



Editorial

Cancer management among older adults living with dementia: A call to action from Asian perspectives



We are aging, not just as individuals or a country but as a world. The number of people aged 60 years or older will rise from 900 million to 2 billion between 2015 and 2050 and from 12% to 22% of the total global population.¹ It is a fact that the population is aging faster among Asians than in the past and in other ethnic groups. There is an urgent call to respond to major changes in the demographic composition of the world population and health related to fast-growing aging. Although aging is a triumph of our human history, as people are living longer because of better nutrition, sanitation, health care, education, and economic well-being, chronic noncommunicable diseases such as Alzheimer disease (AD) and cancer have been rapidly rising in older populations along with increasing life expectancy.^{2,3} This epidemiological transition results in a major shift in causes of death and disability from infectious diseases to noncommunicable diseases, especially cancer and cognitive impairment.

Rising double burden of cancer and dementia in aging population

The number of new cancer cases is expected to double by 2035 among older adults, from 3.9 to 8.5 million among older males and from 2.8 to 5.7 million among older females.⁴ Similarly, the number of people with dementia worldwide is estimated around 55 million, with more than 60% living in low- and middle-income countries. As the proportion of older people in the population is increasing in nearly every country, this number is expected to rise to 78 million in 2030 and 139 million in 2050.⁵ A systematic review found the prevalence of older adults with cancer and dementia ranges between 0.2% and 46%, where differences are due to a variety of data collection methods and settings among individual studies.⁶

Chronologic age is the predictor of most types of cancer, and a growing body of evidence suggests that biological pathways are involved in cell aging and cancer development.⁷ Cancer is the second leading cause of death in the U.S., especially for those aged 60–79 years, and the probability of developing invasive cancer is 1 in 3 for men and 1 in 4 for women. In addition, many older adults with a previous cancer diagnosis survive to older age. In the same vein, the prevalence of dementia increases strongly with age and the prevalence of this disease occurs across all ethnicities.^{8,9}

The burden of AD in Asia is even more daunting because it has a more rapidly growing elderly population. About 12.7 million Asians had AD in 2006, and 62.9 million Asians are projected to have AD by the middle of the century.¹⁰ With no effective prevention or treatment in sight, AD is an immense burden on our economy, patients, and caregivers. It is reported that total monetary cost of dementia in 2010 was between \$157 billion

and \$215 billion in the U.S. Medicare paid approximately \$11 billion of this cost. Studies suggests that the costs of dementia could more than double by 2040 if the age-specific prevalence rate of the disease remains constant as the nation's population continues to grow older.¹¹

Cancer management in the context of aging and dementia

Empirical evidence consistently informs us that early diagnosis and evidence-based treatment have an effect on longer survival of patients with cancer although there are complications of cancer and side effect of treatments.⁹ Dementia is a chronic disease of aging characterized by progressive cognitive decline that interferes with independent functioning and cancer care management. Studies point to the fact that people living with dementia (1) are more likely to be diagnosed with cancer at a later or unknown stage; (2) receive less treatment; and (3) have poor health outcomes.^{11,12} Studies address the challenges of cancer care among individuals with dementia from the patients' and family caregivers' perspectives as there remains limited understanding of the double burden of cancer and dementia and misunderstanding of dementia as well.¹³ In the same vein, health care providers' perspectives might affect the probability of cancer screening, diagnosis, and treatment decisions for patients living with dementia and consequently, patient and family members are reluctant to disclose the diagnosis status. Diagnostic bias can occur if health care providers or family care providers are likely to overlook cancer symptoms or cancer screening in individuals with dementia and AD and if preexisting cognitive impairment leads to under-diagnoses or late diagnosis of cancer or clinical treatment decision.¹⁴ Ashley and others¹⁵ acclaimed that oncology staff often working without the full picture but with limited medical recording of dementia condition as well as limited dementia training, time, and resources pressures which impeded the individual, flexible cancer care required by people living with dementia.

Conclusions

In European countries, population aging took much longer than Asian countries so that they have had time to cope and develop social security and health care system to meet the needs of the growing number of cancer and dementia cases among the aging population. Thus, the looming question is how Asian countries will be looking after this double burden in their aging population. Questions about social security and health care expenditure on the increasing health care of the aged are pertinent as aged population become relatively heavy users of primary health care, and secondary and tertiary health care too. This

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phenomenon of the double burden of aging populations requiring health care providers, especially the nursing discipline, to advance knowledge development to address the challenges of a rapidly increasing patient population with both cancer and dementia. Yet little is known about the effect of dementia on cancer screening, treatment, and outcomes, and no guidelines exist. Thus, until breakthroughs are made in prevention or curative treatment, cancer and dementia will constitute as an increasing challenge to health care systems worldwide.

Nonetheless, we know that population aging is happening much more quickly than in the past in the Asian Pacific region and this note attempts to capture the current situation of the “double burden” challenges and provide some pointers on how some of the main issues need to be identified and to be addressed by researchers, educators, practitioners, and health policy makers. Further research and community need assessments are needed to better understand the impact of cancer and dementia on aging population health and to support and enable patients, caregivers, and health care providers, especially oncology nurses, to make evidence-based informed cancer management decisions for aging populations. Given poor cognitive status of individuals living with dementia and their inability to participate in informed cancer screening and cancer treatment decision-making, the influence of nurses on cancer management will increase. I hope this article will be of interest to the broader health care community and may help stimulate further debate, research, and policies on this crucial issue.

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