN, Kayser AF, Felling AJ: The subjective experience of mastication in subjects with shortened dental arches. J Oral Rehabil 1988;15:321-324

SHORTENED DENTAL ARCH

WHO 1992

- "retention, throughout life, of a functional, esthetic, natural dentition of not less than 20 teeth and not requiring recourse to prostheses should be the treatment goal for oral health"

Features:

- Chewing ability, maintenance of nutrition
- Occlusal stability
- Temporomandibular disorder problems not provoked
- **Cleanliness
- Aesthetics maintained
- Need for prosthodontic intervention?





➔ PRIORITY: maintain and replace strategically important parts of the dental arch (anterior and premolar regions)

PART II

LECTURE OUTCOMES – PART II

- 1. Understand the specific characteristics and dental needs of individuals with dementia, including appropriate treatment adaptations to ensure effective dental care
- 2. Understand the oral health assessments that are performed in residential aged care facilities, and develop an individualised oral care plan
- 3. Facilitate oral health maintenance for geriatric patients, including teaching carers, communication strategies, behavioural considerations, and alternative products and techniques
- 4. Appreciate the role of domiciliary care for the geriatric population

TALK OUTLINE – PART II

- Dementia
- Oral health assessments and oral care plans
- Oral health maintenance for the dependent elderly population
- Domiciliary care

DEMENTIA-FRIENDLY DENTISTRY

DEMENTIA

- "Dementia is a clinical syndrome that is characterised by a progressive deterioration in cognition with resulting decline in function."
  - It is not a specific disease in itself – it is a group of symptoms caused by chronic organic brain disease.
  - Dementia is no longer listed under the new DSM-V categorisation system (it is incorporated under '**major neurocognitive disorders'**), though there is recognition that the term is still routinely used in a clinical setting.

- The DSM-V categorises neurocognitive disorders into three main groupings
  - Delirium
  - Minor neurocognitive disorders
  - Major neurocognitive disorders



• Alzheimer's disease • Frontotemporal_lobar degeneration • Lewy body disease • Vascular disease • Traumatic brain injury • Substance/medication use • HIV infection	• Prion disease • Parkinson's disease • Huntington's disease • Another medical condition • Multiple aetiologies • Unspecified

Major and minor NCDs exist on a continuum and the distinction between them is inherently arbitrary

DMS-V DIAGNOSTIC CRITERIA – NEUROCOGNITIVE DISORDERS

Domain	Skills/Functions
Complex attention	– Sustained attention (maintaining attention over time) – Selective attention (maintaining attention despite distractions) – Divided attention (multi-tasking) – Processing speed (time to do a task)
Executive Function	– Planning – Decision-making – Working memory – Feedback/error utilisation (to infer rules for solving a problem) – Overriding habits/inhibition (to choose a more complex and effortful solution to be correct – eg. blue, red – Mental/cognitive flexibility – ability to shift between two concepts, tasks or response rules
Learning & Memory	– Immediate memory span (overlap with working memory) – Recent memory – Semantic memory – Autobiographical memory – Implicit learning (unconscious learning of skills)
Language	– Expressive language – Grammar and syntax – Receptive language
Perceptual-motor	– Visual perception – Visuoconstructional (hand-eye coordination for assembly) – Perceptual-motor (physical task without visual clues) – Praxis (integrity of learned movements, eg. pantomime or imitation of tasks or gestures) – Gnosis – integrity of awareness and recognition (faces, colours etc)
Social cognition	– Recognition of emotions – Theory of mind (ability to consider another person's mental state or experience)

BEHAVIOURAL FEATURES OF NEUROCOGNITIVE DISORDERS

Psychotic features

- Paranoia and delusions, particularly persecutory delusions, are common; hallucinations may occur, particularly visual hallucinations

Mood disturbance

- Depression and anxiety is common early in the course of Alzheimer's and Parkinson's
- Elation is more common in frontotemporal lobar degeneration

Agitation

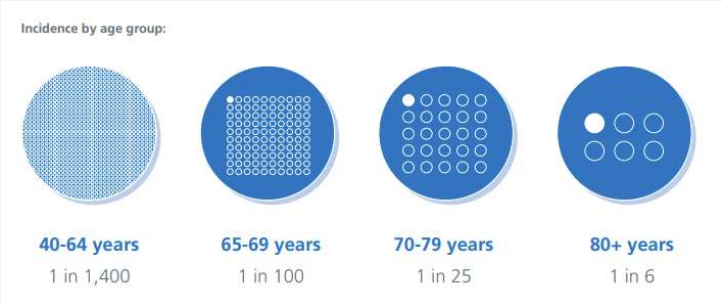
- confusion, frustration

Behavioural symptoms

- Wide-ranging
- e.g. sleep disturbance, apathy (especially in Alzheimer's), wandering, disinhibition, hyperphagia, and hoarding

DEMENTIA - DEMOGRAPHICS

- Dementia is an age-related disorder, therefore the prevalence increases with age. Prevalence doubles every five years from the age of 60 to 90.
- In 2012, approximately 250,000 Australians were living with dementia. This is projected to reach almost 1,000,000 by 2050.



NHS England. Dementia Friendly Dentistry. Cheshire and Merseyside (UK): 2016. Available from: https://gmpcb.org.uk/wp-content/uploads/Dementia_Friendly_Dentistry_advice_and_guidance_booklet.pdf

CAUSES OF DEMENTIA

Reversible (Treatable) Dementia	Irreversible Dementia
Drugs, e.g. alcohol	Alzheimer's disease (50-60% diagnosed dementias)
Emotions and depression	Vascular disease / stroke (20% cases, due to brain damage from hypoxia or infarct)
Metabolic factors, e.g. pernicious anaemia	Lewy body disease, frontal lobe dementia and Pick's disease (lead to destruction of brain cells)
Endocrine conditions, e.g. hypo and hyperthyroidism	Parkinson's disease (assoc with increased incidence of dementia)
Nutritional deficiencies, e.g. folic acid deficiency	Huntington's disease (involves mental deterioration in later stage)
Trauma and brain tumours	AIDS and CJD (v small proportion of cases)
Infections, e.g. TB / syphilis / HIV	Brain tumours and other causes of intra-cerebral pressure
Arteriosclerosis of cerebral vessels	

