Review Article

Strategies to Improve the Quality of Life of the Elderly: Initiatives by Government and corporate health providers

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ABSTRACT

The number of elderly is on the rise. Majority of them live in rural area & belong to poor socio-economical group. In urban area the elderly suffers from more or less the same diseases. Their OPD visits are more frequent then their admissions. However, because of the government's push for elderly care, the public sectors extending medical & health benefits to superannuated employees, similar facilities to government employees & army personnel, medical insurances, improvement in per-capita income & the availability of hospital facilities have resulted in more & more elderly seeking healthcare even as indoor patients. There are geriatric wards in many institutions in urban area. Apollo, a corporate health provider has taken initiatives to provide healthcare to elderly. The concessional tariffs, the health check-up schemes for early detection of diseases & health status have resulted in to improvement in the health of elderly. The aggressive & well-coordinated indoor treatment, the subsidized Apollo health check-up schemes, the utilization of preventive strategies & the Apollo Homecare Services have yielded beneficial results leading to improved quality of life for the elderly.

Introduction:

The World Health Organization's (WHO) holistic definition of Health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" has been widely accepted as being more appropriate, when ascribed to older people. When we talk of older persons, the attention is focused towards ageing which is a progressive, generalized impairment of functions resulting in loss of adaptive response to stress and increased risk of age-related diseases and disabilities.¹

DEMOGRAPHY, MORBIDITY & DISEASE PATTERN

At the time of Independence of the country, life expectancy at birth was 37 years, which has risen to 68 years currently. This dramatic increase in life expectancy has resulted in population ageing to an extent that the number of people above 60 years has tripled in the last 50 years. The census of 2011 has stated that 103.83 million (8.6%) Indians are above

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60 years of age; of them 51.07 million are males and 52.77 million females. When projections were done till the next five censuses it was found that the numbers rose substantially; 133.32 million by 2021, 178.59 million by 2031, 300.96 million by 2051 respectively. (*Fig. 1*)

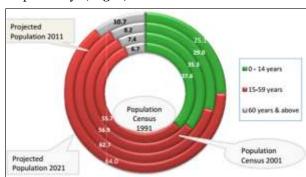


Fig. 1: Elderly Population

According to The Comprehensive Morbidity report on older persons, 75.68% of elderly suffer from one or more diseases, 53.63% of those who were morbid had one chronic disease, 20.83% had at least two chronic diseases, 3.01% had three chronic diseases. 40% of the elderly had one or the other disability, and 5.88% had three disabilities. According to Centre for Enquiry into Health and Allied themes (CEHAT) who analysed the National Sample survey (NSS) data of the 52nd round stated that 13-17% of the survey population without any sickness reported

ill health.³ Most elderly people think that it is absolutely normal to be in a condition of ill health. This further determines that the health services even if available are unutilized by them.

A report of Indian Council of Medical Research (ICMR) on the chronic morbidity profile in the elderly states that hearing impairment is the most common morbidity followed by visual impairment. However, different studies show varied results in the morbidity pattern. A study conducted in the rural area of Puducherry reported decreased visual acuity due to cataract and refractive errors in 57% of the elderly followed by pain in the joints and joint stiffness in 43.4%, dental and chewing complaints in 42%, and hearing impairment in 15.4%. Other morbidities were hypertension (14%), diarrhea (12%), chronic cough (12%), skin diseases (12%), heart disease (9%), diabetes (8.1%), asthma (6%), and urinary complaints (5.6%).

A similar study that had been conducted among 200 elderly people in rural and urban areas of Haryana and Chandigarh observed that as many as 87.5% had minimal to severe disabilities. The most prevalent morbidity was anemia, followed by dental problems, hypertension, chronic obstructive airway disease (COAD), cataract, and osteoarthritis.6 A study on ocular morbidities among the elderly population in the district of Wardha, Maharashtra, found that refractive errors accounted for the highest number (40.8%) of ocular morbidities, closely followed by cataract (40.4%) while other morbidities included aphakia (11.1%), pterygium (5.2%), and glaucoma (3.1%). In a community based study conducted in Delhi among 10,000 elderly people, it was found that problems related to vision and hearing topped the list, closely followed by backache and arthritis.8

Rural elderly has apprehensions and apathy about contacting doctors of modern system of Medicine. They mostly thrive on indigenous system of Medicine; hence they are usually brought to hospitals in advanced stage of diseases. The five top killer diseases in rural elderly are: bronchitis and pneumonia, ischemic heart disease, stroke, cancer and tuberculosis. The elderly bears a social brunt of

being disadvantaged by being marginalized as well as at risk of diseases due to immune senescence. Polypharmacy, un-affordability, improper vaccination schedule, retirement and financial insecurity, disability and disease, loneliness etc. pull the elderly to an immensity of jeopardy. The common complaints among the elderly reported through the NSS were joint pains, Hypertension, piles, urinary problems, cough while the major common disease conditions were Diabetes and cancers. Most of these can be summarily remembered as various I's (Insomnia, Immobility, Incontinence, Impotence, Infection, Isolation, Institutionalization, Incoherence, Impoverishment, Inanition and Intellectual impairment).

