Oral Health and an ageing population
The Challenge!

- Commonwealth Dental Association
- Cape Town 2012
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- Consultant in Special Care Dentistry
- South Wales – UK
- CDA Vice President – Europe
Objectives

- Demographical Changes in global older population
- General effects of ageing on oral health
- Disability and Oral Health in older people
- Global initiatives in relation to oral health and older people
‘The world is on the brink of a demographic milestone’

Global Health and Ageing – 2011

WHO/US National Institute of Ageing
The number of people aged 65 and older

524 million in 2010

1.5 billion in 2050

Highest increase in developing countries
Population projections younger people and older people as a percentage of global Population 1950 -2050

Source – UN World Population Prospects 2012 revision
Changes within the older population

- Improvement in life expectancy in those over 80
Infections v. noncommunicable disease

- Balance has changed
- Less infections and acute and parasitic diseases
- Changes in lifestyle
- More chronic heart disease, cancer, diabetes and dementia.
Effect of good child health

- Links between early life and health in older age
- Implications for low and middle income countries
- Older people at higher risk of health problems in older age
Speed of change

- Developed nations change has happened over many years
- Developing countries change is rapid and they will need to adapt quickly

An Ageing world; 2008 – National institute on aging and US Census Bureau 2009
Senior Tsunami!!
iADH - Melbourne 2012

☐ Prof Kokinoki from Japan.

☐ Almost 1 in 4 in Japan is 65 or older
☐ 30 million older people
☐ Most have chronic health problems
☐ 16% are disabled (about 5 million older that 65)
Raises questions?

- Will ageing mean long periods of good health?
- Or illness disability and dependency?
- What are the effects on healthcare and social costs?
- Different for low income countries?
Systems and Infrastructure?

- Need to adapt quickly
- Health and social care models?
- Challenge to some national infrastructures
Demography of Disability

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Prevalence of Disability</th>
<th>Common causes of disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 16 years</td>
<td>4.3%</td>
<td>Genetic/congenital disorders</td>
</tr>
<tr>
<td>16-49 years</td>
<td>9.65%</td>
<td>Trauma/neurological disorders</td>
</tr>
<tr>
<td>50-64 years</td>
<td>26.6%</td>
<td>Musculo-skeletal, cardio-respiratory &amp; neurological disorders</td>
</tr>
<tr>
<td>65+ years</td>
<td>51.5%</td>
<td></td>
</tr>
</tbody>
</table>
Older age and disability
Heart disease, Stroke and diabetes

- Heart disease and hypertension, stroke and diabetes – leading culprits in overall burden of disease in high income countries.
- Now increasing in low and middle income countries

- More sedentary lifestyles
- Less physical activity
- More fatty foods
- More smoking related disease.
Older Age and Disability Cancer

- 13 million new cancer cases 2009
- 17 million new cancer cases 2020
- 27 million new cancer cases 2030
- By 2020 half new cases in the world in Asia
Older age and disability

Dementia

- Dementia risk increases with age
- Alzheimer's most common
- 7% of people 65 and over
- Prevalence doubles for every 5 years after 65

Organisation of Economic Cooperation and Development health Data 2010
Older age and Disability Dementia

- Complex disease
- Living arrangements
- Mounting financial and social impact
- Especially in less developed countries
- 2/3 of those with dementia
Growth of numbers of people with dementia in high–income and low and middle income countries

- Growth much greater in middle and lower income countries

SOURCE: Alzheimer's Disease International
Older Age and Disability
Neurological disorders

- Parkinson’s disease
- Multiple Sclerosis
- Burden of neurological disorders underestimated
- Lack of training of professionals
- Lack of Access to medications

WHO Global Burden of Disease Study 2004
Older Age and Disability
Musculo skeletal

- Arthritis – over 80% of people over 75 have clinical signs of OA
- Osteoporosis and fractures
What are the oral health issues for older people?

- General problems
- Tooth wear
- Caries – crowns roots
- Tooth fracture
- Loss of vitality
- Tooth loss
- Compromised self care
- Reduced motivation
- Periodontal disease
Prevalence and severity of periodontal disease increases with age

- Repeated episodes of destruction occur over time
- Loss of attachment – mobility and bone loss
- Reduced manual dexterity
- Systemic illness may increase destruction
- Oral factors and medications have adverse effects

Edentulousness later in life

- 65-74 years
  - 15% edentulous

- 75-84 years
  - 30% edentulous

- 85 years
  - 47% edentulous

U.K Adult Dental Survey - 2009
Xerostomia

- Effects of medication
- Difficulty swallowing
- Difficulty speaking
- Problems with dentures
- Impact on quality of life and self esteem
- Severe discomfort
- Increased risk of caries, perio disease and infections
Need for Restorative care

