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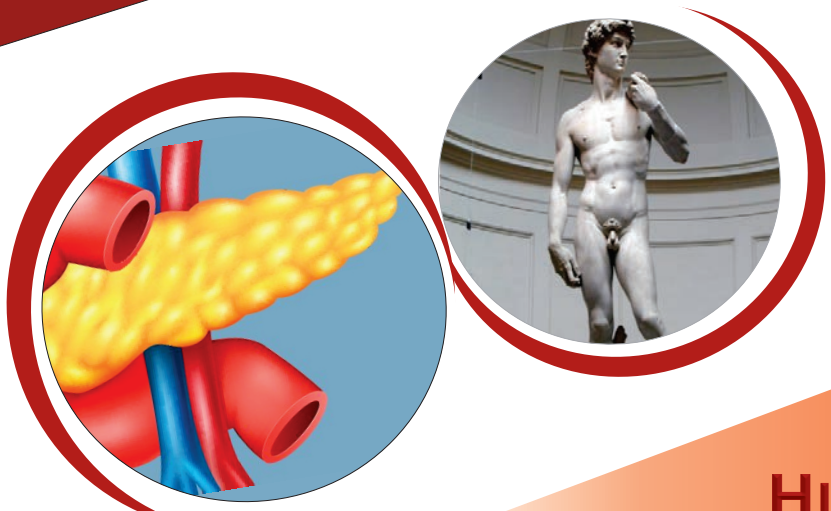

HIGHLIGHTS

GERIATRIC SOCIETY INDIA
CARING THE ELDERLY

In pursuit of excellence in Geriatric Care

Bharat Nursing Home

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Editorial Board

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Prabha Adhikari
Professor and HOD of Medicine
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Yenepoya Deemed to be University

Physicians, Wake up and Prevent Dementia

It is more than 6 months since the Lancet Commissions published an excellent report on the topic on Dementia, Prevention, Intervention and Care[1] by reviewing existing evidence based data and doing their own meta analysis on novel risk factors like hearing loss[2].

While Cure is yet a dream for millions of people who suffer from dementia, it is encouraging for physicians, general practitioners and everybody caring for the elderly to know that the burden of dementia can be reduced by more than a third by addressing nine modifiable risk factors. Recent Lancet Commissions report describes these risk factors in detail and also its population attributable risk for UK by identifying commonality of these risk factors in the community. Similar study is needed for countries with low and middle income countries like India where prevalence is likely to rise rapidly.

Dementia is a neurodegenerative condition with progressive loss of memory and other cognitive functions. As on today there is no drug to cure this disease or halt its progression. Alzheimer's disease, Vascular dementia by and large contribute to more than 75% of cases, while frontotemporal dementia, Lewy Body Dementia and dementia due to Parkinsonism contribute to rest of them. With the figures of people living with dementia touching 46.8 million in 2015 and an estimated figure of 131.5 million for the year 2050, with 68% of them from low and middle income countries, India has to wake up to take cognisance of the fact that several of the modifiable risk factors are not yet addressed. Estimated cost of care of dementia for USA for the year 2015 was 818 billion US$[3], while the cost of care in India has not been estimated.

It is important to recognise treatable conditions that mimic dementia such as Vitamin deficiencies such as Pellagra, Thiamine deficiency, Endocrine diseases such as Hypothyroidism, treatable brain conditions such as Bilateral subdural Haematoma, Normal pressure Hydrocephalus, HIV infection, chronic hyponatremia, Chronic hypoglycaemia and TB Meningitis. Depression and Delirium which may present with cognitive deficits need to be recognised and treated. While we are able to find this in the fortunate few, life course approach for prevention of dementia reported by Lancet Commission and World Alzheimer's report is the only way to bring down the number.

Modifiable risk factors proposed for UK By Lancet Commission[1] include Low Education attainment in early life (Population Attributable risk–PAF-19.1%), mid life Hypertension (PAF-5.1%), obesity (PAF-2%) and Hearing loss (PAF-23%) and late life Diabetes Mellitus (PAF-13.9%), Depression (PAF-10.1%), Physical inactivity (PAF-6.5%), smoking (PAF-5.9%) and poor social engagement (PAF-3.2%) being the other risk factors. In the UK model weighted PAF based on prevalence of these factors in the community the figures were Less Education (7.5%), Midlife Hypertension (2%), obesity (2%), hearing loss (9.1%), late life diabetes (1.4%), depression (4%), smoking (5.5%), physical inactivity (2.3%), and poor social engagement (2.6%).

