

# Psychology 2030B

## Lecture 12

### *Disorders and the Age Spectrum – Old Age*

Week of 31 March 2025

# Final Exam Content

## Textbook

- Chapter 9  
*“Eating”*
- Chapter 13  
*“Personality”*
- Chapter 15  
*“Neurodevelopment”*
- Chapter 16  
*“Aging and Neurocognition”*

## Lectures

- Week 9  
*Disrupted Daily Living*
- Week 10  
*Personality Disorders*
- Week 11  
*Disorders and the Age Spectrum -  
Childhood*
- Week 12  
*Disorders and the Age Spectrum –  
Old Age*

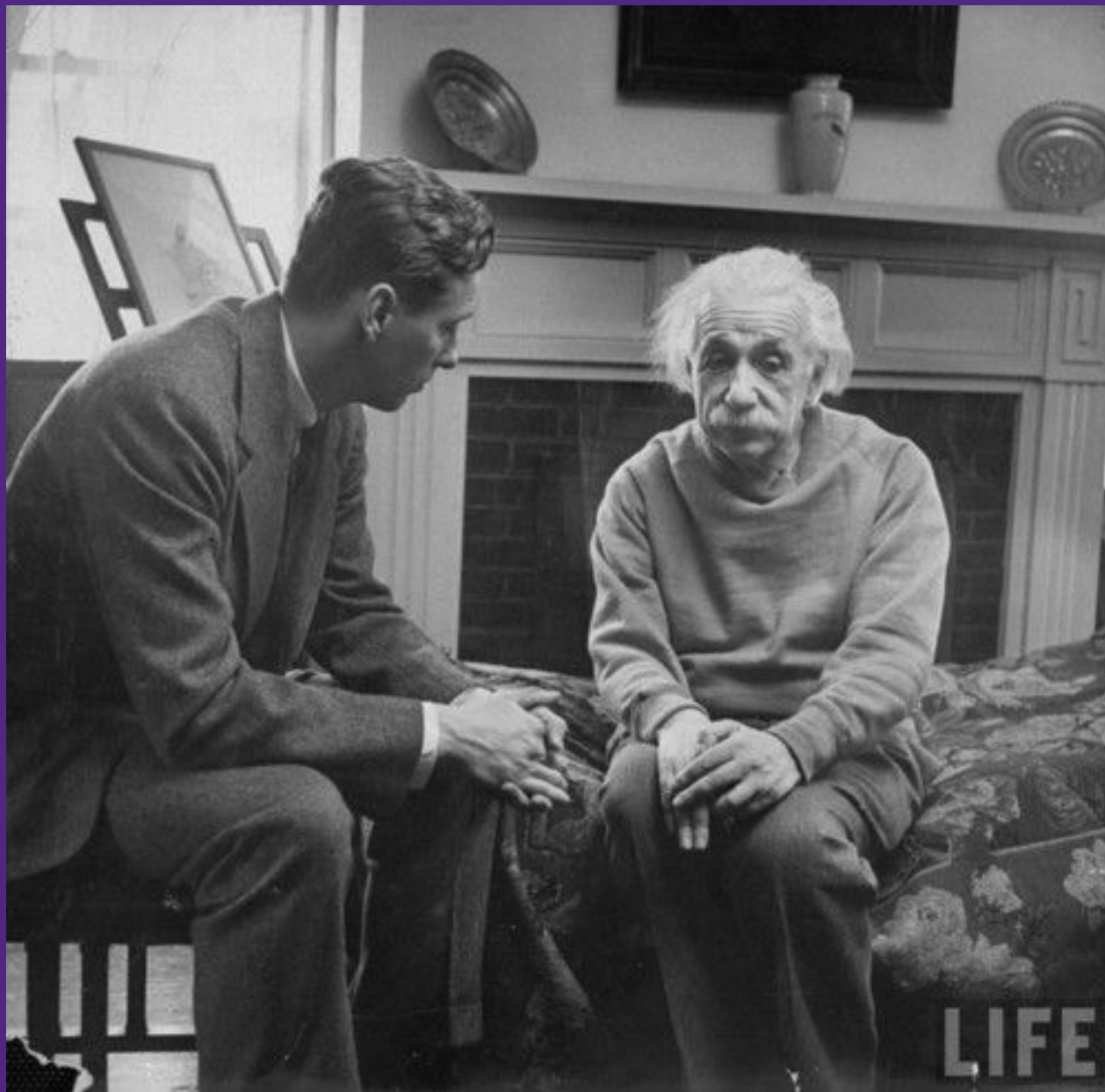
# Final Exam Content

## Textbook

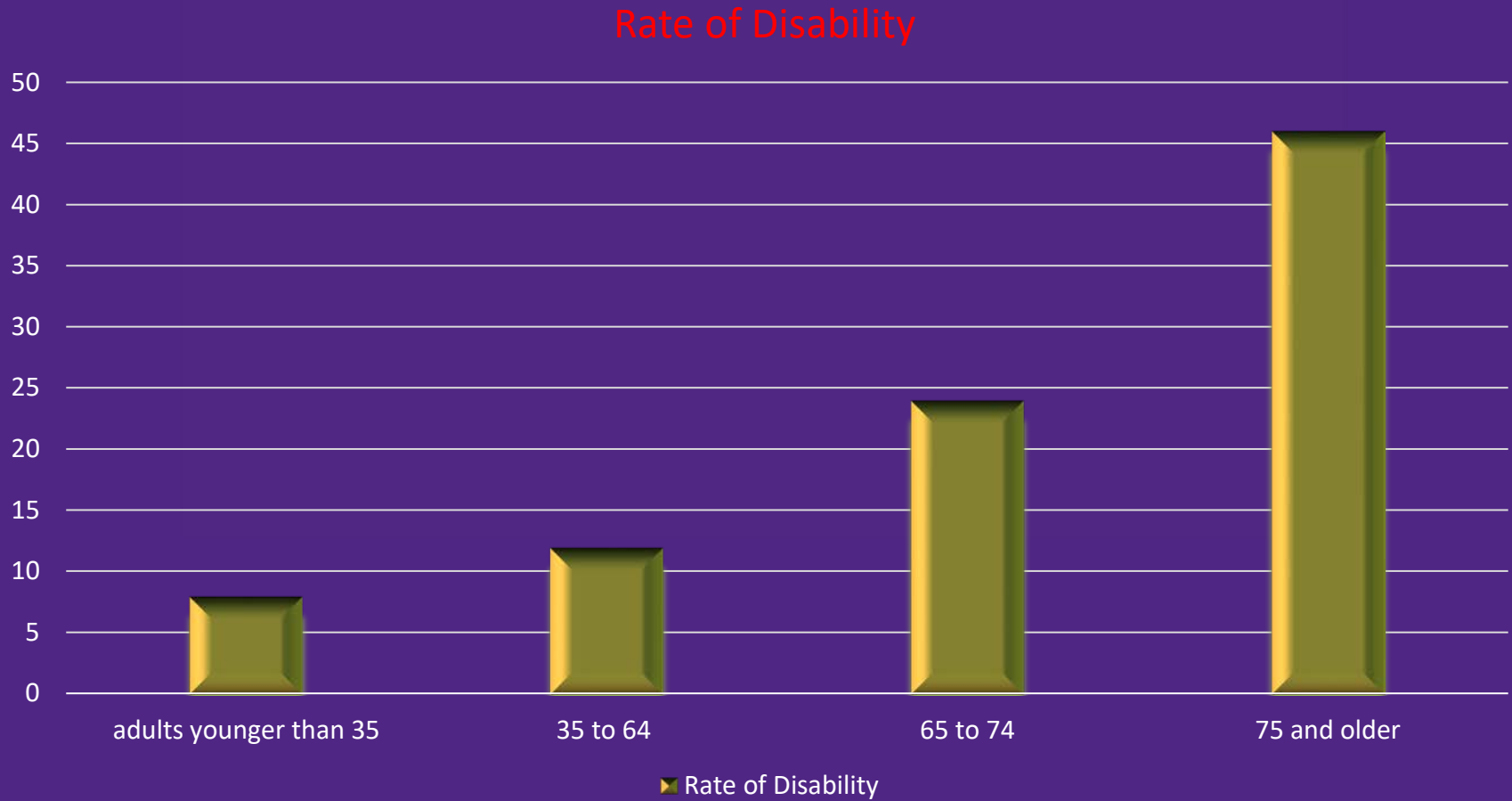
- Chapter 9  
    *“Eating”*  
    - 15 questions
- Chapter 13  
    *“Personality”*  
    - 15 questions
- Chapter 15  
    *“Neurodevelopment”*  
    - 15 questions
- Chapter 16  
    *“Aging and Neurocognition”*  
    - 15 questions

## Lectures

- Week 9  
    *Disrupted Daily Living*  
    - 10 questions
- Week 10  
    *Personality Disorders*  
    - 10 questions
- Week 11  
    *Disorders and the Age Spectrum -  
    Childhood*  
    - 10 questions
- Week 12  
    *Disorders and the Age Spectrum –  
    Old Age*  
    - 10 questions



# Disability and Age



# Delirium

- A. A disturbance in attention (*i.e., reduced ability to direct, focus, sustain, and shift attention*) and awareness (*reduced orientation to the environment*)
- B. The disturbance develops over a short period of time (*usually hours to a few days*), represents a change from baseline attention and awareness, and tends to fluctuate in severity during the course of a day
