Depression and Anxiety Disorders in Later Life

George W. Rebok, PhD, MA
Department of Mental Health
Bloomberg School of Public Health

Lecture 8
April 18, 2019
Depression

- Most common mental disorder
- Term used synonymously with Common Mental Disorder, i.e., includes the broad spectrum of depression and anxiety disorders
- Single most important cause of disability among mental disorders

(Global Burden of Disease Report, 1996)
<table>
<thead>
<tr>
<th>All causes</th>
<th>DALYs (thousands)</th>
<th>Per cent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All causes</td>
<td>160,944</td>
<td></td>
</tr>
<tr>
<td>1. Ischaemic heart disease</td>
<td>15,950</td>
<td>9.9</td>
</tr>
<tr>
<td>2. Unipolar major depression</td>
<td>9,780</td>
<td>6.1</td>
</tr>
<tr>
<td>3. Cerebrovascular disease</td>
<td>9,425</td>
<td>5.9</td>
</tr>
<tr>
<td>4. Road traffic accidents</td>
<td>7,064</td>
<td>4.4</td>
</tr>
<tr>
<td>5. Alcohol use</td>
<td>6,446</td>
<td>4.0</td>
</tr>
<tr>
<td>6. Osteoarthritis</td>
<td>4,681</td>
<td>2.9</td>
</tr>
<tr>
<td>7. Trachea, bronchus and lung cancers</td>
<td>4,587</td>
<td>2.9</td>
</tr>
<tr>
<td>8. Dementia and other CNS disorders</td>
<td>3,816</td>
<td>2.4</td>
</tr>
<tr>
<td>9. Self-inflicted injuries</td>
<td>3,768</td>
<td>2.3</td>
</tr>
<tr>
<td>10. Congenital abnormalities</td>
<td>3,480</td>
<td>2.3</td>
</tr>
</tbody>
</table>
### Disease burden measured in Disability-Adjusted Life Years (DALYS)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause</th>
<th>% total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lower respiratory infections</td>
<td>8.2</td>
</tr>
<tr>
<td>2</td>
<td>Diarrhoeal diseases</td>
<td>7.2</td>
</tr>
<tr>
<td>3</td>
<td>Perinatal conditions</td>
<td>6.7</td>
</tr>
<tr>
<td>4</td>
<td>Unipolar major depression</td>
<td>3.7</td>
</tr>
<tr>
<td>5</td>
<td>Ischaemic heart disease</td>
<td>3.4</td>
</tr>
<tr>
<td>6</td>
<td>Cerebrovascular disease</td>
<td>2.8</td>
</tr>
<tr>
<td>7</td>
<td>Tuberculosis</td>
<td>2.8</td>
</tr>
<tr>
<td>8</td>
<td>Measles</td>
<td>2.7</td>
</tr>
<tr>
<td>9</td>
<td>Road traffic accidents</td>
<td>2.5</td>
</tr>
<tr>
<td>10</td>
<td>Congenital abnormalities</td>
<td>2.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause</th>
<th>% total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ischaemic heart disease</td>
<td>5.9</td>
</tr>
<tr>
<td>2</td>
<td>Unipolar major depression</td>
<td>5.7</td>
</tr>
<tr>
<td>3</td>
<td>Road traffic accidents</td>
<td>5.1</td>
</tr>
<tr>
<td>4</td>
<td>Cerebrovascular disease</td>
<td>4.4</td>
</tr>
<tr>
<td>5</td>
<td>Chronic obs pulmonary disease</td>
<td>4.2</td>
</tr>
<tr>
<td>6</td>
<td>Lower respiratory infections</td>
<td>3.1</td>
</tr>
<tr>
<td>7</td>
<td>Tuberculosis</td>
<td>3.0</td>
</tr>
<tr>
<td>8</td>
<td>War</td>
<td>3.0</td>
</tr>
<tr>
<td>9</td>
<td>Diarrhoeal diseases</td>
<td>2.7</td>
</tr>
<tr>
<td>10</td>
<td>HIV</td>
<td>2.6</td>
</tr>
</tbody>
</table>

In females and developing countries, unipolar major depression is projected as becoming the leading cause of disease burden.
Depression is a common problem among older adults, but is NOT a normal part of aging.

Depressive symptoms are far more common among older adults than depression.

Depression is more than occasionally feeling sad and blue.

Depression is characterized by specific symptoms, and it interferes with daily life and functioning.

