Geriatric psychiatry
„Old age" psychiatry

Geriatric psychiatry

- What is „Geriatric”?
- Physical, mental and social aspects
- Mental disorders in general
- Different disorders in the elderly
- Psychiatric therapies in the elderly

psychogeriatry

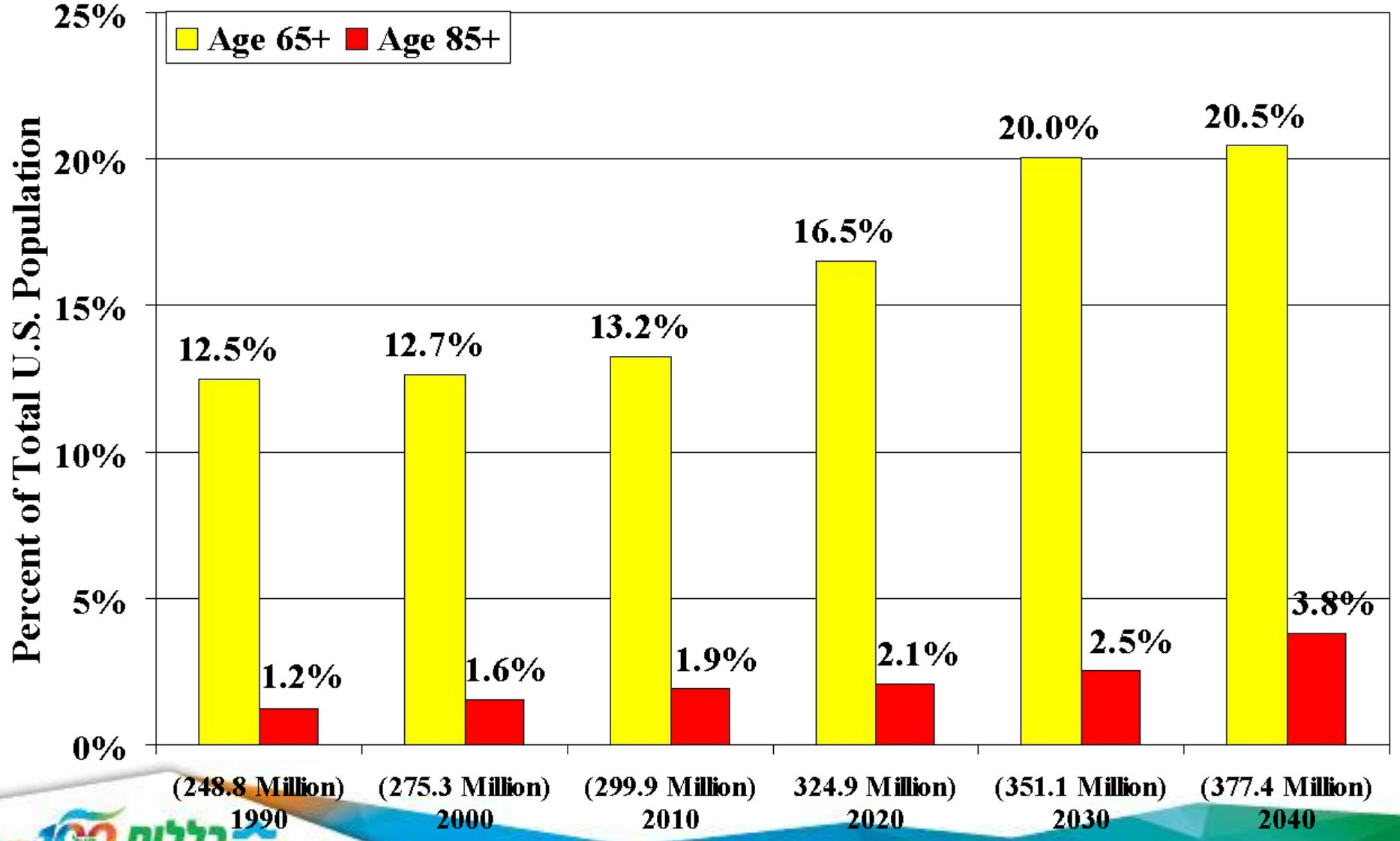
:Medical Definition of *psychogeriatry*

a branch of psychiatry concerned with behavioral and emotional disorders among the elderly

Medical Definition of US

The branch of healthcare concerned with mental illness and disturbance in elderly people, particularly those who have suffered distress as .a result of moving into an institution

Aging In America



?"Old age„

Gladys Burrill 92 y
Honolulu Marathon 2010

Fauja Singh 100 y
Toronto Marathon 2011
(Guinness record)

Psychogeriatric care

Psychogeriatric care is care in which the primary clinical purpose or treatment goal is improvement in the functional status, behaviour and/or quality of life for an older patient with significant psychiatric or behavioural disturbance. The disturbance is caused by mental .illness, age related organic brain impairment or a physical condition

:Psychogeriatric care is always

delivered under the management of or informed by a clinician with .1 specialised expertise in psychogeriatric care, and

evidenced by an individualised multidisciplinary management plan .2 which is documented in the patient's medical record. The plan must cover the physical, psychological, emotional and social needs of the patient, as well as include the negotiated goals within indicative time .frames and formal assessment of functional ability

Getting older v. living longer

- Mental changes
  - Personality
    - amplification of character traits
  - Cognition, memory
    - mental slowing
    - transformed memory structure
    - summerised experiences
  - Emotional changes
    - Emotional maturity

Getting older v. living longer

- Social changes
  - Retirement (financial difficulties)
  - Decrease in social status
  - Facing somatic and mental disfunctioning
  - Somatic diseases
  - Grief (loss of spouse, brothers or sisters, friends)
  - Social isolation
  - Moving to nursing/residential home

What are the differences between older and younger persons with mental illness?