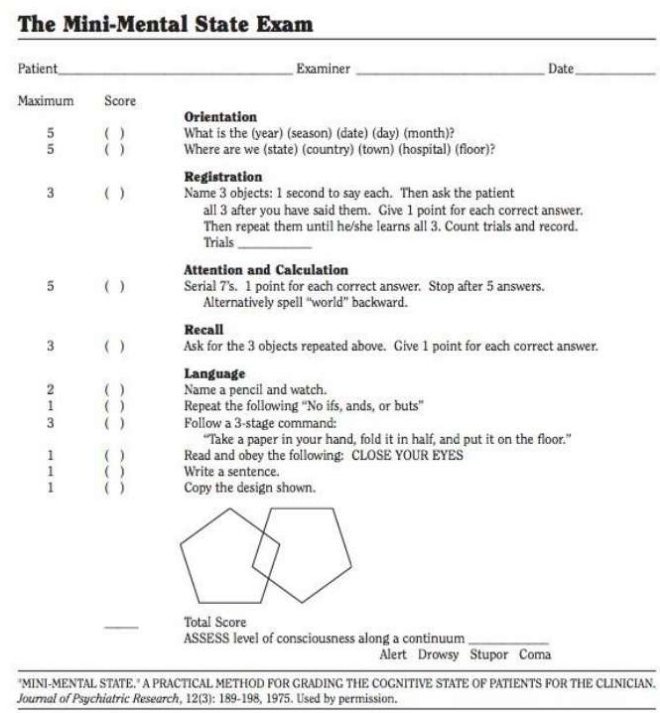
DEMENTIA

Dougall A, Fiske J. Access to Special Care Dentistry, Part 9: Special Care Dentistry Services for Older People. *Br Dent J.* 2008:205(8);421

DIAGNOSIS

Symptoms must be present for at least 6 months to support the diagnosis

1) **Cognitive testing**: Mini Mental State Examination (MMSE), Abbreviated Mental Test Score (AMTS), Modified Mini Mental State Examination (3MS), Montreal Cognitive Assessment (MoCA)
2) **Neurological testing:** check senses and movement
3) **Blood/urine tests:** usually carried out to eliminate other causes (thyroid stimulating hormones, vit B12, folic acid, calcium, renal function, liver enzyme)
4) **Imaging**: CT, MRI, PET



The Mini-Mental State Exam

Patient_____ Examiner _____ Date_____

Maximum	Score	
		Orientation
5	( )	What is the (year) (season) (date) (day) (month)?
5	( )	Where are we (state) (country) (town) (hospital) (floor)?
		Registration
3	( )	Name 3 objects: 1 second to say each. Then ask the patient all 3 after you have said them. Give 1 point for each correct answer. Then repeat them until he/she learns all 3. Count trials and record. Trials _____
		Attention and Calculation
5	( )	Serial 7's. 1 point for each correct answer. Stop after 5 answers. Alternatively spell "world" backward.
		Recall
3	( )	Ask for the 3 objects repeated above. Give 1 point for each correct answer.
		Language
2	( )	Name a pencil and watch.
1	( )	Repeat the following "No ifs, ands, or buts"
3	( )	Follow a 3-stage command: "Take a paper in your hand, fold it in half, and put it on the floor."
1	( )	Read and obey the following: CLOSE YOUR EYES
1	( )	Write a sentence.
1	( )	Copy the design shown.
		Total Score
		ASSESS level of consciousness along a continuum _____ Alert Drowsy Stupor Coma

"MINI-MENTAL STATE." A PRACTICAL METHOD FOR GRADING THE COGNITIVE STATE OF PATIENTS FOR THE CLINICIAN. *Journal of Psychiatric Research*, 12(3): 189-198, 1975. Used by permission.

Cognition

24 / 30 Normal
≤ 9 /30 Severe
10-18 /30 moderate
10-23 / 30 mild

GENERAL MANAGEMENT

No treatment currently available to prevent/cure, but can manage symptoms.

- Referral to neuropsychologist, neurologist and/or geriatrician
- Medications:
  - Cholinesterase inhibitors often used early in disease
    a. E.g. Rivastigmine, donepezil, galantamine → may delay onset
  - Memantine (blocks the effects of glutamate)
  - Antipsychotics: risperidone (Risperdal), anti-epileptics - carbamazepine (Tegretol) → improve behavioural symptoms
  - Antidepressant medications
- Educating and providing emotional support to relatives
- Keeping the person safe and comfortable
- Maintaining a routine to avoid confusion (e.g. regular exercise, sleep, nutritious diet)

PROGNOSIS

Type of dementia	Life expectancy
Alzheimer's disease	Around 8–10 years, depending on the age of diagnosis
Vascular dementia	Around 5 years, with an increase in the risk of stroke or heart attack
Lewy body dementia	Around 6 years, with an increase in the risk of falls and infections
Frontotemporal dementia	Around 6-8 years

STAGES OF DEMENTIA – GENERAL S&S, ORAL HEALTH RELEVANCE

Stage of Dementia	Cognitive Decline	General Signs and Symptoms	Signs & symptoms relevant to oral health & dental care	Dental Management
Pre-Diagnosis	No cognitive decline	Normal function, no memory loss	Not noticeable at this stage	Management as per dental risk (DBOH, NICE recall guidance)
Early/Mild	Mild cognitive decline	Forgetting recent events Struggling to find the right words Lose track of day/date Problems with judging distance Loss of interest with others, reduced social interaction	May show early signs • missing appointments • forgetting where they are up to in a course of treatment	Assess risk of dental disease Management as per dental risk (DBOH, NICE recall guidance) Robust and appropriate treatment planning (see clinical case section) Consideration of shortened dental arch

↳ window of opportunity to future proof treatment

↳ Clinically poor / hopeless prognosis

NHS England. Dementia Friendly Dentistry. Cheshire and Merseyside (UK): 2016. Available from: https://gmpcb.org.uk/wp-content/uploads/Dementia_Friendly_Dentistry_advice_and_guidance_booklet.pdf

