

# GERIATRIC HEALTH

**7<sup>th</sup> April 2012 World  
Health Day theme  
“Ageing and Health”**



# TOPICS



- INTRODUCTION
- GERIATRIC HEALTH PROBLEMS
- PRIMORDIAL, PRIMARY & SECONDARY PREVENTION
- TERTIARY PREVENTION & REHABILITATION
- NATIONAL PROGRAMMES

# INTRODUCTION

Using the slogan

**“Good health adds life to years.”**

With the key message

**The ageing of the world's population - an indicator of improving global health**

**Older people are a valuable resource for their societies and should feel valued.**



# TERMINOLOGY

Ageing: Age dependent & age progressive decline in intrinsic physiological function leading to an increase in age specific mortality & decrease in age specific reproductive rate.

Active ageing: Process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age.

Gerontology: The study of the physical and psychological changes which are incident to old age.

-  
Geriatrics or Clinical Gerontology : Care of the aged

Preventive Geriatrics : The art and science of preventing disease in the geriatric population and promoting their health and efficiency.

# CLASSIFICATION



- WHO Classification of the Elderly individuals:-
  - Elderly :60 to 75 yrs
  - Old :76 to 90 yrs
  - Very Old: Above 91 yrs

# GERIATRIC POPULATION TRENDS IN INDIA



- India : Phase of Demographic Transition
- 2011 census: elderly population in India **90.75 million**
- Life expectancy: **63 years male**  
**66 years female**

# GERIATRIC MEDICINE

- ❖ Branch of medical science which deals with the clinical, preventive, medical, social, rehabilitative & psychological aspects of illness in the elderly.
  
- ❖ Components of geriatric medicine –
  - ❖ Preventive Geriatrics
  - ❖ Geriatrics Syndromes
  - ❖ Psycho Geriatrics
  - ❖ Medicine & Surgery in old age
  - ❖ Geriatric Rehabilitation
  - ❖ Geriatric Pharmacology
  - ❖ Geriatric health services

# GERIATRIC MEDICINE

## Goal

keep the aged persons independent

## Aim

Maintenance of health and maximum independence by:

- Early detection and appropriate treatment of disease.
- Sympathetic care and support during terminal illness.



# RISK OF DISEASES IN ELDERLY

- Prone for infections
- Prone for injuries
- Prone for psychological problems
- Prone for degenerative disorders
- Increased risk for disease
- Increased risk of disability
- Increased risk of death



# HEALTH PROBLEMS OF THE AGE

**Classify on the basis of :-**

- (1) PROBLEMS DUE TO THE AGEING PROCESS
- (2) PROBLEMS ASSOCIATED WITH LONG-TERM ILLNESS
- (3) PSYCHOLOGICAL PROBLEMS

# (1) PROBLEMS DUE TO THE AGEING PROCESS :-

- Senile cataract
- Glaucoma
- Nerve deafness
- Osteoporosis
- Emphysema
- Failure of special senses
- Change in mental outlook

## (2) PROBLEMS ASSOCIATED WITH LONG-TERM ILLNESS:-

- Degenerative diseases
- Cancer
- Accidents
- Diabetes
- Diseases of loco-motor system
- Respiratory illness
- Genitourinary system





# (3) PSYCHOLOGICAL PROBLEMS

- MENTAL CHANGES

Impaired memory, rigidity of outlook, dislike of change are some of them.

- SEXUAL ADJUSTMENT

- EMOTIONAL DISORDERS

Social maladjustment leads to bitterness, inner withdrawal, depression, weariness of life, and even suicide.



# CARDIOVASCULAR DISEASE

- Hypertension
- Atherosclerosis
- Congestive heart failure
- Cardiomyopathy
- Strokes

# HYPERTENSION-

- Transitory or sustained elevation of systemic arterial blood pressure to a level ( $>140/90$  mm Hg) likely to induce cardiovascular damage or other adverse consequences.
- GRADING OF HTN-
  - Mild 140-159/90-99 mm hg.
  - Moderate 160-179/100-109 mm hg.
  - Severe  $\geq 180 \geq 110$  mm hg.
- Long term non treated HTN can cause damage to vital organs, result in strokes etc.

