PREVENTIVE GERIATRICS

BY- DR. SAURAV KUMAR

CONTENTS :

1. Definitions
2. Goals of geriatrics care
3. Demography
4. Problems in geriatrics
5. Prevention
6. Government Initiatives

What is Geriatrics??

• The term 'Geriatrics' was derived from the Greek word 'Geras' meaning old age and 'Latrike' meaning medical treatment.

• The care of the aged is called geriatrics.

What is clinical gerontology?

The study of the physical and physiological changes which are incidental to old age is clinical Gerontology.

Ageing

▶ It is a progressive and generalised impairment of body function resulting in , loss of adaptive response to stress and increasing the risk of age related diseases.

▶ Peoples more than 60 years are considered elderly.

▶ Old age is not a disease but a normal and inevitable biological phenomenon.

Preventive Geriatrics?

▶ Preventive geriatrics is the art and science of preventing disease in the geriatric population and promoting their health and efficiency.

▶ Sir James Sterling comment that 'You do not heal old age ; you protect it ; you promote it; you extent it.

Goals of Geriatric care

▶ Provide a safe and supportive environment.

▶ Restore and maintain the highest possible level of functional capacity.

▶ Preserve individual autonomy.

▶ Maximize quality of life.

▶ Provide comfort and dignity for disabled & ill.

▶ Stabilize & delay progression of chronic diseases.

▶ Prevent acute medical illnesses, early detection and treatment.
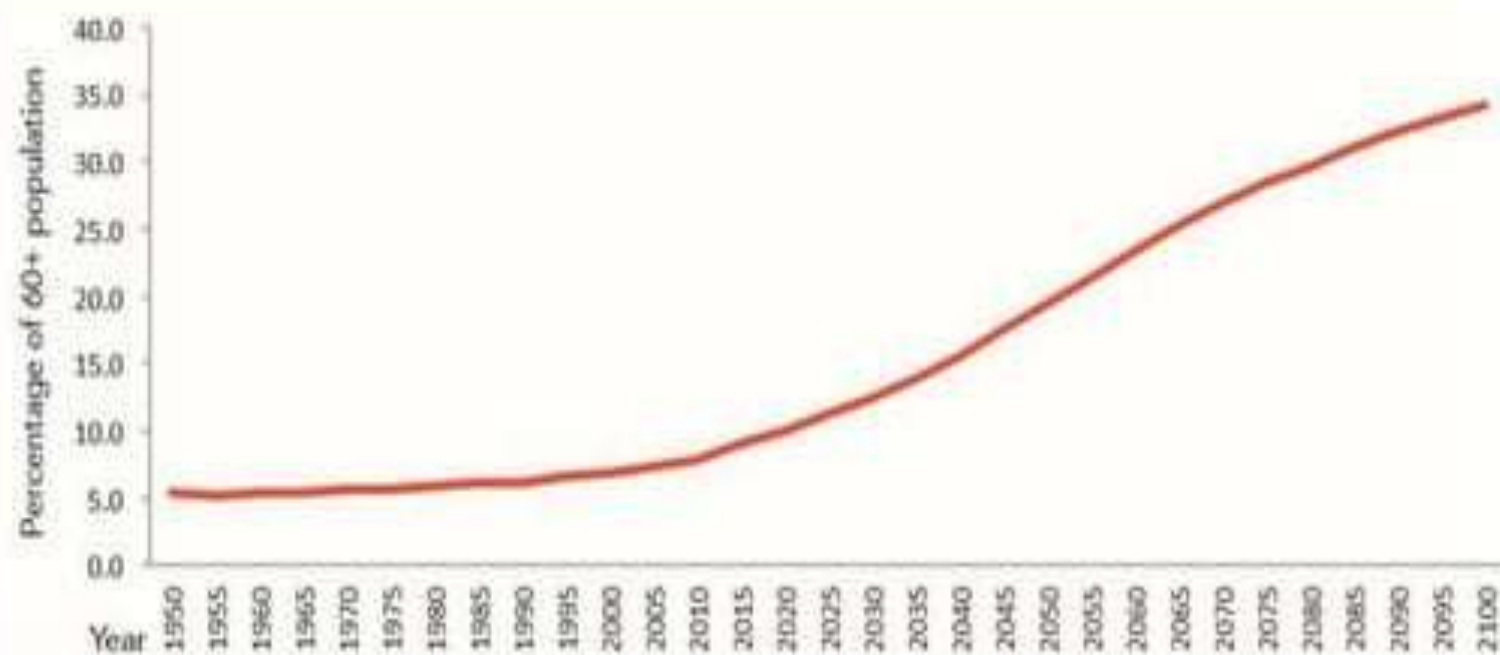
Demography of geriatric population

▶ Globally, the elder population constitute about 12% of the total population of 7.3 billion. The number will be double by 2050 , reaching 2 billion and accounting for 22% of the global population.

▶ In India too, the size and percentage of elderly population have been increasing in the recent years and this trend is likely to continue in the coming decades. The elderly population has increased from 77 million in 2001 to 104 million in 2011. by 2050 it is likely to increase by three times to reach around 300 million.