- C. An additional disturbance in cognition (*e.g., memory deficit, disorientation, language, visuospatial ability, or perception*)

# Delirium

- D. The disturbances in Criteria A and C are not better explained by another preexisting, established, or evolving neurocognitive disorder and do not occur in the context of a severely reduced level of arousal, such as coma
- E. There is evidence from the history, physical examination, or laboratory findings that the disturbance is a direct physiological consequence of another medical condition, substance intoxication or withdrawal (*i.e., due to a drug of abuse or to a medication*), or exposure to a toxin, or is due to multiple etiologies

# Delirium: Specifiers

**Hyperactive:** The individual has a hyperactive level of psychomotor activity that may be accompanied by mood lability, agitation, and/or refusal to cooperate with medical care

**Hypoactive:** The individual has a hypoactive level of psychomotor activity that may be accompanied by sluggishness and lethargy that approaches stupor

**Mixed level of activity:** The individual has a normal level of psychomotor activity even though attention and awareness are disturbed. Also includes individuals whose activity level rapidly fluctuates



# Delirium: Specifiers

Specify if:

- Substance intoxication delirium
- Substance withdrawal delirium
- Medication-induced delirium
- Delirium due to another medical condition
- Delirium due to multiple etiologies

# Delirium



# Delirium

Patients often recall having vivid unreal experiences, which they describe as hallucinations, visions, fantasies, fuzziness, or unusual dreams or nightmares