# LOCOMOTIVE DISORDERS

- OSTEOARTHRITIS
- RHEUMATOID ARTHRITIS
- GOUT
- FIBROSITIS
- MYOSITIS



# OSTEOARTHRITIS

- Leading cause of chronic disability in the elderly
- AGE-Women < 45 years of age: 2%  
, Women 45-64: 30% , Women >65: 68%  
with OA
- Hip OA is more common in men and Knee OA is more common in women.
- Obesity is a risk factor for knee and hand osteoarthritis.

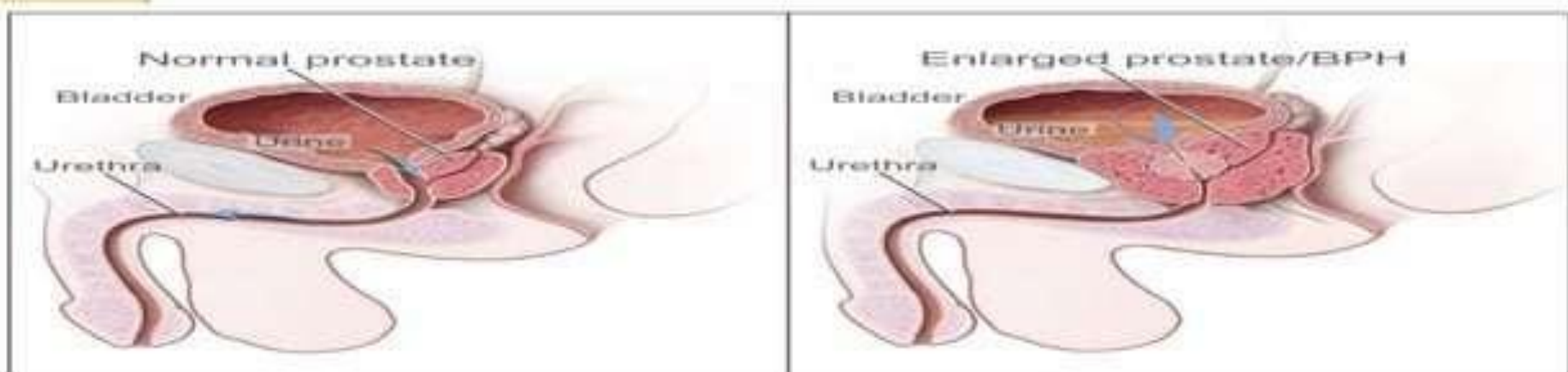
# CANCER

- The danger of cancer looms large past middle life.
- In elderly, cancer is the leading cause of death.
- Incidence rises rapidly after the age of 40.
- In men Cancer of the PROSTATE is common after age of 65 and in women it is **BREAST** cancer.



# PROSTATE CANCER RISK FACTORS

- **Age:** The risk increases with age, but 25% of diagnoses are made under age 65.
- **Family history of prostate cancer:** Men with a family history have two- to three-fold increase in the risk of prostate cancer
- **Diet:** A diet high in saturated animal fat can double the risk of developing prostate cancer.



