

## **SLEEP PROBLEMS IN THE ELDERLY**

### **LEARNING OBJECTIVES**

- Identifying common causes of sleep disorder
- Understanding of the normal changes in sleep with aging
- Evaluation of the sleeping problems.
- Clarify management plan of the sleep disorder according to the cause and the type.
- Recognition of when to refer

### **TEACHING STRATEGIES:**

- Interactive lecture.
- Role play

### **MATERIALS AND EQUIPMENT NEEDED.**

- Overhead projector.
- White board or flip chart and markers for summarizing major points

### **LEARNING POINTS**

- **Consequences of sleep disorders in the elderly:**
  - Loss of sleep
  - Overuse of sedative medication
  - Effect on cardiovascular, pulmonary and CNS systems
  - Association between apnea and hypertension
  - Increased risk of nursing home placement
- **Review of normal changes of sleep with aging**
  - Less total night time sleep in elderly – average 5-6 hours
  - Changes of circadian rhythm – often awoken in the early morning
  - Sleep pattern shows more frequent awakening during the night, and lighter sleep levels
  - Daytime napping is common, but aggravates night-time sleeping
  - Night owl pattern – sleeps during the day, and is awake at night
- **Evaluation of the sleep complaint**

Possible Causes:

  - Misunderstanding of the normal changes of sleep pattern with age
    - Unreasonable expectations of sleeping
  - Poor sleep habits
    - Irregular sleep/ wake pattern
    - Caffeine/Caffeine containing beverages
    - Alcohol intake at any time
    - Wake-full time in bed
  - Medical illnesses

- Acute
- Chronic
- Painful problem (arthritis, malignancy)
- Medications – many are know to affect sleep, for example:
  - Antidepressant ( SRSS)
  - Decongestant
  - Bronchodilators
  - Antihypertensives
  - Corticosteroids
  - Night time diuretics
- Psychiatric
  - Severe depression
  - Effect of assorted life changes
  - Loss of loved ones
  - Leaving a familiar home
- Primary sleep disorders
  - Restless legs syndrome
    - Discomfort in the legs at night
    - Sensation of having to frequently move the legs – disturbs both the patient and his/her sleep partner
  - Periodic limb movements disorder
    - Periodic kicking during sleep – disturbs sleep of patient and sleep partner
  - Sleep apnea
    - Intermittent respiratory obstruction during sleep
    - Results in frequent awakening or lighter sleep
    - More commonly seen in obese individuals with short, thick necks
    - Strongly associated with hypertension, pulmonary hypertension, and occasionally sudden death
    - Diagnosis – can be suspected from history of daytime sleepiness, frequent snoring at night, periodic long periods of lack of breathing while asleep, and obesity.
    - Diagnosis is confirmed by sleep lab investigation (Electroencephalogram, Blood Oxygen saturation)
- **Treatment**
  - General Measures
    - Good sleep habits – regular bedtime even if not initially sleepy
    - Daily physical activity and exercise
    - Avoidance of excessive time in bed – get out of bed when awake
    - Relaxing night time activities before bed time
    - Avoidance of caffeine, alcohol...etc in the afternoon and evening
    - Elimination of loud noise, excessive light and uncomfortable room temperature.
  - Medication Use
    - Use only when above general measures have failed
    - Generally limit use to 2-5 days at a time – avoid regular or daily use which can lead to dependence and higher doses
    - Medications which can be used:

- a. Melatonin (200 – 400 mg/night – no more than
  - b. Antihistamine (Diphenhydramine or promethazine – 25 – 50 mg/night)
  - c. Antidepressant (imipramine or amitriptyline – 25 – 50 mg/night – best used in those who have underlying depression)
  - d. Other hypnotics (lorazepam 1-2 mg/night – avoid diazepam or phenobarbital as too long-acting, with increased risk of dependency)
- Treatment for restless leg syndrome and periodic limb movement
    - Warm baths of legs and feet at bedtime
    - May respond to medications such as carbidopa-levodopa, pergolide, clonazepam, quinine
  - Treatment of sleep apnea
    - Weight loss is the most consistently effective
    - Continuous positive airway pressure – requires special apparatus
    - Surgery – weight reduction, opening of airway – only when all other methods have failed

#### **CRITICAL ELEMENTS FOR REFERRAL**

- Refer to sleep disorder specialist when no improvement without pharmacological and non-pharmacological treatment

#### **CRITICAL POINTS TO BE EVALUATED**

- Common causes of sleep disorders
- Normal changes in sleep with aging
- Proper sleep habits
- Simple treatment for common sleep problems
- Appropriate use of medication when necessary