STAGES OF DEMENTIA – GENERAL S&S, ORAL HEALTH RELEVANCE

Stage of Dementia	Cognitive Decline	General Signs and Symptoms	Signs & symptoms relevant to oral health & dental care	Dental Management
Moderate/ Middle	Moderate cognitive decline	Need frequent reminders and/or help to carry out basic tasks (e.g. mealtimes, dressing, personal hygiene, toothbrushing) Forgetful of names Repeat questions/conversations Become confused with surroundings, may get lost May not recognise familiar people Difficulties with spatial perception	May struggle to remember • treatment plan progress and sequence • details of the treatment plan May attend with support, may still not be formally diagnosed You may notice a deterioration in oral health, in a previously well maintained/ motivated patient Patient may lack capacity to consent May: • struggle to weigh up risks and benefits of treatment • be less compliant than at previous visits • have fragmented conversations • be anxious/agitated during appointment	Re-assess risk Management as per dental risk (DBOH, NICE recall guidance) Consider conservative acceptable treatments (e.g. ART) Support carers with oral hygiene May require more support to accept treatment

NHS England. Dementia Friendly Dentistry. Cheshire and Merseyside (UK): 2016. Available from: https://gmpcb.org.uk/wp-content/uploads/Dementia_Friendly_Dentistry_advice_and_guidance_booklet.pdf

↳ Intense appointments over ↳ might not be diagnosed

↳ fall risk

↳ may lack capacity to consent

STAGES OF DEMENTIA – GENERAL S&S, ORAL HEALTH RELEVANCE

Stage of Dementia	Cognitive Decline	General Signs and Symptoms	Signs & symptoms relevant to oral health & dental care	Dental Management
Late/Severe	Severe cognitive decline	Require increasing amounts of assistance to complete tasks, gradually becoming more dependant on others Profound memory loss, unable to recognise family or familiar objects Increasingly weak, spending more time in bed/chair Difficulties eating/swallowing Incontinence Loss of speech, no meaningful method of communication	May • have difficulties with speech • not remember previous visits • have difficulty cooperating for radiographs • no longer communicate • be totally non-compliant for treatment, including examination • be totally dependent on others to provide dental care and to attend appointment Carers may request domiciliary care Likely to lack capacity to consent	Reassess acceptability of proposed treatment Management as per dental risk (DBOH, NICE recall guidance) Support carers with oral hygiene Palliative care for teeth Treatment of symptomatic teeth May require more support to accept treatment Treatment planning should be realistic and pragmatic Treatment may not be possible

TREATMENT MODIFICATIONS

Access

- Timing:
  - ideally morning, but not too early
  - Suitable for carer
- Good days and bad days
- Appointment reminder/cards +/- involve carer
- Name badges
- Positioning: reduced mobility, wheelchair recliner, hoist, upright
- Accessible parking, clear signage, handrails, waiting room – appropriate seating, accessible toilets, matte/even flooring
- Familiar carer, routine, surroundings to reduce anxiety

Communication

- Information leaflets as reminder of the discussion / recommendations made
- May revert back to first language
- Speech, slurred, aphasia
- Be kind and reassuring, not patronising or talking down
- Maintain respect and dignity
- One Q or topic at a time, allow time to process
- Avoid background noise (e.g. music)
- Patient profile, "This is Me", disability health profiles = get to know preferences and interests of patient

Consent

- Assess capacity: understand info, retain info, weigh up info, communicate decision
- Best interest decisions, involving guardian/family
- Use least restrictive methods
- May have AHD
- If still have capacity, decide upon treatment plan and goals prior to patient losing capacity

• understand the info
• retain the info
• weigh up the info
• explain why they made decision

• communicate decision back

TREATMENT MODIFICATIONS

Education / Prevention

- Involve carers/relatives
- Emphasis importance of routine oral and denture hygiene
- Educate on signs of infection
- Consider toothbrush handle modifications, non-foaming TP, electric TB, high fluoride toothpaste, CHX gel
- Nutritional supplements
- Thickeners
- Availability of cordial

Surgical

- Avoid long complex tx
- Restore/extract carious teeth during early stages
- If long-term care anticipated, full mouth diagnostic RGs taken and kept for future reference
- Dentures: named, consider duplicating dentures/moulds, cooperation?
- IV Sedation / GA: risks of progression dementia
- Medications: tablet/capsule or liquid formulation

Spread

- MRSA
- VRE



ELDER ABUSE



Type of Abuse	Description	Examples
Neglect	Repeated failure of a designated caregiver to provide help with personal care and day-to-day activities	Dirt, faecal or urine smell, or other health and safety hazards in an older person's living environment Rashes, sores, lice on him/her Inadequately clothed, malnourished or dehydrated Poor personal hygiene Lack of assistance with eating and drinking Unsanitary and unclean conditions
Physical abuse	Physical violence, inappropriate physical restraint, over-medication	Cuts, lacerations, bruises, black eyes, burns, bone fractures Untreated injuries in various stages of healing or not properly treated Loss of weight Broken eye glasses/frames, physical signs of being restrained Inappropriate use of medication, eg constantly in a sedated state An older person telling you they have been hit, slapped, kicked or mistreated
Psychological abuse	Persistent insults and threats	Extremely withdrawn and non-communicative or non-responsive Hesitation to talk openly, implausible stories Confusion or disorientation Emotionally upset or agitated Unexplained fear An older person telling you they are being verbally or emotionally abused
Financial abuse	Theft, fraud, misuse of guardian/attorney	An older person telling you they are being verbally or emotionally abused On home visits you may notice: • Lack of amenities, such as TV, personal grooming items, appropriate clothing, that the older person should be able to afford • The unexplained disappearance of valuable possessions
Sexual abuse	Verbal harassment, touching in a sexual way, intercourse without consent	An older person telling you they have been sexually assaulted or raped

Dougall A, Fiske J. Access to Special Care Dentistry, Part 9: Special Care Dentistry Services for Older People. *Br Dent J.* 2008:205(8);421



Help stop Elder Abuse

Call the WA Elder Abuse Helpline and Information Service

If you or someone you know is experiencing elder abuse, or has a question about elder abuse, please call the WA Elder Abuse Helpline and Information Service on **1300 724 679** for a confidential discussion.