Nearly 35% of the risk factors are modifiable. However for countries like India, communality for these

9 risk factors will be higher and there is a need to calculate communality by meta-analysis of all these 9 risk factors including foeto-maternal mal nutrition which is also a risk factor.

Poor foeto-maternal nutrition and less education leads to poor cognitive reserve. Hearing loss has emerged as a strong risk factor starting from midlife probably by age 55 and there is emerging evidence to say that it will continue until late life. It may lead to brain atrophy, poor social engagement and depression. Also it is not clear whether both dementia and peripheral hearing loss are effects of micro vascular disease.

Life style factors like obesity, hypertension and diabetes along with smoking increase the risk of vascular disease, brain inflammation and oxidative stress. Rich social network and reduced depression improves brain cognition by increased cognitive stimulation and physical activity reduces inflammation and stress and vascular damage.

Novel risk factors, that are likely to emerge in future include obstructive sleep apnoea and poor sleep quality. If we look at midlife risk factors such as hypertension, obesity and hearing loss coexist in most of the patients with obstructive sleep apnoea. We need to have more screening programmes for obstructive sleep apnoea.

There are several protective factors such as Mediterranean diet, cognitive stimulation activities and bilingaulity for cognitive protection. However none of them have been able to prevent dementia. Similarly living near major roads, visual impairment, head injury even a minor one are emerging as risk factors. However they have not appeared in the population attributable risk fraction.

With this data we need an action plan for India. Already there are enough programmes for early life to better the foeto-maternal nutrition and education. We need to strengthen these programmes. There is a National Programme For Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke (NPCDCS) which is working on managing diabetes, hypertension, smoking cessation, dyslipidemia, physical activity which is active in some of the states but still in its infancy in some of the states. However there is no governmental programme of screening for hearing loss or supply of quality hearing aids to middle aged and older people. There is urgency to incorporate this in the national programme. There is no programme to keep the elderly happy, active and socially engaged. There is need for active ageing programme to keep them physically and mentally fit.

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Geriatric Care & Family Bonding– Indian Perspective

*KAUSHIK RANJAN DAS

Abstract

Elderly care emphasizes the social & personal requirement of senior citizens who need some assistance with daily activities & health care but who desires to age with dignity. If we can achieve a state of firm family bonding suffering of elderly in India could be minimized to a large extent because of the fact that about 80% of Indian elderly live with family. Therefore revival of firm family bonding is the demand of the hour for elderly care in India.

Keywords: *Graceful ageing, Abuse of elderly, Family bonding*

It is a universal truth that like other parts of the world, number of geriatric population has been increasing in India; that has been imposing great burden on our society and nation as well. Problems of elderly people are multifaceted & their care needs to be individualized. Geriatric care is the fulfillment of the special needs & requirements that are unique to senior citizens, that encompasses services like assisted living, adult day care, long term care, Nursing homes, hospice care and home care. Elderly care emphasizes the social & personal requirement of senior citizens who need some assistance with daily activities & health care but who desires to age with dignity.[1]

GLOBAL PERSPECTIVE

There has been differences in elder's care from country to country, and even regions to region of same country.[2,3] Traditionally over the world, elder's care is the responsibility of family members.[4] Given the choice most elder's would prefer to continue to live in their homes (ageing in place).[5] Assisted living costs less than in nursing homes but still considered expensive for most people.[6] Respite care helps care givers to go on vacation & helps keeping elderly in home.[7]

a) England: A million of people who need care get neither formal nor informal help.[8]

b) USA: In the United States ,most of the large multi-facility providers are publicly owned & managed as for-profit businesses.[9] There is also demand of more care facilities due to increase in number of elderly in coming days. Cost factor prevails in USA also.

