

Review Article

Health Care in Aged Population: A Global Public Health Challenge

Md. Shahidur Rahman¹

Abstract:

Health care and health care delivery systems will be burdened by growing number of ageing population and is going to be the next global public health challenge. Advances in medicine and socioeconomic development have substantially reduced mortality and morbidity. As a result number of aged is increasing with age related morbidity. These demographic and epidemiological changes, coupled with rapid urbanization, globalization, and accompanying changes in risk factors and lifestyles, have increased the prominence of chronic conditions.

Health systems need to find effective strategies to extend health care and to respond to the needs of older adults. The goal of ensuring healthy lives and promoting wellbeing for everyone at all ages cannot be achieved without attention to the health of older adults. With an increasingly large proportion of this population living in low-income and middle-income countries, this will have implications worldwide. This literature based review intends to explore the spectrum of global challenge in geriatric health care.

Keywords: Health care; aged population; global public health challenge.



DOI: <https://doi.org/10.3329/jom.v20i2.42010>

Copyright: © 2019 Rahman MS. This is an open access article published under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited, is not changed in any way and it is not used for commercial purposes.

Received: 11 January, 2018;

Accepted: 19 June, 2018

Introduction:

The greatly increased expectancy of survival into old age is one of humanity's major achievements. To the contrary, worldwide population ageing and concomitants increase in public spending on health and social care are seen as a threat to worldwide economic stability in the 21st Century. By 2050, 21.1% of the world population will be 60 years or older, and 80% of this demographic group will live in low-income and middle-income countries, compared with about two-thirds at present. During the same period, global life expectancies are predicted to rise, reaching 83 years in high-income regions and 75 years in low-income and middle-income regions by 2045–50; when compared with life expectancy figures for 2010–15, the gap between life expectancies in more developed and less developed world regions is expected to narrow.¹ This growth in the older population is taking place in parallel with increasing inequalities in income, disparities in access to health care

and social-support systems, and widening health gaps as a result of complex patterns of disease burden and globalization of health risks. In most developing countries, these issues are compounded by a lifetime of accumulated health risks associated with poverty and inadequate access to health care. If the ageing populations remain productive and healthy, this would be blessings to Medicare innovations but if elderly people lives longer lives with profound morbidity this would incur a global public health challenge.

Compression or expansion, of morbidity:

The compression of morbidity hypothesis posits a situation for which the age of onset of morbidity is delayed to a greater extent than life expectancy rises, thereby compressing morbidity into a short period at a late age.² The expansion of morbidity hypothesis maintains the opposite, that increases in life expectancy are matched or exceeded by added periods of morbidity.³ Data from the Global Burden of Disease 2010 study shows that from 1990 to 2010, as life expectancy raised healthy life expectancy increased more slowly, and little progress was made in the reduction of the non-fatal health effects of diseases.⁴ Data suggest that although severe disability-free life expectancies might have decreased in some high-income countries during the past four decades, total disability-free life expectancy has stagnated.⁵

1. Professor of Physical Medicine and Rehabilitation, Bangabandhu Sheikh Mujib Medical University, Dhaka

Corresponding author: Prof. Md. Shahidur Rahman, Professor of Physical Medicine and Rehabilitation, Bangabandhu Sheikh Mujib Medical University, Dhaka. Email: shahidurpmbd@gmail.com.

Subjective wellbeing:

The notion that impaired subjective wellbeing is associated with increased risk of physical illness is not new; established research has linked depression and life stress with premature mortality, coronary heart disease, diabetes, disability, and other chronic disorders.⁶ Positive subjective wellbeing is a protective factor for health.⁷ Prospective epidemiological studies⁸ suggest that positive life evaluations and hedonic states such as happiness predict lower future mortality and morbidity. Moreover, as Steptoe and colleagues⁹ point out in their paper, the relation between health and subjective wellbeing is bidirectional. Older adults with chronic illnesses are likely to have reduced wellbeing. Subjective wellbeing is predictive of longer survival.

