



## **Geriatric Health Care- Need of The Hour Specialty to Meet Futuristic Trends in Medical Sciences**

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### **ABSTRACT**

*Health care systems are undergoing transformation to meet the new era of challenges where an imbalance between the demand and supply of services and unmet needs respectively is about to exist in the nearing future. Health is a basic right of every citizen. It is versatile necessitating holistic approach involving inter-sectoral coordination. Health problems of an elder person affect every one of us in this society in one or other forms and in particular, the care provider in most cases. The World Health Organization has declared healthy ageing a priority. The cost of healthcare during old age appears to be very high and this in turn increases the out of pocket expenditure on health care particularly when private facilities are availed of. When older persons are economically dependent, increasing health expenditure adds to their burden. Health insurance enables fulfilment of basic healthcare needs at affordable cost and targeting universal coverage without discrimination in the caste, colour, creed and religion overcoming the indifferences of the existing socioeconomic and political systems across the nations is the need of the hour to achieve delivery of timely health care services with equitable distribution. This paper aims at understanding the significance of geriatric health care as a speciality and its need to meet futuristic trends in medical sciences.*

**Keywords:** Geriatric Health Care, Medical Sciences, neurological disturbances

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### **INTRODUCTION**

As per the UN, an individual aged  $\geq 60$  years is an elderly person. Elders are subjected to a variety of problems with advancing age which is commonly known as "Geriatric Giants" which include "4I's" - impairment of cognition, immobility, instability, incontinence as expressed by Professor Bernard Issac who was an innovative geriatric health care provider. Socio economic transformation has led to shift in the trends from joint to nuclear family system that force several senior citizens to neglect self-care due to increased health expenditures. Numerous Indian Government reports have revealed that about 60% older women and 20% male lack monetary source and in addition about 70% men contribute to 60% of the total house hold expenditures. An important fact is that the healthcare expenditure increases with age. Indian elderly aged above 65 years spends about 1.5 times than those aged between 60-64 years. Elderly requires four different types of social support. Emotional support refers to the availability of person to hear them. Another source of support is through an instrumental individual to help in carrying out their routine daily activities. Support is essential by an appraiser who plays a crucial role in offering assistance for decision making while another source is through an individual who could provide them all information necessary along advice. Lack of societal support, declined mental abilities in the form of Alzheimer's disease, reduction in visual acuity, hearing impairments or loss, fragility due to osteoporosis, osteoarthritis, neurological disturbances such as Parkinson's, functional limitations, abuse, property grab, abandonment and materialistic exploitations etc are some of the other challenges faced by the elderly apart from financial deprivation. As per the Erikson's theory, increase in the complexity occurs in the psychosocial development in an older adult when compared to other stages of life since infancy which contributes in regarding them as special population for their heterogeneity from the younger. Elders who are dependable on others for activities instrumental for their daily living require assisted facilities. Disability measure is a potent

indicator of health status and it also facilitates the prediction of adverse outcome. Numerous constraints induce social vulnerability in the elderly creating in them felt loneliness, insecurity and hopelessness and several other challenges that forces to neglect self-care which has a direct link to causation of mortality by 5-8% increasing with higher influential levels of these mentioned factors resulting in fragility and thus emphasizing that senior citizens have specific emotional, economic, physical and medical needs [1]. Comprehensive geriatric assessment is a multidimensional process. It is designed to assess the functional ability, health (physical, cognitive, and mental), and socio environmental situation of older people. This assessment includes activities of daily living (ADLs), history, physical examination evaluating vision as well as hearing and continence. It also assesses gait and balance and in addition includes screening tests for cognitive dysfunction and depression. The elderly patient's social interaction network, available social support resources, special needs, safety and convenience of the older adult's environment are also determined as these factors have influential roles on both the treatment approach as well as outcome. A demographic transition has led to increase in the population of elderly segment. The number of elders is about to escalate up to 2 billion by 2050 from 605 million in 2000. The old age dependency ratio is about to increase to 31 from 12 per 100 members. Geriatric individuals presently contribute to 10 % at a global level. About 20% of the older adults belong to developed nations, 8 % reside at developing regions and 5% live in under developed areas as per the statistics given by the population division of UN in 2011 which is expected to increase to 33%, 22%, 21% and 12% respectively. The contribution at a global level is going to rise to 19% in 2050 from 8% in 2010 [2]. The demographic transition model proposed by Warren and Thompson in 1929 that observed the birth and death rates with the level of industrialization of the region over 200 years found that most of the developed nations were in stage 3 and 4 while developing regions were at stage 2 and 3 with exclusion for those which were poorly developed countries. Stage 2 is categorized by sudden decline in death rate leading to expansion of the crowd. At stage 3, the birth rate appears lower where population levels-off while at the fourth stage, drop in both the mortality as well as fatality rates cause population shrinkage [3]. Moreover, there is an evident remarkable shift in the epidemiological ailment pattern from infectious illnesses in the past to non- communicable diseases in the recent days particularly with increasing prevalence of lifestyle disorders as a result of adopting westernized diet and modernized technological innovations which has led to increase in the average life expectancy which for instance in a developing country like India is expected to reach 71.7 from the present average of 68.7 [4]. Change in the aging population structure has been smooth to adapt in developed nations as the trend has taken place at a slow pace. A similar explosion which is expected to occur at rapid rate in the developing and poorly developed countries may lead to circumstances where the adaption could be a great futuristic challenge for respective Governments with shortage of professionally trained geriatric health care providers. Furthermore, with wider range of creative newer technologies in today's market and evidence-based practices as recent trend, there is marked decline in the fertility and mortality rates which would lead to a state where the number of geriatric individuals would outnumber children of 0-14 years in 2050. A situation with unbalanced population has an impact on a country's economy, taxations, public health polices, programmes and expenses apart from financial as well as its labour markets. Professional geriatric care service is essential as per the primary care principle of the UN which emphasizes on accessibility to health systems for all in addition to achieving the third sustainable developmental goals of the seventeen aimed at health promotion and universal well- being. The strengthening of research and development division in India especially in the field of translational medicine has led to the presently existing era of evidence-based practice which ensures provision of holistic care with an aim not only to maximize life span but also improvise the quality of life. Geriatrics deals with the assessment, diagnosis, management and prevention of health-related problems in the aged individuals and a doctor who is qualified or well trained in this field of practice to provide exclusive care for the senior citizens is called a geriatrician. The ancient literatures suggest that writings of Hippocrates on ageing are available and the first book on this area was published by Charcot in 1881. The term geriatrics is derived from Greek words "Geron" meaning "Old Man" and Iatros which refers to "Healer". The field of geriatrics received first attention by a noble prize laureate named Ilya Ilrych Mechnikov in 1908 and it was recognized as a separate speciality in 1948 with innumerable contributory works of Dr. Ignatz Leo Naushcher who was the former chief at Mount Sinai health unit in New York and is regarded as the Father of Geriatrics while Madam Marjory Warren of the UK is popularly known as Mother of Geriatrics who emphasized the significance of rehabilitative care for the elderly. Gerontology refers to the study about the aging process while geriatric dentistry also called as special care dentistry refers to comprehensive professional care of the oro- facial complex in the older adults. Geriatric health care providers play a vital role in arriving at appropriate diagnosis of the medical conditions as their expertise is significant in overcoming the challenge of atypical presentation of signs and symptoms of multiple morbid conditions in addition to proficiency in handling them with gentleness for provision of patient centred care. Furthermore, geriatricians have acquaintance