Assessment is different: e.g., cognitive assessment needed, recognize sensory impairments, allow more time

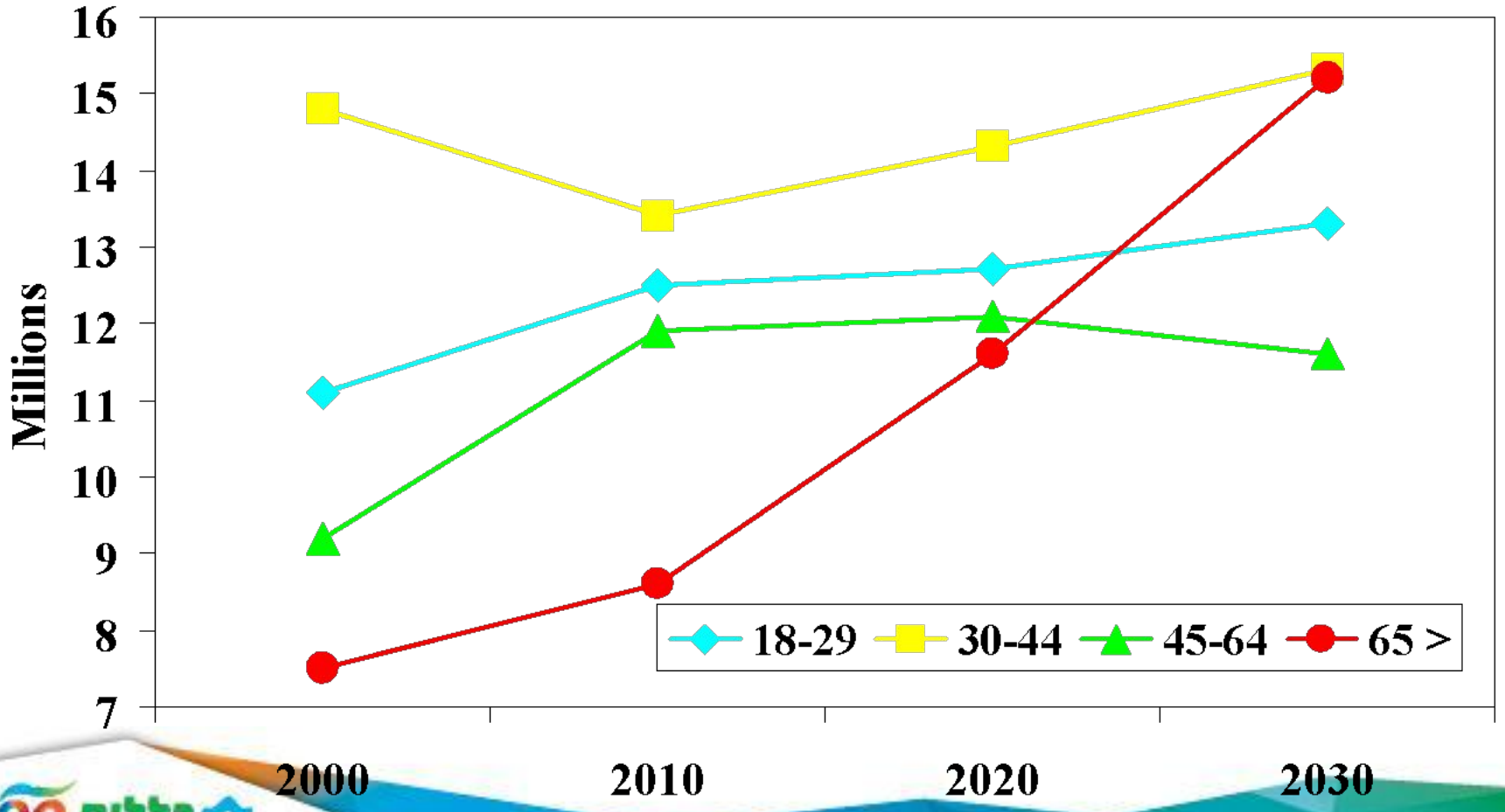
Symptoms of disorders may be different: e.g., different symptoms in depression

Treatment is different: e.g., different doses of meds, different psychotherapeutic approaches

Outcome may be different:

e.g., psychopathology in schizophrenia may improve with age

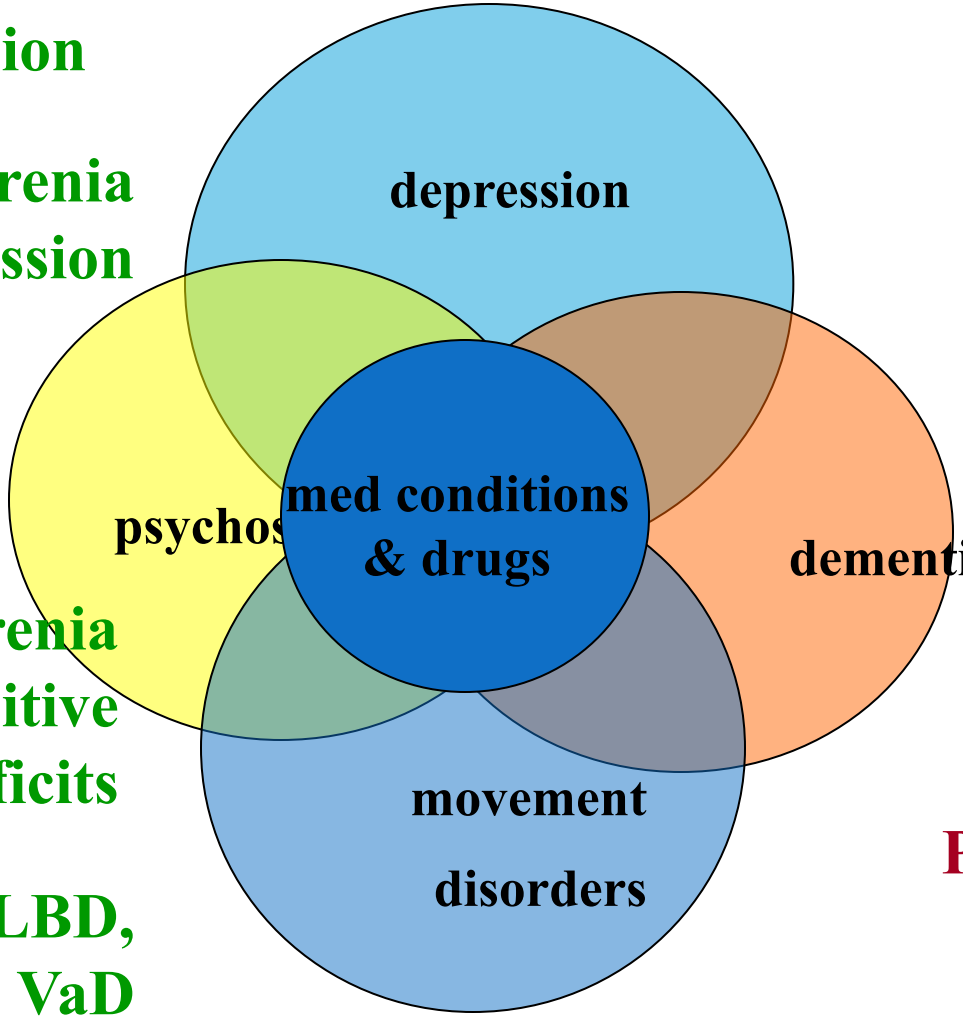
Estimated Prevalence of Major Psychiatric Disorders by Age Group



Jeste, Alexopoulus, Bartels, et al., 1999

DSM Disorders (in order of frequency)	month- 12 prevalence
Anxiety Disorders (phobic disorders,gen anx, panic)	female>male 12%-6%
Dementia	female>male 5-10%
Major depression	female>male 1-2%
Dysthymic disorder	female>male 2%
Alcohol abuse /dependence	male>female 1%
Schizophrenia	male=female 0.5%- 0.3
Bipolar	male=female 0.3%
Any DSM disorder	female>male 12%

OVERVIEW: Consider main syndrome & comorbid conditions



Psychotic depression

Schizophrenia with depression

Schizophrenia with cognitive deficits

PDD, LBD, with AD, VaD psychotic sx

Depression with dementia ("pseudodementia")

Vascular depression with mild cognitive impairment

MCI with depression

Dementia with depression

PD with depression

PDD, LBD, PD+ with cognitive deficits

Schizophrenia with movement disorders

PDD, LBD, AD with movement sx

Mental disorders in general

- Biological, psychological, social factors (bio-psycho-social model)
- Internal medical, neurological, psychiatric aspects
- Multidimensonal approach
- Polimorbidity!
- Syndromatology (atypical) – etiology
- Cross-sectional –long term course

Mental disorders in the elderly

- Dementia
  - Other „organic mental disorders”
- Affective disorders (depression)
- Delirium
- Delusional disorders (psychosis)
- Anxiety disorders
- Substance abuse disorders

- Psychiatric patients getting old

Dementia - Syndromatology

Chronic course (10% above 65 y, 16-25% above 85 y)

Multiple cognitive deficits incl. memory impairment (intelligence, learning, language, orientation, perception, attention, judgement, problem solving, social functioning)

No impairment of consciousness

Behavioural and psychological symptoms of dementia (BPSD)

Progressive - static

Reversible (15%) - irreversible

Dementia - Classification

Severity

Mild cognitive impairment (MCI)

Mild dementia

Moderate dementia

Severe dementia

Localization

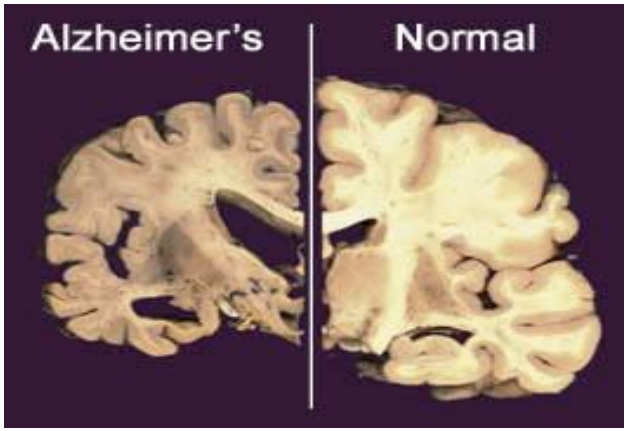
Cortical

Subcortical

Etiology

Dementia -Etiology

Alzheimers disease (60-70%)
Vascular dementia (10-20%)
Neurodegenerative disorders
Lewy body dis, Parkinson, Huntington, etc.)
Drugs and toxins
Intracranial masses
Anoxia
Trauma
Infections (JCD, HIV, etc)
Nutrition
Metabolic
Pseudodementia