The Helpline is funded by the Department of Communities and operated by Advocare, a not-for-profit organisation that supports older people in Western Australia through advocacy, information and education.

WA Elder Abuse Helpline and Information Service

1300 724 679

8:30am to 4:30pm Monday to Friday

Which support services can you turn to?

If you feel that you are being mistreated or abused, you can take action through these support services.

Seniors Peak Body WA Advocare is WA's Peak Body for seniors, ensuring older people are supported, connected and heard. The Seniors Peak Body provides support and information on the rights of older people, accessing services, elder abuse and overcoming social isolation.
Web: **www.advocare.org.au**
Phone: **1800 655 566** (freecall)

Elder Rights WA (ERWA) provides seniors with legal advice, assistance, and representation where appropriate for certain legal matters. Social Workers are also available to support in dealing with social, physical and mental challenges which may impact their legal concerns. This service is provided by Legal Aid WA.
Web: **www.resources.legalaid.wa.gov.au/project/erwa**
Phone: **1300 650 579**.

Older People's Rights Service offers legal advice, advocacy, peer education sessions and social support to those at risk of or experiencing elder abuse, with a focus on positive ageing. Northern Suburbs Community Legal Centre provides this service.
Web: **www.nsclegal.org.au/how-we-can-help/elder-abuse-support/** Phone: **08 9440 1663**.

Office of the Public Advocate works to promote and protect the human rights of Western Australian adults with decision-making disabilities. The Office can provide information about Enduring Power of Attorney and Enduring Power of Guardianship.
Web: **www.publicadvocate.wa.gov.au** or call the **Telephone Advisory Service** Phone: **1300 858 455**.

The Public Trustee offers independent trustee and asset management services. These include Will and Enduring Power of Attorney drafting, deceased estate administration, executor support, financial administration and trust management services.
Web: **www.publictrustee.wa.gov.au**
Phone:**1300 746 212**.

DC1748 0525

Government of **Western Australia**
Department of **Communities**

Everything you've ever wondered (and more) about

Elder Abuse

and the mistreatment of older people

https://www.wa.gov.au/government/document-collections/elder-abuse-support-services-and-resources

ORAL HEALTH ASSESSMENTS



Better Oral Health in Residential Care

Professional Portfolio

Oral Health Assessment Toolkit for Older People
Oral Health Care Planning Guidelines
Dental Referral Protocol

Australian Government
Department of Health and Ageing

Better Oral Health in Residential Care

Prepared by the SA Dental Service and Consortium Members
Funded by the Australian Government



Better Oral Health in Residential Care

Staff Portfolio

Education and Training Program

Government of South Australia
SA Health

Better Oral Health in Residential Care



Better Oral Health in Residential Care

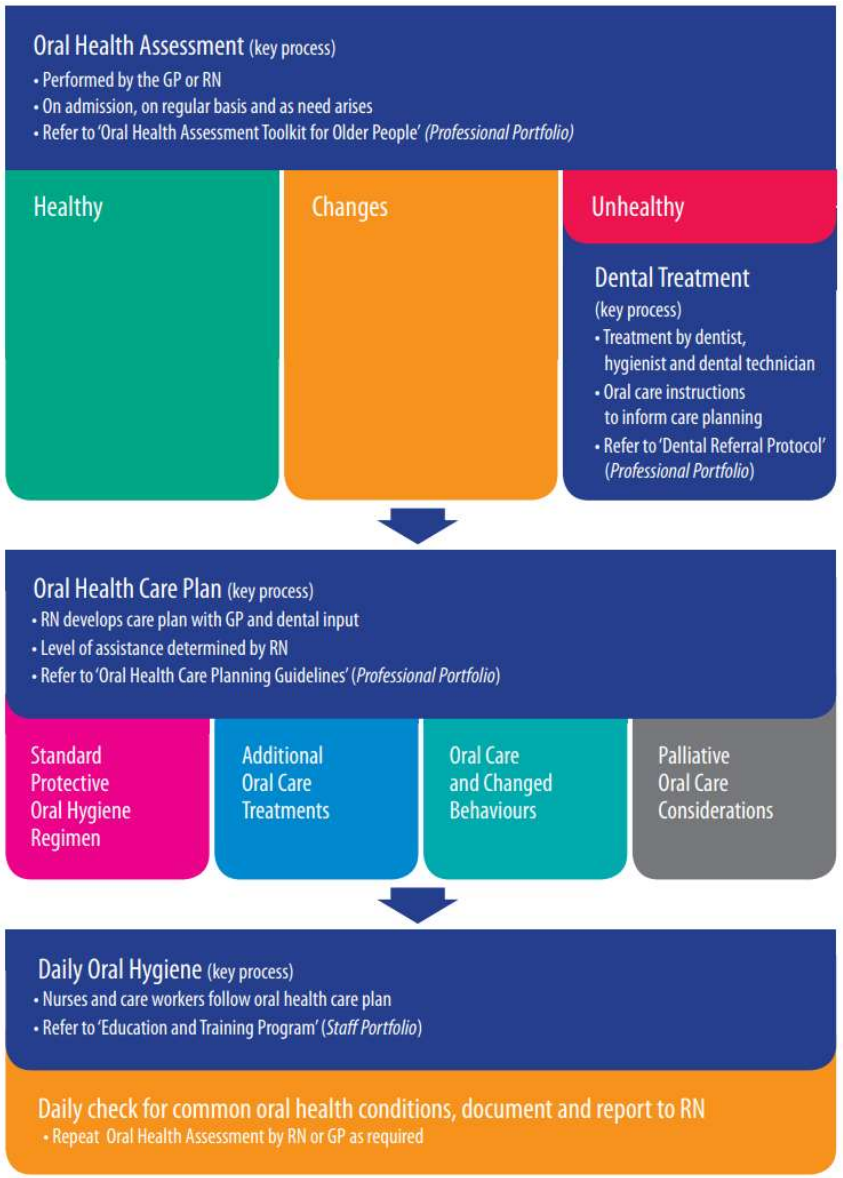
Facilitator Portfolio

Education and Training Program
Introduction

Government of South Australia
SA Health

Better Oral Health in Residential Care

BETTER ORAL HEALTH IN RESIDENTIAL CARE MODEL (2010)



ORAL HEALTH ASSESSMENTS

- Adults who move into a care home should have their mouth care needs assessed on admission
- Self-care can deteriorate before a person moves into a care home, so they may be admitted with poor oral health.
- Mouth care needs may not be visible and can be missed if they are not specifically assessed.
- It is important that mouth care needs are assessed as soon as possible when someone moves into a care home, so that tailored care can start straight away.
- Does not replace a comprehensive examination by a dentist. Is primarily a screening tool to:
  - Monitor residents' oral health
  - Inform OH care planning
  - Evaluate OH interventions
  - Trigger a dental referral when required.