Disorientation is generally described by patients afterwards

Patients feel unable to control the situation or themselves

Patients struggled to distinguish real from unreal

Many patients will have no or little recall and some recall only their emotional reactions (*e.g., fear, distress, anger, loneliness*)

# Delirium: Sleep

This disturbance can include daytime sleepiness, nighttime agitation, difficulty falling asleep, excessive sleepiness throughout the day, or wakefulness throughout the night

Complete reversal of the night-day sleep-wake cycle can occur

Sleep-wake cycle disturbances are very common in delirium and have been proposed as a core criterion for the diagnosis

# Delirium: Prevalence

The prevalence of delirium is highest among hospitalized older individuals

The prevalence is 10%–30% in older individuals presenting to emergency departments, where the delirium often indicates a medical illness

# Delirium: Prevalence

The prevalence of delirium when individuals are admitted to the hospital ranges from 14% to 24%

The estimates of the incidence of delirium arising during hospitalization range from 6% to 56% in general hospital populations

# Delirium: Prevalence

- occurs in up to half of older individuals postoperatively
- occurs in 70%–87% of those in intensive care
- occurs in up to 60% of individuals in nursing homes or post–acute care settings
- residual symptoms in about half of all hospital patients transferred to long-term care
- occurs in over 80% of all people at the end of life

# Delirium: Course

While the majority of individuals with delirium have a full recovery with or without treatment, early recognition and intervention usually shortens the duration of the delirium

Mortality among hospitalized individuals with delirium is high, and as many as 40% of individuals with delirium, particularly those with malignancies and other significant underlying medical illness, die within a year after diagnosis

For those who recover, they often feel great shame, guilt, and embarrassment over their behaviour during delirium when the illness is explained to them; some describe a reaction similar to post-traumatic stress disorder



# Delirium: Treatment

Primary treatment is addressing the underlying causes (*e.g., urinary tract infection*)

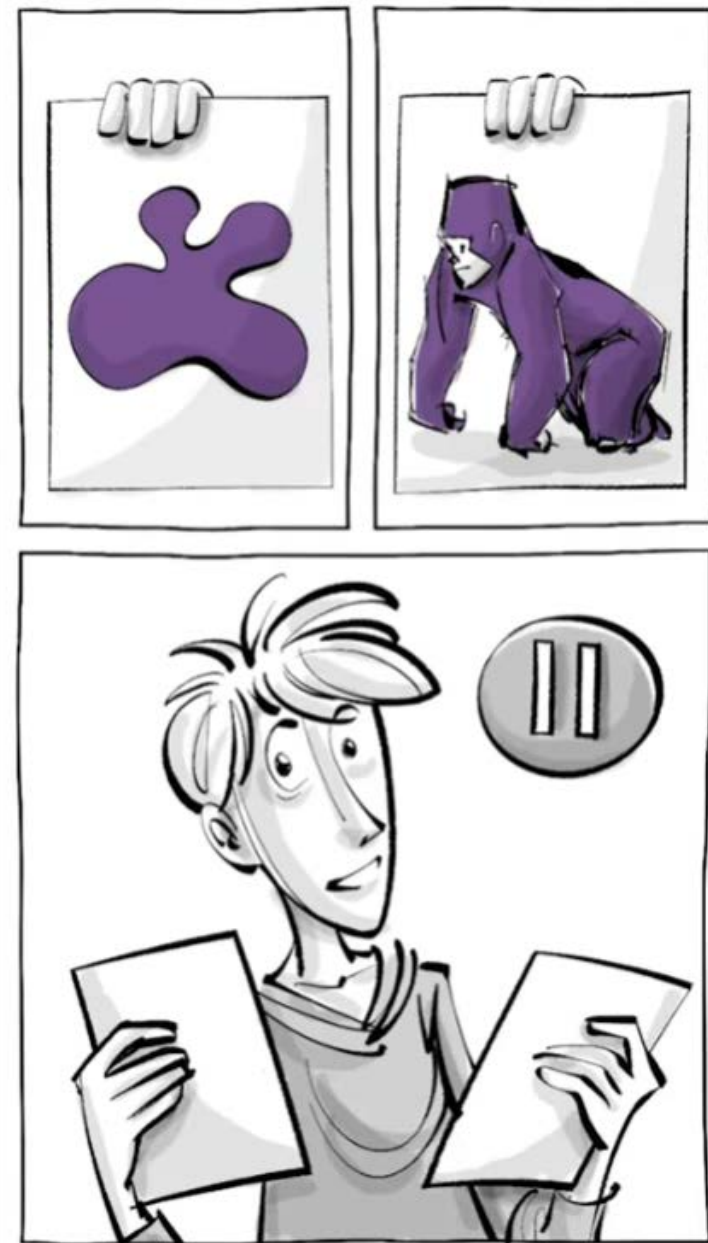
Benzodiazepines, which can worsen or prolong delirium, should be avoided but are often mistakenly used in an attempt to calm someone

Neuroleptics can help for addressing any agitation or distressing psychological symptoms (*e.g., paranoia*)

# Delirium: Management

- Provide a clock or a calendar
- Put familiar object in the patient's environment, including family photos,
  - but be careful not to make the visual field too cluttered and busy
- Routinely introduce yourself
- Minimize noise and distractions
- Eyeglasses and hearing aids