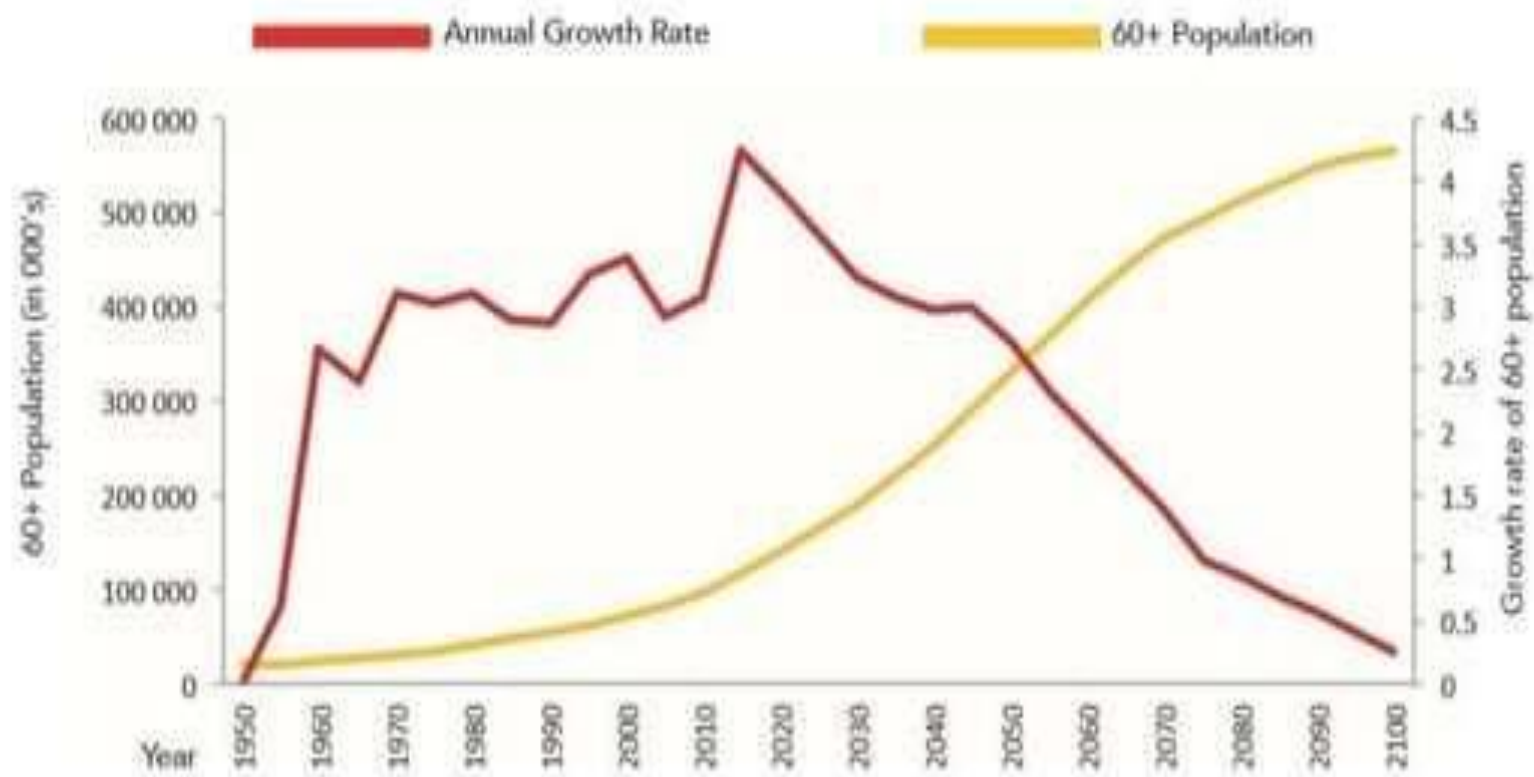Figure 1.1: World Population by Age Category, 1950–2100
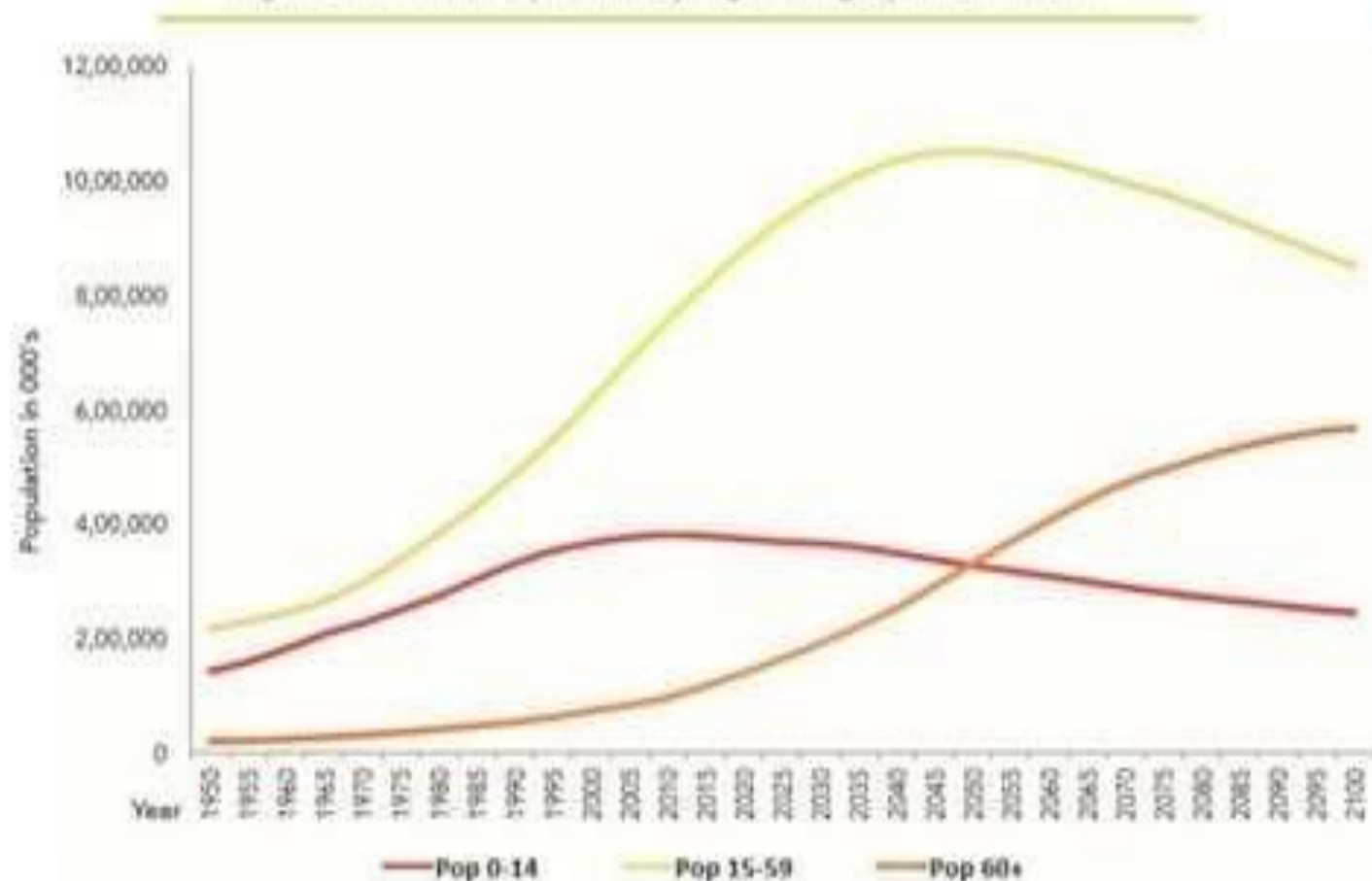
Source: United Nations (2015), World Population Prospects, 2015 Revision, Department of Economic and Social Affairs, United Nations.

1 Gorman M. (1999), "Development and the Rights of Older People", in Randel J., et al. (eds) The Ageing and Development Report: Poverty,

Figure 1.2: Percentage of 60-plus Persons in Total Population, India, 1950–2100

Source: United Nations (2015), World Population Prospects, 2015 Revision, Department of Economic and Social Affairs, United Nations.

