



**SCHOOL OF PUBLIC HEALTH
THE UNIVERSITY OF HONG KONG**

香港大學公共衛生學院

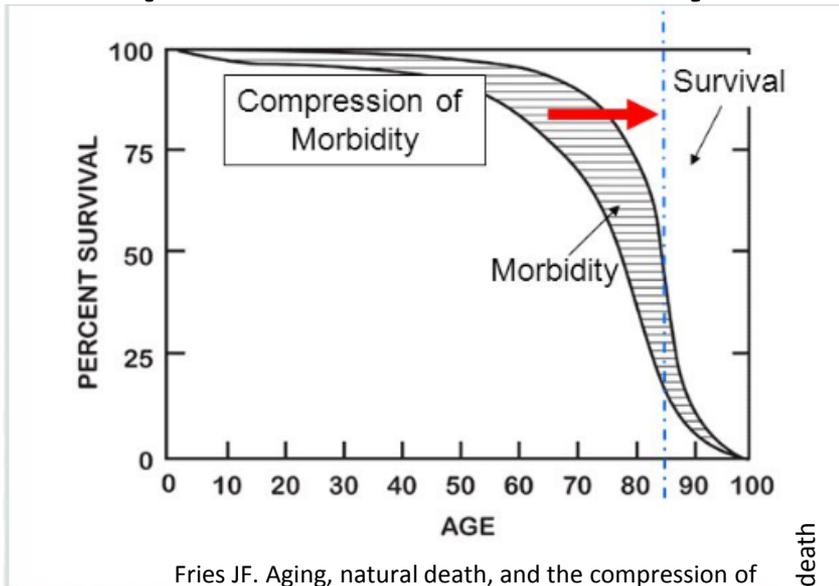
Health System Response to Long-term Care Needs

To discuss the specific health needs of older populations, such as chronic disease management and dementia care. Insight on the needs of the elderly in terms of their health conditions will be particularly useful to understand how a health system must be positioned to respond in terms of these specific needs

CM Schooling, PhD
The University of Hong Kong

Health needs of older populations

Compression of morbidity

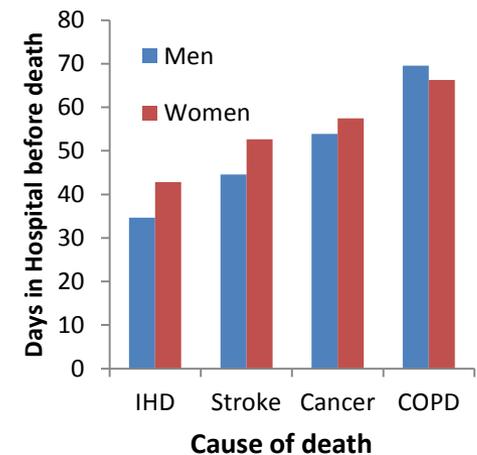


- Ideal situation – minimal morbidity before death and equity by socio-economic position

Likely related to

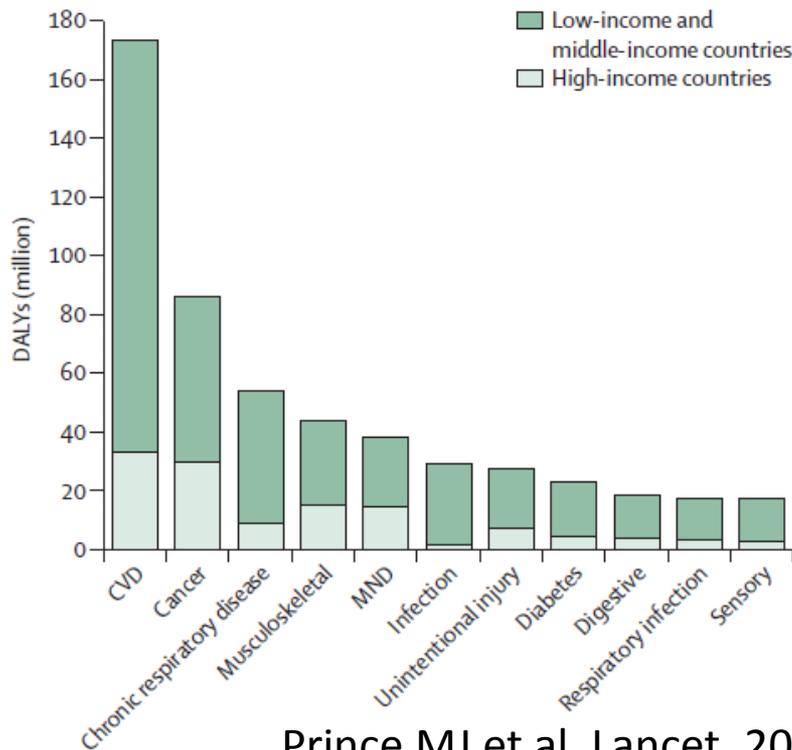
- Inter-generational influences
- Early life conditions
- Adult environment and lifestyle
- Provision of care
- Cause of death

Days in hospital before death



Health conditions in older people

Leading contributors to global disability adjusted life years (DALYs) in people aged 60+ years in 2010



- 23% of the global burden of disease arises in older people (60+ years)
- Chronic non-communicable diseases account for most of the burden
- Diseases vary in their implications for long-term care and costs
 - Dementia worldwide costs estimated to be 1% of the global gross domestic product in 2010

Contributors to disability in low to middle income countries

Major contributors to disability in people aged 65+ years

- Dementia
- Stroke
- Paralysis or weakness of limbs
- Arthritis or rheumatism
- Depression
- Eyesight
- Stomach/intestinal problems