# What is Memory



# Major Neurocognitive Disorder

- A. Evidence of significant cognitive decline from a previous level of performance in one or more cognitive domains (*complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition*) based on:
  - 1. Concern of the individual, a knowledgeable informant, or the clinician that there has been a significant decline in cognitive function; **and**
  - 2. A substantial impairment in cognitive performance, preferably documented by standardized neuropsychological testing or, in its absence, another quantified clinical assessment

# Major Neurocognitive Disorder

- B. The cognitive deficits interfere with independence in everyday activities (*i.e., at a minimum, requiring assistance with complex instrumental activities of daily living such as paying bills or managing medications*)
- C. The cognitive deficits do not occur exclusively in the context of a delirium
- D. The cognitive deficits are not better explained by another mental disorder (*e.g., major depressive disorder, schizophrenia*)

# Major Neurocognitive Disorder: Specifiers

**Without behavioural disturbance:** If the cognitive disturbance is not accompanied by any clinically significant behavioural disturbance.

**With behavioural disturbance (specify disturbance):** If the cognitive disturbance is accompanied by a clinically significant behavioural disturbance (*e.g., psychotic symptoms, mood disturbance, agitation, apathy, or other behavioural symptoms*).

# Major Neurocognitive Disorder: Specifiers

Specify current severity:

**Mild:** Difficulties with instrumental activities of daily living (e.g., *housework, managing money*)

**Moderate:** Difficulties with basic activities of daily living (e.g., *feeding, dressing*)

**Severe:** Fully dependent for activities of daily living

# Dementia

Currently more than 55 million people have dementia worldwide, over 60% of whom live in low-and middle-income countries.

Every year, there are nearly 10 million new cases.

Dementia is currently the seventh leading cause of death and one of the major causes of disability and dependency among older people globally.



# Dementia

In 2019, dementia cost economies globally **\$1.3 trillion US** (expected to be \$1.7 trillion US by 2030) with over 50% of these costs are attributable to care provided by informal carers (e.g., *family members, close friends*), who provide on average 5 hours of care and supervision per day

Canadian estimates are **\$40.1 billion** in 2020 (\$15.1 billion direct)

Women are disproportionately affected by dementia, both directly and indirectly

- experience higher disability-adjusted life years and mortality due to dementia
- provide 70% of care hours for people living with dementia

DEMENTIA	DELIRIUM
Slow onset over months to years; remains a long-term condition	Sudden onset over hours to days; lasts a shorter length of time
Normal speech	Slurred speech
Conscious and attentive until late stages; status relatively stable	In and out of consciousness; inattentive, easily distracted; decreased attention and environmental awareness; symptoms variable, disappearing and reappearing rapidly
Hallucinations possible	Hallucinations common ( <i>usually</i> visual)
Listless or apathetic mood most common; agitation possible	Can be anxious, fearful, suspicious, agitated, apathetic, disoriented, having disorganized thinking, listless, unaware
Often no other sign of physical or medical illness	Other signs of illness are common (fever, chills, pain) or drug side effects

A L Z H E I M E R S

D E M E N T I A

# Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease

- A. The criteria are met for major or mild neurocognitive disorder.
- B. There is insidious onset and gradual progression of impairment in one or more cognitive domains (*for major neurocognitive disorder, at least two domains must be impaired*).

# Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease

C. Criteria are met for either probable or possible Alzheimer's disease as follows:

For major neurocognitive disorder:

**Probable Alzheimer's disease** is diagnosed if either of the following is present;  
otherwise, **possible Alzheimer's disease** should be diagnosed.

1. Evidence of a causative Alzheimer's disease genetic mutation from family history or genetic testing.

# Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease

2. All **three** of the following are present:

- a. Clear evidence of decline in memory and learning and at least one other cognitive domain (*based on detailed history or serial neuropsychological testing*)
- b. Steadily progressive, gradual decline in cognition, without extended plateaus; and
- c. No evidence of mixed etiology (*i.e., absence of other neurodegenerative or cerebrovascular disease, or another neurological, mental, or systemic disease or condition likely contributing to cognitive decline*)

# Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease

- Approximately 80% of individuals have behavioural and psychological manifestations
- These symptoms are as or more distressing than cognitive manifestations and are frequently the reason that health care is sought

# Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease

- At the mild stage or the mildest level of major stage, depression and/or apathy are often seen
- With moderately severe major illness, psychotic features, irritability, agitation, combativeness, and wandering are common
- Can be found to lose their “sense of self”  
*(knowledge of oneself as having a unique identity – including autobiographical memory - and intentional physical presence, accompanied by a strong sense of continuity over time)*



# Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease

- Late in the illness, gait disturbance, dysphagia, incontinence, myoclonus, and seizures are observed
- Late-stage individuals are eventually mute and bedbound
- Major or mild illness progresses gradually, sometimes with brief plateaus, through severe dementia to death
- The percentage of dementias attributable to Alzheimer's disease ranges from about 60% to over 90%, depending on the setting and diagnostic criteria

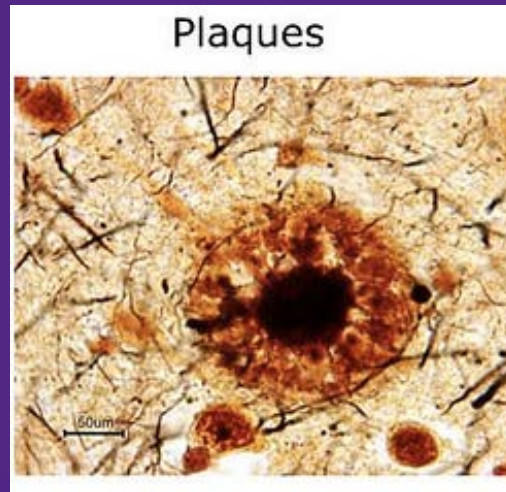
# Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease

- The prominence of memory loss can cause significant difficulties relatively early in the course
- Decision-making is impaired, particularly in decisions under ambiguity or under risk
- Social cognition (and thus social functioning) and procedural memory (*e.g., dancing, playing musical instruments*) may be relatively preserved for extended periods
- Individuals with Down syndrome (*trisomy 21*) often will develop Alzheimer's disease if they survive to midlife (30% of those in their 50s, 50% in their 60s)

# What is Alzheimer's disease?

# Alzheimer's Disease: Common Myths

- Only affects older people
- There is a cure
- It is preventable
- It is caused by aluminum





# Major or Mild Neurocognitive Disorder With Lewy Bodies

1. Core diagnostic features:
  - a. Fluctuating cognition with pronounced variations in attention and alertness
  - b. Recurrent visual hallucinations that are well formed and detailed
  - c. Spontaneous features of parkinsonism, with onset subsequent to the development of cognitive decline

# Major or Mild Neurocognitive Disorder With Lewy Bodies

## 2. Suggestive diagnostic features:

- a. Meets criteria for rapid eye movement sleep behaviour disorder
- b. Severe neuroleptic sensitivity



# Major or Mild Neurocognitive Disorder With Lewy Bodies

The disorder includes:

- not only progressive cognitive impairment (*with early changes in complex attention and executive function rather than learning and memory*)
- but also
  - recurrent complex visual hallucinations
  - concurrent symptoms of rapid eye movement (REM) sleep behaviour disorder (*which can be a very early manifestation*)



# Rapid Eye Movement (REM) Sleep Behaviour Disorder

- a sleep disorder in which the patients physically acts out vivid, often unpleasant dreams with vocal sounds and sudden, often violent arm and leg movements during REM sleep
- sometimes called **dream-enacting behaviour**



# Major or Mild Neurocognitive Disorder With Lewy Bodies

Reduced scores on tests of:

- Executive functioning \*
- Attention
- Visuospatial skills \*
- Memory

*Different from Alzheimer's Disease*

# Executive Functioning

Working memory

Cognitive flexibility

Inhibitory control

Planning/organization

Focused control



# Major or Mild Neurocognitive Disorder With Lewy Bodies

- Estimates range from 0.1% to 5% of the general elderly population
- Individuals frequently experience repeated falls and syncope and transient episodes of unexplained loss of consciousness
- Autonomic dysfunction, such as orthostatic hypotension and urinary incontinence, may be observed

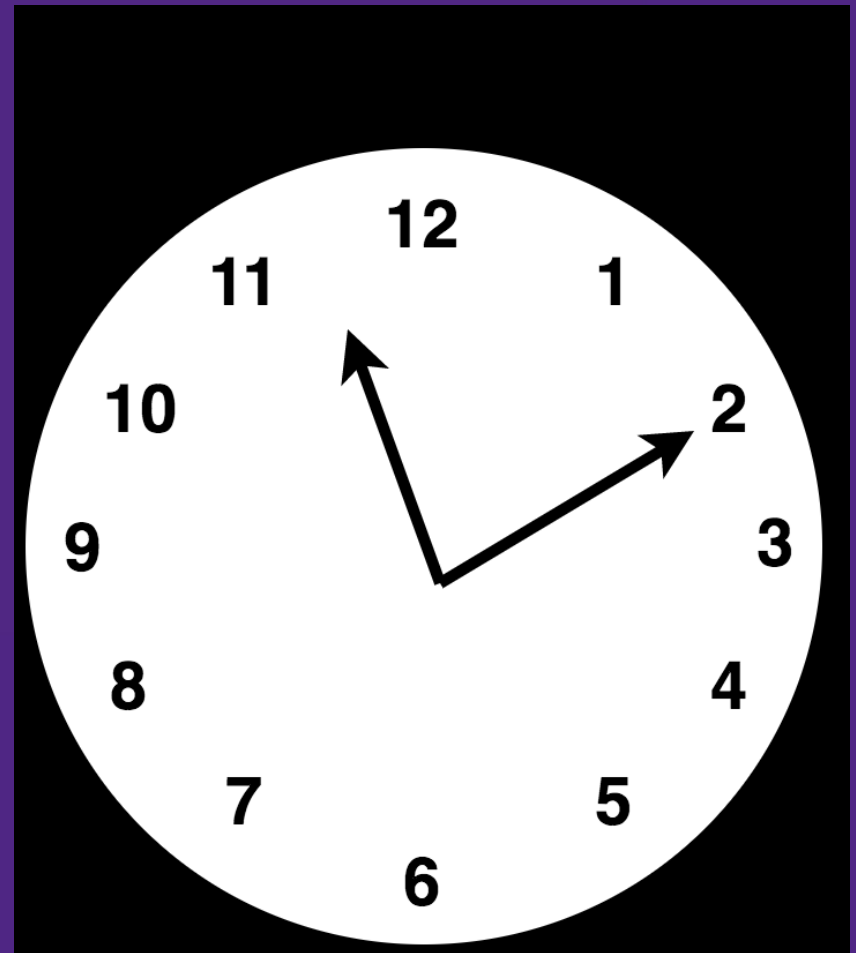
# Major or Mild Neurocognitive Disorder With Lewy Bodies