Family Physican & Geriatrician, Kolkatta

c) Canada: Privately run profit & nonprofit facilities exists. In some provinces Govt. funds care facilities or subsidizes cost of the facilities due to cost factor. Other welfare programmes also prevail.[10]

d)Australia: An Australian Statutory Authority, the Productivity Commission has conducted a review on aged care in 2010. That review concluded that approx. 80% care of older Australians is informal care provided by family, friends & neighbours.[11]

e) In developing nations: Elderly care as has been provided by direct family care will no longer suffice,both institutional & community base services are scarce.[12] **Nepal** has been caring for elderly through family; about 90% of elderly do live in the homes of their family;[13] there are some overambitious programmes in Nepal, yet to be implemented; expensive private care facilities for elderly has been prevailing in Nepal limited to capital city. **Thai Government** is noticing the trend of population ageing, but tends to let family cares for their elderly members rather than create extraneous policies for them. **China** is no exception than other developing countries, they are burdened with increased number of elderly, they have to create infrastructures for elderly care meanwhile China has enacted a law compelling childrens to meet their elderly parents physically & frequently.[14]

India: India is a vast country having about 120 million senior citizens that have been projected to grow to about 198 millions in 2031. In 2050 about 20% of Indians will be of 60+ years; among all elderly 68% (81.6 million) live in rural area &32% (38.4 million) live in urban area; about 33% (39.6 million) are below poverty level; 40% (32.64 million) rural elderly & 20% (7.68 million) urban elderly are below poverty level;

among all 84.7% elderly male & 84.5% of elderly female live with family; regarding economic dependency –about 14% (16.8 million) of elderly are economically independent, 60% are fully dependent & 26% are partially dependent; about 8% of 60+ elderly need assistance in their activities of daily life, that rises to 33% of elderly at the age of 80 years; (above data has been projected to national figure, based on a study in West Bengal).[15]

ELDERLY CARE & INDIA

Indian people, even medical fraternity is still unaware of geriatric medicine. Steps in dispersing the knowledge of geriatrics have been meagre. Initiatives for establishing geriatric health care is rudimentary. Geriatric care facilities so far made is in the form of some geriatric indoor treatment units, some Geriatric OPD clinics; some day care centres, assisted living centres, respite care /chronic care centres; some Govt. & private (including corporate) old age homes. Private facilities have been meant for business & are costlier.

Inspite of the tradition of caring for elderly by family members,we find there is immense suffering of elderly in India in the form of abuse, neglect, abandonment those have thrown them in to a state of insecurity, loneliness, depression & other physical and mental illness. Indian youngsters mostly are mechanized & materialistic now a days, they are in hallucinatory state and bothered by social norm & values and are self centered. Parents have been willfully keeping their kids aloof of their grandparents & they have no family time / do not care to pass on family time – "where interaction amongst all member would create an attraction among them that culminates into faith, love, service & peace in the family **(Mother Teresa)**"; also youngsters may be taught of traditions, norms & values i.e. a new learning could be made that persists for whole life & transcends generations. Due to a false perception, undue behavior among younger parents & faulty learning of their kids, there has been a declining family relations & kids becoming wayward all over the world (British Prime minister had to talk on this & stressed on family relationship); India is no exception of this situation . The above mentioned situation has made our elder's care worse & if we do not intervene/intercept, situation of elderly care in India will be worsen in near future.

FAMILY BONDING & IT'S IMPLICATION

Family bonding is a state of attraction among members of a family. This bonding needs to be acquired, we cannot get it from nature, it needs to be nurtured. In india there has been a tradition of tight family bonding i.e., there has been a status where elderly member were given upper hand in every family decisions, they have been getting great respect & always placed in a dignified position, youngsters has been learning social norms, values & tradition from their elder's in the form of stories, gossips etc; there have been regular family interaction, passing of family times, parental admonition etc. culminating in to a rigid bonding, where elderly have been cared of as family obligation & moral duties of other members (**filial piety**). Presently the scenario has changed- children are living, keeping parents in distant places, they remain aloof in need of their parents/ elderly, values & tradition have not been cared for Grand children are being prohibited from mixing/ interacting with their grand parents, thereby depriving them from learning from wisdom of elderly; sum total of the state of affairs have resulted in declining family bonding in India which in turn causes deleterious effect on the health of elderly in the form of worsening hypertension, diabetes & psychosomatic illnesses, increased incidence of depression & other mental illness, drug abuse, increased tendency for falls, suicidal attempts & suicide, increased disability, decreased care leading to increased suffering, disgraceful situation, premature deaths. So, it is crystal clear that if we can achieve a state of firm family bonding suffering of elderly in India could be minimized to a large extent because of the fact that about 80% of Indian elderly live with family. Therefore revival of firm family bonding is the demand of the hour for elderly care in India.