MA[6]" Mnemonic for Dementia"

:Memory impairment; and one of the following four items

Apraxia

Aphasia

Agnosia

Abstraction and other executive functioning

plus

Absence of clouding of consciousness

Ability to function is impaired

TABLE 1-1 **Clinical Criteria for Amnestic Mild Cognitive Impairment**

1. Memory complaint, preferably corroborated by an informant
2. Essentially normal general cognition
3. Largely normal activities of daily living
4. Objective memory impairment for age
5. Not demented

Diagnostic Criteria of Mild Cognitive Impairment vs Alzheimer's Disease

Mild Cognitive Impairment	Alzheimer's Disease
Memory impairment (subjective, objective [1.5 × standard deviation, corroborated])	Memory impairment
General cognitive function intact	Aphasia, agnosia, apraxia, and/or impaired executive function present
Activities of daily life intact	Activities of daily life impaired
	Insidious onset, gradual progression
	Other potential causes ruled out

Prevalence: about 10% of those in aged 70-79

to nearly 20% aged 80-89

Neuropsychiatric Symptoms of MCI

(Lyketsos et al, 2002; Geda et al, 2008)

Depression: 20% to 27% (1/4)

Apathy: 15 to 19% (1/6)

Irritability: 15 to 19% (1/6)

Psychosis: 5% (1/20)

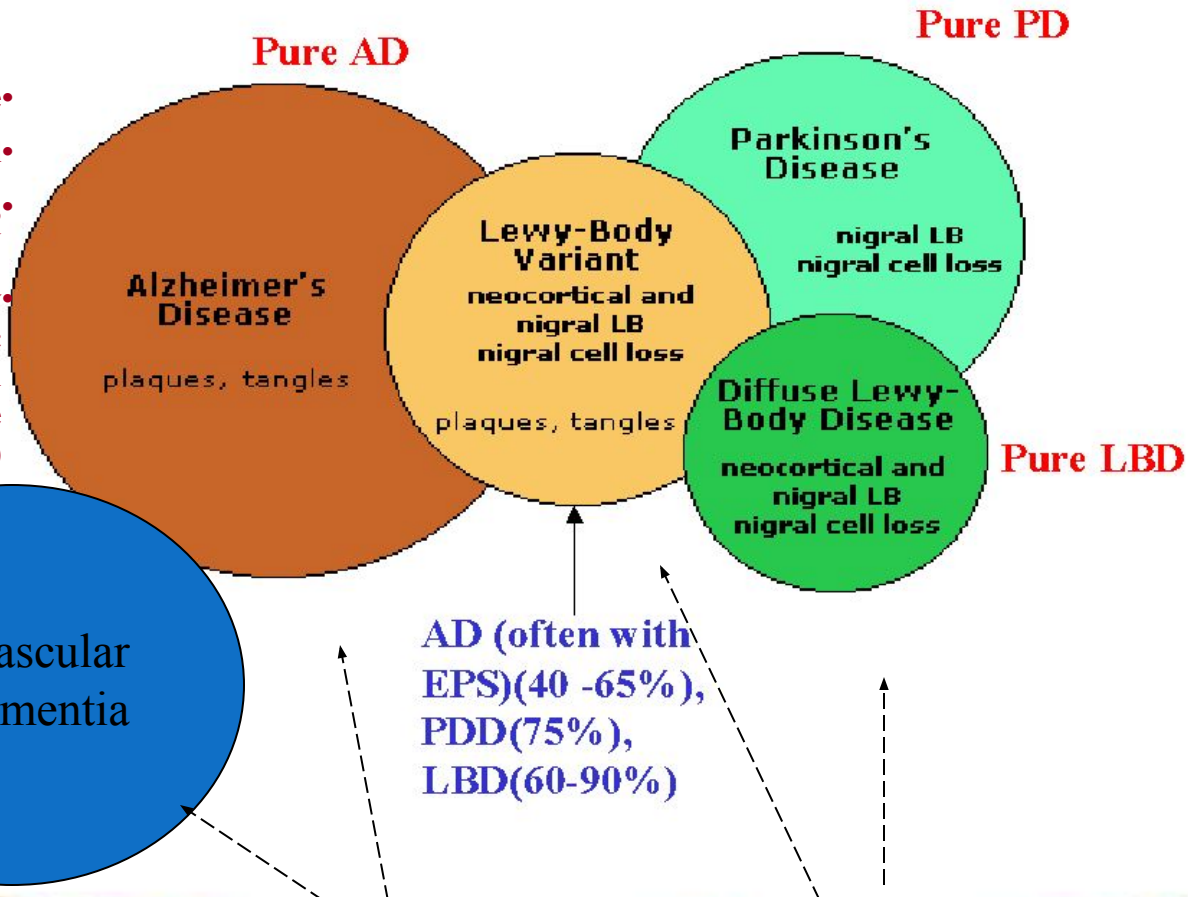
Movement Disorders and MCI (Aarsland et al, 2009)

