SHORT COMMUNICATION

An Excerpt of Geriatric Diseases in India

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Abstract

Background: Aging is a consequence of accumulated effects of living conditions, acquired mutations, and an inefficient regenerative mechanism of the progenitor cells. Chronologic aging is linearly linked to an increase in health-complexities of noncommunicable types. In contrast, medical advancements is enhancing the life-expectancy—certainly at a higher cost; however, the trend could outnumber the young workforce subsequently. Hence, understanding of disease-prevalence is essential with a view to making necessary arrangements for offering appropriate care to the geriatric population.

Materials and methods: Records of over 47,000 outpatient medical consultancies were retrieved from the hospital management system and considered for investigating the disease-prevalence in the older population.

Results: Older population was largely affected with diseases related to the cardiovascular system followed by general medical complications. In general, men were more affected with geriatric diseases, which could largely be due to a lack of financial and other preparedness of the retirees.

Conclusion: A significant osteoarthritis problem in females is undoubtedly associated with aging of ovaries. An intense look at geriatric diseases may guide for building age-friendly and dedicated accommodation at home and healthcare centers. The knowledge may be helpful for handling geriatric disease-burden of low- and middle-income countries.

Keywords: Aging, Cardiovascular diseases, Geriatric diseases, Life-expectancy, Noncommunicable diseases.

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Background

Human aging is not merely a consequence of wear and tear, but it is the inefficient mechanism of replacement of the spare parts as reflected in hair-color, tooth-decay, skin-wrinkles, etc. as marks of aging. Every organ is maintained by the self-generating stem cells. However, environmental stress, epigenetic manipulation, intrinsic micro-environment, DNA-damage, and error-prone or lack of repair diminish the regenerating power of the stem cells, promoting the aging of organisms.[1] Additional contribution from economic and societal stress aggravates human aging with tons of diseases, which is worst for low- or middle-income countries.[2] Besides proneness to infections, a wide spectrum of noncommunicable diseases (NCDs) frequently confines elderly people either to a hospital and/or to a wheel chair for a lifetime. World-wide cardiovascular diseases (CVDs) dominate over all NCDs (50%), being the leading cause of death and disability, which is majorly influenced by life-style/unhealthy diets/lack of physical activities.[3] Uncontrolled behavioral risk factors increase blood-pressure, blood-glucose, and blood-lipid and set a threat for death. In contrast, advancement of medical management and awareness of healthcare influence the life-expectancy, which has become a global issue of health-management and health-insurance of aging.

Materials and Methods

To take a stock of disease-spectrum with a view to measuring healthcare arrangement in a hospital setting, we have analyzed the incidence of NCDs from the outpatient data of 60+ aged males and females ($n = 47,350$). Fourteen systemic disorders were correlated with eight age-groups of five-year age-gap.

Results

The CVD stood first followed by miscellaneous complications for which men and women visited our medicine department. The ailments of endocrine, neurologic, nephrologic, general surgery, gastro-enteric, and ophthalmic problems appeared more or less uniform in both genders; however, musculoskeleton/orthopedic and urologic problems were strikingly higher in women and men, respectively (Fig. 1). Other NCDs were not so actively captured in this hospital, especially cancer due mainly to the apex (ACTREC) facility located in the vicinity.

Discussion and Conclusion

Indian life-expectancy of 69.09 years has a skewed death rate of 7.3 vs a birth rate of 19 per 1,000.[4] Indians retire from work at 60 years, leading to a financial crunch for many. If retirees do not own accommodation, not secured with pension and have children unsettled, they fall prey to CVD, and succumb to death within the first five years post-retirement. Malnutrition and unhealthy diets contribute to orthopedic (osteoporosis/osteoarthritis) and urologic (kidney stone) problems in the two genders. A lack of health-insurance and social/family securities underlie a long stay

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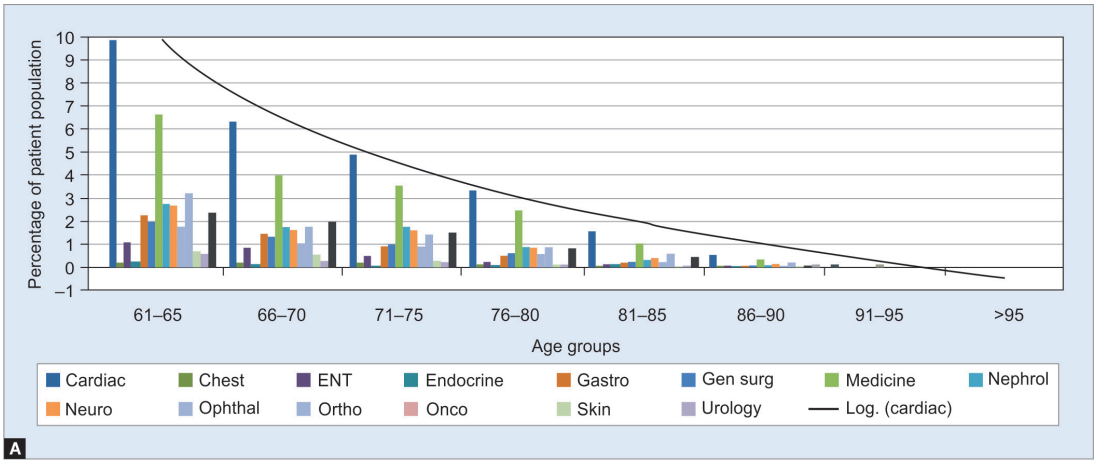