RESOLVING THE HURDLES OF ELDER'S CARE IN INDIA

It is evident from above deliberation that **places where care of the elderly has been undertaken are -** Homes/ residences; hospitals & nursing homes; Day care centres, respite care centres, assisted living centres, hospices & senior citizens home. **Persons who usually undertake care are-** Family, friends, relatives, neighbours, care givers/ geriatric care givers, doctors & other professionals. **Hurdles behind quality elder's care are –** lack of Willingness & late reporting about abuse by elderly, Ignorance, ill motivation leading to denial/avoidance of care, willful neglect & other form of abuses by members of family, financial constraint (33% lives below poverty level), declining family bonding, abandonment, lack of trained manpower & infrastructure etc are all family factors that work as hurdle behind elder care in family setting where about 80% of Indian elderly live. Strengthening of family bonding only can work a mile in combating issues relating to care in family i.e strengthening family bonding is identified as the prominent tool in caring (graceful ageing); national & international initiatives are required for achieving the goal. Financial constraints leading to cost factor, lack of

infrastructure (material & trained personnel) in India like other parts of World including developed countries also is as a hurdle in delivering care for elderly.

There is no treaty among member countries of United nations that could augment family bonding for the sake of intergenerational bonding in different countries in the form of legislature / MOU that will encompass enablement of physical presence of kids of elderly to / from one country to other with ease.

Nationally in India there should be appropriate National or State policy / legislature regarding universal design of housing; registration & running of senior citizens home, assisted living centres, day care centres, respite care centres; protection of elder's from torture; separate department for elder's affairs, development of social support system (universal community policing). Inter sectoral action plan for strengthening of intergenerational bonding for breaking the barriers.

Recommendations : The author puts forward following recommendation for revival & augmentation of family bonding in India for it's elder's care and graceful ageing.

1)Formation of a department exclusively for Elder's affair that will formulate & implement multi sectoral approach for strengthening intergenerational bonding for accomplishing care of about 80% of Indian elderly at family level.

Also organizing social support system by implementing community policing lead by police personnel taking collaboration of associations /organizations working for the cause of elderly & other social organizations. Universal design of housing (for apartments) keeping one room earmarked for elderly.

2) Amendment of MWPSC act 2007 is urgently required. Inclusion of daughter in law & sons in law residing with parents in law must be made. There must be provision of physical presence/visit of children frequently to meet spiritual need of their elderly.

3) Domestic Violence act-2005: For the sake of family harmony, peace & stability of society, Domestic Violence act 2005 needs to be amended immediately, it should be made gender neutral.

4) An International treaty be made under the initiative of United Nations Department of Economic & social affairs, so that member countries adopt a common legislature for ease of physical presence of kids in parents care by the way of parents & kids visa, grant of leave, leave salary, parents stay with kids etc AND enactment of laws favouring graceful ageing and amendment of laws of nation that are working as obstacle to family & societal harmony.

CONCLUSION

Although not substantiated by ample data / evidence, the author firmly presumes that every geriatrician, gerontologists, social activists & others working for the cause Indian elderly are unanimous of the opinion that revival of firm family bonding is the most prominent tool for effective elder's care in India; that is also true for other nations, developing & developed.

Since world body could sign a treaty for nuclear weapon nonproliferation for the existence human & other lives and as we are urging plantation of trees to save lives from green house effect (i.e. revival according to need); why we could not succeed in strengthening family bonding for the sake of societal living & stability? Let us hope to revive wonderful family bonding in India & make graceful ageing a reality.

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Strategies to Improve the Quality of Life of the Elderly: Initiatives of a Corporate Health Provider

*O.P. SHARMA

Abstract

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. Most elderly people think that it is absolutely normal to be in a condition of ill health. Rural elderly has apprehensions and apathy about contacting doctors of modern system of Medicine. The elderly bears a social brunt of being disadvantaged by being marginalized as well as at risk of diseases due to immune senescence. 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.