of PD patients have MCI (1/5) 20%

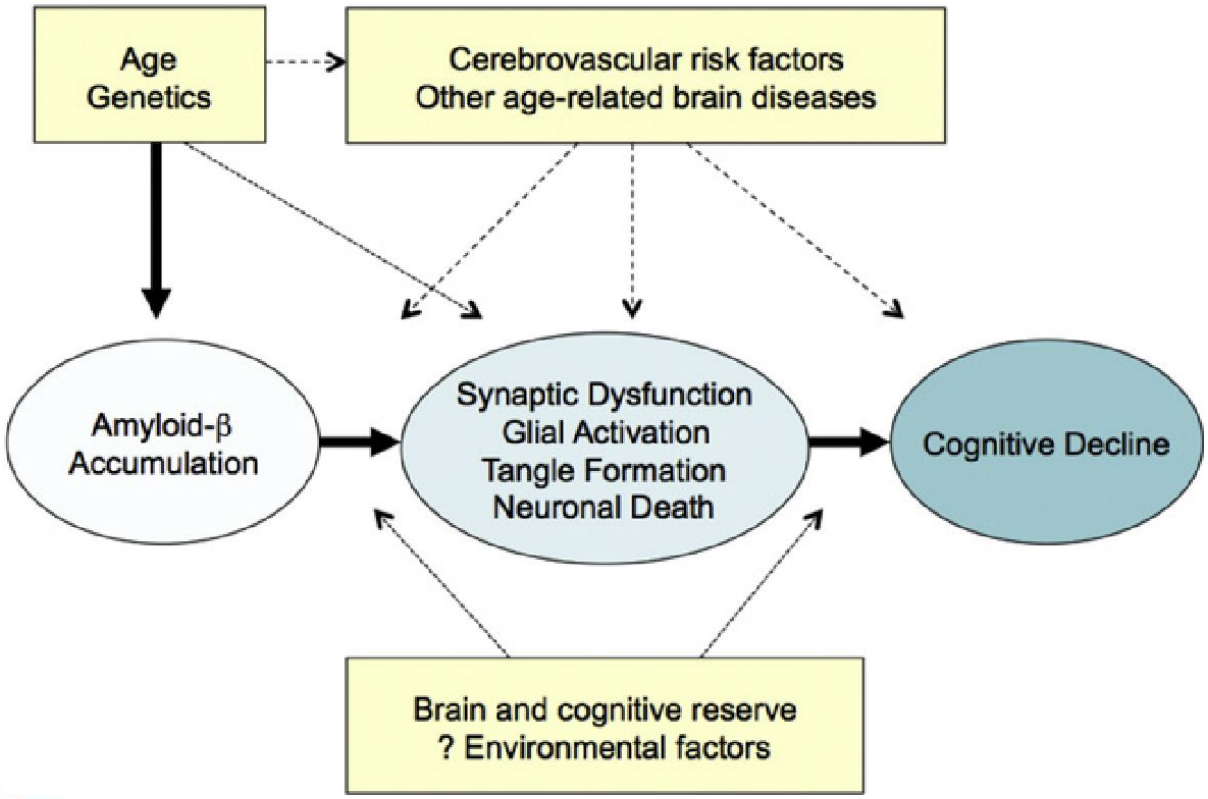
(twice normal group)

Overlap among Various Dementias

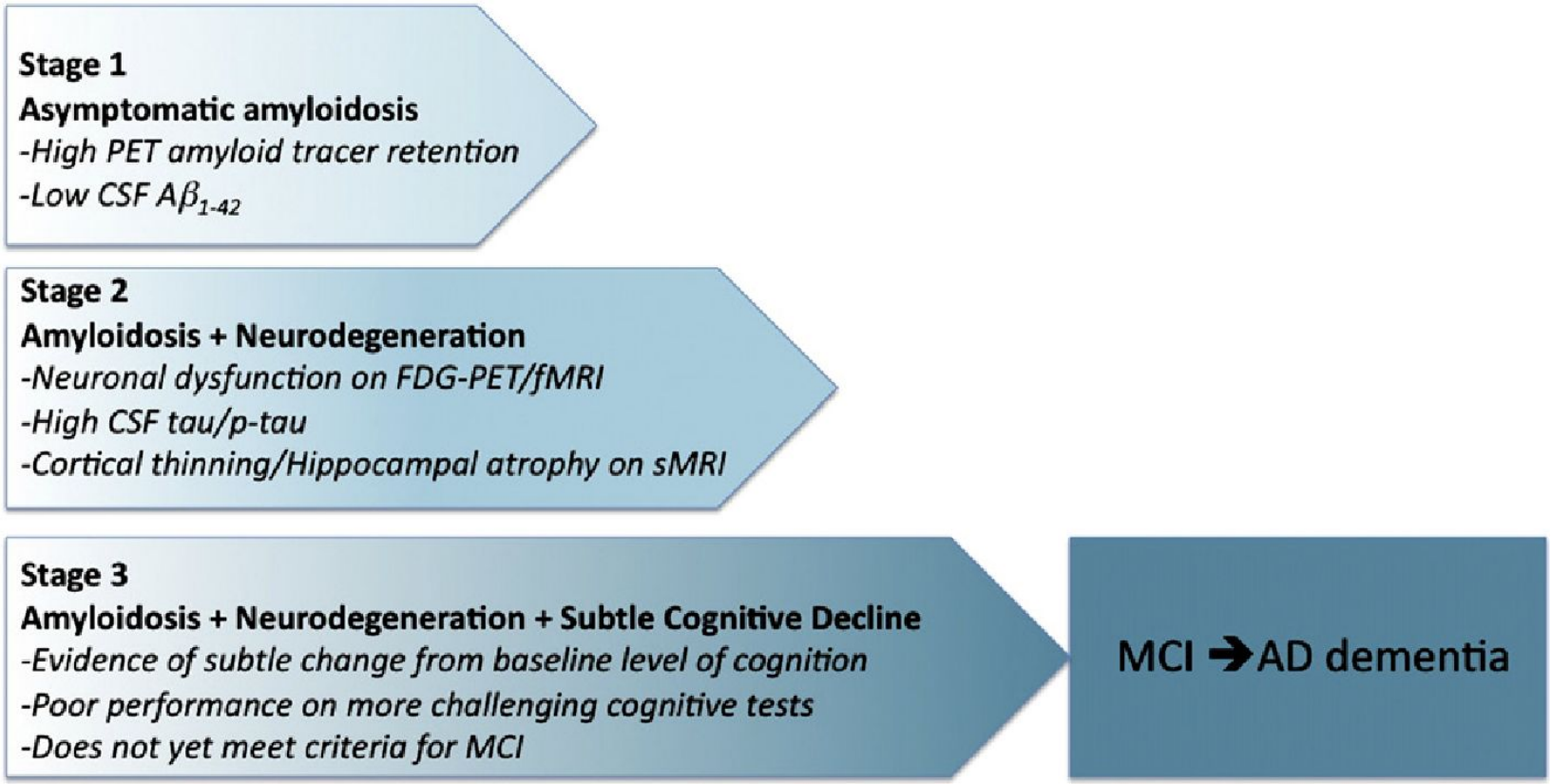
- Pure AD and VaD may be rare.
- AD is multifactorial.
- Similar risk factors: cholesterol, APOE4, DM, HTN.
- Vascular pathology may contribute to cholinergic abnormalities in both disorders (cholinesterase inhibitors may help with both).