Depressive symptoms that persist for two weeks or more are considered by doctors to be depressive disorders or clinical depression.
• Unexplained somatic complaints
• Hopelessness
• Helplessness
• Anxiety and worrying
• Memory complaints
• Feeling a loss of feeling
• Slowed movement
• Irritability
• Lack of interest in self care
“I didn’t feel down in the dumps. I was just in misery . . . I mean, I’m stuck in here a lot. It does get to me and make me angry. Disgusted, but there’s nothing I can do about it . . .”
“I didn’t feel down in the dumps. I was just in misery . . . I mean, I’m stuck in here a lot. It does get to me and make me angry. Disgusted, but there’s nothing I can do about it . . .”

“I don’t know that I’m ever depressed really but I guess I am sometimes. I don’t know. I hate to admit that I’m depressed. . . It just doesn’t meet what I’ve been all my life, you know? It would be a drastic departure from my normal way of living and laughing and cutting up and all that.”
Diagnosable Syndromes of Depression

- Include affective, behavioral, somatic, and cognitive symptoms
- **Affective symptoms**: depressed mood or sadness, feelings of loss of pleasure, irritability, anger
- **Behavioral symptoms**: decreased activity, changes in movement, agitation
- **Somatic signs**: significant weight changes, sleep changes, loss of energy, fatigue, lethargy
- **Cognitive symptoms**: feelings of worthlessness, futility, helplessness, hopelessness, loss of motivation, suicidal thoughts, poor memory, difficulty concentrating, difficulty making decisions
DSM-IV Diagnostic Criteria

• Depressed mood and/or loss of interest in pleasurable activities nearly all day or every day for at least 2 weeks

• Must experience 4 or more of following symptoms for a total of at least 5 symptoms:
  significant weight change, sleep disturbance, psychomotor retardation or agitation, fatigue or low energy, feelings of worthlessness or guilt, poor concentration, recurrent thoughts of death or suicide

• Symptoms cause clinically significant distress in social, occupational, or other important areas of functioning.
Dysthymic Disorder

- Less severe form of depression
- Individual experiences depressed mood and at least 2 additional symptoms (appetite disturbance, sleep dysregulation, fatigue, low self-esteem, poor concentration, sense of hopelessness) for a period of at least 2 years
- Individuals with dysthymic disorder may develop major depressive disorder
- “double depression” involving recurrent episodes of major depression separated by episodes of dysthymia
Course of Depression

- Increasingly understood as a highly recurrent and chronic condition
- 80% of people experience at least one recurrence
- 100% experience recurrence if minor episodes are included and person has experienced multiple major depressive episodes
- Recurrent episodes last about 20 weeks
- Individuals tend to recover from major depression but may have continuing periods of subclinical depressive symptoms
Depression, Self-Rated Instruments

- Geriatric Depression Scale (GDS), 30 items (Yesavage, 1983)
- Geriatric Depression Scale (GDS), 15 items (Yesavage, 1986)
- Center for Epidemiologic Studies of Depression Scale (CES-D) (Radloff, 1977)
- Zung Self-Rating Depression Scale (SDS) (Zung, 1965)
- Beck Depression Inventory (BDI) (Beck & Beck, 1972)
- Patient Health Questionnaire and PHQ-9 (Kroenke, 2001)
1. Are you basically satisfied with your life?  yes  no
2. Have you dropped many of your activities and interests?  yes  no
3. Do you feel that your life is empty?  yes  no
4. Do you often get bored?  yes  no
5. Are you in good spirits most of the time?  yes  no
6. Are you afraid that something bad is going to happen to you?  yes  no
7. Do you feel happy most of the time?  yes  no
8. Do you often feel helpless?  yes  no
9. Do you prefer to stay at home, rather than going out and doing things?  yes  no
10. Do you feel that you have more problems with memory than most?  yes  no
11. Do you think it is wonderful to be alive now?  yes  no
12. Do you feel worthless the way you are now?  yes  no
13. Do you feel full of energy?  yes  no
14. Do you feel that your situation is hopeless?  yes  no
15. Do you think that most people are better off than you are?  yes  no