Keywords: *Ageing, Geriatric medicine, Old Age Social and Income Security (OASIS), Vaccination in Elderly.*

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 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.[2] (Figure 1)

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%

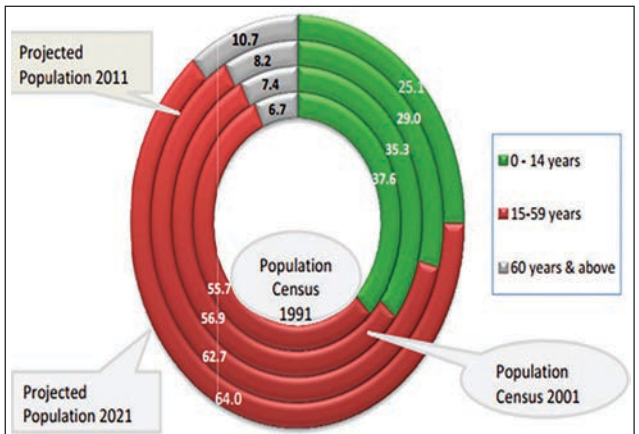

Figure 1. Elderly population

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.[4] However, different studies show varied

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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%).[5]

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%).[7] 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, unaffordability, 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).[9]

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 Bhubaneshwar, JSS Medical College Mysuru, Deccan Medical College Hyderabad, KLEU Prabhakar Kore 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 five year 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.

Social welfare benefits are provided by the Ministry of social justice and empowerment 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 Group of Hospitals, 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, Mysuru, Kolkata, Bangaluru & Bhubaneshwar.

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] (Table 1).

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[20] (Table 2).

Apollo also organizes health talks & health check-up 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.

Table 1: Geriatric Admissions

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

Table 2: Vaccine Usage

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

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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Diabetes in The Elderly- How Do They Differ?

*JOTHYDEV KESAVADEV

Dr. Jothydev Kesavadev was an invited speaker at 8th Emirates Diabetes and Endocrine Congress (EDEC) at Dubai attended upon by around 2500 physicians from Middle East, Egypt and neighbouring countries. One lecture was specifically on Diabetes in Elderly population. A picture and the summary of lecture follows.

Management of type 2 diabetes (T2DM) in elderly requires a differential approach. Especially in the era of modern medicine, where elderly are living longer, chronic complications can be more prevalent unless managed closely. T2DM management in older individuals is often complicated by the clinical and functional heterogeneity of this patient population. Elderly patients therefore often meet with increased rates of premature death; functional disability; and chronic illnesses, such as hypertension, cerebrovascular accidents, and coronary artery disease. Of note, it is often the biological age rather than the chronological age that highly influences the health of an individual. The key challenges that have been recognized in the management of diabetes in the elderly include altered pharmacokinetics and pharmacodynamics, increased risk of hypoglycemia, visual impairment, renal impairment, irregular routine (e.g. exercise and meals), cognitive impairment, concomitant diseases, polypharmacy etc.

Many national and international organizations like the American Geriatrics Society (AGS) and the International Diabetes Federation, recommend individualizing the target setting of diabetes care in the elderly. Though tight metabolic control should be the goal, it might not be safe for all the elderly individuals with diabetes because of co-morbidities and risk of hypoglycemia. Hypoglycemic episodes in the elderly can trigger life-threatening events like myocardial infarction or stroke. For example, the AGS Guidelines for Improving the Care of Older Adults with Diabetes Mellitus, recommends a diabetes care that is customized and prioritized to the individual person with T2DM, with due attention to the quality of life and personal and caregiver choices related to health care. It thus recommends addressing the clinical and functional heterogeneities in older adults with T2DM such as: differences in general health status, age and duration of disease at diagnosis, number of years of treatment, comorbidities and underlying chronic conditions, range of complications, degree of frailty, limits in physical or cognitive function, and differences in life expectancy (time horizon for benefit).

According to the ADA/AGS 2012 Consensus Report on Diabetes in Older Adults, an HbA1c of < 7.5% is recommended for a healthy patient, < 8% for a complex or intermediate patient and < 8.5% for a very complex/ unhealthy patient.

Judicious choice of insulin sensitizers, timely introduction of insulin, meticulous control of hypertension and hyperlipidemia are all critical to prevent complications. Long-acting sulphonylureas should be avoided due to their associated risk of hypoglycemia. In the long run, majority of the elderly patients with diabetes will ultimately require insulin and/or other injectables for optimal glycemic control as well as to ensure a better quality of life. While choosing insulin for an elderly patient, the risk for a hazardous hypoglycaemic episode should be ruled out. Short-acting insulin secretagogues must be preferred to avoid prolonged and frequent hypoglycemia. Long-acting basal analogs are associated with a lower frequency of hypoglycemia than

*Chairman & Managing Director, Jothydev's Diabetes Research Centers, Trivandrum, Attingal & Kochi

intermediate-acting or premixed insulin in the elderly. Newer long-acting basal insulins, rapid-acting insulins, and soluble co-formulations have a more predictable activity and safety profile making them suitable to be used judiciously among the elderly.