Hypothetical model of AD pathophysiological cascade



Graphic representation of the proposed staging framework for preclinical AD



Major Neurocognitive Disorder: The DSM-5's New Term for Dementia

Major neurocognitive disorder is a decline in mental ability severe enough to interfere with .independence and daily life

Dementia vs. Neurocognitive Disorder

The word "dementia" is related to a Latin word for "mad," or "insane." Because of this, the introduction of the term neurocognitive disorder attempts to help reduce the stigma associated with both the word dementia and the conditions that it refers to

Symptoms of Alzheimer's Disease

:According to the DSM-5, there are three Criterion for Alzheimer's Disease

,A. The diagnostic criteria for major or minor neurocognitive disorder is fulfilled

B. Insidious onset and gradual decline of cognitive function in one or more areas for mild neurocognitive disorder, or two or more areas for major neurocognitive disorder, and

C. The diagnostic criteria for either possible or probable Alzheimer's Dementia are fulfilled, as defined by the :following

.Presence of causal Alzheimer's Dementia genetic mutation based on family history or genetic testing

:The following three indicators are present

Decline in memory or learning, and one other cognitive area, based on history or trials of neuropsychological .1 testing

Steady cognitive decline, without periods of stability, and .2

.No indicators of other psychological, neurological, or medical problems responsible for cognitive decline .3

Alzheimer's Disease

Prevalence

According to the DSM-5, the prevalence of Alzheimer's Disease is 5-10% in persons in their seventies, and 25% for those age 80 and over (American Psychiatric ,Association
.(2013

Comorbidity

The DSM-5 indicates that APD is comorbid with multiple medical problems (American Psychiatric Association, 2013). The comorbidity of Alzheimer's Disease with Down's Syndrome is 75% in individuals with Down .Syndrome over age 65 (Alzheimer's Association, 2014a)

Impact on Functioning

Alzheimer's Disease will have a progressive major impact on most areas of functioning. It is inexorable and terminal. :(American Psychiatric Association, 2013). The degree of impact will depend on what stage the disease process is in

.Stage 1: No impairment- no detectable cognitive impairment in an individual with risk factors for Alzheimer's Disease

Stage 2: Very mild decline- subjective experience of occasional aphasia or STM (Short Term Memory) failure which .cannot be objectively verified. This may me MCI instead of Alzheimer's Disease. (see note at the end of this section)

Stage 3: Mild decline- objective indicators of aphasia, STM impairment including problems with name recall, or .concentration may be present

Stage 4: Moderate decline- difficulty with Short term, recall, inability to perform serial seven's, impaired episodic LTM .(Long Term Memory) recall, and difficulty successfully completing multi-step tasks

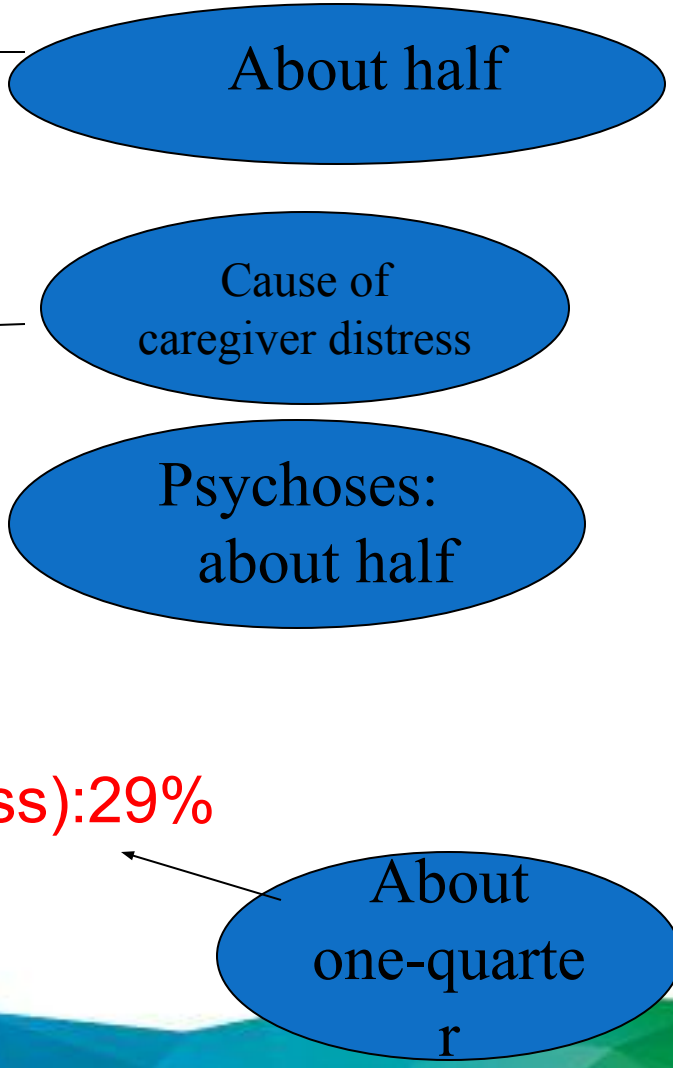
Stage 5: Moderately severe decline- disoriented to time and place, difficulty dressing appropriately for weather and .occasion, deeper episodic LTM deficits