Oral Health Assessment Tool

Print from CD

Resident: _____ Completed by: _____ Date: _____

Resident: ☐ is independent ☐ needs reminding ☐ needs supervision ☐ needs full assistance

☐ Will not open mouth ☐ Grinding or chewing ☐ Head faces down ☐ Refuses treatment

☐ Is aggressive ☐ Bites ☐ Excessive head movement ☐ Cannot swallow well

☐ Cannot rinse and spit ☐ Will not take dentures out at night

Lips

Healthy	Changes	Unhealthy	Dental Referral
Smooth, pink, moist	Dry, chapped or red at corners	Swelling or lump, red/ white/ulcerated bleeding/ ulcerated at corners *	☐ Yes ☐ No

Tongue

Healthy	Changes	Unhealthy	Dental Referral
Normal moist, roughness, pink	Patchy, fissured, red, coated	Patch that is red and/or white/ulcerated, swollen *	☐ Yes ☐ No

Gums and Oral Tissue

Healthy	Changes	Unhealthy	Dental Referral
☐ Moist, pink, smooth, no bleeding	☐ Dry, shiny, rough, red, swollen, sore, one ulcer/ sore spot, sore under dentures	☐ Swollen, bleeding, ulcers, white/ red patches, generalised redness under dentures *	☐ Yes ☐ No

Saliva

Healthy	Changes	Unhealthy	Dental Referral
Moist tissues watery and free flowing	Dry, sticky tissues, little saliva present, resident thinks they have a dry mouth	Tissues parched and red, very little/no saliva present, saliva is thick, resident thinks they have a dry mouth *	☐ Yes ☐ No

Natural Teeth

Healthy	Changes	Unhealthy	Dental Referral
No decayed or broken teeth or roots	1-3 decayed or broken teeth/ roots, or teeth very worn down	4 or more decayed or broken teeth/ roots or fewer than 4 teeth, or very worn down teeth *	☐ Yes ☐ No

Dentures

Healthy	Changes	Unhealthy	Dental Referral
No broken areas or teeth, worn regularly, and named	1 broken area or tooth, or worn 1-2 hours per day only or not named	1 or more broken areas or teeth, denture missing /not worn, need adhesive, or not named *	☐ Yes ☐ No

Oral Cleanliness

Healthy	Changes	Unhealthy	Dental Referral
☐ Clean and no food particles or tartar in mouth or on dentures	☐ Food, tartar, plaque 1-2 areas of mouth, or on small area of dentures	☐ Food particles, tartar, plaque most areas of mouth, or on most of dentures *	☐ Yes ☐ No

Dental Pain

Healthy	Changes	Unhealthy	Dental Referral
No behavioural, verbal or physical signs of dental pain	Verbal &/or behavioural signs of pain such as pulling at face, chewing lips, not eating, changed behaviour.	Physical pain signs (swelling of cheek or gum, broken teeth, ulcers), as well as verbal &/or behavioural signs (pulling at face, not eating, changed behaviour) *	☐ Yes ☐ No

*** Unhealthy signs usually indicate referral to a dentist is necessary**

Assessor Comments

ORAL HEALTH RELATED QUALITY OF LIFE

ORAL HEALTH IMPACT PROFILE (OHIP)

- Slade 1997: 14 questions covering 7 domains

Dimension	Question	Weight
Functional limitation	Have you had trouble *pronouncing any words* because of problems with your teeth, mouth or dentures?	0.51
	Have you felt that your *sense of taste* has worsened because of problems with your teeth, mouth or dentures?	0.49
Physical pain	Have you had *painful aching* in your mouth?	0.34
	Have you found it *uncomfortable to eat any foods* because of problems with your teeth, mouth or dentures?	0.66
Psychological discomfort	Have you been *self-conscious* because of your teeth, mouth or dentures?	0.45
	Have you *felt tense* because of problems with your teeth, mouth or dentures?	0.55
Physical disability	Has your *diet been unsatisfactory* because of problems with your teeth, mouth or dentures?	0.52
	Have you had to *interrupt meals* because of problems with your teeth, mouth or dentures?	0.48
Psychological disability	Have you found it *difficult to relax* because of problems with your teeth, mouth or dentures?	0.60
	Have you been a bit *embarrassed* because of problems with your teeth, mouth or dentures?	0.40
Social disability	Have you been a bit *irritable with other people* because of problems with your teeth, mouth or dentures?	0.62
	Have you had *difficulty doing your usual jobs* because of problems with your teeth, mouth or dentures?	0.38
Handicap	Have you felt that life in general was *less satisfying* because of problems with your teeth, mouth or dentures?	0.59
	Have you been *totally unable to function* because of problems with your teeth, mouth or dentures?	0.41

* Responses are made on a 5-point scale, coded 0=never, 1=hardly ever, 2=occasionally, 3=fairly often, 4=very often. Within each dimension, coded responses can be multiplied by weights to yield a subscale score.