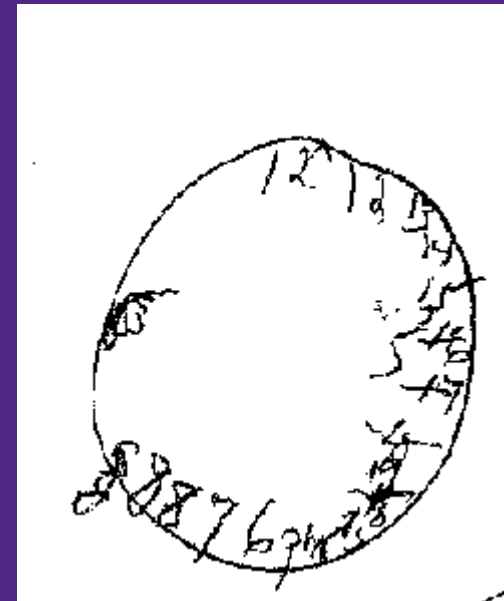
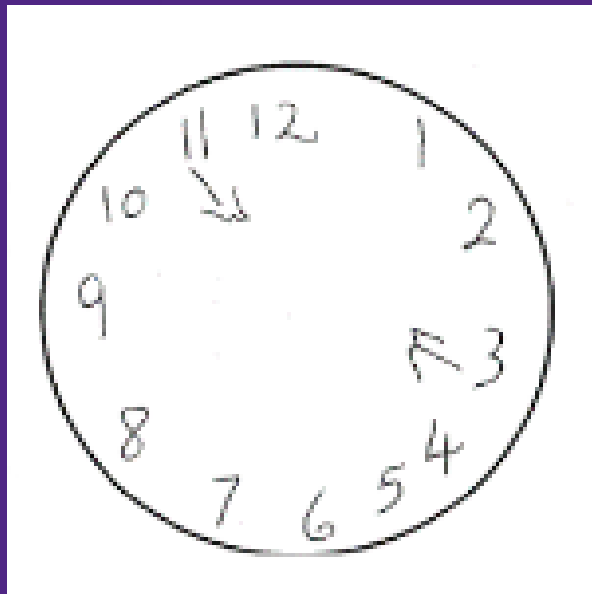
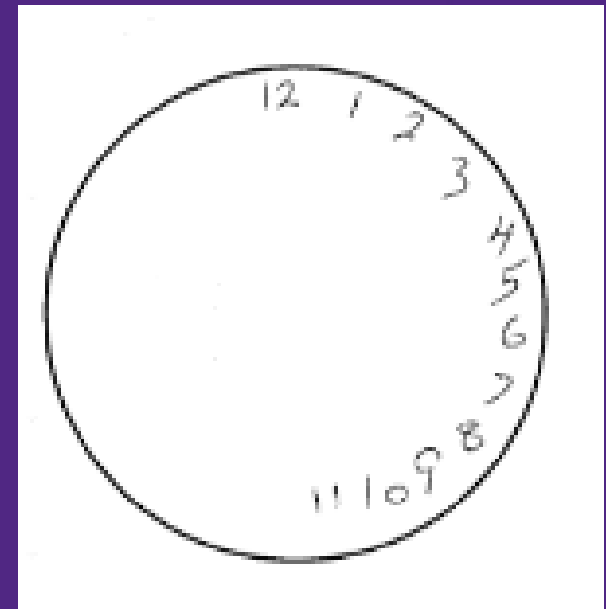
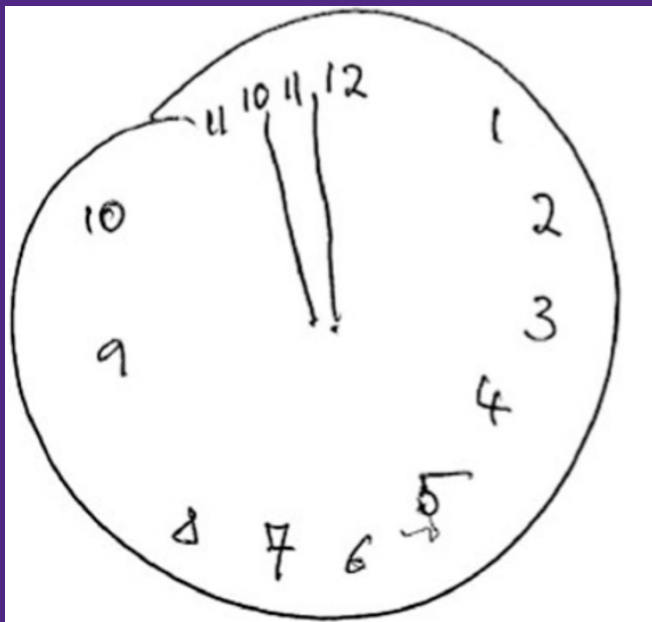
- Auditory and other nonvisual hallucinations are common, as are systematized delusions, delusional misidentification, apathy, and depression
  - But up to 50% of individuals have severe sensitivity to neuroleptic drugs, and these medications should be used with extreme caution in managing the psychotic manifestations
  - These were the primary symptoms that affected quality of life for patients and for their caregivers

# Clock Drawing Test

The most impaired cognitive test in recent research on Lewy Body Dementia

Patients are to draw a clock face, put in the numbers, and put the hands of the clock at 10 past 11