Figure 1.3: Size and Growth Rate of the Elderly Population in India, 1950–2100

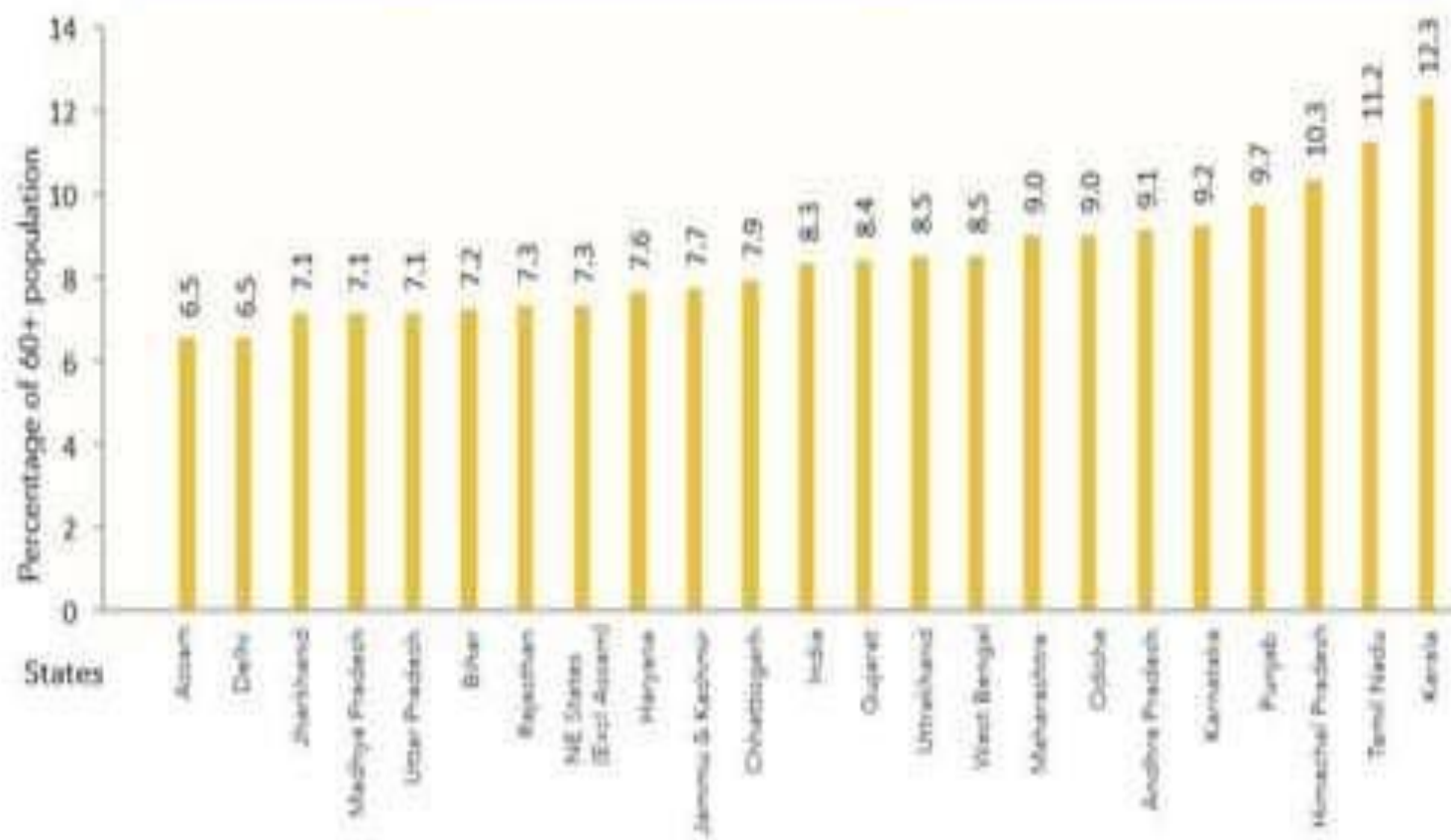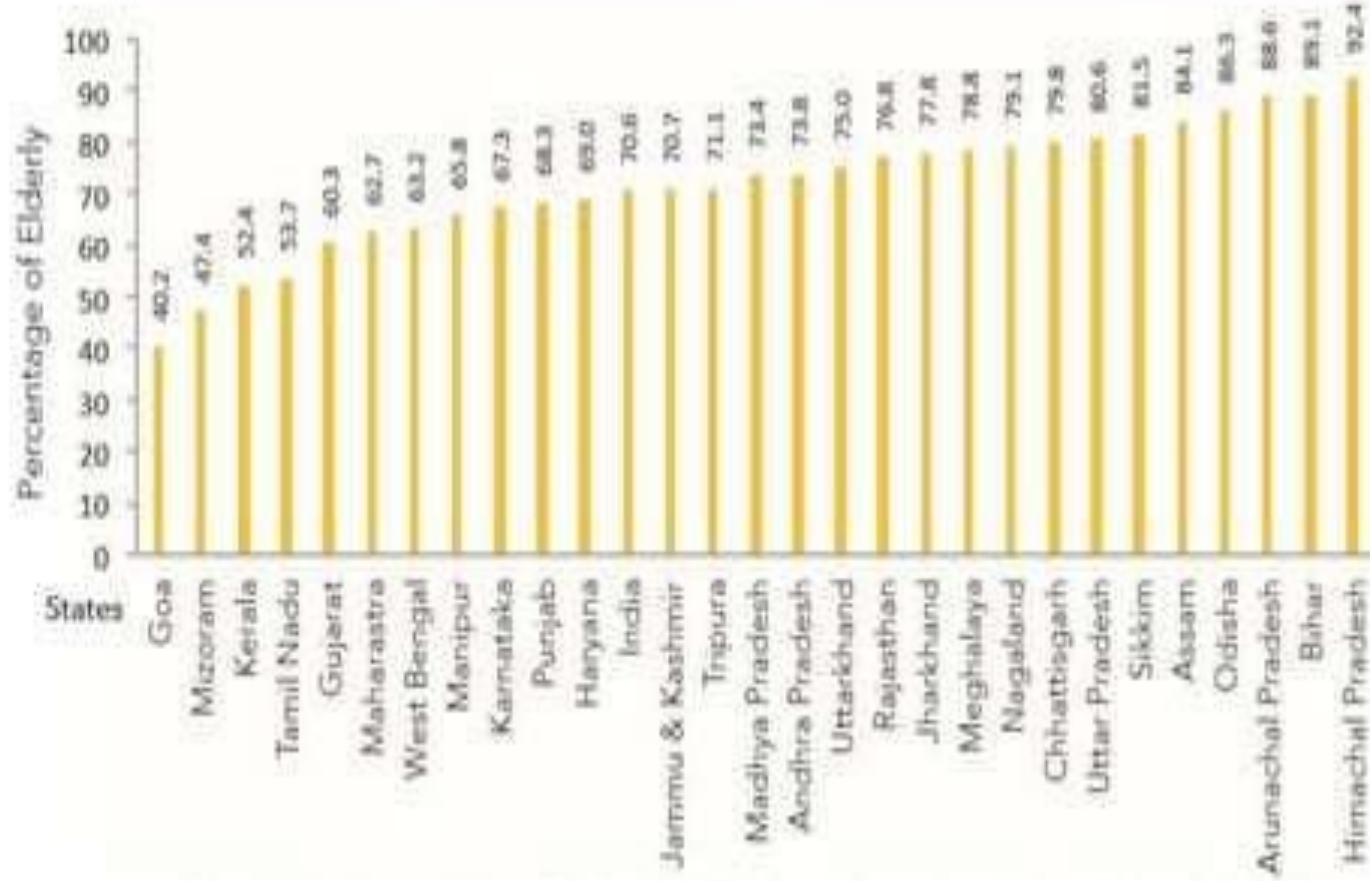Figure 1.4: Percentage of 60-plus Population across States in India, 2011