GERIATRIC ORAL HEALTH ASSESSMENT INDEX (GOHAI)

- 1990's: 12-items
- Physical, psychosocial and pain/discomfort domains

Item In the past three months…
1. How often did you limit the kinds or amounts of food you eat because of problems with your teeth or dentures?
2. How often did you have trouble biting or chewing any kinds of food, such as firm meat or apples?
3. How often were you able to swallow comfortably?
4. How often have your teeth or dentures prevented you from speaking the way you wanted?
5. How often were you able to eat anything without feeling discomfort?
6. How often did you limit contacts with people because of the condition of you teeth or dentures?
7. How often were you pleased or happy with the looks of your teeth and gums, or dentures?
8. How often did you use medication to relieve pain or discomfort from around your mouth?
9. How often were you worried or concerned about the problems with your teeth, gums, or dentures?
10. How often did you feel nervous or self-conscious because of problems with your teeth, gums, or dentures?
11. How often did you feel uncomfortable eating in front of people because of problems with your teeth or dentures?[2]
12. How often were your teeth or gums sensitive to hot, cold, or sweets?[3]

ORAL CARE PLANS

- An Oral Care Plan developed by the dentist following a consult regarding the residents' needs
  - Can be used for residents able to attend a dental clinic, or residents seen on a home visit
- Assists communication with the RACF re: oral health care planning for residents.
- Provides information on a standard preventive care regimen, additional oral care treatment, oral care and changed behaviour and palliative care considerations
- Must be followed by the RACF once incorporated into the resident's overall care plan

Oral Health Care Plan

Print from CD

Oral Health Assessment (OHA) Date: _____ (OHA) Review Date: _____

Oral Health Care Considerations

Problems: ☐ difficulty swallowing ☐ difficulty moving head ☐ difficulty opening mouth ☐ fear of being touched

Interventions: ☐ bridging ☐ chaining ☐ hand over hand ☐ distraction (activity board/toy) ☐ rescue

☐ other _____

Daily Activities of Oral Hygiene

	Morning	After Lunch	Night
Natural Teeth ☐ Yes ☐ No **Cleaned by:** ☐ Self ☐ Supervise ☐ Assist **Replace toothbrush** (3 monthly) Date:	☐ clean teeth, gums, tongue	☐ rinse mouth with water ☐ antibacterial product (teeth & gums)	☐ clean teeth, gums, tongue
Denture ☐ Full ☐ Partial ☐ Upper ☐ Lower **Inserted / removed by:** ☐ Self ☐ Staff **Cleaned by:** ☐ Self ☐ Supervise ☐ Assist	☐ clean teeth, gums, tongue ☐ brush denture	☐ rinse mouth with water ☐ rinse denture ☐ antibacterial product (gums)	☐ clean teeth, gums, tongue ☐ brush denture with mild soap ☐ leave dentures out overnight ☐ soak denture in cold water **Disinfect dentures** (weekly) Specify day:

Oral Hygiene Aids

☐ soft toothbrush ☐ modified toothbrush ☐ toothbrush grip ☐ denture brush ☐ spray bottle (labelled)

Oral Health Care Products

☐ mild soap (denture) _____ ☐ antibacterial product _____ ☐ saliva substitute _____

☐ lip moisturiser _____ ☐ high fluoride (5000 ppm) toothpaste _____

Additional Oral Care Instruction

☐ antifungal gel _____ ☐ denture adhesive _____

☐ interproximal brush ☐ tongue scraper ☐ normal saline mouth toilet

Comments

_____

_____

Check daily, document and report to RN if:

- bad breath
- bleeding gums
- lip blisters/sores/cracks
- tongue for any coating/change in colour
- sore mouth or gums
- mouth ulcer
- swelling of face/mouth
- broken / lost denture
- difficulty eating
- refusal of oral care
- denture not named
- excessive food left in mouth
- broken teeth

Signed RN: _____ Date: _____

ORAL HEALTH MAINTENANCE

Daily Check, Document and Report to the RN

Lips
- sore corners of mouth (angular cheilitis)

Tongue
- sore tongue (glossitis)
- thrush (candidiasis)

Gums and Tissues
- gum disease (gingivitis)
- severe gum disease (periodontitis)
- oral cancers
- ulcers and sore spots
- sore mouth (stomatitis)

Saliva
- dry mouth (xerostomia)

Natural Teeth
- tooth decay (caries)
- root decay (root caries)
- retained tooth roots

Dentures
- requiring attention
- poorly fitting

Oral Cleanliness
- poor oral hygiene

Changed Behaviour

Residents, especially residents suffering dementia, can behave in a way that makes it difficult to provide oral health care. They may display changed behaviour, such as the following:

- fear of being touched
- not opening the mouth
- not understanding or responding to directions
- biting the toothbrush
- grabbing or hitting out.

Oral Health Care

Establish effective verbal and non-verbal communication.

Develop ways to improve access to the resident's mouth.

Develop strategies to manage changed behaviour.

Use oral aids such as a modified toothbrush or mouth prop.

Use modified oral care application techniques as short-term alternatives to brushing.

Seek GP or dental referral to review oral care.

Toothbrush Alternatives







Modified Soft Toothbrush

A soft toothbrush can be bent to give better access to the mouth.

A forward bent toothbrush can be used to brush the inner upper and lower teeth.

A backward bent toothbrush can be used to retract the cheek, while another brush is used to brush the resident's teeth.

Electric Toothbrush

An electric toothbrush may help residents with limited manual dexterity, due to stroke or arthritis for example, to manage brushing by themselves.

Vibration can be a problem for some residents.

Cost and maintenance can be a barrier.

This type of brush is recommended if the resident is currently using one.

Interproximal Brush

This type of brush is ideal for cleaning the larger spaces between teeth, underneath bridges, around crowns and between tooth roots where gum recession has occurred.

The brush can also be used to apply antibacterial gels between the teeth.

Interproximal brushing does not replace normal toothbrushing. The brushing of teeth, gums and tongue must still take place with a soft toothbrush.

Additional Oral Hygiene Aids





Tongue Scraper

This can be used as an alternative when a toothbrush is not able to clean the surface of the tongue sufficiently; for example, when thrush is present.

Hand Grip

This is useful for residents with reduced grip strength.

Toothpaste Application



Use high fluoride toothpaste (5000 ppm) morning and night.

Only a small pea-sized amount of toothpaste is required.

CLEANING SOMEONE ELSE'S TEETH



Positioning

When the resident requires assistance, try different positions to suit the situation.

Standing in front position

Sit the resident in a chair facing you.

If the resident is in bed you will need to support the resident's head with pillows.

Support the resident's chin with your index finger and thumb, being careful not to place pressure on the resident's throat with your remaining fingers. This is sometimes referred to as a 'pistol grip'.