The efficacy of the glucagon-like peptide-1 (GLP-1) receptor agonists with respect to blood glucose, A1C and weight reduction is independent of age. They are well tolerated in the older individuals with diabetes with a similar side effect profile to younger individuals. Liraglutide and semaglutide are proven to improve the CV outcomes in older people with diabetes and pre-existing cardiovascular disease. The recently introduced insulin-liraglutide combination, IDegLira is another promising drug for the elderly with diabetes. IDegLira led to better glycaemic control *vs* GLP-1 analog liraglutide, and *vs* basal insulins, and had the advantage of weight loss compared with basal insulin alone, and low rates of hypoglycemia. Insulin pumps and Artificial Pancreas systems are also promising options for geriatric patients with diabetes, provided those patients meet the eligibility criteria for using such technologies.

In short, diabetes is a risk factor for the development of frailty which can lead to key adverse outcomes such as hospitalization, increased risk of a fall, and premature mortality. Even though guidelines tend to differ with respect to their stringency and conceptual frameworks, the potential benefits of achieving tight glycemic control for the individual should be balanced with the risk of hypoglycemia. A more relaxed HbA1c target should be set and adjusted based on individual clinical characteristics.

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REVIEW ARTICLE

Overview of Late Onset Hypogonadism

***RAVI KANT SARAOGI**

Abstract

The term andropause *is more appropriately referred as* late onset hypogonadism. *Clinicians should measure testosterone concentrations in the morning after an overnight fast. When prescribing testosterone to older men, the clinician should discuss with these men the possible risks. Although there is no evidence that testosterone causes prostate cancer, there is concern that testosterone therapy might cause subclinical prostate cancers to grow. After beginning treatment, a man should be monitored by digital rectal examination and by PSA at three months and then yearly.*

Keywords: *Andropause, Late onset hypogonadism, free testosterone, Serum PSA.*

The term *andropause* has been used to denote age-related decline in testosterone concentrations; this term is a misnomer because there is no discrete time when testosterone concentrations decline abruptly. It is more appropriately referred as *late onset hypogonadism*. This age related decline starts in the third decade of life and progresses slowly; the rate of decline is greater in obese men, men with chronic illness, and those taking medications than in healthy older men. This fall might have adverse consequences on energy, sexual function, muscle mass and function, erythropoiesis, and bone. However, unlike menopause, where complete estrogen deficiency with known clinical consequences occurs, the decline in testosterone in ageing men is modest and the possible clinical consequences have not been well-established.

Serum testosterone concentrations exhibit a diurnal variation with peak values in the morning; ageing reduces the magnitude of this diurnal variation. However, glucose and food intake suppress testosterone concentrations. Therefore, clinicians should measure testosterone concentrations in the morning after an overnight fast. Older men with unequivocally low serum testosterone concentrations (less than 264 ng/dL) should undergo the same diagnostic evaluation for hypogonadism as a young man with a low testosterone.

The **Endocrine Society** updated its evidence-based clinical guidelines for testosterone therapy in adult men with androgen deficiency in 2018. In the absence of known pituitary or testicular disease, it suggest testosterone therapy only for men with low serum testosterone concentrations on more than one occasion (since testosterone concentrations fluctuate) and symptoms of testosterone deficiency. Free testosterone should be measured (by equilibrium dialysis or calculated from total testosterone and sex hormone-binding concentration [SHBG]) only in men who are obese.

When prescribing testosterone to older men, the clinician should discuss with these men the possible risks, including erythrocytosis, exacerbation of prostate cancer, benign prostatic hyperplasia, and possibly cardiovascular disease. It is contraindicated in men with a history of prostate or breast cancer. It should not be administered to men with baseline hematocrit >48% (>50% for men living at high altitude), severe untreated obstructive sleep apnea, uncontrolled or poorly controlled congestive heart failure, or myocardial infarction, stroke or acute coronary syndrome in the preceding 6 months, or thrombophilia.