Figure 1.7: Percent Population Aged 60 and above Living in Rural India, 2011

Health problems of the aged

- Physical
- Psychological
- Social problem
- Economical

Problem due to ageing process

Both the genders	males	females
Ocular diseases	BPH	Menopausal
Hearing defect	Male sexual dysfunction	Urinary incontinence
Reduce in muscle strength		
Osteoporosis		
Nutritional problems		
Cardiovascular diseases		
Diabetes		
Neurological problems		

The I's of geriatric morbidity

- Instability
- Inanition(malnutrition)
- Incontinence
- Insulin resistance
- Immobility
- Incoherence
- Impaired memory

Risk factors

▶ Physical problems are mainly due to ageing and long term illnesses

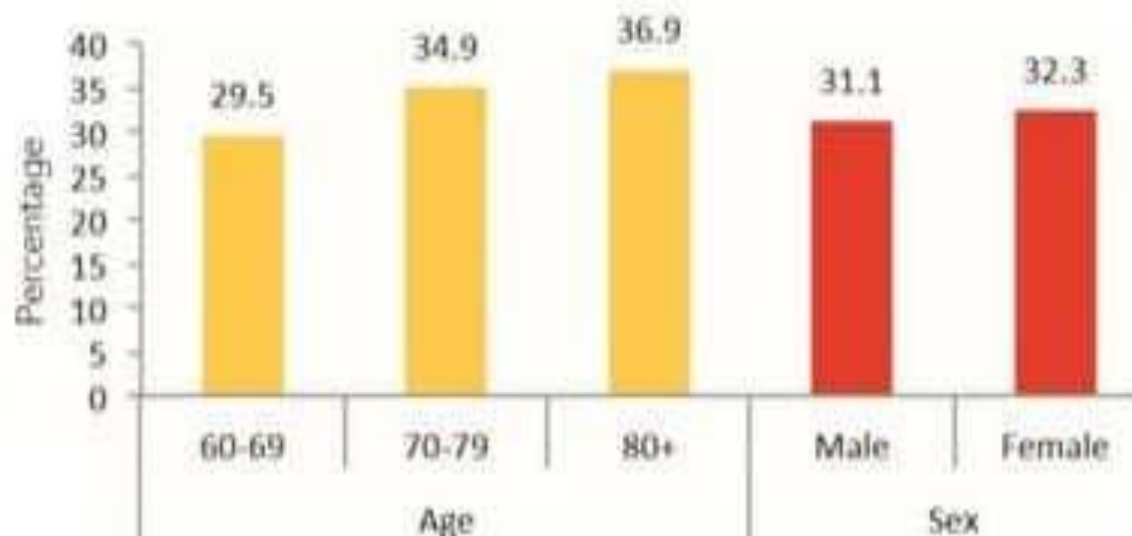Figure 2.7. Prevalence of Acute Morbidities Among the Elderly (by age and sex)

Figure 2.8. Incidence of Disability per 1,000 Persons (by age and sex), 2011

Men Women

Age	Men	Women
60-69	44.1	38.9
70-79	62.6	61.9
80+	82.3	85.7
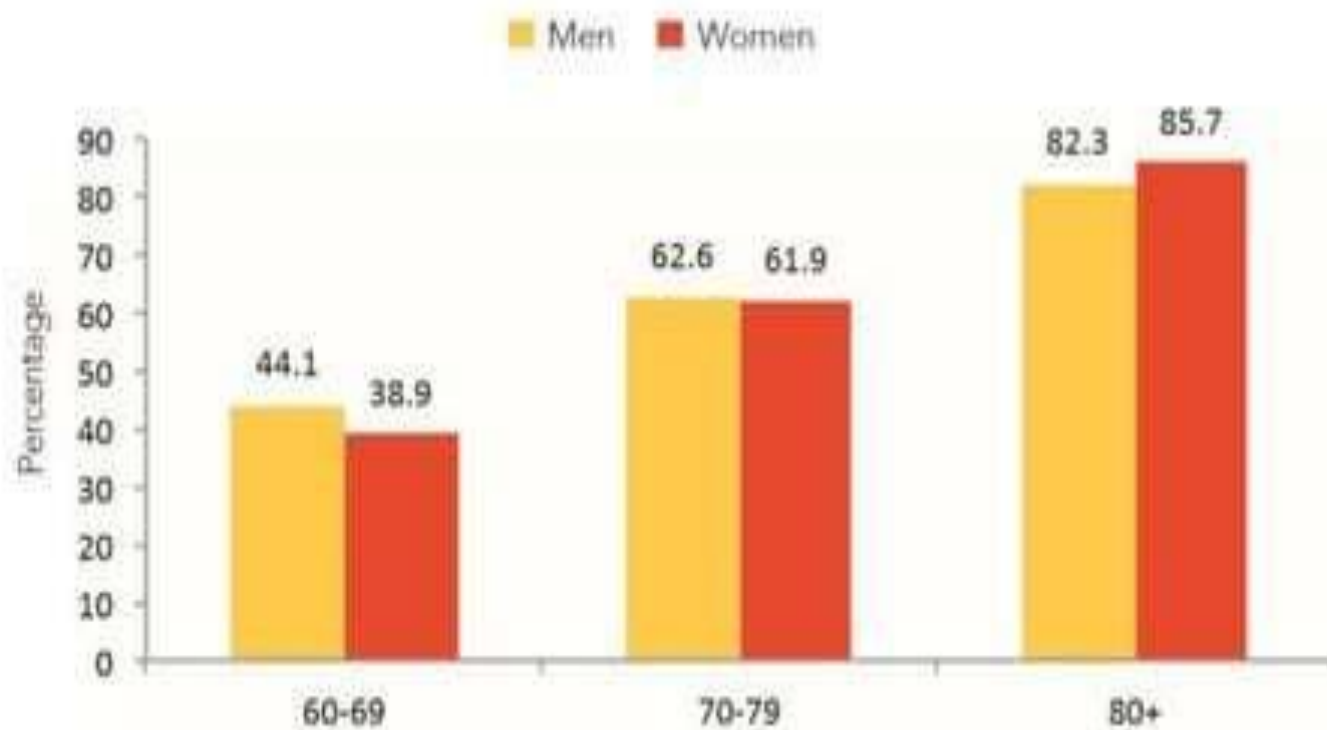
Figure 2.9. Multiple Disabilities among Elderly Men and Women, 2011
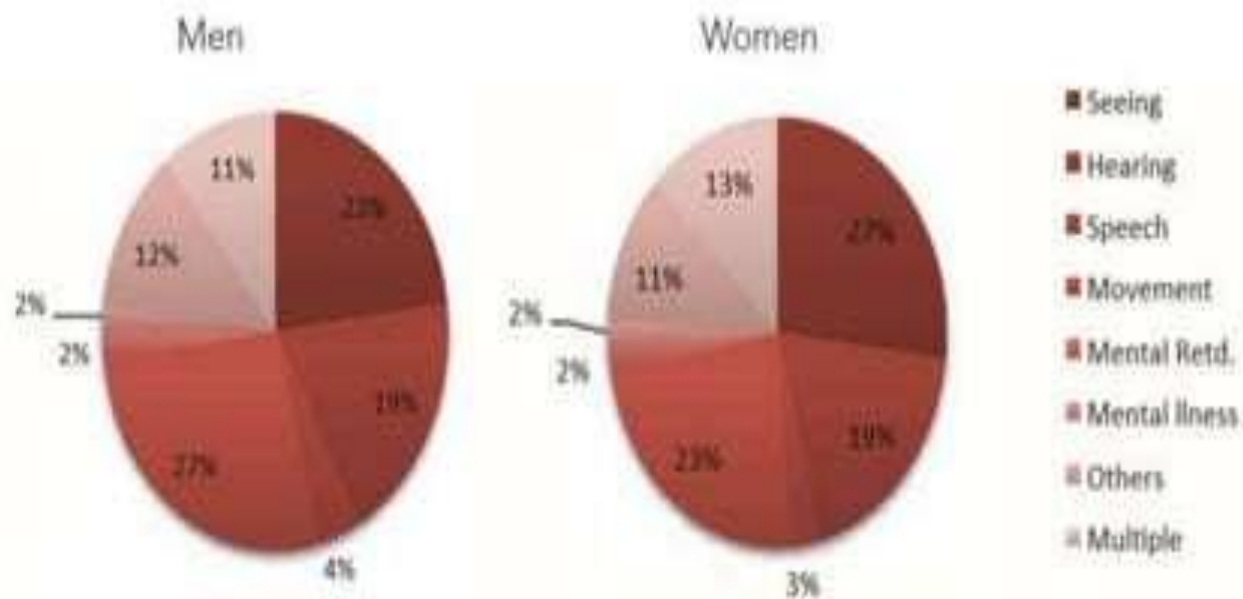
Men

