### MANAGING OSTEOPOROSIS IN RURAL SETUP

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### **Abstract**

The problem of osteoporosis is more prevalent in rural India. The incidence of osteoporosis is more and management of osteoporosis in rural setup is challenging and very much different from urban India. This talk highlights the problems faced by orthopedic surgeons while treating patients with osteoporosis in rural India. The problems are multifocal and we need to have solutions to them. The geriatric orthopedic problems are most of the time related with osteoporosis and managing the osteoporosis in rural India is really a tough job.

**Key words:** osteoporosis, rural setup, management, problems, solutions

Main part of the talk- the management of osteoporosis (fragility) in rural India is very different job from the urban India. The terrible triad of poverty, illiteracy, and misbelieves poses lot many problems and hurdles in treating geriatric population in rural India. There are physical problems, psychological problems, social issues, economical issues and all are related with the poverty, illiteracy, misbelieves, population explosion and so on. The orthopedic surgeon at periphery has to combat so many lacunas and deficiencies and has to make many compromises while treating the patients of geriatric age group. The lack of infrastructure facilities, trained staff, lack of basic facilities for hospitals adds more problems in treating geriatric population in rural India. The addictions and lack of hygiene and other added problems pose difficulties in treating such patients in rural India. The social and cultural issues, influence of bone setters and of other pathy doctors also poses many problems in treating osteoporosis or fragility in rural India. The talk includes all the hurdles and barriers in treating geriatric orthopedic patients in rural India. This talk

PRACTICAL PROBLEMS IN
TREATING GERIATRIC
ORTHOPAEDIC PATIENTS IN
RURAL INDIA

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is based on 20 years of experience of author of practicing in rural India. it elaborates various aspects of geriatric orthopedic practice in rural India. The talk also includes solutions which are amicable and achievable and it underlines the importance of health education, public awareness and importance of insurance, public private partnership, infrastructure development in rural India.

The talk also includes authors efforts in improving the status of health education and public awareness in last 20 years in rural India. The talk is introspective and eye opener for all concerned. The poverty, illiteracy, misbelieves in rural India need to be handled in more organized and effective way

### Conclusion

The talk aims at high lightening the problems faced by orthopedic surgeons while treating geriatric orthopedic patients in rural set up and amicable solutions which can improve status of managing the osteoporosis and geriatric orthopedic problems in rural India.



### INTRODUCTION

- Geriatric orthopedics is now a separate specialty
- It deals with orthopedic problems and fractures of old ages
- Senior citizens are the people above 65 years of age
- This age group constitutes significant number of patients due to increased life expectancy and advances in medical field



### Why this topic?

- Senior citizens are reservoir of love, affection, experience and humanity
- We must take at most care of our senior citizens especially our parents
- We see and experience this beautiful world because of our parents
- Life has many stages like childhood, adolosence, youth, adult and old age

### Why this topic?

- Change is the only constant thing in our life
- Everything changes with time like body, mind, people and so on.....
- The old age is very sensitive and tender stage of life
- It mimics with childhood in many aspects except degenerative changes in body and mind

# Special aspects of geriatric age group

- · Changes occur in both body and mind
- Feeling of loneliness
- Lack of companion
- Generation gap
- Social and economical aspects
- · Physical and psychological aspects
- · Expectations and dissatisfaction



### MYTH!

- Elderly people are incompetent and incapable of making decisions or handling their own affairs.
- Most elderly live in nursing homes
- · All elderly people live in poverty
- Surgery will not be possible in old age, it will not be tolerated by them



### **Physical Changes of Aging**

 Most physical changes that occur with aging are gradual and take place over a long period of time.
 In addition, the rate and degree of change varies among individuals.