Total Score
Center for Epidemiologic Studies Depression Scale (CES-D), NIMH

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

<table>
<thead>
<tr>
<th>Week</th>
<th>During the Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely or none of the time (less than 1 day)</td>
<td>Some or a little of the time (1-2 days)</td>
</tr>
<tr>
<td>1. I was bothered by things that usually don’t bother me.</td>
<td>☐</td>
</tr>
<tr>
<td>2. I did not feel like eating; my appetite was poor.</td>
<td>☐</td>
</tr>
<tr>
<td>3. I felt that I could not shake off the blues even with help from my family or friends.</td>
<td>☐</td>
</tr>
<tr>
<td>4. I felt just as good as other people.</td>
<td>☐</td>
</tr>
<tr>
<td>5. I had trouble keeping my mind on what I was doing.</td>
<td>☐</td>
</tr>
<tr>
<td>6. I felt depressed.</td>
<td>☐</td>
</tr>
<tr>
<td>7. I felt that everything I did was an effort.</td>
<td>☐</td>
</tr>
<tr>
<td>8. I felt hopeful about the future.</td>
<td>☐</td>
</tr>
<tr>
<td>9. I thought my life had been a failure.</td>
<td>☐</td>
</tr>
<tr>
<td>10. I felt fearful.</td>
<td>☐</td>
</tr>
<tr>
<td>11. My sleep was restless.</td>
<td>☐</td>
</tr>
<tr>
<td>12. I was happy.</td>
<td>☐</td>
</tr>
<tr>
<td>13. I talked less than usual.</td>
<td>☐</td>
</tr>
<tr>
<td>15. People were unfriendly.</td>
<td>☐</td>
</tr>
<tr>
<td>16. I enjoyed life.</td>
<td>☐</td>
</tr>
<tr>
<td>17. I had crying spells.</td>
<td>☐</td>
</tr>
<tr>
<td>18. I felt sad.</td>
<td>☐</td>
</tr>
<tr>
<td>19. I felt that people dislike me.</td>
<td>☐</td>
</tr>
<tr>
<td>20. I could not get “going.”</td>
<td>☐</td>
</tr>
</tbody>
</table>

SCORING: zero for answers in the first column, 1 for answers in the second column, 2 for answers in the third column, 3 for answers in the fourth column. The scoring of positive items is reversed. Possible range of scores is zero to 60, with the higher scores indicating the presence of more symptomatology.
Epidemiology of Depression

- In U.S., about 5% prevalence rate for major depressive disorder
- Prevalence rates for dysthymic disorder are about 2-4%
- Lifetime rates are estimated at 17.1% (National Comorbidity Study, 1994)
- Depression rates higher for females than for males
- Hispanic ethnicity, younger age, lower education, lower income, and separated/divorced status are all significantly associated with higher rates of major depression
Figure 1. Baltimore, Md, Epidemiologic Catchment Area Follow-up data, 1981 to 1996. The incidence of Diagnostic Interview Schedule/DSM-IV major depression per 1000 per year. The figure shows curves smoothed with a 5-year band width.

Epidemiology of Depression: ECA

- **Age 65 years and older in the community**
  - 1% meet criteria for Major Depression (ECA)
  - 15% endorse depressive symptoms

- **Ambulatory primary care patients**
  - 5-10% major depressive disorder (MDD)
  - 15% or more depressive symptoms not MDD

- **Depression and disability**
  - depression is a leading contributor to disability
  - significant depression interferes with medical care
  - relationship to cardiovascular disease
Depressive Symptoms, by sex

Clinically relevant depressive symptoms among the population age 65 and over, by sex, 1998–2006

**Men**
- 1998: 12%
- 2000: 12%
- 2002: 12%
- 2004: 11%
- 2006: 10%

**Women**
- 1998: 19%
- 2000: 19%
- 2002: 18%
- 2004: 17%
- 2006: 18%

**NOTE:** The definition of "clinically relevant depressive symptoms" is four or more symptoms out of a list of eight depressive symptoms from an abbreviated version of the Center of Epidemiological Studies Depression Scale (CES-D) adapted by the Health and Retirement Study (HRS). The CES-D scale is a measure of depressive symptoms and is not to be used as a diagnosis of clinical depression. A detailed explanation concerning the "4 or more symptoms" cut-off can be found in the following documentation, http://hrsonline.isr.umich.edu/docs/userg/dr-005.pdf. Proportions are based on weighted data using the preliminary respondent weight from HRS 2006.