# Clock Drawing

# Major or Mild Neurocognitive Disorder With Lewy Bodies

Capgras Syndrome is also evident in many of these features

- People with dementia experience the delusion that someone they know well has been replaced by an identical imposter

# Capgras Syndrome



RESEARCH CENTERS OF EXCELLENCE

## LEWY BRIEFS



# Progression of Lewy Body Dementia

## Early Stages



Delusions, restlessness,  
REM sleep disorder,  
movement difficulties,  
urinary issues

## Middle Stages



Motor impairment,  
speech difficulty, decreased  
attention, paranoia,  
significant confusion

## Later Stages



Extreme muscle rigidity  
and speech difficulties,  
sensitivity to touch,  
susceptibility to infections

# Depression

Increased risk of depression in the elderly thought to be related to decreased sense of “**matter**ing” (*that we feel like we are significant and important to other people*)

Mattering involves both a sense of

- having value to other people, and
- giving value to other people

# Causes of Increased Rates of Depression

- Belief that they do not belong with others
- Belief that they are a burden on others
- Increased isolation and loneliness
- Increase grief from death of people they know

# Causes of Increased Rates of Depression

- Increased disability and health issues
- Increased technology challenges
- Decreased mobility
- Decreased financial resources

# Impact of Depression

44% of older adults in residential care shows signs of diagnosable depression

22% of older adults screen positive for depression

5% of older adults access mental health services

Suicide rate (per 100,000) is 20 for men over age 65

Suicide rate (per 100,000) is 34 for men over age 90



# Suicide Attempts

Older males die by suicide more often than any other group because they use more lethal means when attempting suicide.



# Depression vs Dementia

## Similar symptoms (*Pseudo-dementia*)

- Loss of interest in once-enjoyable activities and hobbies
- Social withdrawal and isolation
- Memory problems
- Irritability and agitation
- Sleeping too much or too little
- Impaired attention and concentration
- Slowed speech and body movements

# Depression vs Dementia

	Dementia	Depression
Onset	Months to years	Weeks to months
Mood	Fluctuates	Low
Course	Chronic, with slow deterioration	Chronic, responds to treatment
Self-awareness	Likely to hide or be unaware of cognitive deficits	Likely to be concerned about memory management
Memory	Chronic problems storing new information	Occasional memory lapses or trouble concentrating
Orientation	Tend to be confused	Generally intact
Language	Effected	Not effected
Use of familiar objects	Apractic	No apraxia

# Depression to Dementia

Research has also demonstrated that for a subset of older adults, depression can represent the first symptoms of dementia

- 1) Is depression a first phase of dementia?
- 2) Does depression increase the risk of dementia?

# Depression to Dementia

A follow-up study of 232 patients with depressive pseudo-dementia found:

- 38% progressed to dementia
- 48% did not develop dementia
  - 31% improved; 17% stable or worse
- 10% died
- 5% lost to follow-up

A middle-aged man with thinning hair, wearing a blue button-down shirt and a dark brown textured blazer, is shown from the chest up. He is looking slightly to his left and appears to be speaking. The background is a plain, light-colored wall.

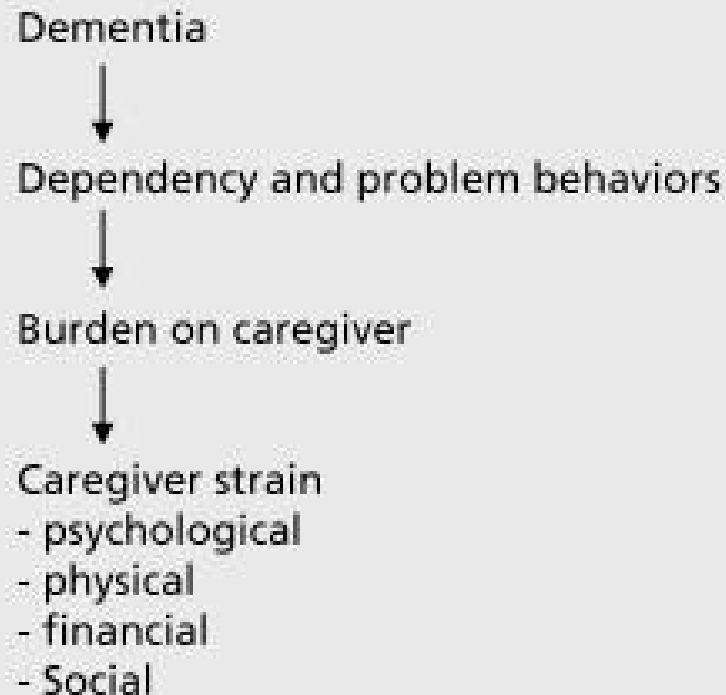
Health.com

# Dementia Caregiving

Family caregivers may be motivated to provide care for several reasons: a sense of love or reciprocity, spiritual fulfillment, a sense of duty, guilt, social pressures