- Factors such as disease can increase the speed and degree of the changes. Lifestyle, nutrition, economic status, and social environment can also have effects.
- If an individual can recognize the changes as a/an normal part of aging, the individual can usually learn to adapt to & cope with change

# Fears of a sick person: Death Chronic illness Loss of function Pain





### Physical problems

- Degenerative changes
- Systemic diseases like hypertension, diabetes etc
- · Chronic diseases like COPD, ASTHMA, etc
- Osteoporosis or fragility of bones and related problems
- Skin related problems
- Physical changes in almost all body organs and parts
- Nutritional problems

### Osteoporosis & osteoarthritis

- Most common problems in old age
- Deformities and crippling more in rural areas
- Lack of awareness about these elements
- No importance is given to treat these elements
- More in females
- · Needs much more attention





## Pre operative and post operative care

- Lack of awareness
- Many myths and misbelieves
- No proper hygiene
- No attention by next to kins



### Psychological problems

- Dementia and related problems
- Depression
- Alzheimer's disease
- Frustration
- Loneliness feeling
- Power issues



### Social issues

- · Educational status (illiteracy)
- Misbelieves
- Hygiene issues
- Transportation and other problems
- Povert
- This triad of poverty, illiteracy and misbelieves (dangerous triad) is very important in Rural India in geriatric problems
- Addictions

### **Everything Early Like**

- Early marriage
- Early child bearing
- Early hysterectomy because of
- Poverty
- Illiteracy
- Misbelieves
- Population Explosion
- Lack of hygiene



### Incidence of fragility

- It is about 4 in 1 for males and 2 in one for females
- Exact incidence not known
- But in rural India it is even more especially in females
- Every women in post menopausal age is osteoporotic unless proved otherwise
- It is said that the person comes in this world through pelvis and goes(dies) through neck of the femur. Such is the common occurrence of fragility fractures in old age worldwide

### Common sites of fragility fractures

- Wrist, hip and spine are the commonest sites of fragility fractures
- · However It may occur to any bone .
- Fragility of bones is the main hurdle in treatment of patients with fractures in old age



### Risk factors in rural India

- Poverty
- Illiteracy
- Misbelieves
- Addictions (in male, predominantly alcohol and smoking)
- Population explosion
- Lack of facilities to check BMD(DEXA which is gold standard is only available in metros

### Hurdles in rural India



- · Socio- economical problems
- · Lack of awareness about fragility fractures
- · poor hygiene
- · Influence of quacks and bone setters
- · Poor implant holding(purchase)
- Other co morbid conditions like diabetes, hypertension, COPD etc
- · Anesthesia fitness problems
- · Other age related problems like senile dementia etc
- · Financial dependence on children

### **Economical** issues

- Poverty
- · Agriculture base economy, so unpredictable
- No insurance
- Dependency on children for money
- Frequent droughts and natural calamities
- Unplanned financial position
- No fixed or certain resources of money
- Population issues

### Generation gap

- Most important aspect in geriatric age group
- · Mismatch between expectations and delivery
- Lack of understanding
- Moral and cultural issues
- · As you sow, so will you reap (get)
- · Moral values and issues

### Rural v/s urban

- Rural group don't have money and awareness
- But have affection, manpower, caring attitude
- No one in rural area seen in vrudhashram( shelter
- Urban people have money and awareness
- But they don't have manpower, time, affection(sort of professionalism in relations)
- No caring attitude
- We see so many parents of urban educated persons in shelter homes

### Meeting the Elderly Needs

· Culture: the values, beliefs, ideas, customs, and characteristics that are passed from one generation to the next.



- Areas affected by an individual's culture:
  - Language
  - Food habits
  - Dress
  - Work
  - Leisure activities
- Health care



### Nursing care

- · Most important issue in geriatric age group
- No awareness in rural area about nursing care
- No manpower available for nursing care in urban area
- Paid nursing done in cities which is not possible in rural areas due to lack of money and infrastructure
- Close relatives and near ones do it in rural area
- · Affection and readiness to do care is more in rural area but lack of scientific care

### Rural v/s urban

- For rural people affordability is a big issue
- · Fear about surgery is also an important issue
- · People like to die due to complications of disease(fracture)
- · But they don't like to have complications of treatment if they happen
- Life style in rural area is totally different than urban life
- · Use of commodes and avoiding squatting after joint replacement or other fractures is an big issue also.
- Most of the people in rural area don't have toilets, they go for open defecation, so use of commodes is out of question

