Geriatric Psychiatry:
A review

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Geriatric Psychiatry

- **Geros** – old age
- **Iatros** – physical

**Aims of specialty**
- Address psychological issues in the elderly
- Promote longevity
- Mental adaptation

25% have psychiatric symptoms

- Commonest are:
  - Depressive disorders
  - Cognitive disorders
  - Phobias
  - Alcohol use disorders
  - Suicide
  - Drug induced psychiatric disorders
Psychiatric examination

- Same format as in younger patients
- Interview patient alone
  - Privacy, SI & paranoia
- Get the family & caretaker story also
- Comorbid cognitive issues will require:
  - Explanation of the reason & process of interview
  - Confirm details with family/caretaker
- Ask patients to bring their medications in
Geriatric patients’ attitude towards young physicians is more likely to result in them treating the physician as:

A. Child figure
B. Parent figure
C. With a superiority complex
D. With an inferiority complex
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Psychiatric examination

Medical history is important because:
- Multiple, chronic illnesses
- Psychiatric symptoms may precede manifestation of medical syndrome
- Geriatric patients are major consumers of OTC medications
Psychiatric examination

- Cognition & sensorium
  - Observe: Assess attention & concentration
  - “I’d like to ask you some questions to assess your thinking, concentration & memory”
  - “Let me start by asking you to repeat the following three objects back to me”
  - Immediate recall
  - Orientation to time, place, person & circumstance
  - Presidents
  - Serial 7’s, Serial 3’s, Object or word recall
  - Name 3 objects: tests naming, not object recall
  - Intersecting pentagons
  - Reading and writing
  - 3 object recall in 5 min
Neuropsychology

- **Mini Mental State Examination**
  - Detects cognitive abnormalities
  - Monitors the course of cognitive problems
  - Monitors treatment response
  - DOES NOT make a cognitive disorder diagnosis

- **Weschler Adult Intelligence Scale – Revised (WAIS-R)**
  - Verbal IQ + Performance IQ = Full scale IQ
  - Performance IQ is more affected in dementia

- **Bender Gestalt**
  - Visuospatial test

- **Halstead-Reitan Battery**
  - Comprehensive neuropsychologic testing

- **Geriatric Depression Scale**
  - Eliminates recording of somatic or psychosomatic complaints
Epidemiology
Epidemiology

[Graph showing population growth from 1900 to 2050 with a peak at 40,000,000]
Epidemiology

~ 8,000,000

20,900,000
Indicator 1 - Number of Older Americans

Percentage of the population age 65 and over, by county and State, 2008

Reference population: These data refer to the resident population.
Epidemiology

Predominantly female and white
58% of the population ages 65 and older

Life expectancy
1900 - 48.3 years for females and 46.3 years for males
2004 - 80.4 years for females and 75.2 years for males.
65-year-old average of 18.7 more years,
75-year-old could expect to live 11.9 additional years
Higher percentage of elderly women with increased life expectancy
- Cigarette smoking more in men
- More physical demands from work in men
- Women have a genetic advantage
- But...more women are entering the workforce and more are smoking
Psychiatric illness

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Lifetime prevalence</th>
<th>12 month prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol use disorder</td>
<td>16.1%</td>
<td>1.5%</td>
</tr>
<tr>
<td>MDD</td>
<td>8.2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Panic d/o</td>
<td>2.8%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Social anxiety</td>
<td>3.0%</td>
<td>1.6%</td>
</tr>
<tr>
<td>GAD</td>
<td>2.6%</td>
<td>1%</td>
</tr>
<tr>
<td>Specific Phobia</td>
<td></td>
<td>7.5%</td>
</tr>
<tr>
<td>MDD in nursing homes</td>
<td>14.4%</td>
<td>(non-NESARC data)</td>
</tr>
</tbody>
</table>

NESARC-National epidemiologic study on alcohol and related conditions
## Cognitive illness

<table>
<thead>
<tr>
<th>Author</th>
<th>Location</th>
<th>N</th>
<th>Age</th>
<th>Cognitive illness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manley et al</td>
<td>NYC</td>
<td>1315</td>
<td>65+</td>
<td>2.1-6.2% MCI</td>
</tr>
<tr>
<td>Callahan et al</td>
<td>Primary care in Indiana</td>
<td>3594</td>
<td>60+</td>
<td>15.7%</td>
</tr>
<tr>
<td>Regier et al</td>
<td>ECA</td>
<td>5702</td>
<td>65+</td>
<td>4.9% (2.9% ages 65–74; 6.8% ages 75–84; 15.8% ages 85+)</td>
</tr>
<tr>
<td>Evans et al</td>
<td>East Boston</td>
<td>467</td>
<td>65+</td>
<td>10.3% probable Alzheimer’s</td>
</tr>
</tbody>
</table>
| Rovener et al     | Maryland                  | 50  | Mean age = 83 | 5.2% probable dementia  
                          |                           |     |        | 56% primary degenerative  
                          |                           |     |        | 18% multi-infarct  
                          |                           |     |        | 4% Parkinson’s dementia |
Over age 85

