

General overview on geriatric healthcare



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Abstract

It becomes much more necessary to be aware of the several geriatric problems for their early detection and management. Such improvements in the quality of life will lessen the burden on society as a whole. This would include medical interventions alongside appropriate social and policy measures in sustaining and upholding continuous well-being and dignity for older adults. Advancements in geriatric care are hence necessary to meet the growing needs of this demographic and ensure a healthier, more inclusive future for one and all.

Keywords: Geriatric, Interventions

1. Introduction

Geriatrics is the practice of providing medical care to the elderly, focusing on their unique health needs and challenges. Gerontology is the study of physical and psychologic changes in old age. The demographic change underway in India today is an aging population. This shift is attributed to decreasing mortality and fertility rates and increasing life expectancy, which adds to the number of citizens above the age of 60 and classes them as elderly. Such negligence thus makes the rising senior citizens of India face different sorts of medical, social, psychological, and economic problems that have become a burden to the nation. Such challenges include chronic diseases, mobility problems, psychic disorders, and social isolation for which thorough treatment is looked for with specialized professional care. Nor are the financial implications of an aging population through rising healthcare spending and the requirement for socio-economic supporting systems very small either (1,2).

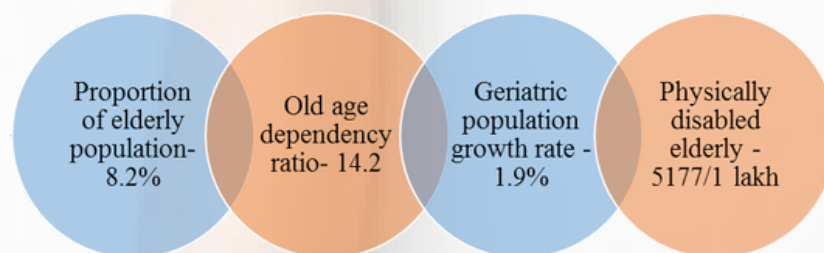


Figure 1. Elderly population: growth, dependency, disability

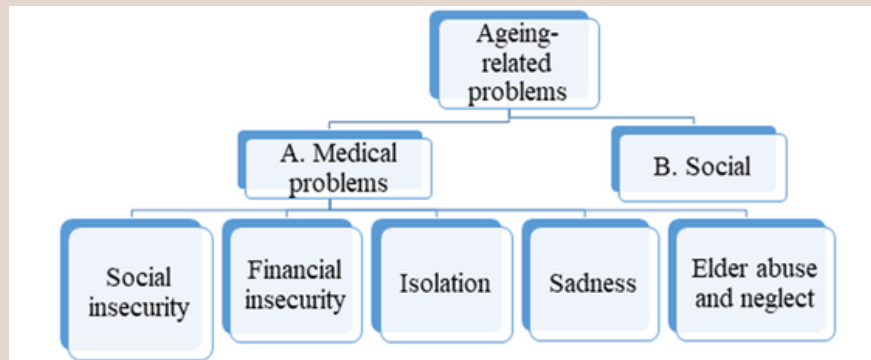


Figure 2. Aging related problem

2. Digital technology for effective geriatric care

Digital technology enables a set of tools and solutions for changes in health outcome and quality of life for older adults. These include:

- 2.1. **Telemedicine:** This enables remote consultation, whereby patients spend less time traveling and equally have access to specialist visits.
- 2.2. **Health monitoring:** The wearables and remote monitoring systems track vital sign measurements and daily activities, which then send off alerts in real-time.
- 2.3. **Medication adherence:** Smart pill dispensers, apps which manage medication schedules and dosages.
- 2.4. **Cognitive health:** Brain training apps, virtual reality therapy for cognitive function and conditions such as dementia.
- 2.5. **Social connectivity:** Communication tools, online communities decrease isolation and foster social interaction.
- 2.6. **Personalized care:** Electronic health records (EHRs), AI-driven analytics that facilitate a personalized care plan.
- 2.7. **Assistive technologies:** Smart devices around the home and adaptive tools for improved daily living and independence.
- 2.8. **Education and training:** The role online resources and training platforms play in supporting seniors and caregivers cannot be overemphasized.
- 2.9. **Health and wellness apps:** Fitness, diet, and nutrition apps promote a healthy lifestyle (3-5).