### Rural/urban

- For rural people most of the times telling about surgery and costly implants is like if you don't get bread to eat, eat cake
- The urban people don't have problem of money and awareness, but no people to take care.
- The problems of rural and urban geriatric population are different all the way

### Rural/ urban

- Joint v/s nuclear families
- Working couples
- Culture of flat and apartments
- Mindset difference
- Infrastructure facilities different
- Cost of treatment
- Rehabilitation facilities

### Plus points of rural area

- Joint families
- · Caring attitude is more
- Communication more powerful
- Seniors feel more secure

### Management of fragility fractures

- Die
- Exercise
- Drugs
- Patient education
- Counseling
- Positive thinking
- Surgical treatment
- Rehabilitation
- Psychological Evaluation
- Prevention of early PMO
- Hormonal Replacement Therapy



### Negative points of rural area

- Money problem (poverty)
- Illiteracy
- Misbelieves
- Hygiene problems
- Population issues

### Solutions

- Cost effective treatments
- · Health education and counseling
- Insurance/ mediclaim in rural area
- Involvement of government machinery
- Public private partnership promotion
- Public awareness
- Infrastructure development

### Influence of bone setters/quacks

 Because of illiteracy and poverty the people are more attracted towards quacks and bone setters



### solutions

- Senior citizens day celebrations
- 1<sup>st</sup> October is celebrated every year as senior citizens day world wide to create awareness about care of senior citizens



### Influence of other pathies

- Most of the times due to misguidance of other pathies people suffer a lot
- The fear of side effects of allopathy and brain wash by other pathy people about it, creates problems in treating geriatric patients
- People disappear from treatment and again come with more complications and progression of disease
- It becomes more difficult to treat such patients in late stages

### Our contribution

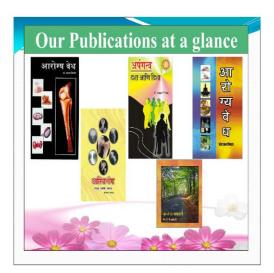
- Conducted almost more than 60 camps for free BMD check up in last 18 years
- More than 10000 patients screened for fragility
- Ultrasound based calcaneal method was used most of the times
- More stress on health education and public awareness along with treatment
- Display of DVDS on fragility awareness, fall prevention, taking care of old age people etc in out door waiting hall for patient education

### Our contribution

- · Counseling, reassurance,
- Publication of pamphlets, articles in newspapers, books in local language regarding fragility prevention and treatment and care of geriatric patients
- Comprehensive approach of treatment like diet, exercise, drugs
- Team effort is important (dietician, physiotherapist, psychologist, counselor, social worker, orthopedic surgeon etc
- Celebration of senior citizens day every year

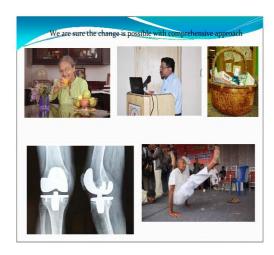
### Our contribution

- Health education should start from school level because early age bone mass is important determinant
- Lectures at school, college level on health education and awareness of fragility of bones is important
- De addiction movement- at least ask your every patient about any addiction in history taking and ask them to quit it



# Our Presentations for Society ★ Disaster Management ★ Gender inequality ★ First Aid Treatment & ★ Health & Related Pre-hospital Care Presentations ★ Mantra of Safe Driving ★ Teacher Student Relationship ★ Study Mantra ★ Life Skill Education ★ Infotherapy ★ Post Menopausal Osteoporosis





### Take home message

- Fragility fractures is an important issue in old age
- It should be addressed in proper way to get expected results
- Comprehensive treatment approach is must
- Health education and public awareness is must
- Prevention is much better than cure
- Better patient care through education and research
- Social and economical issues should be taken care
- Can mixing of urban and rural positive issues is possible



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