**Reference population:** These data refer to the civilian noninstitutionalized population.

**SOURCE:** Health and Retirement Study.
Clinically relevant depressive symptoms among the population age 65 and over, by age group and sex, 1998–2006

Percent

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>65–69</td>
<td>14</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>70–74</td>
<td>13</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>75–79</td>
<td>16</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>80–84</td>
<td>15</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>85 and over</td>
<td>19</td>
<td>18</td>
<td>19</td>
</tr>
</tbody>
</table>

NOTE: The definition of "clinically relevant depressive symptoms" is four or more symptoms out of a list of eight depressive symptoms from an abbreviated version of the Center of Epidemiological Studies Depression Scale (CES-D) adapted by the Health and Retirement Study (HRS). The CES-D scale is a measure of depressive symptoms and is not to be used as a diagnosis of clinical depression. A detailed explanation concerning the "4 or more symptoms" cut-off can be found in the following documentation, http://hrsonline.isr.umich.edu/docs/userg/dr-005.pdf. Proportions are based on weighted data using the preliminary respondent weight from HRS 2006.

Reference population: These data refer to the civilian noninstitutionalized population.

SOURCE: Health and Retirement Study.
Risk Factors for Depression

- Female sex
- Social isolation
- Widowed, divorced, or separated
- Economic hardships
- Co-morbid medical conditions/chronic illness
- Uncontrolled pain
- Insomnia
- Family and past history of depression
- Functional and/or cognitive impairment
- Caregiving
- Stressful life events
- Sensory loss
- Personality traits
- Neighborhood/environmental factors
Diagnostic and Definitional Issues

• Are childhood, adolescent, and adult depression the same disorder across the life span?
• Implicit assumption of continuity but may not be true
• Early onset depression usually regarded as more severe form of disorder
• Many adulthood cases may have originated in adolescence
Deliberate Mis-diagnosis of Depression

Diagnoses most frequently substituted (for depression)
  • fatigue
  • insomnia
  • headache
  • anxiety
  • adjustment/grief reaction

Most frequently cited reasons for substitution
  • uncertainty about the diagnosis
  • reimbursement problems anticipated
  • jeopardize patient’s ability to get health insurance
  • stigma will delay recovery from depression
  • patient unwilling to accept the diagnosis
  • explicit request from the patient
  • jeopardize patient’s future employment

Life-Span Questions for Further Study

- Is there a commonality among depressions that begin at different ages?
- If not, are the differences due to developmental forces shaping the same underlying disorder, or are they really different forms of depression?
- Should “recurrence” be a critically defining feature of depression?
- Do the same processes underlie first onset, maintenance, and recurrence of depression across the life span?
“Patients will consult the doctor in general practice . . . complaining sometimes of mild depression, but more often of anything but depression. They have vague or emphatic complaints of headache . . . dyspepsia of various kinds . . . and fatigue.”

Henderson & Gillespie, 1927
Depression in Older Adults

- Older persons with depression may not present with typical symptoms of depression such as sadness.
- Older patients with depression often have unexplained somatic complaints and exhibit a sense of hopelessness.
- Anxiety and anhedonia are also encountered frequently.
- Other features that may indicate underlying depression include memory complaints, slowness of movement, and lack of interest in personal care.
- May be difficult to detect because of frequency of comorbid psychological and medical conditions.
Depressive Symptoms and Functional Impairment

- Depressive symptoms associated with the development of functional impairment in the elderly
- Processes underlying the depression-function relationship are poorly understood
- Important to study mediators of the relationship between depression and functional impairment
Linking depressive symptoms and functional limitations in late life

Joseph J. Gallo MD MPH
University of Pennsylvania

George W. Rebok PhD
Johns Hopkins University

Sharon Tennstedt PhD
New England Research Institute

Virginia Wadley PhD
University of Alabama at Birmingham

Ann Horgas PhD
Wayne State University

and the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) study investigators
Disability and depression

• Depression → disability
  – Kennedy, 1990 (community sample, New York)
  – Bruce, 1994 (MacArthur Studies of Successful Aging)
  – Forsell, 1994 (community sample, Sweden)
  – Alexopoulos, 1996 (psychiatric patients)
  – Gallo, 1997 (ECA community survey, Baltimore)
  – Penninx, 1998 (community sample, Iowa)
  – Yen, 2011 (community sample, ACTIVE study)

• Disability → depression
  – many studies
  – Gurland, 1988 (reciprocal relationship)
Depression

Mediators

Function

ACTIVE study
Conceptual model: depression

**Depression**

- **Memory** → **Fluid abilities**
- **Speed of processing** → **Crystallized abilities**

**Function**

**ACTIVE study**

- Age
- Gender
- Education
Disability and depression

• Memory
  – Hopkins Verbal Learning Test
  – Auditory Verbal Learning Test
  – Rivermead Behavioral Memory Test

• Fluid abilities
  – Letter Series
  – Letter Sets
  – Word Series

• Depressive symptoms
  – CES-D

• Function
  – EPT
  – OTDL

ACTIVE study
### Disability and depression

Pilot sample with complete data (n=147)