GERIATRIC MEDICINE

The branch of Medicine dealing with elderly is called Geriatric Medicine& the principles of geriatric Medicine or the science of health care of the elderly are derived from the above physiological concepts. These principles are:

- 1. Individuals gradually become more and more heterogeneous or dissimilar as they age unlike the stereotype usually related to old age.
- 2. Ageing does not produce abrupt decline in any organ function; disease always does.
- 3. Ageing process is accentuated by disease and attenuated by modification of certain risk factors namely; smoking, sedentary life style and obesity.
- 4. Healthy old age is an attainable goal with different levels of preventive measures.

EXISTING MEDICAL INFRASTRUCTURE

Currently we have more than 25 thousand PHCs, 900 District Hospitals, Govt. Tertiary Care Hospitals, 460 Medical Colleges Hospitals, PSU Hospitals, Military Hospitals, 1.3 Lakhs Private Practitioners besides other systems of medical treatment like Ayurveda, Unani, Homoeopathy, Naturopathy etc. for our entire population of 1.33 billion. Our Medical and Paramedical infrastructure grossly falls short for delivering adequate medical services for our population. When comes to elderly whose number is 11.7 million, we have almost no trained Geriatricians & beds for elderly in hospitals.

GERIATRICS MEDICAL SERVICES

Geriatric Clinics have been started in Kasturba Medical College Mangaluru, M S Ramaiah Medical College Bengaluru, Rajiv Gandhi Chest Foundation Bengaluru, BMC Bangalore, BLDEU Shri B M Patil Medical College Hospital and Research Centre Vijayapura, AIIMS Bhubaneswar, JSS Medical College Mysuru, Deccan Medical College Hyderabad, KLEU PrabhakarKore Hospital Belagavi, Bharati Vidyapeeth Medical College Pune, Osmania Medical College Hyderabad, SVS Medical College Mahabubnagar, Telangana, St John's Health Sciences Bengaluru, Yenapoyya Medical College Mangaluru, S N Medical College Bagalkot, and KBN Institute of Medical Sciences, Kalaburagi, Karnataka.

In addition to above clinics, in last two decades Geriatric wards have been commissioned in Government Medical College Chennai, AIIMS Delhi, AIIMS Cochin, CMC Vellore, St. John's Health Sciences Bangalore, KMC Mangaluru, MGM Mumbai & Five Government District Hospitals in Karnataka.

GOVERNMENT INITIATIVES

The major government initiatives are enlisted as follows. 10-16

- a) The National Policy for the Older persons (NPOP), the National Council and Directorate for older persons, Autonomous National Association of Older persons.
- b) National Programme for the Health care of the Elderly (NPHCE). Conceptualized in 11th fiveyear plan this had the provision of 2 National Centres of Ageing at Madras Medical College, Chennai and AIIMS, New Delhi.
 - Regional Geriatric Centres (RGC) in 20
 Regional Medical Institutions with a
 dedicated Geriatric OPD and 30-bedded
 Geriatric ward for management of diseases of
 the elderly, training of health personnel in
 geriatric health care and conducting research;
 - Post-graduate courses in Geriatric Medicine (40 PG per year) from 20 Regional Geriatric Centres and various courses related to Geriatric Medicine.

- District Geriatric Units with dedicated Geriatric OPD and 10-bedded Geriatric ward in 325 District Hospitals;
- Geriatric Clinics / Rehabilitation units set up for domiciliary visits in Community / Primary Health Centres in the selected districts;
- Sub-centres provided with equipment for community outreach services;
- Training of Human Resources in the Public Health Care System in Geriatric Care.
- Special services for 75 years plus population such as earmarking 50% of hospital beds created under the scheme, development of home health care manpower, focused screening for common health conditions, special IEC activities and vaccination on pilot basis.
- Geriatrics clinics on fixed days at CHC and PHC and Home-based care at sub-centre level) and the National programme for Cancer Diabetes Cardiovascular Diseases and Stroke (NPCDCS). During the 12th Five Year Plan, the remaining districts would be covered in a phased manner @ 100 districts per year.
- The Government of India will facilitate implementation of the programme in selected districts and States for NPHCE. The key activities coordinated by the National NCD cell in the Directorate General of Health Services, Ministry of Health and Family Welfare will be Selection of States and Districts, Information, Education & Communication, Support to Regional Geriatric Centres, Training, and Monitoring, Evaluation and Research. The similar pattern will follow at state & district levels
- c) Social welfare schemes OASIS (Old age social and income security), identity card for senior citizens, transportation allowance at major transport ways like road, railways, civil aviation, telecommunication, consumer affairs, food and public distribution, health and family welfare, income tax, employment through the Aadhar and the Agewell foundation).
- d) NGO schemes working for the elderly

e) Separate bureau for older persons in the ministry of Social Justice and empowerment.