Global burden of diseases:

We focused our analysis on trends in functioning in older adults because the review by Prince and colleagues¹⁰ addresses the issue of trends in chronic diseases in far greater detail. An analysis of data from the Global Burden of Disease study⁴ shows that nearly a quarter of all disease burden globally is carried by those aged 60 years and older, and that the per person burden is higher in developing countries, driven mainly by cardiovascular and respiratory diseases, and sensory impairments. The situation in low-income and middle-income countries is much less studied, with very few data available. Delineation of the path of health and morbidity in old age has important implications for public health and the economy in terms of aspects of medical spending¹¹ planning of social programs, prediction of trends in the workforce, and the social patterning of poverty.¹²

Ageing population and sustainable development goal:

Researchers of one review concluded that the issue of whether rises in life expectancies across the world, especially in oldest old people aged at least 80 years, have been accompanied by a postponement of disability, is still open,¹³ As the world population continues to age, age related concerns should be incorporated into the post-2015 United Nations development agenda and sustainable development goals. This brief summarizes current and future trends in population ageing, and their implications for social and economic development.¹⁴ Research suggests that ageing processes are modifiable and that people are living longer without severe disability. This finding, together with technological and medical development and redistribution of work, will be important for our chances to meet the challenges of ageing populations.¹⁵

Health interventions:

Health interventions can focus on improving the functioning of older adults within an integrated people-centered care strategy across the entire continuum of care. As noted in the Comments by Rodriguez-Manas and Fried¹⁶ and Banerjee¹⁷ drawing attention to the identification and management of the health of older adults as they grow frail with many chronic disorders is especially urgent. Bloom and colleagues emphasize in their review that older people have greater health and long-term care needs than younger people, leading to increased expenditure. They are also less likely to work if they are unhealthy, and could impose an economic burden on families and society.¹⁸ As we add increasing years to life, we should also ensure that these years are spent in good health as far as possible, thereby keeping this burgeoning section of the population healthy, with preserved wellbeing.

Daunting Challenges:

These demographic and epidemiological transitions represent a daunting challenge for both developed and developing countries. Health-care systems are focused on the treatment of acute illness, and are poorly adapted to chronic disease and disability. The needs of older persons with multiple chronic diseases are not met, leading to increased risk of deteriorating health, as well as increased health-care use and costs.¹⁹

Achieving Improved Health and Functional Status in Older Persons:

As people live longer, it is important not only that they can access health services, but also that they can access quality services. Home care, most often done by women, remains an unrecognized, yet crucial, pillar of the care for the oldest. Investing in, protecting, and supporting the ageing population and those who care for them are essential prerequisites for the wellbeing of our ageing societies.²⁰ Meeting the challenge of the aging population and responding to the needs of older persons requires a better understanding of aging, frailty, disability, and appropriate interventions. The objectives need to be two-fold: first, a strong emphasis on prevention of chronic disease and promotion of healthy aging in order to delay the onset of disability and dependency; second, appropriate services for older persons when they do develop disabilities.²¹ Both of these objectives will result in decreased burden on individuals, families, and society. Health and social care to provide for the complex needs of older persons with disabilities can improve the well-being of these individuals and their families in a cost-effective manner.²² The challenge then becomes how to translate these objectives and interventions into a coherent system of health and social service in the context of limited resources.

Conclusion:

Interventions that are targeted towards older people, including health promotion, disease prevention, and the entire range of care provision, from primary to palliative care, hold the promise of keeping older adults in good health for longer. However, patterns of limitations in functioning vary substantially between countries and within countries over time, with no discernible explanation. Data from low-income countries are very sparse, and efforts to obtain information about the health of older adults in less-developed regions of the world are urgently needed. We especially need studies that focus on refining measurements of health, functioning, and disability in older people, with a core set of domains of functioning, that investigate the effects of these evolving patterns on the health-care system and their economic implications.

Conflict of interest: None.