The thumb holding the chin can be used to roll down and hold the lower lip for better vision and access.

Good eye contact between you and the resident is maintained with this position.

Cuddle Position

Stand behind and to the side of the resident.

Rest the resident's head against the side of your body and arm.

Support the resident's chin with your index finger and thumb, being careful not to place pressure on the resident's throat with your remaining fingers. This is sometimes referred to as a 'pistol grip'.

The thumb holding the chin can be used to roll down and hold the lower lip for better vision and access.

Greater head control is achieved by using this position.

Prepare

- Read resident's care plan
- Environment and set-up
- Timing and routine

Cleaning someone else's teeth

- Introduce yourself
- Explain and communicate throughout
- Familiarise
- Relaxed position
- Position yourself
- Relax mouth
- Introduce brush at corner of mouth
- Remove pouched food and oral debris
- Brush gumline, from front of mouth to back

Helpful Hints

Preparation



It is suggested the resident be positioned in the semi-reclined position to facilitate the examination.

The use of a planet lamp, hands-free light source or torch is recommended to assist in viewing the oral cavity.

Assistance with the recording aspect of the assessment may help to decrease the amount of time required.

Using a Modified Toothbrush



A backward bent toothbrush can be used to retract the cheek and provide better access to the mouth.

Clear plastic toothbrushes are the easiest to bend. Some can be bent (without having to soften the plastic) to a 45 degree angle by simply using your hands.

Others will need to be softened by placing the toothbrush in a cup of hot water. Apply gentle downward pressure on the toothbrush until it bends to a 45 degree angle.

Managing Changed Behaviours





Getting the resident's attention

Touch a neutral place such as the hand or lower arm.

Firstly, focus on building a good relationship with the resident before you start the oral health assessment.

Speak clearly and at the resident's pace giving one instruction at a time.

Mime what you want the resident to do and allow the resident to inspect the items you are going to use.

If the resident walks away allow the resident to perch against a bench or table rather than sit during the assessment.

Counteracting grabbing or hitting out

Approach the resident from the diagonal front and at eye level. By standing directly in front you can look big and are more likely to be grabbed or hit.

If the resident holds onto items you are using and does not let go stroke the resident's forearm in long, gentle rhythmic movements as a distraction and to help relax the resident.

Managing Changed Behaviours (continued)





Counteracting grabbing or hitting out (continued)

If the resident grabs out at you or grabs your wrist, pull back and give the resident space. Ask if the resident is OK. Offer the resident something to hold while you do the oral health assessment.

Think about what may have caused the resident's behaviour. Did something hurt? Was the resident trying to help but the message was mixed?

Improving access to the mouth

If the resident does not open his or her mouth or keeps turning his or her face away try to stimulate the resident's root reflex by stroking the cheek.

If the resident bites the items you are using ask the resident to release and distract the resident with gentle strokes to the head or shoulder, using soothing words.

Improve Access to the Mouth







Overcoming Fear of Being Touched

The resident may respond fearfully to intimate contact when the relationship with you has not been established.

Firstly, concentrate on building up a relationship with the resident. Once you have engaged the resident, gently and smoothly stroke the resident's face. The aim is to relax the resident and create a sense of comfort and safety.

This process may need to be staged over time until the resident becomes trusting and ready to accept oral care.

Bridging

Bridging aims to engage the resident's senses, especially sight and touch, and to help the resident understand the task you are trying to do for him or her.

Undertake this method only if the resident is engaged with you.

Describe the toothbrush and show it to the resident.

Mimic brushing your own teeth so the resident sees physical prompts, and smile at the same time.

Place a brightly coloured toothbrush in the resident's preferred hand (usually the right hand).

The resident is likely to mirror your behaviour and begin to brush his or her teeth.

Chaining

If the resident does not initiate brushing his or her teeth through bridging, gently bring the resident's hand and toothbrush to his or her mouth, describing the activity and then letting the resident take over and continue.

Improve Access to the Mouth (Continued)







Hand over hand

If chaining does not work, then place your hand over the resident's hand and start brushing the resident's teeth so you are doing it together.

Distraction

If the hand over hand method is not successful, place a toothbrush or a familiar item (such as a towel, cushion or activity board) in the resident's hand while you use the other toothbrush to brush the resident's teeth.

Familiar music may also be useful to distract and relax the resident during oral care.

Rescuing

If your relationship with the resident is not working and attempts at oral care are not going well, then tell the resident that you will leave it for now. Ask for help and have someone else take over the oral care.

DOMICILIARY CARE

WHAT IS DOMICILIARY CARE?

- **Domiciliary care** = oral health care and dental treatment carried out in an *environment where a patient is resident* either permanently or temporarily
  - Includes residential care facilities, nursing homes, hospitals, day centres and patient's own homes.

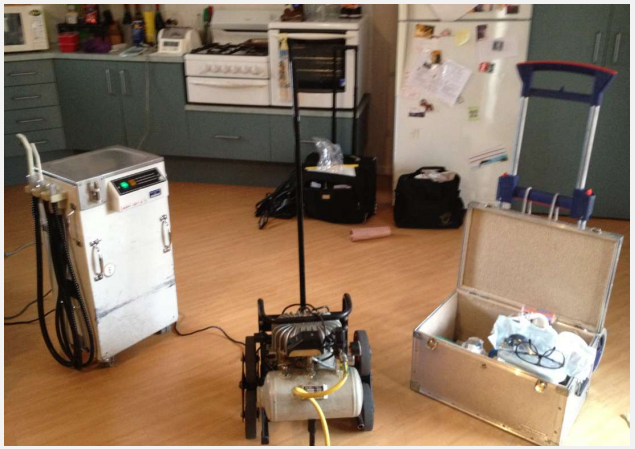
- **Aim** = deliver appropriate oral health care to patients whose circumstances make it impossible, unreasonable or otherwise impracticable for them to receive that care in a fixed clinic, hospital site or from a mobile dental clinic.
  - Though surgery-based care remains the best option for irreversible treatment procedures, where this is not reasonable or possible, patients should not be unduly disadvantaged by having to receive domiciliary oral healthcare.

