The aging of the population is one of the most profound and far-reaching changes affecting contemporary society.

People are living longer.

Between 1900’s and 2000 the average life expectancy increased from:
- Men: 46 to 74
- Women: 49 to 80

In the past people died early from:
- Illness
- Injury
- Contaminated food or water
- Childbirth complications
- Infectious diseases
Introduction

- Greater life expectancy
- Smaller family size
- Better medical care has led to an increase in the population being 65+
- Mental health professionals with expertise to assess and treat the problems of later life are very much needed.

What is the older population like?

Described in several dimensions:

- Social characteristics
- Health and functioning
- Financial status
- Each of these can play a role in assessment and treatment

Characteristics

- Women who are widowed are least likely than men to remarry.
- Racial and Ethnic populations are increasing
- 80+ is growing faster than any other age group
- “Young-old” 55-75: Living active lives
- “Old-old” 76+: Chronic illnesses that limit their functioning
Where Older People Live

• Majority live independently alone or with their spouse
• 10% live with their children
• 4.5% nursing homes

Education, Income, and Employment

• Most elderly have completed high school
• 20% have completed college
• 10% live in poverty:
  – One income: $9,750 to $12,187 per year
  – Two incomes: $12,830 to $16,037 per year
• Health care costs
• No insurance

Retirement

• Some people do retire in good financial standing
• Estimated that nearly one-half of the older population faces risk of becoming poor or near poor before they die
• Economic hardship can lead to depression and other mental disorders, as well as limit their ability to get medical and mental treatment that they need
Cognition

• The mental processing of information
• Both memory and thinking are involved in the storage, retrieval, and manipulation of information

How Does the Memory Process Begin?

The brain as Information Processor

• Organizes, interprets and responds to information from the environment

A. Information Processing

Three Processes:
1. Encoding  2. Storage  3. Retrieval
Cognitive Disorders

- Abnormalities of thinking and memory that are associated with temporary or permanent brain dysfunction
- Main symptoms include problems with
  - Memory
  - Orientation
  - Language
  - Information processing
  - Ability to focus and maintain attention on a task

Delirium, Dementia, Amnestic and Other Cognitive Disorders

The predominant disturbance is clinically significant deficit in COGNITION that represents a SIGNIFICANT CHANGE from the PREVIOUS level of FUNCTIONING.
Etiology (Causes)

- **General Medical Condition**: Medical problem does not have to be identifiable. Important that client is medically cleared from a physician.
- **Substance**: Drug abuse, medication, toxin  
  *Note*: Make notice of specific substance specifiers. Code changes for each type of drug (p.145)
- **Multiple Etiologies**: A combination of these factors
- **Not Otherwise Specified (NOS)**: The cause is undetermined

Delirium

- Disturbance of consciousness and a change in cognition that develops over a short period of time
- **Delirium Due to A General Medical Condition**
- **Substance-Induced Delirium**
- **Delirium Due to Multiple Etiologies**
- **Delirium Not Otherwise Specified (NOS)**

Delirium

- Reduced clarity of awareness
- Difficulty with shifting attention
- Inattention
- Drowsiness
- Trouble solving problems and reasoning
- Problems in language (speech), memory, orientation, perception (illusions, hallucination, delusions)
Delirium

- Problems in Sleep-Wake Cycle
- Psychomotor Activity and Behavior (slowed, hand flapping)
- Mood (depression, fear)
- Reasoning (often impaired)

Differential Diagnosis (Comorbidity)

- Dementia
- With hallucinations, delusions, language disturbances, agitation:
  - Psychotic Disorders
  - Mood Disorders
  - Anxiety Disorders
  - Acute Stress Disorders

Donald 80 year-old man

Donald returned from the hospital following minor surgery. He had been prescribed an anti-inflammatory medication to aid the healing process. Waking up in the middle of the night, he telephoned his daughter. She quickly realized Donald did not know what time it was, his thoughts were disorganized, he reported a dream as actually happened. Donald seemed fearful and agitated. Prior to hospitalization he had been functioning well, with occasional memory lapse, especially in unfamiliar surroundings, but he never had symptoms like these. His daughter was concerned that he was becoming senile.
Vignette

- "Harold Hoyt" page 19 DSM-IV Made Easy
- Axis I: 293.0 Delirium Due to Chest Surgery (this is a medical condition so medical condition must be coded on Axis III)!
- Axis II: V71.09 No diagnosis
- Axis III: 35.24 Mitral Valve replacement (with prosthesis)
- Axis IV: None
- Axis V: 40/71

ADMISSION/DISCHARGE

Dementia

- The disorders in this section share a COMMON SYMPTOM presentation, but are differentiated based on etiology.
- Cause is usually a disease process that lies elsewhere in the body, outside the CNS!