**Dependent variable:** EPT

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES-D</td>
<td>-0.240</td>
<td></td>
</tr>
</tbody>
</table>

**Memory**
- Hopkins Verbal Learning Test
- Auditory Verbal Learning Test
- Rivermead Behavioral Memory Test

**Fluid abilities**
- Letter Series
- Letter Sets
- Word Series
## Disability and depression

**Pilot sample with complete data (n=147)**

### Dependent variable: EPT

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES-D</td>
<td>-0.240</td>
<td>-0.105</td>
</tr>
<tr>
<td>Memory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Hopkins Verbal Learning</td>
<td>0.267</td>
<td></td>
</tr>
<tr>
<td>– Auditory Verbal Learning</td>
<td>0.107</td>
<td></td>
</tr>
<tr>
<td>– Rivermead Behavioral Memory</td>
<td>0.635</td>
<td></td>
</tr>
<tr>
<td>Fluid abilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Letter Series</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Letter Sets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Word Series</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ACTIVE study**
Disability and depression
Pilot sample with complete data (n=147)

Dependent variable: **EPT**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES-D</td>
<td>-0.240</td>
<td>-0.105</td>
<td>-0.016</td>
</tr>
<tr>
<td>Memory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopkins Verbal Learning</td>
<td>0.267</td>
<td>0.136</td>
<td></td>
</tr>
<tr>
<td>Auditory Verbal Learning</td>
<td>0.107</td>
<td>0.076</td>
<td></td>
</tr>
<tr>
<td>Rivermead Behavioral Memory</td>
<td>0.635</td>
<td>0.195</td>
<td></td>
</tr>
<tr>
<td>Fluid abilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Letter Series</td>
<td></td>
<td></td>
<td>-0.201</td>
</tr>
<tr>
<td>Letter Sets</td>
<td></td>
<td></td>
<td>0.610</td>
</tr>
<tr>
<td>Word Series</td>
<td></td>
<td></td>
<td>0.576</td>
</tr>
</tbody>
</table>

ACTIVE study
Depression

Memory → Fluid abilities

Observed Tasks of Daily Living

ACTIVE study

Age
Gender
Education
Disability and depression
Pilot sample with complete data (n=147)

**Dependent variable: OTDL** | 1 | 2 | 3
---|---|---|---
**CES-D** | -0.205 | -0.125 | -0.094
**Memory** | | | |
  - Hopkins Verbal Learning | 0.271 | 0.201 | |
  - Auditory Verbal Learning | 0.020 | -0.036 | |
  - Rivermead Behavioral Memory | 0.410 | 0.204 | |
**Fluid abilities** | | | |
  - Letter Series | | | -0.108
  - Letter Sets | | | 0.164
  - Word Series | | | 0.363

ACTIVE study
Disability and depression

• In pilot data, we found evidence that the relationship of depressive symptoms to functional limitation may be mediated by cognitive factors
Disability and depression
Limitations

• **cross-sectional** design
  ✓ “causal pathways” are not certain
  ✓ changes in memory or fluid ability may lead to depression, not the other way around

• **measurement** issues
  ✓ are we measuring what we think we are measuring?

• **sample** selection
  ✓ pilot data only

• focus on **isolated components** of the model

ACTIVE study
Disability and depression
Strengths

• performance-based measures of function
  ✓ mitigates overestimation of functional impairment when depressed persons report their functional status

• functional measures based on everyday tasks

• theoretical model permits assessment of potential pathways to functional limitation
  ✓ implications for intervention strategies for prevention of disability

ACTIVE study
Disability and depression
Implications and next steps

• treatment / prevention strategies for depression should **consider and measure** fluid abilities and other cognitive functions in assessing the effects of interventions on everyday functioning

• use of **structural equation modeling** to more comprehensively assess pathways from depressive symptoms to functioning

• **longitudinal analysis** would help tease out temporal relationships

ACTIVE study
Disability and depression

Depression → Depression → Depression

Cognition → Cognition → Cognition

Function → Function → Function

Time

ACTIVE study
Disability and depression

Depression → Depression → Depression

Cognition → Cognition → Function

Function → Function → Function

Time

ACTIVE study
Treatment Approaches to Mood Disorders in Later Life

- Pharmacotherapy has proven effective for treating depression in older adults at all levels of severity (50-70% effectiveness rates)
- Effectiveness of psychodynamic and self psychological approaches limited to anecdotal case reports and a few empirical reports of life review
- Empirical studies support efficacy of cognitive and behavioral treatments (Floyd et al., 2004; Laidlaw et al., 2008; Paukert et al., 2013; Spector et al., 2012)
- Some support for effectiveness of family therapy but more outcome studies are needed
- Integrating multiple treatment modalities has proven effective in treating mood disorders
Antidepressant and antianxiety drug use in the past month

