Health and Functional Profile of Elders Who Seek Government Subsidised Long-term Care in Hong Kong: A 19-year Trend Analysis from 2001 to 2019

Introduction: With the rapid ageing of Hong Kong's population, the demand for long-term care services has surged. Government-subsidized long-term care programs play a vital role in supporting these individuals. This study aims to analyze trends in the demographic, social, health and functional profiles of older adults who seek government-subsidized long-term care between 2001 and 2019. A central question is, given the relatively stable provision of government services over the years, how the ageing trend has influenced the profile of applicants during this period.

Methods: This is a secondary analysis of evaluation data collected from a repeated cross-sectional survey of older adults seeking subsidized long-term care services from 2001 to 2019. The dataset includes comprehensive assessments of applicants' health status, functional abilities, and sociodemographic profiles. Through trend analysis and age-sex-cohort-period analysis, we examined changes over time in key health and functional indicators, including physical functioning, cognitive functioning, social functioning, and chronic conditions. Cochran-Armitage tests were utilized to assess temporal trends for each outcome. Subgroup analyses were conducted to compare health profile changes across different age cohorts over the years.

Results: Over the 19-year period, significant deterioration was observed in both physical (measured by the Activities of Daily Living Hierarchy scale) and cognitive functions (measured by the Cognitive Performance Scale) across all age groups. For example, the prevalence of ADL decline increased from 23.2%-34.4% in 2011 to 40%-60% in 2019 (p for trend<0.00001), and the prevalence of moderate to severe impairment rose from 34.9%-42.6% to 48.1%-73.3% (p for trend<0.00001). Our results suggest that while life expectancy has increased, there is no clear evidence that older adults in the same age groups are becoming significantly healthier. In fact, their health profiles have become increasingly diverse. Notably, social functioning declines (communication capability and social interaction) were found with upward trends among those aged 65 and older (10%-12.3% in 2011, 20.3%-34% in 2019, p for trend<0.00001). Conversely, the 60-64 age group did not show this trend but exhibited slightly higher rates of minor to moderate depression and mood symptoms, which decreased less significantly than in older cohorts. Differences in the prevalence trends in chronic conditions were also evident, with younger ages showing steady trends in many diseases (e.g., stroke, diabetes, coronary heart failure, congestive heart failure, and cataract), while older groups experienced a dramatic rise in neurological diseases as ageing. These variations highlight a growing need for person-centred long-term care that addresses the multifaceted needs of community-dwelling older adults.

Research Significance: The findings of this study will provide crucial insights into the evolving health trends of older adults in Hong Kong and their implications for long-term care planning. Understanding whether older adults are experiencing better health outcomes as they age has significant policy implications for resource allocation and program development. Additionally, the study contributes to the broader discourse on healthy ageing and the capacity of long-term care systems as well as healthcare services to meet the needs of an ageing population.