- **65 - 74 year olds**
  - 20.9 teeth
  - 9.5 filled
  - 22% active decay

- **85+ year olds**
  - 14 teeth
  - 6.3 filled
  - 27% active caries

U.K Adult Dental health Survey 2009
<table>
<thead>
<tr>
<th>PARKINSON’S DISEASE</th>
<th>SYMPTOM - IMPAIRMENT</th>
<th>IMPACT ON ORAL HEALTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscle Rigidity</td>
<td></td>
<td>Ability to self care</td>
</tr>
<tr>
<td>Random Movements</td>
<td>Impaired Manual Dexterity</td>
<td></td>
</tr>
<tr>
<td>Tremor</td>
<td>Mobility</td>
<td>Access to Dental Services</td>
</tr>
<tr>
<td>Impaired Manual Dexterity</td>
<td>Dysphagia</td>
<td>Increased risk of aspiration infections associated with poor oral hygiene</td>
</tr>
<tr>
<td>Mobility</td>
<td>Decreased quality and quantity of saliva</td>
<td>Xerostomia – increased risk of caries, oral infections, perio disease, denture problems, burning mouth</td>
</tr>
<tr>
<td>Decreased quality and quantity of saliva</td>
<td>Weak oral musculative</td>
<td>Difficulty with dentures, eating/drinking</td>
</tr>
<tr>
<td>Weak oral musculative</td>
<td>Hyper-salivation and posture</td>
<td>Drooling and difficult to access mouth</td>
</tr>
<tr>
<td>Hyper-salivation and posture</td>
<td>Medication - Levadopa</td>
<td>Salivary disturbance and taste dysfunction</td>
</tr>
</tbody>
</table>
# DEMENTIA

<table>
<thead>
<tr>
<th>SYMPTOM - IMPAIRMENT</th>
<th>IMPACT ON ORAL HEALTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive skills</td>
<td>Ability for self care&lt;br&gt;Denture wearing skills</td>
</tr>
<tr>
<td>Memory Loss</td>
<td>Lost Dentures&lt;br&gt;Support for oral care</td>
</tr>
<tr>
<td>Dependence</td>
<td>Access to dental care and reliance on others for oral care</td>
</tr>
<tr>
<td>Non-Compliance</td>
<td>Perio disease – refusal of care (issues around consent)</td>
</tr>
<tr>
<td>Eating Difficulties</td>
<td>High sugar diet - caries</td>
</tr>
<tr>
<td>Communication</td>
<td>Ability to express pain or discomfort</td>
</tr>
<tr>
<td>Personality change – may be dementia</td>
<td>Difficulty in diagnosis</td>
</tr>
</tbody>
</table>

- **Non-Compliance**
  - Perio disease – refusal of care (issues around consent)
Reducing ability to manage personal care

- Inability to manage oral homecare
- Dental neglect
- Poor nutritional uptake – food supplements
- Loss of quality of life
Increase in clinical time required to manage preventable disease

- Solutions??
- Skill mix
- Plaque control
- Sugar intake
- Fluoride and chlorhexidine
- Tooth mousse
- Water fluoridation?
What is there to help us!?
Global oral health of older people - Call for public health action
Poul Erik Petersen et al – Community Dental Health 2010, 27 Supp

- Survey of CDOs and World Health data bank
- Experience of oral problems is high in older people esp in Low income countries whilst access to care is also poor
- Services are available in developed countries but not taken up by older people
Global oral health of older people
- Call for public health action

Poul Erik Petersen et al – Community Dental Health 2010, 27 Supp

- Tooth brushing less common in older people
- Traditional self care is prevalent in Africa and Asia
- Fluoridated toothpaste infrequently used in developing countries
- Lack of Oral Health promotion programmes targeting older people
- Lack of policy relating to older people
W.H.O. Centre for Development

- Oral Health in Ageing Societies
  - Integration of Oral Health and General Health

- W.H.O. Geneva 2006
Recommendations for Action

- Policy development for oral health – general health
  - Goals and targets
  - Life Course perspective

- Health systems capacity building
  - Settings for health
  - Integrated chronic disease prevention and health promotion
  - Common risk factors
  - Community orientation and outreach care
Recommendations for Action

- Oral healthcare delivery
  - Target Groups and age friendly services
  - Training for service and care

- Research for oral health, general health and quality of life
  - Research priorities
  - Oral health information systems
Strategy Documents

Gerodontology

Meeting the Challenges of Oral Health for Older People: A Strategic Review

Published on behalf of The Gerodontology Association

Commissioned and funded by the Department of Health

Better Health in Old Age

Report from Professor Ian Philp, National Director for Older People's Health to Secretary of State for Health
Guidelines for better oral health care

www.bsg.org.uk

www.dh.gov.uk
Training packages - Scotland

- Training guide for oral healthcare professionals to deliver training for carers
- 7 units
- Core knowledge
- Practical skills
- Oral health risk assessment
- Careplans and recording daily care
- Dementia and ‘care resistant ‘ behaviour
- CD – learning outcomes

nhs.healthscotland
Training Package
Australia – Department of Health and ageing

- Based on portfolios
- Professional portfolio for GPs and RNs
- Facilitator portfolio for the delivery of the training and education programmes
- Staff portfolio for nurses and care workers

www.health.gov.au
Training Package
Australia

- Committed to Team approach
  - Oral health Assessment
  - Oral health care plan
  - Daily oral hygiene
  - Dental treatment