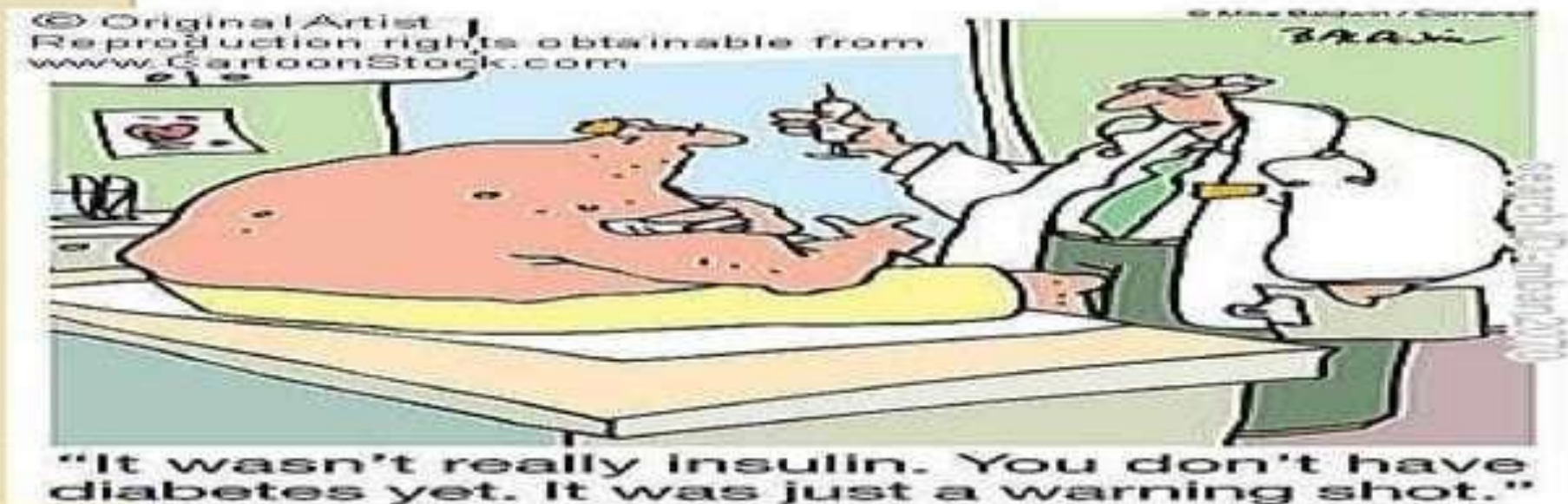
# BREAST CANCER-RISK FACTORS:

- Age- 80% of all female breast cancers occur among women aged 50+
- Role of genetics
- Obesity
- Alcohol consumption
- Estrogen therapy
- Radiation exposure



# DIABETES

- Diabetes is long term illness due to faulty carbohydrate metabolism
- It is leading cause of death as population grows older
- About 75% of diabetics are over 50 years age



# Psychological disorders

- DEPRESSION
- MANIC DEPRESSIVE PSYCHOSIS
- ALZHEIMER'S DISEASE
- PARKINSONISM DISORDER

# RISK FACTORS

- Female
- Social isolation
- Widowed, divorced, separated
- Lower socioeconomic status
- Comorbid medical conditions
- Uncontrolled pain
- Insomnia
- Functional limitations
- Cognitive impairment



# DEPRESSION

- **It** is a state of low mood and aversion to activity that can have a negative effect on a person's thoughts, behavior, feelings, world view, and physical well-being
- The median prevalence rate of depression among the elderly Indian population was determined to be 21.9% (annuals of Saudi medicine)



# Alzheimer Disease

- A brain disorder which gradually destroys the ability to reason, remember, imagine, and learn.
- It's different from the mild forgetfulness normally observed in older people.
- Prevalence of alzheimers-33/1000 population



# PARKINSONISM

- Parkinson's syndrome/atypical Parkinson's/secondary Parkinson's-a neurological syndrome characterized by tremor, hypokinesia, rigidity and postural instability.
- Prevalence of parkinsons-150 to300/100000 population.(modernmedicare.co.in)


PREVENTION

# Primordial prevention

- Healthy life style established during childhood.
- Practices during adolescence and youth age continued in later life are helpful in delaying the process and maintain quality of life .
- Goal of primordial prevention **”Add life to the year and not merely the year to life”**

# Primary prevention

Areas potentially amenable to Primary Prevention in Elderly :-

- ▶ **Health habits** 
  - Tobacco consumption
  - Alcohol abuse
  - Nutrition
  - Physical activity
  - Sleep
- ▶ **Social Activity**
- ▶ **Coronary Heart disease risk factors**
- ▶ **Immunization**
- ▶ **Injury prevention**
- ▶ **Osteoporosis prevention**

# Health Habits



## Tobacco

Tobacco use in any form should be discouraged by-

- Education
- Legislation
- Controlling production
- sale and consumption of Tobacco

As it contributes to:-

- Diseases of Lungs & Oral cavity
- Heart diseases
- Cancer and diseases of peripheral blood vessels



# ALCOHOL



- Sensitivity to the effect of alcohol increases with age.
- Older people have a decreased ability to develop tolerance to increasing amount of alcohol.
- Intake should be restricted to 60ml/day .
- Linked to liver diseases , stomach ulcers ,gout , depression , osteoporosis , heart disease , breast cancer , diabetes and hypertension.