- 3 year incidence of depression 4.1%
- Incidence of schizophrenia 3 per 100,000 persons of new cases per year
- Incidence of dementia 118 per 100,000 persons for new cases per year
- Incidence of Alzheimer’s disease 8.4%
Psychiatric disorders
Dementing disorders

- Risk factors
  - Age
    - 5% of patients over 65 years
    - 20% of patients over age 80 years
  - Family history
  - Female sex
  - Depression
  - Substance use
  - CVAs
  - 10-15% have a reversible cause
    - Benzodiazepines & other medications
    - Hypothyroidism
    - Dementia syndrome of depression (Pseudodementia)
Dementia affects

- Cognition
- Memory
- Language
- Visuospatial functioning
- Behavior
  - Agitation, restlessness, wandering, rage, violence, shouting, social/sexual disinhibition, impulsiveness
- Sleep
- Neuropsychiatric symptoms
  - Depression
  - Mania
  - Delusions and Hallucinations seen in 75% of dementia patients
Dementing disorders

- **Cortical dementias** (Aphasia, agnosia, apraxia, memory loss, executive functioning)
  - Alzheimer’s disease
  - Creutzfeld-Jakob disease
  - Pick’s disease

- **Subcortical dementias** (gait apraxia, movement disorders, psychomotor retardation, apathy, memory loss less prominent in the beginning)
  - Huntington’s disease
  - Parkinson’s disease
  - Normal pressure hydrocephalus
  - Wilson’s disease

- **Mixed dementias**
  - Vascular dementia
  - Dementia of Lewy Body type
  - HIV & other infectious causes
Alzheimer’s disease

- 50-60% of dementia cases
- 5% cases >65 yrs & 15-20% cases >85 yrs
- 50% cases in nursing homes
- Insidious onset and progressive course
- Mean survival of 8 years (Range: 1-20 years)
- Course: Memory → Language → Visuospatial changes
- Plaques – amyloid deposits
- Tangles – tau protein deposits
- Loss of cholinergic neurons
- Pharmacology
  - Aricept, Exelon, Reminyl, Namenda
  - Slow memory loss, delay placement, treat neuropsychiatric symptoms, reduce caregiver burden
- Nonpharmacologic behavioral management
Vascular dementia

- Second most common type
- Abrupt onset with stepwise deterioration…or not!
- Few large lesions or numerous smaller lesions
- Treatment:
  - Acetylcholinesterase inhibitors
  - Treat secondary neuropsychiatric syndromes
  - Manage hypertension, DM, smoking, arrhythmia
  - Nonpharmacologic behavioral management
Depressive disorders

- 15% in community have depressive symptoms
- 15% in nursing homes have depressive symptoms
- Risk factors
  - Female
  - Widowed
  - Chronic medical illness
- More likely to report somatic symptoms
Bipolar disorder

- Relapse remitting history
- Lifetime relapse risk
- If the first episode occurs after age 65 years
  - Suspect an organic cause
  - Suspect a medication induced cause
- Lithium
  - Decreased GFR increases toxicity risk
  - More likely to have neurologic side effects
Schizophrenia

- Lifetime relapse risk
- Patients more likely to be in the residual phase
  - 20% with no active symptoms
  - 80% have a variable presentation
  - 30% in residual phase
- Late onset if onset is after age 45
  - More in women
  - Co-occurring dementia likely
Delusional disorder

- Delusions which are chronic and non-bizarre
- Onset at 40-55 years
- Persecutory delusions are most common
- Accompanying behavior problems
- Precipitating or exaggerating features
  - Death of spouse
  - Job loss
  - Entering retirement
  - Social isolation
  - Financial issues
  - Debilitating illness
  - Deafness
  - Visual impairment
- Rule out other psychiatric illness
  - Alzheimer’s disease
  - Depression
  - Substance use
Anxiety disorders

- Onset in elderly is rare
- Phobias are commonest
- Panic disorder
- Agoraphobia
- Generalized anxiety disorder
- Obsessive compulsive disorder
- PTSD
- Social phobia
- Specific phobia
- Secondary to medical illness or substances
Alcohol & substance use

Either in remission

Or with ongoing use

Legal issues

Liver/medical illness

Failed relationships

Dementia

20% of NH pts – etoh

Etoh w/d - delirium

Benzodiazepines &

Opioid dependence

Addiction vs. dependence

Nicotine & caffeine also seen

Other substances

35% use OTC analgesics

30% use laxatives
Suicide risk

>65 years white males – highest risk group for suicide

- 5 times higher than general population
- In 1/3 loneliness is the precipitating factor
- In 10% of suicide completers triggers are:
  - Financial issues
  - Comorbid medical illness
  - Depression
- High rates in widowed, divorced or separated patients
- Asking about SI doesn’t increase risk
- Style is important for valid truthful answers
Suicide