References:

1. UN Department of Economic and Social Affairs Population Division. World Population Ageing 2013. New York; 2013.
2. Fries, JF. Measuring and monitoring success in compressing morbidity. *Ann Intern Med.* 2003;139:455–459.
3. Gruenberg, EM. The failures of success. *Milbank Mem Fund Q Health Soc.* 1977;55:3–24.
4. Salomon JA, Wang H, Freeman MK, Vos T, Flaxman AD, Lopez AD, et al. Healthy life expectancy for 187 countries, 1990–2010: a systematic analysis for the Global Burden Disease Study 2010. *Lancet.* 2012;380:2144–2162.
5. Crimmins, EM and Beltrán-Sánchez, H. Mortality and morbidity trends: is there compression of morbidity?. *J Gerontol B Psychol Sci Soc Sci.* 2011; 66: 75–86.
6. Cutler DM. Declining disability among the elderly. *Health Aff (Millwood).* 2001;20:11–27.
7. Chida Y and Steptoe A. Positive psychological well-being and mortality: a quantitative review of prospective observational studies. *Psychosom Med.*2008;70:741–756.
8. Lyubomirsky S., King L. & Diener, E. The Benefits of Frequent Positive Affect: Does Happiness Lead to Success? *Psychological Bulletin*, 2005;131(6):803-855.
9. Steptoe A, Deaton A, Stone AA. Subjective wellbeing, health, and ageing. *Lancet.* 2015; 385(9968):640–648.
10. Prince M, Ferri CP, Acosta D, Albanese E, Arizaga R, Dewey M et al. The protocols for the 10/66 dementia research group population-based research programme. *BMC Public Health.* 2007 Jul 20; 7:165.
11. Freedman, VA and Martin, LG. Contribution of chronic conditions to aggregate changes in old-age functioning. *Am J Public Health.* 2000; 90: 1755–1760.
12. Freedman VA, Schoeni RF, Martin LG, and Cornman JC. Chronic conditions and the decline in late-life disability. *Demography.* 2007;44:459–477.
13. Jang, SN and Kim, DH. Trends in the health status of older Koreans. *J Am Geriatr Soc.* 2010;58:592–598.
14. WHO strategy on people-centered and integrated health services. Draft for Consultation. World Health Organization, Geneva; 2014.
15. Christensen K, Doblhammer G, Rau R and Vaupel JW. Ageing populations: the challenges ahead. *Lancet* 2009; 374: 1196–1208.
16. Rodriguez-Mañas L and Fried LP. Frailty in the clinical scenario. *Lancet.* 2014; (published online Nov 6.) [http://dx.doi.org/10.1016/S0140-6736\(14\)61595-6](http://dx.doi.org/10.1016/S0140-6736(14)61595-6).
17. Banerjee S. Multimorbidity—older adults need health care that can count past one. *Lancet.* 2014; (published online Nov 6.) [http://dx.doi.org/10.1016/S0140-6736\(14\)61596-8](http://dx.doi.org/10.1016/S0140-6736(14)61596-8).
18. Bloom DE., Chatterji S, Kowal P, Lloyd-Sherlock P, McKee M, Rechel B et al. Macroeconomic implications of population ageing and selected policy responses. *Lancet* 2015; 385(9968): 649–657.
19. Bergman H, Karunanathan S, Robledo LG, Brodsky J, Chan P, Cheung M et al. Understanding and Meeting the Needs of the Older Population: A Global Challenge. *Can Geriatr J.* 2013;16(2):61–65.
20. Editorial: Ageing: a 21st century public health challenge? *The Lancet Public Health* 2017;2(7):e297.
21. Bergman H, Beland F, Perrault A. The global challenge of understanding and meeting the needs of the frail older population. *Ageing Clin Exp Res.* 2002;14(4):223–25.
22. Béland F, Bergman H, Lebel P, Clarfield AM, Tousignant P, Contandriopoulos AP, et al. A system of integrated care for older persons with disabilities in Canada: results from a randomized controlled trial. *J Gerontol A Biol Sci Med Sci.* 2006;61(4):367–73.