Dementia

- Syndrome of progressive decline in memory and other intellectual abilities
- Acquired (as opposed to mental retardation)
- Persistent (symptoms worsen over time)
- Impairments in multiple domains of intellectual functioning (language, memory, visual-spatial general intellectual abilities
Dementia Criteria

• Development of Multiple cognitive deficits that include **memory impairment**
• At least ONE of the following **cognitive disturbances**:
  – Aphasia
  – Apraxia
  – Agnosia
• Severe enough to interfere with social or occupational functioning

Dementia

• **Aphasia**: Disturbance of language use. Patient unable to use words as symbols
• Difficulty producing names of individuals and objects
  – Echolalia: Echoing what is heard
  – Palilalia: Repeating sounds or words over and over

Dementia

• **Apraxia**: Impaired ability to execute motor activities despite intact motor abilities, sensory function, and comprehension of the required task
• May contribute to deficits in cooking, dressing, and drawing
Dementia

• **Agnosia**: Failure to recognize or identify objects despite intact sensory function.
• May have normal visual acuity but lose the ability to recognize objects such as chairs and pencils
• May progress to not being able to recognize family or self

Dementia

• Memory impairment is required for the diagnosis
  – Impaired ability to learn new material
  – Forget previously learned material
• Disturbances in executive functioning are common
  – Frontal lobe
  – Ability to think abstractly and to plan, initiate, sequence, monitor, and to stop complex behavior.

Dementia

• **NOT DIAGNOSED DURING THE COURSE OF DELIRIUM.**
• Delirium may be superimposed on preexisting dementia-BOTH DIAGNOSES ARE GIVEN
Types of Dementia

- Alzheimer’s (AD)
- Vascular (VD) (formerly Multi-Infarct Dementia)
- Due to Other General Medical Conditions
  - HIV-Associated
  - Head Trauma
  - Huntington’s
  - Creutzfeldt-Jakob (CJD)
  - Parkinson’s
  - Lewy body
  - Frontotemporal (FTD)
  - Picks (a form of FTD)
  - Multiple Sclerosis (MS)

Alzheimer’s Disease

- Most frequent cause of Dementia
- Gradual onset, steady deterioration
- Memory Loss: Impairment in memory and new memory, visual-spatial and language problems can also present early in this disease
- Loss of ability to perform daily tasks
- Personality changes, Increased apathy, dependency, anger, aggressiveness, inappropriate sexual behavior

Coding Notes

- Disturbance of Behavior:
  294.10 Dementia of Alzheimer’s Type, Without Behavioral disturbance
  294.11 Dementia of Alzheimer’s Type, With Behavioral disturbance
Subtype

• Specify the age which the person first becomes ill
  With Early Onset: Onset by age 65
  With Late Onset: Onset by 66 +

Vignette

• “Sarah Neil” page 34 DSM Made Easy
• Axis I: 294.10 Dementia Due to Alzheimer’s Type, with Late Onset, Without Behavioral Disturbances
• Axis II: V71.09 No diagnosis
• Axis III: Alzheimer’s Disease
• Axis IV: None
• Axis V: 35 (current)

Vascular Dementia

• Involves multiple stoke or infarcts in the cerebral cortex when blood vessels are blocked
• Infarcts result in death of the surrounding tissue due to insufficient blood supply
• Stokes are usually bilateral, affect both hemispheres
• Blockage can be caused by embolism (a blood clot that forms at a different site and migrates to a vessel which cause an occlusion) or thrombosis (formation of a clot within the blood vessel and occlusion of the vessel at some point)
• Racial differences: High in Japan, Japanese Americans in Hawaii, Latinos in US, & some European populations
• Rare until 50’ & 60’s increases with age, declines after 85
• Loss of consciousness and temporary motor, language, and sensory changes can occur
Lewy Bodies and Other Parkinsonian Syndromes

- Rigidity, tremor, difficulty initiating movement, problems with posture and equilibrium
- 3 syndromes:
  - Dementia with Lewy bodies (DLB)
  - Parkinson’s Disease with Dementia (PDD)
  - AD with Parkinsonian symptoms
- All involve cognitive and Parkinsonian motor symptoms.
- Differ in the timing of the symptoms, type, and location of underlying brain pathology
- Often misdiagnoses makes symptoms worst

Frontotemporal Dementia

- Effect the frontal and temporal lobes
- Picks
  - Characterized by the presence of Pick bodies, large dense structures found in the cytoplasm of the brain, and by swollen ballooned cells called Pick cells
  - Abnormal variants of the tau protein

Behavioral and Cognitive Symptoms of FTD

- Impairment of executive functioning
- Personality changes
- Disinhibition of behavior, impaired social behavior and judgment
- Lack of insight
- Impaired language, speech, and movement
- Impulsivity- outbursts of profanity
- Poor judgment in handling finances
- Lack initiative
- Poor grooming and hygiene
- Blunted mood or slightly euphoric
- Stereotyped and repetitive behaviors
Amnestic Disorders

• The ability to learn and recall new information (always affected) or are unable to recall previously learned information or past event (varies depending on location and severity of brain damage)
• Diagnosis not made in the presence of dementia or delirium

Amnesia

Loss of short term memory

• Anterograde: Loss of ability to form new memories
• Retrograde: Loss of memory for events that occurred before a certain time

Substance-Induced Persisting Amnestic Disorder

• Korsakoff’s Syndrome or Korsakoff’s psychosis:
  Alcohol most frequent problem, caused by a combination of prolonged thiamine deficiency and the direct effects of alcohol on the brain
  Now it is routine to give patients thiamine who are detoxified from alcohol
Other Terms

• Mild Cognitive Impairment (MCI): denotes subtle cognitive changes that may be first symptoms of dementia.

• Reversible or Secondary Dementia "treatable": Caused by a variety of diseases, toxins, and medications. These problems do not necessarily cause diffuse damage to the brain, unless untreated. Most frequent causes: nutritional deficits (vitamin B12, hypothyroidism, endocrine disorders, exposure to heavy metals, medications, alcoholism. – Associated with mental disorders such as depression.