### Frailty and disability in Hong Kong & Asia

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### Motivation

- A chapter focusing on Hong Kong in the 'Handbook on Ageing and old-age in Asia-Pac'.
- Hong Kong (HK SAR) one of the most demographically matured economies in Asia.
- Theme on frailty and old-age disability.
- Draw parallels with rest of Asia.
- Importance of 'health of older adults' in understanding the global ageing burden.

### Outline

### I. Overview of Population Aging in HK

- demographic transition
- epidemiologic transition
- II. Old-age Frailty
  - prevalence in Asia
  - risk factors

### III. Disability among Older Persons

- measures
- prevalence in Asia

#### IV. Care Provision

### (I) Overview HK

Densely populated global trade hub & financial center.

Census & stats dept: share of aged 65+ is 15% in 2014, projected to increase to 36% by 2064.

### ✤ UN data:

- o number aged 65+: 1.1 million in 2015
  → 2.8 million in 2065
- o number aged 80+: 0.3 million in 2015
  →1.4 million in 2065

### **Overview HK**

- Demographic transition over 1960s 2000s.
  - declining infant & childhood mortality.
  - industrialization and urbanization.
  - falling death rates & fertility rates. Rising longevity.
  - enjoyed accelerated economic growth.
  - Now, an aging population.
- Epidemiologic transition
  - Prior to 1960s, leading causes of death were infectious, respiratory, and intestinal diseases.
  - Now, chronic disease & degenerative illness (e.g. cancer, heart diseases, circulatory system diseases)
  - 'diseases of wealth' (Director of Med. & Health Services).

### **Overview HK**



### **Overview HK**

"Old people are commonly seen scouring streets looking for cardboard paper and bottles to recycle, often with their backs badly bent."



# (II) Health & Frailty

Elderly prone to becoming frail as they age:

- "state of increased vulnerability."
- "set of symptoms including weakness, involuntary weight loss, exhaustion, & limited mobility."
- Some frail elderly become chronically ill, disabled, institutionalized, etc.
- ◆ Frail older adults require care and support in various daily tasks → Higher levels of dependency.
- Aged care & LTC is expensive. Weakening of traditional family models in Asia.



#### Prevalence / trends

- Studies measure prevalence of frailty among community-dwelling older adults using established criteria (e.g. deficit model or phenotype model).
- HK/China: proportion of frail elderly in HK and urban Beijing ~12.9% and 12.8%. Only 4.5% in rural Beijing.
- ✤ Japan: 6-9%
- ✤ Korea: 9-16%
- Australia: Women frailer than men. Average frailty levels fell over time. Stochastic aging model.

Sources: Woo et al. 2015; Imuta et al. (2001); Chen et al. (2015); Jung et al. (2014); Fong et al. (2015).

### Frailty Asia

#### **Risk factors**

Older Asian adults have higher risk of frailty if:

- more aged; female; less physically active
- cognitively impaired; visually impaired
- Iower education level
- more emotionally reliant on another person
- more chronic diseases (e.g. diabetes, stroke, heart disease)
- more falls; higher number of functional disabilities
- depressed; rate their health as poor

Cultural- or gender-specific:

- weak grip / upper body strength (esp. Japanese)
- hypertension (esp. Chinese men)

Sources: Woo et al. 2015; Imuta et al. (2001); Ng et al. (2014); Lee et al. (2011); Yukawa and McCormick (2000). •10

# (III) Old-age Disability

- Disability = a physical, mental, or psychological condition that limits a person's ability to undertake daily activities. (N.B.: related but somewhat distinct from frailty)
- measured by:
  - limitations in basic activities of daily living (ADLs. e.g. eating, bathing, dressing, toilet
  - limitations in instrumental activities of daily living (IADLs).

e.g. light housework, shopping for groceries, paying bills, preparing meals.

# **Disability** Asia

#### Across Asia-Pacific

Efforts to gather data on disability at the national level either through large-scale census or household surveys. Also, other small-sample studies.

### Example 1

- Australia: Commonwealth government collect info on people with disability since 1980s.
- 4 levels of severity {mild, moderate, severe, and profound} based on ADL/IADL & amt of help req.
- In 2012: prevalence of profound or severe disability among Australians aged 70-79 is ~ 12-15% (males); 13-21% (females).

# **Disability Asia**

#### Example 2

- o India: Govt of India relies on large-scale census.
- In 2011: 5.4 mil (or 5.2%) persons aged 60+ are disabled (impairments in sight, speech, hearing, movement, or mental).

### ✤ Issues:

- Disability data and prevalence may <u>not</u> be comparable across countries in Asia-Pacific.
- Differences in the conceptualization and definition of disability, mode of data collection, disability severity thresholds, study design, etc.
- Shift to a 'social model of disability' disability as arising from the interaction of a person's functional status with the physical, cultural, and policy <u>environments</u>.

# **Disability** Asia

#### **Recommendations?**

- Provide a supportive physical & social environment for disabled elderly.
- Creation of "age-friendly cities" (WHO).
- Appropriate accommodations and supports.



- ✓ No lifts?
- ✓ Poorly maintained?
- ✓ Cramped interiors?
- ✓ Fire hazard?
- Nearby community facilities?

# (IV) Care provision

### Care for the elderly in Hong Kong:

- Ethnic Chinese, > 90% of population
- Ancestors originating from various regions in Guangdong, China.
- ✤ Traditionally, care for the elderly primarily responsibility of the individual and the family → older parents usually lived with the eldest son & family in three-generational households.
- Aged are cared for by their immediate/ extended family.
- Strong values and practices of 'filial piety'.

Care provision

#### Weakening of familial supports:

- Ifestyles & aspirations changed with economic dev.
- greater emphasis on individual rights & occupational aspirations.
- women's increased participation in employment.
  - proportion of the females aged 15+ with post-secondary education 50% in 1986 → 78% in 2014.
- shifts in living arrangements.
  - preference to live alone, or with spouse only.
  - out-migration of younger people during the 1980s and 1990s following 1997 handover to China.
- 'westernized' value systems.

Sources: Tam and Yeung (1994); Leung (2002); Chow (2006).

### Care provision

#### Recent years:

- Governments and civil society started to assume a greater role in eldercare.
- A number of NGOs provide community and home care services to elders in need.
- Public long-term care services (but screening process).
- Health subsidies.
- Various income supports.
- Encourage lifelong learning.
- Extension of productive working lives.

# Thank you for your kind attention.

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