Stage 6: Severe decline- disoriented to person, time, place, more profound episodic LTM deficits, reversed sleep pattern, loss of bladder and bowel control, enhancement of previously suppressed personality characteristics, and .paranoid delusions

Stage 7: Very severe decline- unresponsive, loss of motor control, abnormal reflexes, difficulty swallowing, death. (Alzheimer's Association, 2014b)

Prevalence of Neuropsychiatric Symptoms(i.e., Psychiatric and Behavioral Problems) in AD

Physical Aggression: 42%
Verbal Aggression/threats: 54%
Restlessness:38%
Wandering: 29%
Sleep disturbances:38%
Apathy/Withdrawal: 27%
Hallucinations:24%
Delusions:50%
Paranoia/suspiciousness:30%
Emotional lability: 8%
Mood disturbances(depression,tearfulness):29%



treatment

:Medications for Memory

Medications for early to moderate stages

All of the prescription medications currently approved to treat Alzheimer's symptoms in early to moderate stages are from a class of drugs called cholinesterase inhibitors. Cholinesterase inhibitors are prescribed to treat .symptoms related to memory, thinking, language, judgment and other thought processes

:Additionally, cholinesterase inhibitors

- Prevent the breakdown of acetylcholine (a-SEA-til-KOH-lean), a chemical messenger important for learning .and memory. This supports communication among nerve cells by keeping acetylcholine high
- .Delay or slow worsening of symptoms. Effectiveness varies from person to person
- Are generally well-tolerated. If side effects occur, they commonly include nausea, vomiting, loss of appetite and .increased frequency of bowel movements

:Three cholinesterase inhibitors are commonly prescribed

- .Donepezil (Aricept) is approved to treat all stages of Alzheimer's
- .Rivastigmate (Exelon) is approved to treat mild to moderate Alzheimer's
- .Galantamine (Razadyne) is approved to treat mild to moderate Alzheimer's

treatment

Medications for moderate to severe stages

Memantine (Namenda) and a combination of memantine and donepezil (Namzaric) are .approved by the FDA for treatment of moderate to severe Alzheimer's

Memantine is prescribed to improve memory, attention, reason, language and the ability to perform simple tasks. It can be used alone or with other Alzheimer's disease treatments. There is some evidence that individuals with moderate to severe Alzheimer's who are taking a cholinesterase inhibitor might benefit by also taking memantine. A medication that combines .memantine and a cholinesterase inhibitor is available

:Memantine

- .Regulates the activity of glutamate, a chemical involved in information processing
- ..Improves mental function and ability to perform daily activities for some people
- .Can cause side effects, including headache, constipation, confusion and dizziness

treatment

Common changes in behavior

Many people find the changes in behavior caused by Alzheimer's to be the most challenging and distressing effect of the disease. The chief cause of behavioral symptoms is the progressive deterioration of brain cells. However, .medication, environmental influences and some medical conditions also can cause symptoms or make them worse

:In early stages, people may experience behavior and personality changes such as

Irritability•
Anxiety•
Depression•

:In later stages, other symptoms may occur including
Aggression and Anger•
Anxiety and Agitation•
General emotional distress•
Physical or verbal outbursts•
Restlessness, pacing, shredding paper or tissues•
Hallucinations (seeing, hearing or feeling things that are not really there)•
Delusions (firmly held belief in things that are not true)•
Sleep Issues and Sundowning•

treatment

Concerns about alternative therapies

Although some of these remedies may be valid candidates for treatments, there are legitimate concerns about using these drugs as an alternative or in addition to physician-prescribed :therapy

- Effectiveness and safety are unknown. The rigorous scientific research required by the U.S. Food and Drug Administration (FDA) for the approval of a prescription drug is not required by law for the marketing of dietary supplements. The maker of a dietary supplement is not required to provide the FDA with the evidence on which it bases its claims for safety and .effectiveness

- Purity is unknown. The FDA has no authority over supplement production. It is a manufacturer's responsibility to develop and enforce its own guidelines for ensuring that its .products are safe and contain the ingredients listed on the label in the specified amounts

- Dietary supplements can have serious interactions with prescribed

vascular dementia

A common form of dementia in older persons that is due to cerebrovascular disease, usually with stepwise deterioration from a series of small strokes and a patchy distribution of neurologic deficits affecting some functions and not others. Symptoms include confusion, problems with recent memory, wandering or getting lost in familiar places, loss of bladder or bowel control (incontinence), emotional problems such as laughing or crying inappropriately, difficulty following instructions, and problems handling money. The damage is typically so slight that the change is noticeable only as a series of small steps

vascular dementia

DSM-IV criteria for the diagnosis of vascular dementia

:A. The development of multiple cognitive deficits manifested by both

Memory impairment (impaired ability to learn new information or to recall previously learned information)

