



# **Culture and Dementia**

## **From Diversity to Partnership**

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# Culture

The ideas, customs, skills, arts, etc.  
of a given people in a given period



# Population Ageing

World Population --- 6.1 billion

- 80% live in developing countries
- Average life expectancy in developing countries: 41 years in 1950 → 62 in 1990 → 70 in 2020
- By 2020, no. of people aged 60 or above > 1000 million, 70% in developing countries



Europe --- 20%  $\geq$  60 years

25% by 2020

oldest region in the world


By 2020 --- Japan is “oldest country”, 31%  $\geq$   
60 years

23% in N America

17% in East Asia

12% in Latin America

10% in S Asia



	<b>Nigeria</b>	<b>New Zealand</b>
Under 15	44%	22.5%
65+	3%	11%
Life expectancy	52	77.8

Year 2000



## **Dementia – a Worldwide problem**

In 2000, 18 millions have dementia.

In 2025, an estimated 34 millions, with over two-thirds in developing countries



# Epidemiology

Jorm et al (1987) --- prevalence rate doubled every 5 years from age 60 onwards

Alzheimer's Disease > Vascular Dementia in western countries

VaD > AD in Japan, China, Russia



# Incidence of dementia

Jorm & Jolley 1998 – meta-analysis of 23 studies

- East Asian countries, lower incidence of dementia and AD than Europe





## **Developed versus Developing countries**

10/66 Dementia Research Group, Prince,  
2000 – trend for dementia prevalence in  
developing countries lower than those in  
EURODEM

e.g. Studies in Nigeria (Hendrie et al, 1995)  
and India (Chandra et al, 1998) showed  
very low rates of dementia



# Dementia in Nigeria


Hendrie et al, 1995, Ogunniyi et al, 2000

- Survey of 2 communities (Ibadan and Indianapolis) with the same research method
  - Age-adjusted prevalence of dementia and AD, significantly lower in Nigeria Africans than African Americans
- AD > VaD



# Hendrie et al, 2001

- FU after 2 years and 5 years
- Age-standardized annual incidence rates of dementia significantly lower among Nigeria Africans (1.35%) than among African Americans (3.24%) as well as for AD

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- No association between AD and ApoE4 in the Nigerians
  - Marginal association between AD and ApoE4 in African Americans
  - Lower cholesterol and other vascular risk factors in Nigerians
  - ? Environmental factors



# Native Americans

- AD is rare in Cree elderly living on reserves in Manitoba (0.5%), versus 3.5% in Whites

(Hendrie et al, 1993)



# China (Chiu & Zhang, 2000)

- VaD more prevalent in Northern regions
- AD more in Southern regions
- ? Reasons
  - stroke more common in the north
  - diet
  - other life style factors



# Japan

Homma & Hasegawa, 2000

37 community surveys on dementia

Before 1990 VaD > AD

Over 70% of surveys done after 1990 showed  
that AD > VaD

Trend of ↑ in AD



# Differences in prevalence rates of dementia across countries

- Definition of race and ethnicity
- Methodological issues
- Prevalence bias
- Genetic differences
- Environmental effects





# Methodological issues

- Problems in assessment tools and procedures; educational level; linguistic issues; test-taking behavior etc.
- Diagnostic criteria, in particular diagnosis of Vascular dementia
- Other methodological problems



# Prevalence Bias

High mortality rate in developing countries  
(e.g. Katzman et al, 1994)



# Genetic Factors

## APOE $\epsilon$ 4

- Lower APOE  $\epsilon$ 4 =>
  - ? Lower prevalence of AD in Chinese
- Lack of association in sub-Saharan Africa



# Environmental Factors

- Diet
- Vascular disease and risk factors
- Infectious agents
- Chemical neurotoxin
- Lifestyle and behaviour
- Others



# Culture and Dementia Care

- Value system
- Role of elderly in society
- Attitudes towards ageing and dementia
- Utilization of services
- Provision of care
- Carer stress



# Value system and Ageing

The issue of independence

- In USA, emphasis on independence and individualism
- In China, dependency, reciprocity and obligation
- Chinese culture may provide an easier transition to a dependent role in old age



# India

1 billion people

4% of population aged 65+

Life expectancy at birth 61 years

A country with huge diversity

1,652 dialects



# Indian Tradition

- The Hindu culture prepares for old age with the disengagement theory
- Give up one's authority over family and property and devote to self-realization
- Indian social norms – care of elderly by family
- Now states of elderly and traditional care undermined





# India

Patel & Prince, 2001

- Dementia regarded as normal part of ageing not requiring medical care
- Primary health physicians rarely saw patients with dementia
- Family care less reliable than before



# Japan

126 million

17% of population aged 65+

Life expectancy at birth 81



# Japan

- Elderly people prefer to be looked after by relatives
- Eldest son providing care
- Reluctance to use public service
- Carers' concern for others' opinions => ↓  
utilization of public service (Arai et al, 2000)



# China

1.26 billion people

7% of population aged 65+

Life expectancy 71

Ancient history

Huge diversity



# China

- Poor awareness of dementia
- Dementia sufferers frequently not receiving service
- Stigma of mental illness and dementia
- Tradition of family care and filial piety
- Low rate of admission to residential services



# Hong Kong China

6.8 million people

10.5% of population aged 65+

Life expectancy 80

British colony for over 100 years

Returned to Chinese rule in 1997



# Hong Kong

- ↓ in filial piety and respect for elderly
- trend of nuclear family
- crowded living area
- ⇒ high rate of admission to residential facilities
- high level of carer stress

Chung, 2000 –

Preference to use external events to explain occurrence of dementia



# Caregiving Experience

Janevic et al, 2001

- 21 studies
- White caregivers more likely to be spouses
- White caregivers tend to report greater depression than African American caregivers
- Findings in other groups more mixed





# Dementia Care – A Global Challenge

- Particularly in developing countries
- Rapidly rising elderly population
- Breakdown of traditional family support
- Lack of awareness
- Lack of services
- Large rural areas
- Low priority by government



# Culture and Dementia -- Partnership

- Dementia assessment – harmonization
- Collaborative Research – clues to risk factors

10/66 Dementia Research Group

- Training
- Dementia Care  
ADI



■ Courtesy : **Helen Chiu**