# DIETARY MODIFICATIONS

- Saturated and trans fatty acid should be discouraged
- Salt intake should be limited
- Mono and poly-unsaturated fatty acids should be encouraged
- Encourage the intake of fiber containing food
- Micronutrient rich food
- Calcium and vitamin D rich food
- Drink plenty of water

# PHYSICAL ACTIVITY



Regular exercise helps maintain good health as it helps to

- ✓ Control weight
- ✓ Improves emotional wellbeing
- ✓ Improves blood circulation
- ✓ Increases flexibility and balance
- ✓ Lowers blood pressure and blood sugar
- ✓ Improves bone density
- ✓ Promotes good sleep

# SOCIAL ACTIVITIES

By involving in Social Activities like joining various **Social Clubs**, doing various **Cultural, Creative** and **Recreational activities** – **Stress** can be lowered.







# IMMUNIZATION

- Immune system function is compromised **So elderly are more vulnerable to infection**

## **(A) INFLUENZA**

- Above 65 year of age, every year
- Trivalent inactivated vaccine is administered is dose of 0.5 ml I.M
- Chemoprophylaxis with amantidine or rimantadine

## **(B) PNEUMOCOCCAL PNEUMONIA**

- Above 65 year of age once in a life time
- Administered in a dose of 0.5 ml I.M. or S.C.

## **(C) TETANUS**

- Elderly need a full course of tetanus toxoid again with booster dose every 10 years



# INJURY PREVENTION

- Osteoporosis prevention
  - ✓ Regular physical activity
  - ✓ Calcium and vitamin D rich diet
- Slip resistant flooring materials



- Non-slip tread caps in stairs
- Handrails on both sides of corridor staircase
- Staircase having contrasting color at the beginning and end of stairs



# SECONDARY PREVENTION

# GERIATRIC TEAM

- Geriatricians
- Nurses
- Physiotherapist
- Social worker
- Health worker

## *Must be remember:*

- Under or over investigations to be avoided.
- Know the age related variables while interpreting the results.
- Non-invasive tests are preferred than invasive.
- Polypharmacy should be avoided whenever possible
- Regular review of medication is a must



# SCREENING DISEASES IN THE ELDERLY

Breast cancer

Mammography

Cataract

Clinical examination of eye

Cervical cancer

Pap smear

Colorectal cancer

Stool occult blood

Coronary heart diseases

Risk analysis, ECG

Deafness

Clinical evaluation (whisper test) and audiometry



Dementia	Mini-mental state examination (MMSE)
Diabetes mellitus	Blood glucose estimation
Diabetic retinopathy	Fundoscopic examination, flourescin angiography
Dyslipidemia	Lipid profile
Glaucoma	Intra ocular pressure by tonometry
Hyper tension	Blood pressure recording
Lung cancer	Chest X-raays
Osteporosis	Bone densitometry after risk assessment
Prostate cancer and BPH	Rectal examination and prostate specific agent level

# TERTIARY CARE AND REHABILITATION

- This is applicable to ensure rehabilitation and use of remaining capacity of elderly.
- Rehabilitation is an essential constituent of geriatrics.
- This comprises of :
  1. **RE-ABLEMENT**-i.e.acquisition of skills that are need for leading and independent life.
  2. **RE-SETTLEMENT**- i.e., restoration of patient to his or her own or another environment.
  3. For its implementation ,geriatrics team is required, for providing good quality life to them.

## NEED FOR REHABILITATION:

- They form a major part of vulnerable population.
- They are more prone for getting infection,diseases,accidents,emotional and psychological disturbances.
- Elders are wisdom banks as they have life experiences which can be used for the benefit of society and community.



➤ Residual capacity of elders can be used in a number of measures i.e. working in development programs e.g. health education, literacy drive, child welfare , mass education and other national building activities.

➤ Increasing trends of nuclear families may lead to stress likely to be more in coming years, presence of elder person can reduce the burden

# TYPES OF CARE AND REHABILITATION

Tertiary care and rehabilitation are provided through-

1-Medical care and rehabilitation.