- **Familiar environment** = reduced anxiety, improved behavioural compliance

DOMICILIARY CARE









KITS

General Kit

- Exam instruments (mirror/probe)
- Portable light
- Mask, face visors, gown/apron
- Patient glasses
- Blueys
- Waste bags
- Sharps disposal
- Dirty instruments hard container
- Disinfectant solution / wipes / hand sanitiser

Administrative Kit

- Identification badge
- Pens, prescription pad
- Forms: medical hx, consent, patient education, post-op instructions, lab slips, referrals
- Diary, appointment cards, patient records

Prosthetics Kit

- Impression material, trays, mixing equipment
- Shade guide, artic paper, pressure relief paste
- Denture fixative, tissue conditioner
- Wax knife, bite gauge, paint scraper, indelible pencil, scalpel
- Heating equipment

Extractions Kit

- Topical, LA, syringes, needles
- Forceps, elevators
- Suture kit and sutures
- Gauze bite packs
- Haemostatic agents
- Dry socket medicament

Cons Kit

- Topical, LA, syringes, needles
- Restorative and temporary dressing materials
- Handpieces, burs
- Matrix bands
- Gauze, cotton rolls, Vaseline
- Silver fluoride

Periodontal Kit

- Hand scalers
- Ultrasonic scalers
- Toothbrushes, toothpaste
- Prophy
- Fluoride varnish

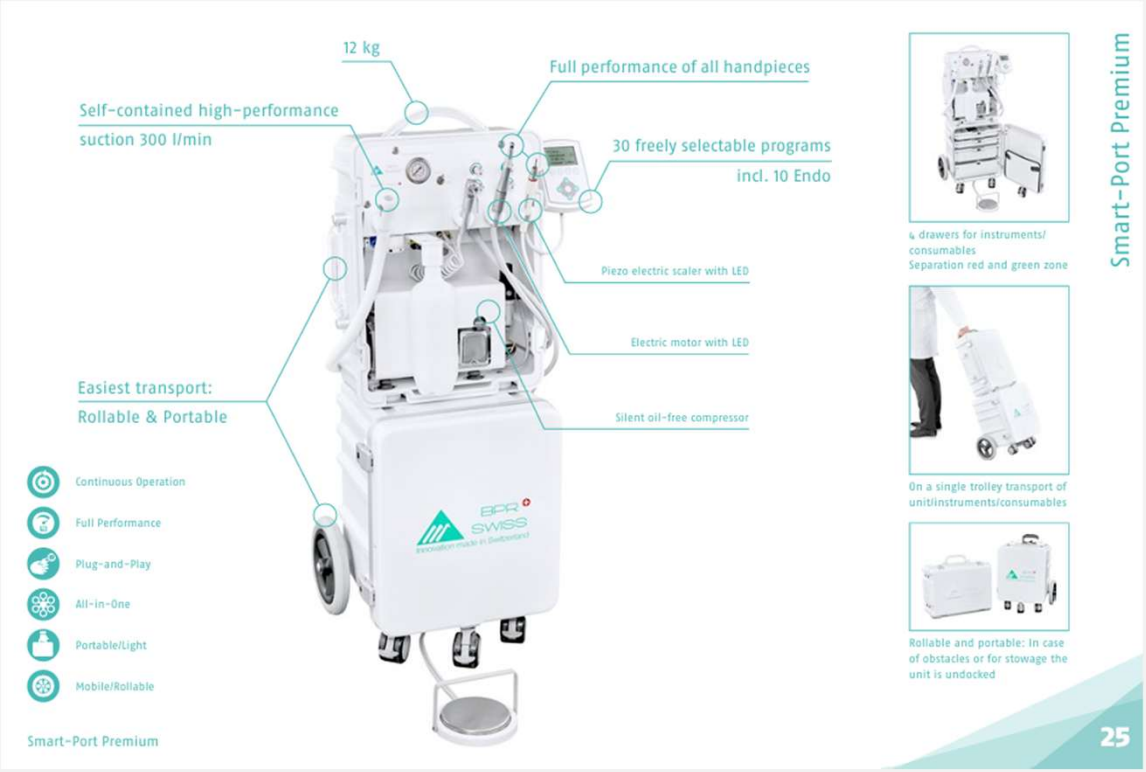
ARRANGING THE APPOINTMENT

- C: Check full address and helpful directions
- A: appointment sent in writing if possible
- M: medical history and consent – need to liaise with relevant people
- P: parking facilities
- I: information about who will be present (eg. carer, relative, neighbour)
- N: name of dentist visiting, provided for security
- G: gain access to any special instructions/requirements (eg. collect key form neighbour, dog barks but does not bite, etc)

PROCEDURES

- **Initial visit**
  - Clinical assessment
  - Find out if appropriate site for care (environmental risk assessment)
  - Risk assessment
- **Treatment plan and consent**
  - Further investigations required?
  - Need to liaise with medical practitioner?
  - Cost, number of visits
  - Risks:benefits of treatment
- (**Emergency treatment** may be able to be performed on the day if able to gain consent, appropriate environment, and no medical concerns)
- **Return to base**
  - Clinical waste vs non-clinical waste disposal
  - Equipment processing
  - Notes, send forms, follow-up admin
  - Chase consents
- **Plan subsequent treatment visit**

PORTABLE EQUIPMENT



BPR Swiss Smart Port



BPR Swiss Combi Cart

PORTABLE EQUIPMENT





NSK Viva Ace

PORTABLE EQUIPMENT





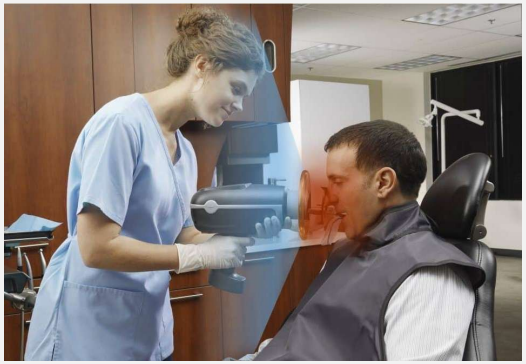
NSK Dentalone

RADIOGRAPHY

- Occlusal films for anterior periapical films
- Hand held devices (e.g. NOMAD)







THANK YOU!

Any questions?



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