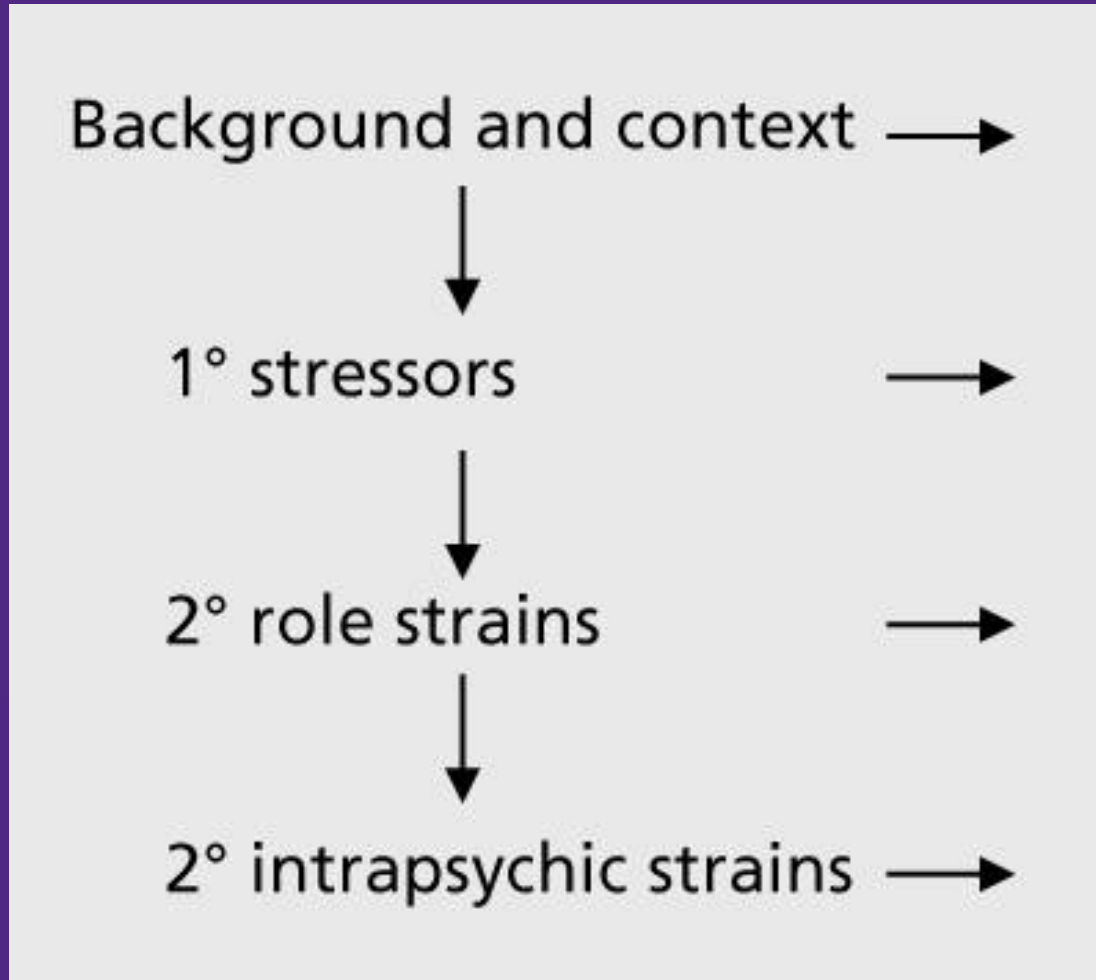
Women are more likely to assume the role with family members

# Dementia Caregiving





# Dementia Caregiving



# Dementia Caregiving

Greater caregiver stress when:

- Spousal caregiver
- Co-habiting with the care recipient
- Lower income
- Greater loss of ADL (Activities of Daily Living) in care recipient
- Isolation/lack of external supports

# Lisa Raitt

MP Halton 2008-2019

Minister for Natural  
Resources, Labour,  
Transport

Shadow Minister of  
Finance

Deputy Leader of the  
Conservative Party 2017-  
2019





# Elder Abuse

a single, or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust which causes harm or distress to an older person (WHO definition)

# Elder Abuse

- Elder abuse often occurs when there is an imbalance of control.
- The abuser either limits or takes control over the rights and freedoms of the senior
- The abuse/violence is used to intimidate, humiliate, coerce, frighten or simply to make the senior feel powerless
- Elder abuse does not always occur as an isolated incident but is recurrent in up to 80% of cases

# Elder Abuse: Prevalence

- North American studies indicate that 2-10% of older adults will experience some type of elder abuse or neglect each year
- There are currently 2 million seniors aged 65 and over, or 14.6 per cent of the population who reside in Ontario
- Between 40,000 and 200,000 seniors living in Ontario who have experienced or are experiencing elder abuse

# Elder Abuse

Elder abuse includes:

- **Physical abuse** such as slapping, pushing, beating or forced confinement
- **Financial abuse** such as stealing, fraud, extortion or misusing a power of attorney
- **Sexual abuse** as sexual assault or any unwanted form of sexual activity
- **Neglect** as failing to give an older person in your care food, medical attention, or other necessary care or abandoning an older person in your care
- **Emotional abuse** as in treating an older person like a child or humiliating, insulting, frightening, threatening or ignoring an older person



# Elder Abuse

- Elder abuse can lead to serious physical injuries and long-term psychological consequences
- Elder abuse is predicted to increase as many countries are experiencing rapidly ageing populations
- The global population of people aged 60 years and older will more than double, from 900 million in 2015 to about 2 billion in 2050

# Elder Abuse

- Individual level characteristics which increase risk:
  - functional dependence/disability
  - poor physical health
  - cognitive impairment
  - poor mental health
  - low income

# Elder Abuse

- Community- and societal-level factors:
  - ageism against older people
  - certain cultural norms (*e.g., normalization of violence*)
- Factors for reducing the likelihood:
  - social support
  - living alone



# Elder Abuse





"The relentless pursuit of happiness is actually a fairly good way of producing its opposite."



Dr. Randy Paterson  
*Psychologist and Author*