about the common psychological problems of the old age such as depression, dementia, delirium and drug abuses etc affecting their health care behaviour which are neglected frequently by the general health care physicians. An exclusive speciality is required in order to encourage shared-decision making in the health care treatment plans with prioritization of patient goals and preferences to overcome the medico-legal issues as proxy consents are commonly obtained in cases of older adults, to preserve functional efficacy and not only prolong life expectancy but also improvise their overall quality of life. Population-aging is irreversible and is expected to remain the most significant demographic trend of 21st century with an anticipation of influence on a wide range of public issues of recent times warranting newer strategies of healthcare management. According to the Webster dictionary the older population is classified in to young old comprising of those aged between 60-69 years, middle old constituting those aged 70-79 years and oldest old are those aged  $\geq 80$  years. The oldest old group of the elderly population is the fastest growing segment of all groups which contributes to 1 % of the global population presently and is projected to reach 4% by 2050 which is likely to be an increment by almost 5 times. Male mortality would change the gender ratio with age. About 81 men for every 100 female at 60 years is deducted to 53 at 80 years leading to an outnumbering of females than males having an implication for policies and schemes for which the planning must reflect sensitivity. Epidemiological data plays a key role in risk-profiling and in the formulation of target based interventional programmes. The elderly are also classified in to functionally dependent, independent and frail based upon their accessibility to health care by Ettinger and Becker in 1984. They are also categorized by House in to indifferent patients who lack motivation with tendency to blame the service provider, realistic who are cooperative and philosophical, exacting who generally are obliging after their expectations are met precisely with provision of utmost care and as hysterical or resentful who are uncooperative. In order to maintain sound health status for elders, it is significant that they are associated with social networking where group activities could gain their vocational health through recreations. Social engagement enables the elders to actively take part in volunteering actions for the community. Social cohesive measures help those senior citizens with similar goals to get united through bonds for societal good such as Red Cross for an instance [5].

#### **Understanding Oral Health and Elderly**

The identified barriers to access oral health care facilities were distance, finance, and lack of interest in consulting a dentist as per a study by Yotat Michele Lolita *et al* in 2015[6]. A study by Daniela Santucci *et al* in 2015 found that institutionalized older adults had a poor oral health status comparable to institutionalized older adults [7]. According to a study by Diviane Alves da Silva *et al* in 2016, elderly individuals who resided predominantly in rural areas showed a greater need for and lower use of prosthesis [8]. The dental status of the majority of participants did not represent a functional dentition without tooth replacements in a study by Qian Zhang *et al* in 2016[9]. A study carried out by Mohd Masood *et al* in 2016 found that presence of active caries was associated with impaired oral health related quality of life in older adults [10]. Gender and age were important predicting variables for the oral health outcomes in a study conducted by Barbara Janssens *et al* 2017[11]. Elders have a higher need for prosthesis which is in accordance with the results of a study by Hegde V *et al* 2017[12]. A study by Minh Son Nguyen *et al* 2018 concluded that dental diseases were prevalent among elderly owing to a lack of awareness of oral health self-care behaviours, especially among those living in rural areas [13]. None of the edentulous participants had dentures and 86.6% required new or repaired dentures and it was found that the prevalence of untreated oral diseases among elders was very high in a research by Thuy Anh Vu Pham *et al* 2018[14].

#### **CONCLUSION**

Understanding and knowledge about the emerging unmet needs of the fast growing elderly population is essential in order to overcome major challenge like shortage of resources in provision of geriatric health care. Geriatrics is in an evolving stage in the Indian scenario. Need of the hour proactive actions for preparedness through widespread activation of geriatric health care delivery system without any discrimination could lead to reduction in the major public health disease burden of the aged community in our country.

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