Women

- Seeing
- Hearing
- Speech
- Movement
- Mental Retd.
- Mental Ilness
- Others
- Multiple

Men: 11%, 2?%, 12%, 2%, 2%, 1?%, 2?%, 4%

Women: 13%, 27%, 11%, 2%, 2%, 1?%, 2?%, 3%

Figure 2.10. Need for Full/Partial Assistance in ADL by Sex and Age, 2011
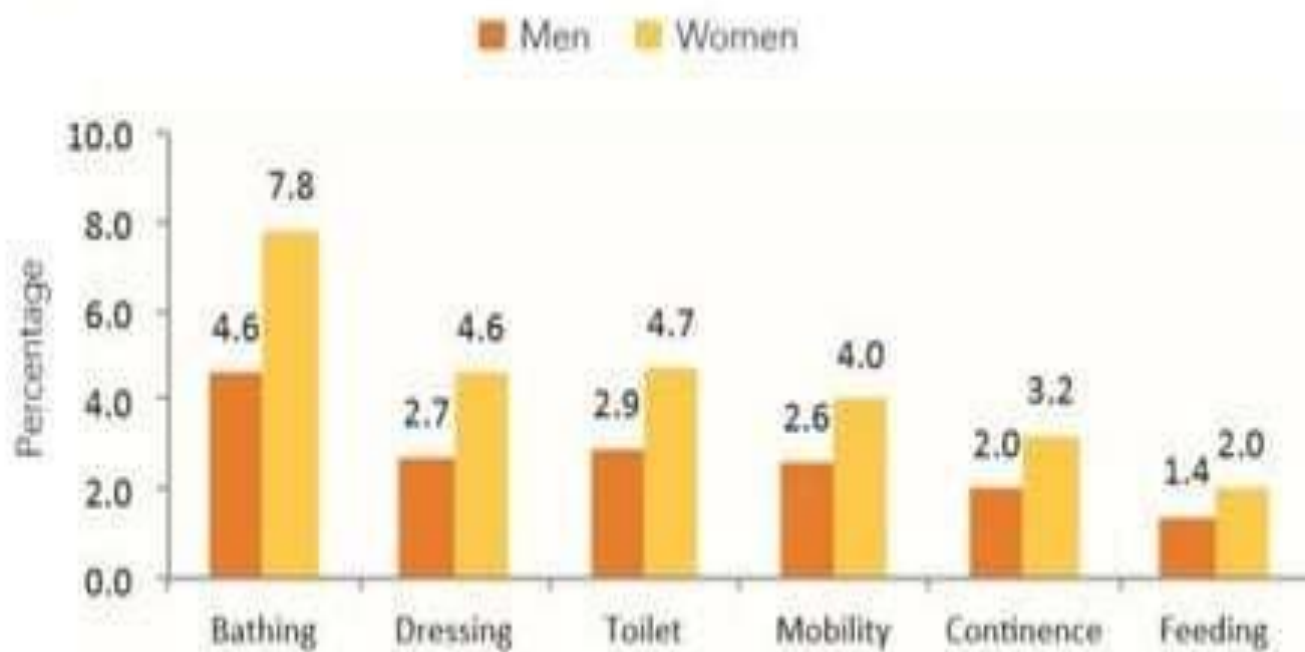
Psychological problems

Mental changes

- Impaired memory
- Depression
- Delirium

Sexual adjustment

Emotional disorder

- Social maladjustment
- Inner withdrawal
- Elder abuse

▶ This is period of critical changes in body, mind and spirit.

▶ Loneliness, boredom, depression, grief and worrying about the future which are common in this age group alter the normal psychological process.

▶ **Bereavement -**Death of spouse/ siblings ,close relatives, friends, or separation of their children after marriage.

Social

- Social problems of aged is important because the physical wellbeing & mental health is affected.

- Loneliness & Social isolation.

- Rapid disintegration of joint family.

- Change in social contacts due to retirement.

- Diminished participation in social & cultural activities like marriages, ceremonies, visiting temples etc.

- Diminished role in the family & community. Even if they participate their role is not much appreciated.

- These factors leads to **STRESS** which in turn contributes to **ILLNESS.**
- Problems of leisure
- Absence of job

- Diminished social contact-
  - Chronic disability associated with ageing process
  - Due to death of close friends and relatives
  - Lowered or loss of income.
- Change in the attitude of community towards elderly.
- Inability to adopt with changing environment.

