### Post-Stroke Depression

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### Demographics of PSD

- Prevalence: 20% to 60%
- Depression in elderly: 15%
- Depression in medical/ surgical inpatients: 20% to 30%

# Under-recognition of PSD

- 113 PSD patients: 1 referred to psychiatry; 1 received antidepressants
- 10 out of 200 stroke admissions get a psych consultation
- Stroke pts on rehab ward: 68% depressed (psych interview); 50% depressed (BDI); 0% (rehab team)

# Negative Effects of PSD

- Morbidity & mortality
- Treatment issues
- Functional status
- Cognition
- Quality of life
- Dementia

#### Risk Factors for PSD

- Female gender
- Previous depression
- Previous stroke
- Living alone
- Social distress
- Social inactivity
- Stroke-related factors

### Diagnosis: DSM-IV criteria for Major Depression

- 5 or more of the following, for at least 2 weeks:
  - → Depressed mood
  - → Diminished interest or pleasure
  - → Weight loss or gain
  - ◆ Insomnia or hypersomnia
  - Psychomotor agitation or retardation
  - → Fatigue or loss of energy
  - ◆ Feelings of worthlessness or guilt
  - → Decreased concentration
  - → Thoughts of death or suicide
- Significant distress or impairment in functioning

# Problems with PSD studies

- What to include as stroke?
- What to include as depression?
- No lab test
- Undiagnosed strokes
- Symptom similarity
- Aphasia
- Denial of depressed mood
- Comprehension impairment

#### Treatment of PSD

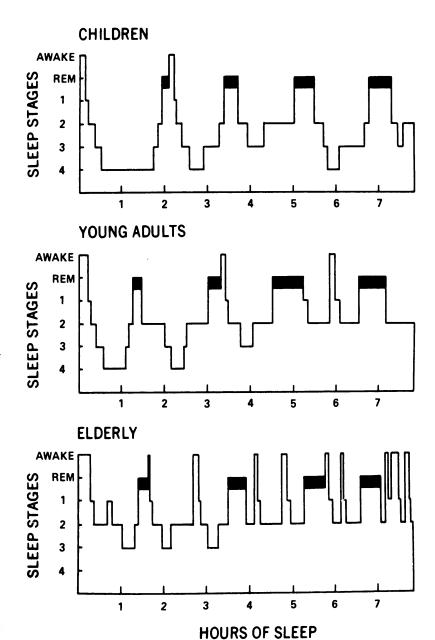
- Psychotherapy
- Support and social activities
- Cyclic antidepressants
- MAOIs
- SSRIs
- Psychostimulants
- ECT

# What we don't know about PSD

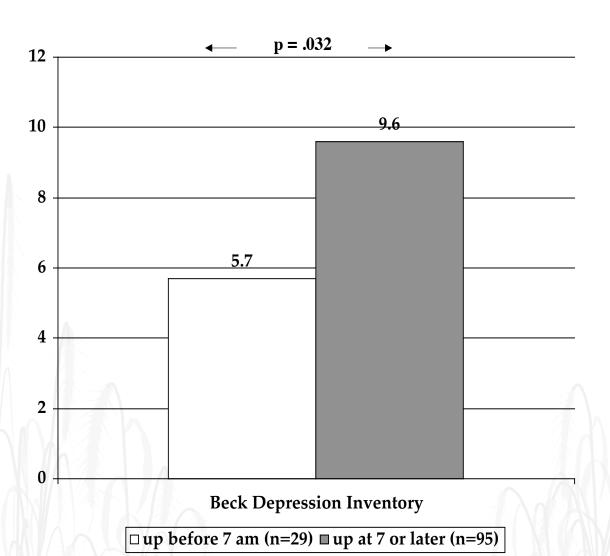
- Importance of lesion location
- Reversibility of cognitive impairment
- Same as depression associated with other medical illnesses?

### EEG Stages of Normal Sleep

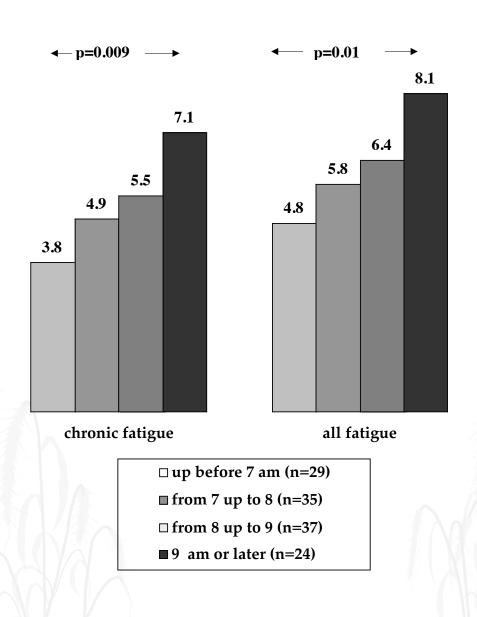
- Note
  decrease in
  stage 3 and
  4, and
  increase in
  awakenings,
  with aging
- REM sleep occurs every 90 minutes, and increases through the night



#### Depression vs Arising Time

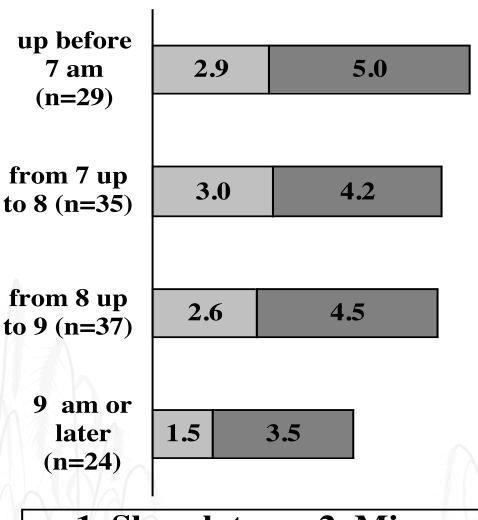


### Fatigue vs Arising Time



#### Attitudes about Sleep

- Attitudes about sleep and sleep behaviours:
- q1. If I don't get enough sleep during the night, I should make up for it by sleeping late or taking a long nap. (agree strongly = 0; disagree strongly = 6)
- q2. Sometimes it's necessary to miss work or school because of lack of sleep or really poor sleep.



□ q1. Sleep late □ q2. Miss work

# Depression: categories and features

- Categories
  - → Major depression
  - Dysthymic disorder
  - Subsyndromal depressive disorder
  - → Bipolar affective disorder, depressed phase
- Important features
  - → Psychosis
  - ⋆ Agitation
  - Suicidality
  - ◆ Self-neglect
  - homicidality

### Sleep History

- ◆ Quality of sleep
- + Bedtime
- ◆ Time to fall asleep
- Waking during the night: why, frequency, duration
- Waking time in AM
- → Getting up time
- Daytime drowsiness
- → Fatigue
- + Naps
- Sleeping aids
- Sleep problems
- → Habits when well
- Attitudes

### Sleep Hygiene

- ◆ Same arising time
- → Limit time in bed
- No drugs
- Avoid naps
- ⋆ Exercise
- ◆ Avoid evening stimulation
- → Warm bath
- ◆ Regular meal schedule
- ⋆ Relaxation routine
- → Comfortable conditions
- ◆ Out of bed if awake