

Ageing, health and care across cultures: a 10/66 symposium

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By 2050 the number of people aged 60 and over will have increased to 22 percent of the world's population. Although Japan, European countries and North America have been the first places to experience 'population ageing', the greatest increase in numbers of older people in coming years will be in low and middle income countries. This will lead to a change of priorities for communities, policy-makers and families, with an increased focus in management of chronic diseases, disability and needs for care. The symposium will explore these issues across diverse cultures, using the experiences learned from three different studies that are being carried out by our research group: the 10/66, INDEP, WHO-COPE.

Abstract #1 - The 10/66 Study – The epidemiology of dependence, healthy-life expectancy and frailty

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Introduction: The number of older people is set to increase dramatically worldwide. Demographic changes are likely to result in the rise of frailty and age-related chronic diseases, which largely contribute to years lived with a disability and future dependence. A clearer understanding of the nature of the frailty construct and its relation to adverse outcomes is necessary to inform and prioritise intervention strategies, in particular in low and middle income countries.

Methods: Population-based cohort studies of older adults aged 65 and over were conducted in catchment area sites in Cuba, Dominican Republic, Venezuela, Mexico, Peru, India and China. We estimated the prevalence of disability and dependence, as for 10/66 survey protocol. Disability was measured using the WHODAS-II scale, and dependence using the informant's responses to a set of open-ended questions. Disability and dependence free life expectancies were calculated for each site using the Sullivan's method. Seven frailty indicators; gait speed, self-reported exhaustion, weight loss, low energy expenditure, undernutrition, cognitive and sensory impairment; were assessed to estimate Fried and Strawbridge frailty phenotypes. Mortality and onset of dependence were ascertained after a median of 3.9 years.

Results: The prevalence of dependence increased with age at all sites, with a tendency for the prevalence to be lower in men than in women. Disability-free life expectancy at age 65 ranged from 11.20(SD = 0.21) years in Indian men to 16.54(0.57) in Venezuelan women, whereas dependence-free life expectancy ranged from 12.07(0.21) years in Indian men to 17.35(0.48) in Puerto Rican women. Both frailty phenotypes predicted the onset of dependence and mortality, even adjusting for chronic diseases and disability, with little heterogeneity of effect among sites.

Discussions: The demographic and health transitions will lead to large and rapid increases in the numbers of dependent older people particularly in low and middle income countries. Simply assessed frailty indicators identify older people at risk of dependence and mortality, beyond information provided by chronic disease diagnoses and disability. Prevention and development of long-term care policies and plans should be urgent priorities.