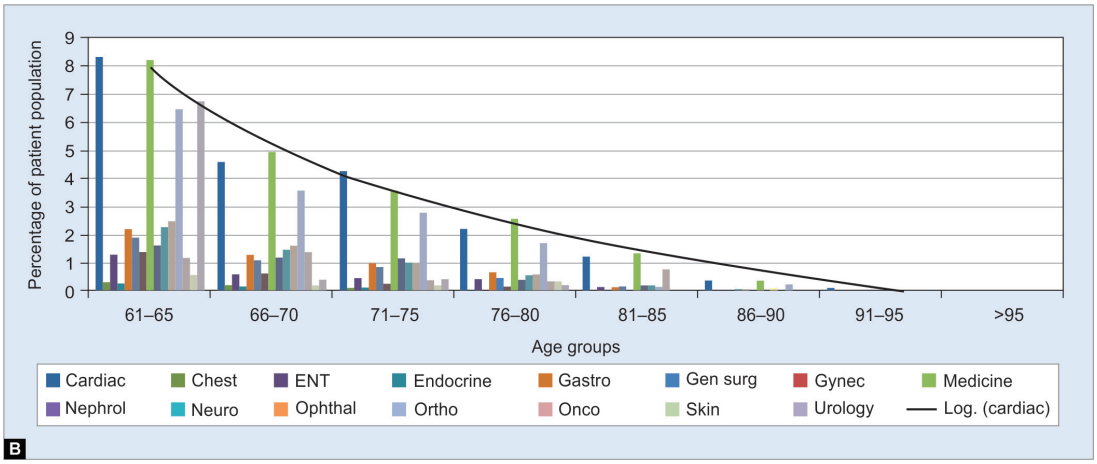

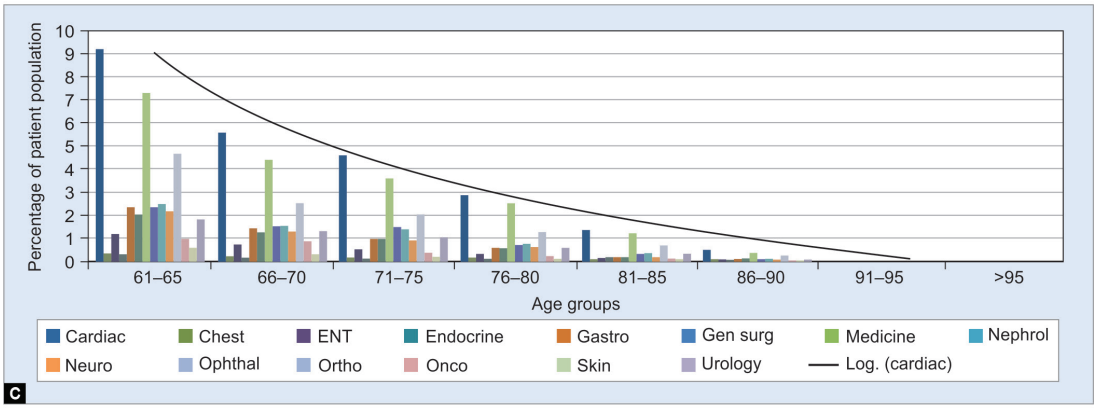

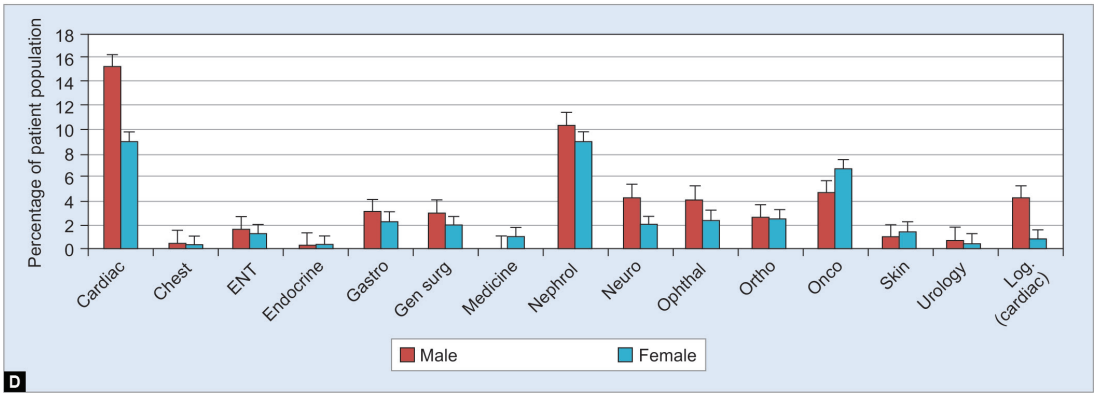

Figs 1A to D: Age-related disease burden; (A) Male; (B) Female; (C) Combined; (D) Male vs female

in hospitals. Altogether, enhanced life-expectancy jeopardizes the lives of elderly people in the Indian scenario. India's mega health reform scheme,[5] which was set as the flagship agenda of the recent election, would not benefit the elderly population. Therefore, Indian public-health and health-insurance policies need to be redefined for 1.35 billion population; especially age-friendly accommodation, social security, and dedicated long-term healthcare arrangement in hospitals would not only protect the elderly population but also their family members and other hospital-patients from financial burden and infection, respectively. Analysis of age-related morbidity and mortality is underway on a larger population to understand the 'cause and effect' accurately.

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