Sousa RM, et al . Lancet. 2009



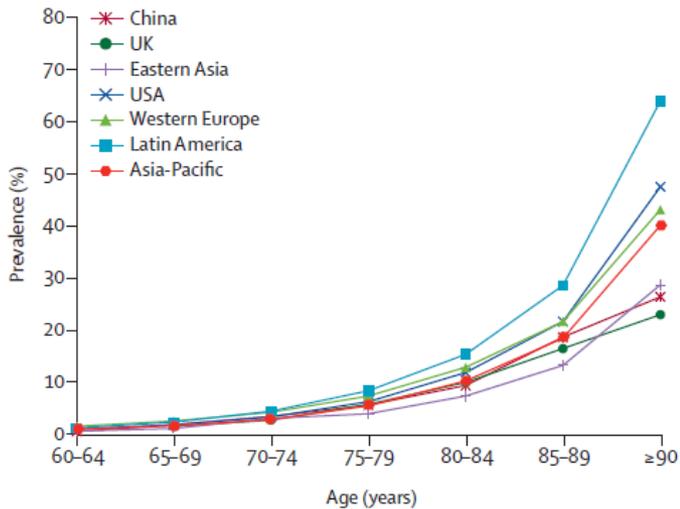
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Dementia

Dementia

Age specific prevalence



- 50-70% Alzheimer's disease, 25% vascular dementia
- Usually higher in women
- Time trends in incidence unclear
- No well-established association with any modifiable risk factor

Alzheimer's disease

Potentially causal factors (or not)

Using genetically predicted exposures (Mendelian randomization)

Protective	Unrelated
Low LDL-cholesterol	Body mass index
Low Vitamin D	Leptin
Insulin sensitivity	Coffee
High blood pressure	Diabetes
	Education

Treatment development

- Many recent trial failures
 - None at the moment
- Paradigm being rethought

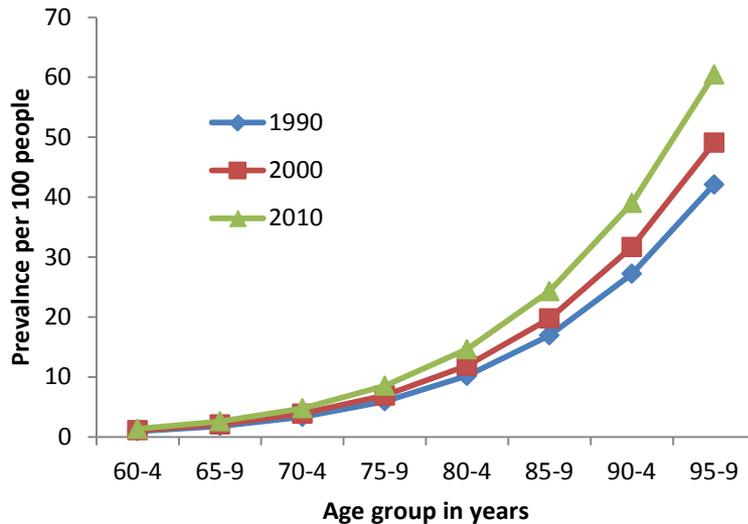


Winblad B, Lancet Neurology 2016



Dementia trends in China

Prevalence



- About 80% Alzheimer's disease
- Dementia about 1.65 times more common in women than men, Alzheimer's disease 2.37 times more common in women than men
- Dementia more common in urban dwellers

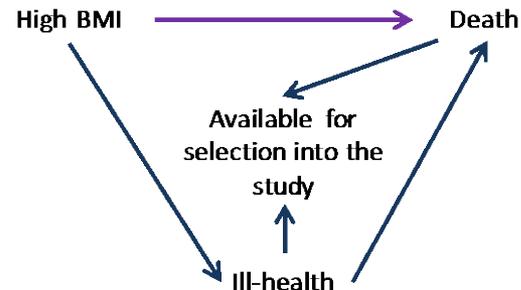
Preventing health needs in older populations

Issues with preventive medical interventions in older people

- Evidence of benefit for interventions in that age group may be limited
- Greater concerns over side-effects
- Paradoxical associations may be observed, such as
 - Higher body mass (BMI) index associated with lower mortality
 - Little effect of smoking

Resolutions

- Increasing number of trials focusing on older people,
 - SPRINT confirmed benefits of intensive blood pressure lowering in older people
 - Williamson JD et al, Intensive vs Standard Blood Pressure Control and Cardiovascular Disease Outcomes in Adults Aged ≥75 Years: A Randomized Clinical Trial. JAMA. 2016 Jun 28;315(24):2673-82.
- Paradoxes now understood to be survivor or selection bias



The older or sicker the people you recruit into the study the more likely you will get an inverse relation of high BMI with death because those most susceptible to the effects of high BMI are already dead



Issues with medical interventions in older people

Multi-morbidity

- 2+ chronic conditions
- Common in older people
- Leads to
 - Poorer health outcomes
 - Higher mortality
 - Reduced functional status
 - Higher risk of drug-drug interactions
- Requires holistic treatment
- Should perhaps be framed within
 - Healthy cities
 - Age friendly cities

Proven interventions

- To reduce not living at home
 - Geriatric assessment of general elderly people
 - Community based care after hospital discharge
 - Group education and counselling
- To reduce hospital admission
 - Geriatric assessment of elderly people selected as frail
 - Community based care after hospital discharge

Beswick AD et al, Lancet. 2008



Thank you

Questions