Elder abuse

▶ Elder abuse refers to any intentional or negligent act by a caregiver or any other person that causes harm or a serious risk of harm to a vulnerable adult.

▶ Abuse of older persons is considered a global public health problem.

▶ Mainly due to loss of job

▶ Physical, mental and economical burden and depend on caregiver for day to day needs.

▶ Loss of spouse.

Figure 2.1: Elderly Living Alone in Selected States, 2005/06

State	Percentage
Tamil Nadu	13.7
Nagaland	10.9
Andhra Pradesh	8.0
Meghalaya	8.0
Madhya Pradesh	5.7
Karnataka	5.3
India	5.0
Gujrat	4.8
Maharashtra	4.8
Himachal Pradesh	4.7
Orissa	4.4
Tripura	4.3
Goa	4.2
West Bengal	4.1
Bihar	4.0
Uttar Pradesh	3.8
Arunachal Pradesh	3.3
Rajasthan	3.2
Mizoram	3.1
Delhi	2.9
Kerala	2.8
Haryana	2.6
Manipur	2.3
Punjab	2.2
Assam	2.1
Jammu and Kashmir	1.4

Source: National Family Health Survey, Round 3, 2005/06. Ministry of Health and Family Welfare, Government of India. http://rchiips.org/nfhs/nfhs3.
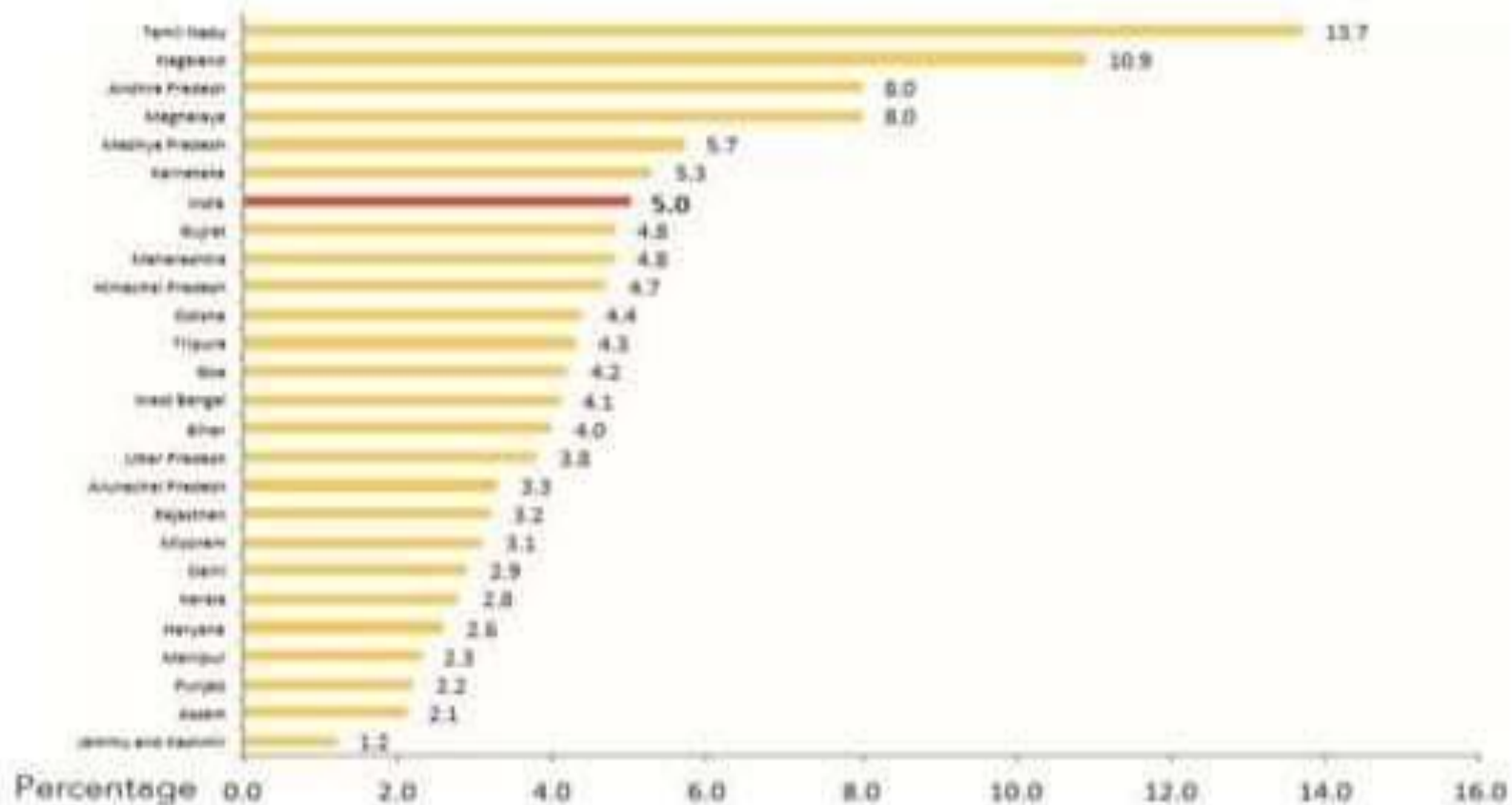
Figure 2.2: Elderly Living Alone by Sex, Caste, Marital Status and Wealth Quintile, 2005/06
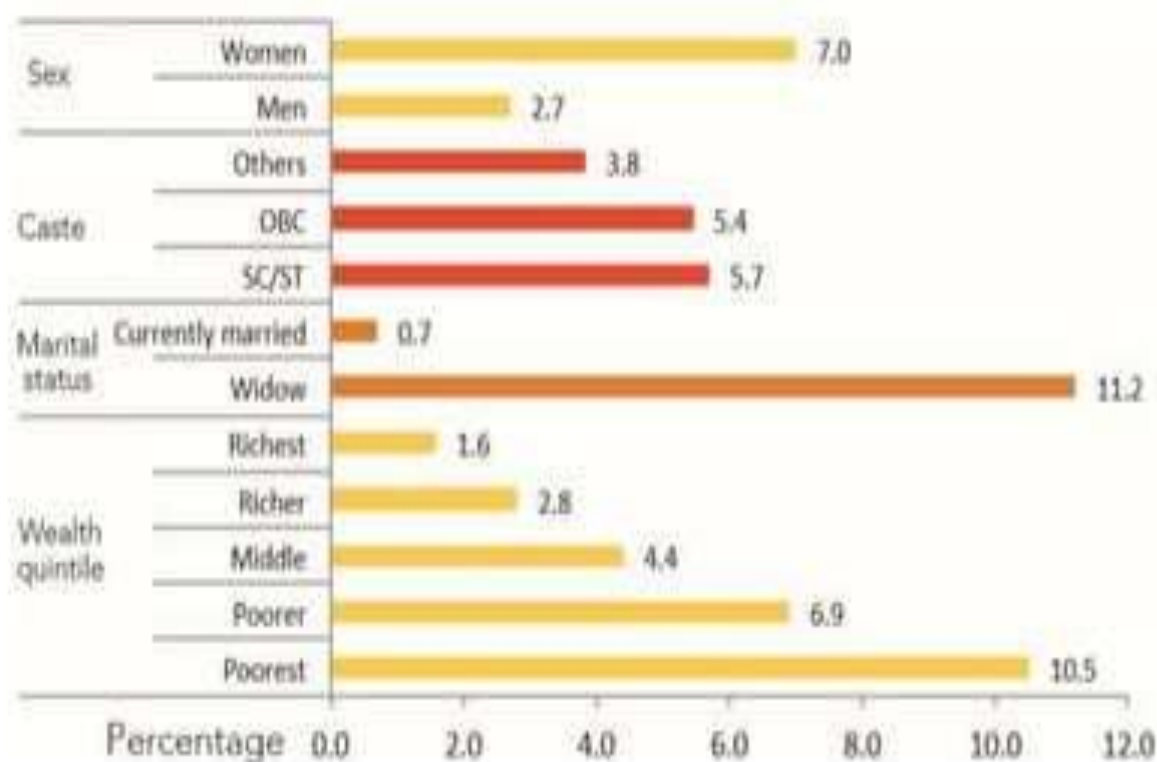
Economical