If the decision is made to treat an older man who has a low testosterone concentration for no apparent reason other than age, the target serum testosterone concentration should be **lower** than that for younger men, for example, 300 to 400 ng/dL, rather than 500 to 600 ng/dL, to minimize the potential risk of testosterone-dependent diseases.

If treatment is undertaken, the man should be screened before treatment and monitored during treatment for evidence of testosterone-dependent diseases, such as prostate cancer. Testosterone treatment should not be initiated in a man with a prostate nodule by digital rectal examination or a prostate-

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specific antigen (PSA) greater than 4.0 ng/mL (or greater than 3.0 ng/mL if he has a family history of prostate cancer or is African American) without urologic consultation. Although there is no evidence that testosterone causes prostate cancer, there is concern that testosterone therapy might cause subclinical prostate cancers to grow.

Although some clinicians have suggested considering patients with a history of organ-confined prostate cancer for testosterone replacement on an individualized basis—if they have undergone radical prostatectomy, have undetectable PSA, and no detectable residual disease 2 or more years after surgery—the lack of data from RCTs precludes a general recommendation.

After beginning treatment, a man should be monitored by digital rectal examination and by PSA at three months and then yearly. If a prostate nodule is detected at any time or the PSA increases by 1.4 ng/mL at three months or 0.4 ng/mL per year thereafter (confirmed by repeat measurement), urologic consultation should be obtained.

If treatment is undertaken, the clinical outcomes for success should be well defined. If the symptoms or condition that led to measuring testosterone is not corrected in the expected period of time (e.g., improvement in energy, libido, or hemoglobin in a few months or bone mineral density [BMD] in two years), discontinuation of the treatment should be considered.

Data on the risk of cardiovascular complications with testosterone therapy have been conflicting, with some studies suggesting no increase in cardiovascular events in older men, while others suggest a possible increase in cardiovascular events in some men who take testosterone. The Testosterone Therapy Trials, in short, confirmed that testosterone treatment of older men with unequivocally low testosterone levels is efficacious in improving sexual function, walking, mood, depressive symptoms, anemia, and bone density (vertebral but not femoral), all to a modest degree. Testosterone treatment, however, did not improve vitality or cognition and was associated with an increase in coronary artery plaque volume.

A clinician must make two key decisions before initiating testosterone therapy for late onset hypogonadism. The first decision is to determine whether the man is hypogonadal; the second is to determine whether the potential benefits exceed the potential risks.

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Shalender Bhasin, Juan P. Brito, Glenn R. Cunningham et al. Testosterone Therapy in Men With Hypogonadism:An Endocrine Society* Clinical Practice Guideline 2018.

News from Kerala

Congratulations Dr. Jothydev Kesavadev for lecture at Dubai on "DIABETES IN THE ELDERLY- HOW DO THEY DIFFER?"

Congratulations Dr. Arun N. Bhatt for being awarded Brian Chapman Scholarship award of 2018 by Royal College of Physicians of Edinburgh.

This is a scholarship provided for selected candidates of developing countries to attend International Course in Medicine for Older Persons."

News from Mumbai

Congratulations Dr. Varsha Reddy Jayar for being awarded Gold Medal for presentation on Anti-aging myths and facts of women's life in 2nd international regenerative medicine conclave. Chandigarh on 14th May 2018

Congratulations!

Dr. S. Ramanathan Iyer

for

FRCP Glasgow

News from Madhya Pradesh

Congratulations Dr. Atulya Saurabh for being awarded "MADHYA PRADESH RATNA" for services to Geriatric Medicine by The Chief Minister Sri Shivraj Singh Chauhan & MP Mr. Alok Sanjar in a function held on 9th April 2018.