3. Preventive measures for elderly

- 3.1. **Regular health check-ups:** Routine physical examinations and screening tests for conditions like high blood pressure, cancer, and diabetes.
- 3.2. **Immunizations:** Vaccination against preventable diseases.
- 3.3. **Healthy lifestyle:** Regular exercise, a balanced diet, and enough sleep are indicators.
- 3.4. **Mental health:** Activities such as reading books, solving puzzles, and maintaining social connections can be used as interventions to promote excellent cognitive health.
- 3.5. **Fall prevention:** Modifications to the home, exercises for strength and balance, and routine eye and hearing examinations.
- 3.6. **Medication management:** Periodic medication review to prevent potential interactions and side effects (6-8).

4. Health policies and programs for older adults

- 4.1. **Medicare and medicaid:** For the financing of care of the elderly; provide coverage of both inpatient and outpatient services with a prescription drug benefit.
- 4.2. **Social security:** It provides funds to the retired.
- 4.3. **Older Americans act:** Fund for services, including meal programs, caregiver support, transportation.
- 4.4. **PACE programs:** These are programs which provide hospital and community-based comprehensive medical and social services to elderly patients residing in the community.
- 4.5. **Community health programs:** A sub-county or local initiative on health education, screening programs, and wellness activities (9,10).

5. Gaps in care for the elderly

- 5.1. Lack of access to care:** Living in an inaccessible remote or underserved location.
- 5.2. Affordability:** Exorbitant medical and pharmaceutical expenses.
- 5.3. Care coordination:** Fragmentation of care from multiple providers.
- 5.4. Mental health services:** Insufficient assistance or provision of mental health services.
- 5.5. Caregiver support:** Family caregivers lack resources and supports.
- 5.6. Technology barriers:** A high percentage of older adults lack access to and the ability to use technology (11).

6. Effective geriatric care in the future

The following are some of the transformative trends and innovations that are going to define effective geriatric care in the future:

- 6.1. Telehealth expansion:** Telemedicine will turn into a standard practice, allowing easy access to healthcare services for older adults without having them travel much. It improves access and enables more frequent check-ups and consultations.
- 6.2. Integrated models of care:** There will be a shift to coordinated care models that address the whole person by integrating physical, mental, and social health. In this way, all aspects of the wellbeing of an elderly individual are managed in a holistic way.
- 6.3. Advancements in AI and data analytics:** AI and predictive analytics will facilitate personalized care. Early detection and tailored treatment for the possible health issues will be facilitated with the analysis of huge health data.
- 6.4. More focus on mental health:** In this way, geriatric care of the future will have a greater focus on mental health, providing better support and resources for conditions like depression, anxiety, and dementia.
- 6.5. Robotics and assistive technologies:** More efficient support in daily living and better ways of health monitoring provided by robotics and high-level assistive technologies will allow independent living for the aging population and provide support in critical situations.
- 6.6. Reforms políticos:** Building further on policy areas that will help in improving affordability and accessibility of care means that more elderly citizens will be able to receive quality care. Such reforms will fill the gaps that become problematic and give more viable models of care.
- 6.7. Community-based services:** Boost community-based programs for comprehensive, local care. Such services will offer continuous supports, from social interaction and wellness programs to practical help, creating a helpful environment for the process of aging.

These will be changes that result in a more complete, accessible, and efficient geriatric care system and, hence, better quality of life in old age (12-14).

7. Conclusion

It is important to remember that aging itself is a physiological process related to these changes, which predispose or put people in a state that makes them more vulnerable to various diseases. Many of these changes result in changes in test markers that do not necessarily imply pathology. Multiple simultaneous problems are common in the elderly, and the pathophysiology of medical diseases is often multifactorial. Besides, there should be early diagnosis and treatment of cognitive impairment and potentially treatable conditions such as urinary incontinence, falls, and elder mistreatment. Immobility and adverse medication reactions account for almost all the significant iatrogenic disorders in the elderly. The approach towards geriatric care has to be directed towards the maintenance of functional capacity and quality of life; only then will a cure follow. Collaboration amongst the different specialists attending on the patient, straddling disciplines, is necessary in delivering proper care. Most care for older adults is provided outside the hospital system and occurs either in assisted living/skilled nursing facilities or at home.

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