2-Social rehabilitation.

3-Economical rehabilitation.

4-Psycological rehabilitation.

# SOCIAL REHABILITATION:

- People who are socially isolated are less healthy. Getting out and keeping involved with others create a sense of belonging.
- it can be described under following heads:
  1. ROLE OF FAMILY
  2. ROLE OF COMMUNITY
  3. SPIRITUAL AID

# ROLE OF FAMILY

- Nearly 80% of elderly person in rural and urban areas are living in joint family so family can be pivotal institution or the sheet anchor for rehabilitation of elderly people.
- Family ensures social, economic and emotional security and ensures most congenial environments.
- Family need them and they need family support, this way it is a symbiotic and mutual support, self fulfillment and coexistence.



# ROLE OF COMMUNITY:

The panchayati raj institution and nagar palikas have special role to play care of elderly people by establishing :

- Village community center/village chaupal in village setting.
- Elderly come here and spend most of there day time and in this way it act as a day care center municipal parks in cities.
- Older people make get together enjoying in group discussion share the problem with each other and discover their solution

# SPIRITUAL AID

- Involvement into reading of holy books: provide peace to mind.
- Practicing Yoga provide rest to mind and body both.
- Encouragement for pilgrimage.
- Attending Spiritual gatherings.

# PSYCHOLOGICAL REHABILITATION

- Counselling of elder person and encouragement of self care so that they become independent at least for their activities of daily life
- Improve the number of people receiving treatment for psychological disorder
- Counseling of family member so that they can give emotional support to their elder person

# REHABILITATION STRATEGIES FOR SUBSTANCE ABUSE

- **Psychotherapy**

- Attempting to teach the patient new methods of interacting in a drug-free environment
- Making the person aware of losses and isolation resulting from substance abuse
- Group, family and network therapy for damage to family and peer relationships from substance abuse.

- **Optimized by age-specific treatment**

- Must fill the time formerly spent using substances



# ECONOMICAL REHABILITATION

- Economic Security Non Contributory Pensions to the Older Persons in BPL Families
- Income Generation Opportunities for Able and Willing Older Persons
- Imaginative Schemes for contributory Pensions for those older Persons Who can Afford to Save in Prime Years
- Special Schemes for Women, Dalits, Rural Poor, Destitute and Disabled Older Persons, Widows

# NATIONAL PROGRAMMES



**Ministry of Health and Family Welfare  
Government of India**

# NATIONAL PROGRAMME FOR THE HEALTH CARE FOR THE ELDERLY (NPHCE)





# NATIONAL PROGRAM FOR HEALTH CARE FOR THE ELDERLY

- The program is expected to result in a healthy elderly community with better physical and mental health independence
- The national programme for health care for elderly has emphasized the major issues relevant to the elderly population and the need to provide specialized geriatric services at various level of health care



# GOAL

To improve the access to :-

- Promotive
- Preventive
- Curative &
- Emergency health care among elderly person

# OBJECTIVES

- ✓ Provide comprehensive health care to elderly by preventive, curative, and rehabilitative services.
- ✓ Train health professionals in geriatrics, including supportive care and rehabilitation.
- ✓ To identify health problems in the elderly and provide appropriate health interventions in the community with a strong referral backup support.
- ✓ To provide referral services to the elderly patients through district hospitals, regional medical institutions

## OTHER NATIONAL PROGRAMMES

- NATIONAL POLICY FOR OLDER PERSONS (1999)
- OLD AGE SOCIAL & INCOME SECURITY (OASIS)
- INDIRA GANDHI NATIONAL OLD AGE PENSION SCHEME
- PACE ( PROGRAMME OF ALL-INCLUSIVE CARE FOR THE ELDERLY )

# National Policy for older person

- It aims to strengthen their place in society and help older persons to live the last stage of their lives with dignity and peace.
- Government has supported by;
  - 1.old age pensions.
  - 2.houses and shelters.
  - 3.welfare measures.
  - 4.health and nutrition through primary health care setup supported by secondary and tertiary care level.
  5. financial support to NGOs



## NGOS:

- Help age India
- Age well Foundation
- Age care India
- Elder home society
- Age care centre for retired personnel



**THANK YOU**