▶ More common in women then men.

▶ Retirement of people employed in government services, local bodies, public sector & private organizations.

▶ Self employee like agriculturists, businessmen, daily wage earners who cannot earn their livelihood due to disease and disability etc.

Figure 2.3. Sources of Personal Income of the Elderly, 2011
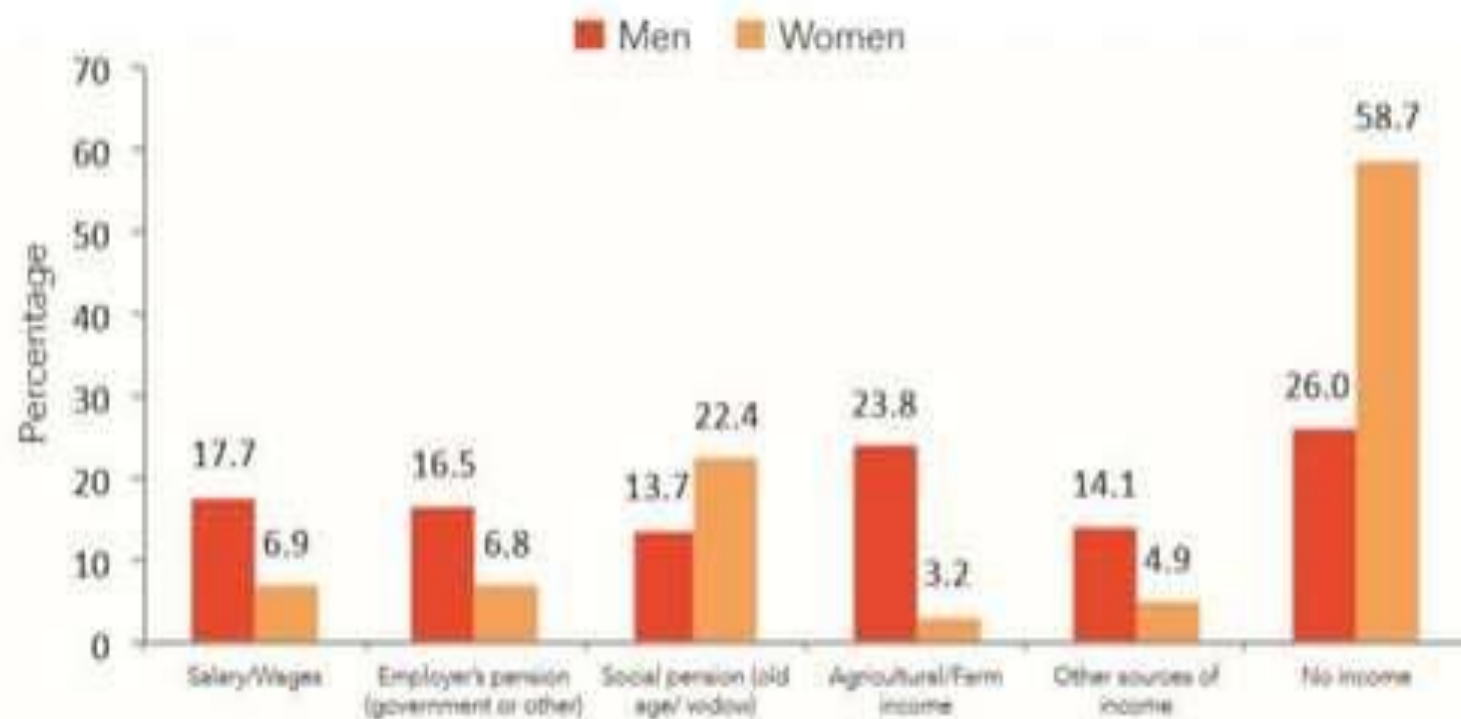
Prevention of the Geriatric problems

Objectives –

▶ To gain understanding of the various disease prevention strategies and their relationship to the care of the elderly.

▶ To understand the relationship between cultural values and preventive strategies, including those affecting the care of older patients and their families.

UN principle for older person

- 1) Independence
- 2) Participation
- 3) Care
- 4) Self-fulfilment
- 5) Dignity

Independence

▶ Older persons should have access to adequate food, water, shelter, clothing and health care.

▶ Older persons should have the opportunity to work or to have access to other income-generating opportunities.

▶ Older persons should have access to appropriate educational and training programmes.

▶ Older persons should be able to live in environments that are safe.

▶ Older persons should be able to reside at home for as long as possible.

<u>Participation</u>

▶ Older persons should remain integrated in society, participate actively in the formulation and implementation of policies that directly affect their well-being and share their knowledge and skills with younger generations.

▶ Older persons should be able to seek and develop opportunities for service to the community and to serve as volunteers in positions appropriate to their interests and capabilities.

▶ Older persons should be able to form movements or associations of older persons.

Care

▶ Older persons should benefit from family and community care.

▶ Older persons should have access to health care to help them to maintain or regain the optimum level of physical, mental and emotional well-being and to prevent or delay the onset of illness.

▶ Older persons should have access to social and legal services to enhance their autonomy, protection and care.

▶ Older persons should be able to utilize appropriate levels of institutional care providing protection, rehabilitation and social environment.

▶ Older persons should be able to enjoy human rights and fundamental freedoms when residing in any shelter, care or treatment facility, including full respect for their dignity, beliefs, needs and privacy and for the right to make decisions about their care and the quality of their lives.

Self-fulfilment

▶ a) Older persons should be able to pursue opportunities for the full development of their potential.