18–44 years

45–64 years

65 years and over

*Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

SOURCE: CDC/NCHS, Health, United States, 2010, Figure 10. Data from the National Health and Nutrition Examination Survey.
Anxiety Disorders

• One of the most prevalent disorders among older adults but one of the least researched
• Up to 15% of the older population experience some type of anxiety disorder
• Has been associated with a decreased quality of life, functional disability, health care utilization, and increased morbidity and mortality
• Can be very difficult to diagnose; probably underdiagnosed and underreported
• Several promising treatments; probably undertreated
Epidemiology

- Consistently more prevalent in younger than in older cohorts
- One-month prevalence rate of 5.5% for 65-years-and-older cohort (based on ECA data)
- More common in women than among men in both age groups (About 2X the rate)
- Evenly distributed between early onset and later onset cases
Symptoms and Criteria

• Anxiousness presents in different ways across the life span
• In older adults, anxieties about loss of loved ones, mobility status, or fear about such losses
• Older adults tend to worry more about their health; younger adults more likely to worry about their finances
• Most common anxiety disorders in older adults are: generalized anxiety disorder (GAD), panic disorder (PD), social phobia (SP), posttraumatic stress disorder (PTSD), acute stress disorder (ASD), and anxiety disorder due to general medical condition (ADGMC)
Symptoms of Anxiety

- Anorexia
- Chest discomfort
- Dizziness
- Faintness
- Headache
- Muscle tension
- Palpitations
- Shortness of breath
- Tremulousness
- Insomnia

- Backache
- Diaphoresis
- Dyspnea
- Fatigue
- Hyperventilation
- Pallor
- Parethesia
- Stomach pain
- Urinary frequency
- Body aches and pains
Symptoms of Anxiety (cont.)

- "Butterflies" in stomach
- Diarrhea
- Dry mouth
- Restlessness
- Sweating
- Nausea
- Sexual dysfunction
- Tachycardia
- Vomiting
- Facial flushing

Source: Small, 1997; Folks & Fuller, 1997
Anxiety and Depression

• Often exist simultaneously
• 38% of outpatients diagnosed with major depression also diagnosed with anxiety disorder (Alexopoulos, 1990)
• In younger adults, 60-90% of depressed patients experience at least some symptoms of anxiety
• Early onset depression associated with higher rates of anxiety than later onset depression
• Early onset anxiety associated with comorbid depression
• Symptoms common to anxiety and depression: High negative affect, feelings of inferiority and rejection, oversensitivity to criticism, self-consciousness, social distress
Generalized Anxiety Disorder

• GAD one of most prevalent of anxiety disorders in elderly
• Cardinal symptom is **worry**
• Worry should be about a number of events and of at least 6 months duration, occurring more days than not
• Person should experience at least 3 of the following symptoms: Restlessness or feeling keyed up; being easily fatigued; difficulty concentrating or mind going blank; irritability; muscle tension; sleep disturbance
• Worry or physical symptoms must cause significant distress
Self-report Measures of Anxiety

- Speilberger State-Trait Anxiety Inventory – most commonly used self-report measure of anxiety across adulthood
- Worry Scale
- Padua Inventory
- Penn State Worry Questionnaire
- Fear Questionnaire
- Relaxation Inventory for Older Adults
- Geriatric Anxiety Inventory
Interview-based Measures of Anxiety

- Hamilton Anxiety Rating Scale (HARS) measures severity of anxiety and is used to assess change in anxiety over time
- Structured Clinical Interview for DSM (SCID) – provides information about diagnosable anxiety disorders
- Anxiety Disorders Interview Schedule (ADIS) – frequently used in clinical research
Treatments for Anxiety

• Relatively few studies have been done
• Most studies involve pharmacological treatments
• Relaxation training has been found effective for reducing anxiety symptoms in later life
• Cognitive-behavioral therapy (CBT) is a frequently used therapeutic approach, alone or in combination with other therapies
Conclusions

• Older adults are highly susceptible to anxiety
• Geriatric anxiety is an important but neglected research topic
• Lifetime course of anxiety disorders and comorbidities need to be better understood
• More research needed on treatment options and side effects