Other Programmes under this Scheme:

- Maintenance of old age homes.
- Maintenance of respite care homes and continuous care homes.
- Mobile Medicare units.
- Running of day care centres for Alzheimer's disease/Dementia Patients.
- Physiotherapy clinics for older patients.
- Disability and hearing Aids for older persons.
- Mental health care and specialized care for older persons.
- Help lines and counselling centres for older persons.
- Training of care givers of older persons.
- Multi-facility care centre for destitute older widow women.
- Indira Gandhi old age pension scheme.

The Ministry of social justice and empowerment provides social welfare benefits to the elderly as well as Differently Abled elderly.

Supplementary Strategies include:

- Mainstreaming AYUSH linking of Indian System of Medicine with Modern System of Medicine in rejuvenation therapies, revitalizing local health traditions, and convergence with programmes of Ministry of Social Justice and Empowerment in the field of geriatrics.
- Reorienting medical education to support geriatric issues.

CORPORATE HEALTH PROVIDER

Apollo, one of the corporate health providers in the country in their multispecialty group of hospitals took certain initiatives for elderly care.

These initiatives are in the form of providing Geriatric Care through their Geriatric Clinics. These clinics have been commissioned in their hospitals at New Delhi, Hyderabad, Chennai, Mysore, Kolkata, Bengaluru & Bhubaneswar. These services are being managed by a team comprising of a Geriatrician, a Geriatric Nurse, a Physiotherapist, a Dietician & Clinical Pharmacologist. Special assistance is provided to the elderly patients, the moment they arrive at the hospital, they are provided assistance in approaching Geriatrician, in getting investigation done & also in procuring medicines.

A lot of stress is laid on preventive aspects & therefore under preventive health checks,¹⁷ two types of packages have been designed. Under Geriatric Package 1 "Apollo Senior Citizen Check I" the person is examined & then taken for Blood Tests which include CBC, Serum Creatinine, Blood Sugar Fasting, Glycosylated Hemoglobin (HbA1C) - Lipid Profile Test.

Routine Urine analysis, X-ray chest, ECG is also done.

This is followed by consultation from a cardiologist & finally geriatrician examines the person, analyses the investigations & gives a comprehensive prescription. If required the opinion of dietician is also sought.

Under Geriatric Package 2 the Blood Tests include CBC, Serum Calcium, Serum Creatinine, Blood Sugar Fasting, Glycosylated Hemoglobin (HbA1C), Lipid Profile, Liver Function Tests, Serum Phosphorus Inorganic, Thyroid Stimulating Hormone (TSH), Blood Urea, Serum Uric Acid besides Urine Routine, Stool Test, ECG, Ultrasound abdomen, and Dexa Scan. There is a consultation by internal medicine expert, cardiologist, surgeon, physiotherapist, dietician& in the end the geriatrician reviews the whole case & gives expert opinion.

Apart from above tests in elderly male Prostate Specific Antigen (PSA) & in elderly female a pap smear, a mammogram & a gynaecological consultation is also provided.

In the year 2017, Indraprastha Apollo Hospitals at New Delhi besides treating in outpatient department, provided medical treatment to 6999 elderly patients in indoor services. ¹⁸ (*Fig. 2*)

Gender	60 - 70 Years	71 - 80 Years	81 - 90 Years	Total
Female	1295	1092	277	2664
Male	1865	1988	482	4335
Total	3160	3080	759	6999

Fig. 2: Geriatric Admissions

In the same year Apollo Home Care services (Established in August 2015) extended home health services (both nursing & medical) to 852 patients out of which above the age of 50 years were 615 patients.¹⁹

A number of infections, both bacterial & viral can be prevented by the use of respective vaccines. In Geriatric Care vaccination for vaccine preventable diseases are advised to elderly. In Apollo Hospital, New Delhi the data shows be higher utilization of vaccines after the induction of geriatric services. In the year 2017, the consumption of Pneumococcal Vaccine (PPSV23 & Prevenar) was 983 as against 966 in the year 2016. While the use of Influenza Vaccine was 1690 in the year 2017 as against 614 in the year 2016. **(Fig. 3)*

Name of Vaccine	Consumed in Year 2017	Consumed in Year 2016
Pneumococcal Vaccine (PPSV23 & Conjugate Vaccine)	983	966
Influenza Vaccine	1690	614

Fig. 3 : Vaccine Usage

Apollo also organizes health talks & health checkup camps for senior citizens in RWAs & Corporate Offices where elderly are given tips on day to day health management & their physical check-up along with some selected tests are done without any charges.

Continued medical education programs are organized for the family physicians in which they are updated on elderly health & care.

CONCLUSION

The demographic changes owing to reduction in child mortality rate, reduced fertility, improved hygiene, better medical & health services, health consciousness etc has resulted in a mammoth number of elderly population. There are government initiatives for both rural & urban elderly. With the increase in per capita income, tendency among people to spend for their health, insurance companies entering health sector & health coverage to superannuated employees; a number of corporates have entered health sector. Apollo group of hospitals is one such group that has taken the initiatives to prove health coverage to elderly. Besides providing treatment in their multispecialty hospitals they have created special health packages for them for preventive checks, and also extend services to elderly at home as well. As a social commitment Apollo organizes health awareness talk / camps jointly with resident welfare associations & public-sector undertakings.

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