Geriatric Giants

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February 2008
Mr X, 83 years.

Presents to emergency with “confusion”, found on the floor by a neighbour, incontinent. Family can’t provide care.

PH:
- Minor stroke 5 yrs ago
- Prostatectomy for BPH
- Hypertension

Social:
- Wife died 2 years ago, “no longer the same man”.
- Stopped driving 9 months ago
- Needs help with meals, cleaning, finances
- On 8 medications, but compliance poor

Formulation

Working diagnosis: Acopia

He doesn’t have a genuine acute illness – he doesn’t need a big teaching hospital service

Why isn’t his family looking after him? This looks like a grandpa dump.

Can’t we provide better home care to keep him out of hospital? Where’s his GP, can’t he look after him?

Can’t he be sent straight to a nursing home?

He’ll block an expensive hospital bed for weeks

This is the formulation of a desperate ED RMO
Your future

• Graduation 2010 (age 25)
• Real graduation 2015+ (age 30)
• Clinical practice 2016 - 2050
• Retirement? 2050 (age 65?)
• You die 2070 (age ~ 80)
Expectation of life
Australia 2003

At 25 years
Male: 53.8 yrs
Female: 58.5 yrs

At 65 years
Male: 17.6 yrs
Female: 21 yrs

Age

Life expectancy (years)

0 10 20 30 40 50 60 70 80 90 100

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The University of Queensland
## Life expectancy at birth (2003)

<table>
<thead>
<tr>
<th>Country</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>78</td>
<td>85</td>
</tr>
<tr>
<td>Italy</td>
<td>78</td>
<td>84</td>
</tr>
<tr>
<td>France</td>
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<td>81</td>
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<tr>
<td>United States of America</td>
<td>75</td>
<td>80</td>
</tr>
</tbody>
</table>

*Source: WHO 2005a.*
Life Expectancy

• At birth, beginning of 20\textsuperscript{th} Century:
  – Males = 55; Females = 59
• At birth, 2003:
  – Males = 77.8; Females = 82.8
• At age 65, beginning of 20\textsuperscript{th} Century:
  – Males = 66; Females = 68
• At age 65, 2003, life expectancy:
  – Males = 82.6; Females = 86
• Indigenous Australians at birth, 1991 – 96:
  – Males = 56.9; Females = 61.7
During your career...

You will consult with a lot of older people who are approaching the end of their lives

- A lot of people will die (more than usual)
- They will die when they are old
- Most will want to die later
- They will come to you in an attempt to avoid dying too soon
- If they have cognitive impairment, their relatives will bring them to you
- If you can’t fix their problems, they’ll want you to help reduce discomfort and minimise disability
Two important demographic trends that will change your working life…

• The baby boom generation will reach very old age after 2020
• Age specific mortality rates are declining rapidly, particularly in old age
• There will be more very old patients
• There will be the same number of middle aged people and clinicians
Persons aged 75 years and older
2001 to 2051

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Baby boomers
Anyone born between 1945 and 1964
2001

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2031
The proportion of the population aged 65 years or older (12% in 1997) is projected to increase to between 21% and 22% by 2031.
Projected population profile
Australia 1997 - 2041

Consumers

Taxpayers & paid carers

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Survival curve
Australia 2003

Rectangularisation

% surviving

Females
Males

Age

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Older people are refusing to die…

Source: AIHW National GRIM Books.

Figure 2.2: Trends in death rates, selected age groups, 1907–2004
Life expectancy at 65 years
Survival curve- persons aged 65 yrs
Australia 2003

% surviving

Females
Males

Age

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Causes of death in old age

Males 85+
- Cardiovascular disease 46%
- Cancer 19%
- Respiratory disease 12%
- Genitourinary disease 3.5%

Males 45-64 yrs
- Cancer 43%
- Cardiovascular disease 27%
- Injury and poisoning 10%
- Digestive disorders 5%
Figure 2.20: Death rates for coronary heart disease and cerebrovascular disease, 1950 to 2004

*Note:* Age-standardised to the Australian population as at 30 June 2001.

*Source:* AIHW National Mortality Database.
Profound disability restriction
Australia 1998

Source: ABS 1999b: 15
Causes of disability in old age

- Arthritis
- Hearing disorders
- Hypertension
- Heart disease
- Stroke
- Visual disorders
- Back problems


Figure 2.12: Prevalence rate of health conditions (based on all conditions) among people with a profound or severe core activity limitation, by age, 2003

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Prevalence of dementia

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Institutionalisation

- Age group: 65-69, 70-74, 75-79, 80-84, 85+
- Graph showing percentage of severe disability and institutionalisation across age groups

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Life Time Risk of Nursing Home Care

Source: AIHW, Australia’s Welfare 1997
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O/E:
- Features of delirium (restless, poor attention, hallucinating)
- Dehydration: tachycardia, dry mouth, low BP
- Subtle R sided UMN signs
- CT brain, multiple white matter infarcts
- Urine exam: e-coli infection

Diagnoses:
- Delirium, recent cerebral infarct, UTI, dehydration

Background issues:
- Vascular dementia (mild)
- Bereavement
- Limited social support

Plan:
- Treat reversible medical problems
- Provide adequate support & time for functional recovery, reassess
- Consider carefully cognitive function, judgement, insight, safety
- Negotiate with family and patient, consider available social resources
- Evaluate home setting
- Construct “transition” care plan
- Consider medium to long term possibilities
The Geriatric Giants

• Falls
• Immobility
• Incontinence
• Confusion

• Each of these “syndromes” is associated with a differential diagnosis, and a logical process for determining the underlying cause
Special considerations for older patients

• Homeostatic thresholds are low
  – Minor illnesses, injuries can have significant consequences

• Presenting symptoms may be non-specific
  – High index of suspicion required

• Cognitive function is often impaired
  – Need to use co-lateral information

• Recovery from acute illness may be slow
  – Patience and transitional arrangements often required

• Solutions often are multi-dimensional
  – Multiple actions may produce useful gains
Finally...

- Geriatric medicine is an important general and specialist discipline
- Increasingly relevant to all areas of adult medicine
- Work is rewarding, but quick fixes and miracles are rare
- Specialist geriatric medicine is already the 2\textsuperscript{nd} most popular internal medicine specialty