▶ b) Older persons should have access to the educational, cultural, spiritual and recreational resources of society.

Dignity

▶ a) Older persons should be able to live in dignity and security and be free of exploitation and physical or mental abuse.

▶ b) Older persons should be treated fairly regardless of age, gender, racial or ethnic background, disability or other status, and be valued independently of their economic contribution.

Prevention

- Primodial
- Primary
- Secondary
- Tertiary

Primodial Prevention

Add life to year and not merely year to life

Health Education

- Explaining the biological changes in ageing.
- Personal hygiene.
- Regarding smoking, alcohol related diseases.
- Information on CD & NCD specific to old age.
- Availability & utility of health services.
- Over the counter drugs.
- Use of aids like visual, auditory, walking aids etc
- Information regarding elderly abuse.

Primary prevention

Environmental Modification

▶ Maintenance of clean housing conditions.

▶ Need for fresh air, light & ventilation.

▶ Disposal of waste & human excreta.

▶ Vector control.

Prevention of accidents both inside & outside the home

▶ Slip resistant flooring

▶ Smooth pathways

▶ Hand rails in bathrooms

▶ Stairs- landing at short intervals

▶ Adequate lighting

Nutritional intervention

- Principles of balanced diet.
- Food safety.
- Food which improve bowel movement.

Life style & behavioural changes

- Physical exercises like yoga and relaxation
- Personal habits like alcohol, smoking & tobacco chewing.

Secondary prevention

▶ **Specific protection-**

  ▶ Immunization.

  ▶ Avoidance of injuries and falls

  ▶ Vitamin D, calcium supplementation.

  ▶ Certain food rich with antioxidant property- protect against cancer and degenerative disorders.

▶ **Early diagnosis & treatment –**

▶ Early recognition of CD & NCD, proper treatment, patient compliance & self care.

▶ Provision of free medical care.

Tertiary prevention

▶ All measures available to reduce or limit impairments & disabilities,& minimize suffering caused by existing disability.

▶ Rehabilitation of elderly people with chronic diseases & care for terminal illness.

▶ Rehabilitation – medical, vocational , social and psychosocial.

▶ Re- settlement- restoration of patient to his or her own environment.

Medical rehabilitation

▶ Appropriate exercise therapy for maintain the range of motion of joints, improving power in weak muscles and strengthening them.

▶ Restoring function of affected extremity.

▶ Provision of external appliance, splint or calliper, crutches, wheel chair etc.

▶ Relief of pain by means of physical modalities like heat, cold, electricity.

▶ Bowel/ bladder training to achieve continence.

Social rehabilitation

▶ People who are socially isolated are less healthy

▶ It need family, community ,economical , and spiritual intervention

▶ Government contribution

▶ Psychological rehabilitation

Psychosocial rehabilitation

▶ Rehabilitation is never complete unless the psychosocial aspects are duly taken care.

▶ Problems– loneliness, anxiety, depression, feeling of insecurity, behavioural disorders, affective disorders, personality disorders, suicidal tendencies, dependence, irritability, malingering, hysteria etc.

▶ The clinicians duty is to–explain, reassure, remove problems of the disabled about his disabilities, their effect on work and its possible solutions.

Global approach

▸ Recently World Health Assembly adopted "The Global Strategy and Action Plan for Ageing and Health" .

▸ 2020-2030 has been declared by WHO as a decade of the elderly.

The Global Strategy and Action Plan for Ageing and Health

Vision- A world in which everyone can live a long and healthy life.

Strategy-

- commitment to action on *Healthy Ageing* in every country

- developing age-friendly environments

- aligning health systems to the needs of older populations

- developing sustainable and equitable systems for providing long-term care (home, communities, institutions)

- improving measurement, monitoring and research on *Healthy Ageing*.

Major Government of India Initiative for Elderly Population

- National Policy on Older Person
- Maintenance of Senior Citizen Act-2007
- National Program for healthcare of Elderly.

National Policy on Older Person

▶ Adopted by Ministry of Social Justice and Empowerment in 1999, focused on well-being of elderly.

▶ Revised in 2011.

Principal area of Intervention are-

1)Financial security

2)Health care and Nutrition

3)Shelter, education and welfare

4)Protection of life and property

5)Involvement of NGOs

Indira Gandhi National Old Age Pension Scheme

▶ Old age pension scheme would cover all senior citizens living below the poverty line.

▶ Rate of monthly pension would be raised to Rs.1000 per month per person and revised at intervals to prevent its deflation due to higher cost of purchasing.

▶ The „oldest old" would be covered under Indira Gandhi National Old Age Pension Scheme (IGNOAPS). They would be provided additional pension in case of disability, loss of adult children and concomitant responsibility for grand children and women. This would be reviewed every five years.

National Council for Senior Citizens

▶ A National Council for Senior Citizens, headed by the Minister for Social Justice and Empowerment .

▶ The Council would include representatives of relevant central ministries, the Planning Commission and ten states by rotation.

▶ Representatives of senior citizens associations from every state and Union Territory.

▶ Representatives of NGOs, academia, media and experts on ageing. The council would meet once in six months.

Maintenance of Senior Citizen Act-2007

▶ Implemented in all over India Except J & K.

▶ Revised in 2018

▶ 'An Act to provide for maintenance and welfare of parents and senior citizens for ensuring their basic needs; safety and security; establishment, management and regulation of institutions and services.

National Program for healthcare of Elderly

▶ The MoHFW launched the NPHCE during the year 2010-11.

▶ Beneficiaries & Eligibility Criteria-All elderly People (above 60 Years) in the country.

▶ Types of Benefits-Free, Specialized health care facilities exclusively for the elderly people through the State health delivery system.

Major components-

▶ Establishment of 30 bedded Department of Geriatric in 8 identified Regional Geriatric Centres.

▶ Dedicated geriatric health care facilities in District Hospitals, CHCs, PHCs and Sub Centres level in 100 identified districts of 21 States.

▶ Develop 12 additional Regional Geriatric Centres in selected Medical Colleges of the country.

Main Strategies-

▶ Preventive and promotive care

▶ Management of Illness

▶ Health Man Power Development for Geriatric Services

▶ Medical Rehabilitation & Therapeutic Intervention

▶ Information, Education & Communication

Other Initiatives by GOI

- Integrated program for older person.
- Rashtriya Vayoshri yojana
- Pradhan Mantri Vaya Vandana Yojana
- Varishtha Pension Bima Yojana 2017

Elder Care Services in the Non-governmental Sector

- Age-well Foundation
- Alzheimer's and Related Disorders Society of India.
- Calcutta Metropolitan Institute of Gerontology.
- Ekal Nari Shakti Sangathan
- Guild for Services
- HelpAge India
- Heritage Foundation
- ILC's Elder Care Services
- Nightingale Medical Trust
- Janaseva Foundation
- Silver Innings Foundation
- Sulabh International: Services for Widows in Ashrams
- Elderly Self-help Group

THANK YOU