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Review article

Global geriatric oncology: Achievements and challenges

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ABSTRACT

The aging of the population is a global challenge. The number of older adults is rapidly growing, leading to an increase in the prevalence of noncommunicable diseases associated with aging, such as cancer. Worldwide, older adults account for approximately half of all cancer cases, and this proportion is projected to increase globally. Furthermore, the majority of older adults live in less developed regions, where health systems are generally ill-equipped to provide care for complex chronic conditions. Worldwide, there is paucity of geriatric training, and most of the oncology workforce lacks the skills and knowledge to provide comprehensive care for older patients. Various initiatives aimed at providing adequate clinical care for older adults, increasing the geriatric skills and knowledge of healthcare professionals, and developing geriatric oncology research, have been successfully implemented. However, most developments in geriatric oncology have taken place in high-income countries, and there are still large inequalities in the availability of clinical, educational, and research initiatives across different regions of the world. This article provides an overview of geriatric oncology initiatives in Asia, Europe, Australia and New Zealand, Latin America, and the United States and Canada. Understanding the achievements and challenges of geriatric oncology around the world, and fostering international collaboration in research and training are essential for improving the care of all older adults with cancer.

Contents

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Introduction

Globally, the number of older adults is increasing at a rapid pace. The number of people aged 65 and older is projected to grow from an estimated 524 million in 2010 to nearly 1.5 billion in 2050, with most of this increase taking place in developing regions [1,2]. Furthermore, by 2050 global life expectancy at birth is projected to increase to 74.3 years (up from the current 69.4 years) [3]. Currently, the proportion of older adults is highly variable across regions, ranging from 17.9% in Europe to 3.5% in Africa, but this will also increase globally (Fig. 1) [1]. As of 2015, 387 million persons aged 65 and older live in less developed regions of the world, compared to 221 million in more developed regions [2]. By 2050, 1 in 4 people living in developed countries and 1 in 7 living in developing countries will be older than 65 [1].

The Global Challenge of Cancer Care in Older Adults

Aging can be associated with a greater burden of co-morbidity and disability [4], which can make management of older patients particularly challenging, especially in regions of the world that lack resources and infrastructure. Many healthcare systems were designed to tackle acute ailments, such as infectious diseases, and are ill-equipped to provide care for complex chronic conditions requiring multidisciplinary interventions [5–7]. In most regions, older adults already account for more than half of all cancer cases and for an even larger proportion of cancer mortality [8]. Although current cancer incidence and mortality rates in older adults are higher in developed regions (Fig. 2), the absolute number of new cases and deaths is larger in developing regions such as China, Southeast Asia, India and Latin America [8,9]. Furthermore, there are significant differences in the incidence-to-mortality ratios for older patients with cancer across regions. While in developed regions, such as Australia/New Zealand or the United States (US) and Canada, the incidence-to-mortality ratio for all cancer types in older adults ranges from 0.4 to 0.6, it can be as high as 0.8 to 1 on the African continent (Fig. 2) [8], reflecting inequities in the quality of cancer care [6,7,10].

Several centers (mostly in developed countries) have implemented geriatric oncology clinics or programs that follow a variety of models of care. Some centers offer a comprehensive care model, in which all patient care is undertaken by dually trained geriatric oncologists [11–13]. More commonly, geriatric oncology clinics follow a consultative or shared care model, in which a geriatrician or a geriatric oncologist performs an initial assessment, makes recommendations, and provides concurrent care during the disease trajectory [13]. However, many countries still lack the resources to tailor treatment to the needs of older patients with cancer, and most oncologists practice in settings where geriatric expertise is not available [11].

The Current Global Landscape of Geriatric Medicine Training

Despite its wide applicability and the potential for helping a growing population of patients, the number of physicians trained in geriatric medicine remains low. In the US, for example, 56% of fellowship positions for geriatrics remained unfilled [14], and only about 50% of all geriatricians recertify in their subspecialty board [15]. The same

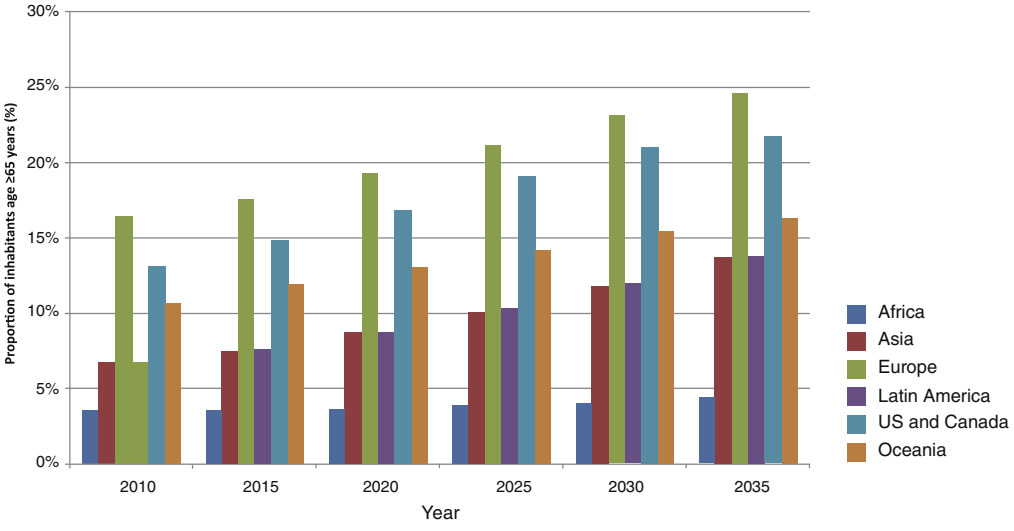

Fig. 1. Older adult population by world region.
(Source: United Nations World Population Prospects) [2].

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