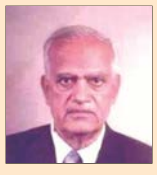
News from West Bengal

WEAAD was observed by Geriatric Society of India West Bengal branch on 16.06.2018 at Bodyguard line auditorium of Kolkata Police, jointly with "PRONAM" of Kolkata Police in association with BANCHBO Kolkata, Dignity Kolkata, Parkinson's disease patient welfare society Kolkata & Barrackpore Elderly Care Society from 05 pm to 09pm. The meeting was attended by about 300 persons with majority are members of PRONAM. Veteran Cinema star Smt. Sakuntala Barua was the chief guest, Guest of honours were – Justice (Retd.) Sri. Arun Mitra, Sri. Sujay Kumar Chanda (IPS), Joint commissioner of Kolkata police; Sri. Satyajit Bandyopadhyay (IPS)OSD, Executive officer, community policing, kolkata; Smt. Alakananda Roy (veteran dan cer & social activist). From GSI WB branch Dr. Ashoke Das, Dr. Chinmay Kumar Maity, Dr. Kaushik Ranjan Das, Dr. Krishnanjan Chakraborty, Dr. Mainak Gupta, Dr. Dhires Kumar Chowdhury & Dr. Soumik Ghosh were present. Media partner was EAI SAMAY Bengali daily. GSI West Bengal branch members delivered talks on different aspects of elder's abuse including ways to combat the issue. All dignitaries also spoke on this issue & stressed on imparting knowledge of cultural norms, aspects of elder's care & values to younger generation in different way and also on intergenerational bonding & stability of family. Members of associated organizations took part in discussion & also performed on stage. Web site of GSI WB branch has been inaugurated by Dr. Chinmay Kumar Maity. GSI WB branch has declared a programme for sensitizing youngsters in the name "JAGARAN". Finally a resolution was adopted for sending it to different persons for necessary action. Dr. Dhires Kumar Chowdhury has been instrumental in organizing this function successfully.

Barrackpore elderly care society, in association with Geriatric Society of India West Bengal branch has observe WEAAD 2018 on 22.06.2018 by organizing a street corner meeting at Ever youth club, Barrackpore. There has been a consensus agreement to work toward making younger generation aware about elder's issues & impart a new learning to them for stability of our joint family system where more as 80% of elderly chooses to live with family. We will write letters to central & State Ministries relentlessly about resolving elder's issues with proposals. Dr. Kaushik Ranjan Das organized the function.

A GREAT LOSS

With a very heavy heart, we inform all the members of GSI, the sad demise of



our respected Patron Dr. C. Prakash.
May God grant piece to the departed noble soul & courage to the family to bear this irreparable loss.
We members og GSI solidly stand with the family as a symbol of support in this hour of crisis.

News from Vijayapura

CONGRATULATION! DR. ANAND P. AMBALI

Congratulations Dr. Anand P. Ambali for passing Master Degree of M. Sc in Dementia from the prestigious University of Stirling in Scotland.

The Chancellor of the University of Stirling, Scotland, presented the degree to Dr. Anand P. Ambali during the Convocation, held on June 27, 2018, at Scotland.

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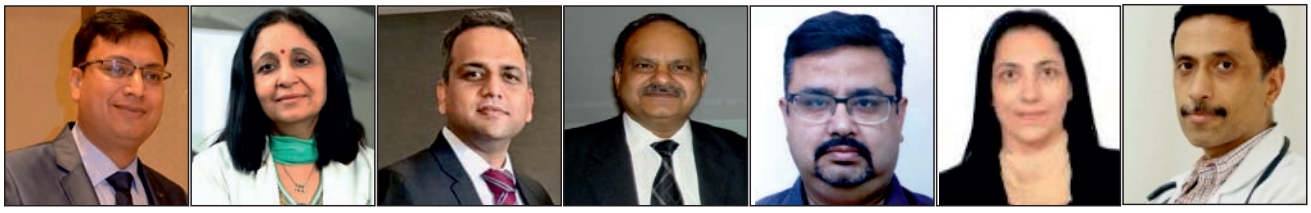
Safer oral hypoglycaemics in elderly	Dr. Mohammada Asim Siddiqui	Dr. Rakesh Kumar, Dr. Anil Manchanda
Insulinization in elderly	Dr. Amit Gupta	Dr. Meena Chhabra, Dr. L.R. Sharma
Vaccination in Elderly	Dr. Puneet Khanna	Dr. Ajay Agarwal, Dr. Pradeep Suri
GI Disturbances in Elderly Diabetics	Dr. Sudeep Khanna	Dr. Alok Agarwal, Dr. Rakesh Gupta
Dietary Issues in Elderly Diabetics	Dr. Anita Jatana	Dr. Amitesh Aggarwal, Dr. Surjadeep Sengupta
Physiotherapy in Elderly Diabetics	Dr. Seema Grover	Dr. Saurabh Srivastava, Dr. Gunjan Kishore Sharma

Speakers



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