~49 per 100,000

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>&gt;75 years</th>
<th>15-24 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50.0 per 100,000</td>
<td>22.0 per 100,000</td>
</tr>
<tr>
<td>Women</td>
<td>15.8 per 100,000</td>
<td>4.9 per 100,000</td>
</tr>
</tbody>
</table>
Elder abuse

- Occurs in 10% of patients over age 65 years
- Can be verbal, physical, emotional and sexual
- Acts of omission (neglect) also possible
  - Withholding
    - Food
    - Clothes
    - Medicine
    - Other necessities
- Perpetrator
  - Financially dependent on victim
  - Victim also closely dependent on perpetrator
  - Both may under-report
Geriatric psychopharmacology

- Pre-Rx medical eval
- May need EKG
- Home meds’ listing
- May need TID or BID dosing
- HS dosing for sedatives
- Liquid preparation for dysphagia or noncompliance

- >65 years use the most amount of medications
- 25% scripts are for:
  - Psychotropics
  - Cardiovascular meds
  - Diuretics
- 40% of all hypnotics consumption
- Check OTC use
  - 70% in elderly
  - 10% in younger pts
Geriatric psychopharmacology

- Decreased absorption
  - ↓ gastric acid
  - ↓ Lean mass
- Decreased excretion
  - ↓ Renal clearance
  - ↓ Hepatic metabolism
  - ↓ Cardiac output
- ↑↑ Fat – lipid soluble drugs more widely distributed with prolonged drug effects
- Use lowest effective dose
Geriatric psychopharmacology

Tricyclic antidepressants
- Nortriptyline and desipramine
  - Commonly used
  - Lower anticholinergic effects
  - Lower sedation
  - Decreased orthostatic hypotension with nortriptyline
- Therapeutic blood levels
  - Nortriptyline: 60-150 ng/mL
  - Desipramine: >115 ng/mL
- Low doses can cause therapeutic levels
- Type Ia antiarrhythmic effects
  - Get pre-rx EKG
  - Don’t use in RBBB or LBBB
  - Careful s/p MI
Geriatric psychopharmacology

- **SSRIs**
  - Same dose as in young adults
  - Side effects
    - Insomnia, akathisia, nausea, anorexia, pseudoparkinsonism & SIADH
  - Can cause CYP2D6 inhibition increasing levels of:
    - Desipramine, antipsychotics, beta-blockers, verapamil and type Ia antiarrhythmics
  - Some can cause 3A4 inhibition increasing levels of:
    - Xanax, Halcion, Carbamazepine, Quinidine and Erythromycin
- **Luvox + Theophylline**
  - 3 fold increase in Theophylline levels via CYP 1D12 inhibition
Geriatric psychopharmacology

MAOIs
- Orthostatic hypotension and fall risk
- Weight gain, anergia, insomnia, somnolence, neuropathy
- Effexor, Wellbutrin, Serzone
  - Safe in elderly; similar as young adult dosing

Augmentation therapies
- Lithium augmentation
- Combination treatments usually poorly tolerated

ECT
Geriatric psychopharmacology

- Antimanic agents
  - Lithium, depakote, carbamazepine
  - Atypical antipsychotics
  - Lamotrigine for bipolar depression

- Anxiolytics
  - >65 years represent 12% of the population
  - But represent 15% of anxiolytics’ users
  - 5 times higher use than the general population
Geriatric psychopharmacology

- Atypical antipsychotics
  - May need lower doses
  - Increased EPS risk
  - More likely to have unusual side effects
    - Stop speaking or ambulating or swallowing
  - Neurologic side effects
    - Akathisia, parkinsonism, autonomic s/e, fall risk
Psychotherapies

Main issues addressed:
- Loss
- Role adjustment
- Accepting mortality

Supportive psychotherapy
- Frail, nursing home patients
- Ventilation
- Advice
- Accept decreased functional capacity
- Accept increased dependency
Psychotherapies

Life review/reminiscence therapy
- Reflect & reminisce on the past
- Progressive return of memories
- Biography write up
- Look through
  - Scrapbooks
  - Memorabilia
  - Family reunions
- May significantly distract patient
Psychotherapies

- **CBT**
  - Similar technique as in younger adults
  - Conduct at a slower pace
  - More active role by therapist
  - Notes and tapes for hearing loss
  - Slow termination upon completion of treatment

- **Psychodynamic**
  - Brief course for:
    - Adjustment disorder
    - Grief reaction
    - New-onset anxiety disorder
  - Insight oriented format
Grow old along with me!
The best is yet to be. . .
—Robert Browning