One or more of the following cognitive disturbances: (a) aphasia (language disturbance) apraxia (impaired ability to carry out motor activities depite intact motor function) (b) agnosia (failure to recognize or identify objects despite intact sensory function) (c) disturbance in executive functioning (i.e., planning, organizing, sequencing, (d) abstracting)

B. The cognitive deficits in criteria A1 and A2 each cause significant impairment in social or occupational functioning and represent a significant decline from a previous level of .functioning

C. Focal neurological signs and symptoms (e.g., exggeration of deep tendon reflexes, extensor plantar response, psuedobulbar palsy, gait abnormalities, weakness of an extremity) or laboratory evidence indicative of cerebrovascular disease (e.g., multiple infarctions involving cortex and underlyig white matter) that are judged to be etiologically .related to the disturbance

.D. The deficits do not ocurr exclusively during the course of a delirium

Treatment and prevention of vascular dementia

RISK FACTOR MANAGEMENT

Antihypertensive drugs

Diabetes management

Statins

Antiplatelet agents

Homocysteine lowering — Elevated homocysteine is an independent risk factor for vascular disease and may also be associated with risk of dementia

Healthy lifestyle — There is mounting evidence that certain modifiable health behaviors (eg, smoking, alcohol use, physical activity, and diet) are associated with cognitive function later in life, underscoring the importance of promoting a healthy lifestyle at all ages

Acetylcholinesterase inhibitors — Cholinergic dysfunction has been documented in VaD as well as Alzheimer disease (AD) Three ,acetylcholinesterase inhibitors approved for use in AD, donepezil galantamine, and rivastigmine, have also been studied in VaD

Frontotemporal dementia

Frontotemporal dementias (FTDs) are a group of clinically and neuropathologically heterogeneous neurodegenerative disorders characterized by prominent changes in social behavior and personality or aphasia accompanied by degeneration of the frontal and/or temporal lobes. Some patients with FTD also develop a concomitant motor syndrome such as parkinsonism or motor neuron disease (MND). FTD is one of the more common causes of early-onset dementia, with an average age of symptom onset in the sixth decade

Frontotemporal dementia

Clinical presentation — Early behavioral changes of bvFTD include the following:, striatal and .hypothalamic degeneration

- Disinhibition – Examples of disinhibition or socially inappropriate behavior include touching or kissing strangers, public urination, and flatulence without concern. Patients may make offensive remarks or invade others' personal space. Patients with FTD may exhibit utilization behaviors, such as playing with objects in their surroundings or taking others' .personal items

- Apathy and loss of empathy – Apathy manifests as losing interest and/or motivation for activities and social relationships. Patients may participate less in conversations and grow passive. Apathy is mistaken frequently for .depression, and patients are often referred for psychiatric treatment early in the disease course

As patients lose empathy, caregivers may describe patients as cold or unfeeling towards others' emotions. Degeneration of right orbitofrontal and anterior temporal regions may drive the loss of sympathy and empathy

- Hyperorality – Hyperorality and dietary changes manifest as altered food preferences, such as carbohydrate cravings, particularly for sweet foods, and binge eating. Increased consumption of alcohol or tobacco may occur. Patients may eat beyond satiety or put excessive amounts of food in their mouths that cannot be chewed properly. They may attempt to consume inedible objects. This behavior correlates with right orbitofrontal, insularaviors such as hoarding, checking, or cleaning. Other behaviors traditionally associated with obsessive compulsive disorder, such as hand washing and germ phobias, are generally absent. Patients with FTD can develop a rigid personality, rigid food preferences, and .inflexibility to changes in routine

Compulsive behaviors – Perseverative, stereotyped, or compulsive ritualistic behaviors include stereotyped speech, simple repetitive movements, and complex ritualistic beh

Frontotemporal dementia

Currently, there is no cure for FTD. Treatments are available to manage the behavioral symptoms. Disinhibition and compulsive behaviors can be controlled by selective serotonin reuptake inhibitors (SSRIs).[24][25] Although Alzheimer's and FTD share certain symptoms, they cannot be treated with the same pharmacological agents because the cholinergic systems are not affected in FTD.[4]

Because FTD often occurs in younger people (i.e. in their 40's or 50's), it can severely affect families. Patients often still have children living in the home. Financially, it can be devastating as the disease strikes at the time of life that often includes the top .wage-earning years

Personality changes in individuals with FTD are involuntary. Managing the disease is unique to each individual, as different patients with FTD will display different symptoms, .sometimes of rebellious nature

criteria for the clinical diagnosis of probable and possible dementia with Lewy bodies (DLB

Essential for a diagnosis of DLB is dementia, defined as a progressive cognitive decline of sufficient magnitude to interfere with normal social or occupational functions, or with usual daily
activities. Prominent or persistent memory impairment may not necessarily occur in the early ,stages but is usually evident with progression. Deficits on tests of attention, executive function .and visuoperceptual ability may be especially prominent and occur early

Core clinical features (The first 3 typically occur early and may persist throughout the course.)

.Fluctuating cognition with pronounced variations in attention and alertness

.Recurrent visual hallucinations that are typically well formed and detailed

.REM sleep behavior disorder, which may precede cognitive decline

One or more spontaneous cardinal features of parkinsonism: these are bradykinesia (defined as
slowness of movement and decrement in amplitude or speed), rest tremor, or rigidi

Supportive clinical features

Severe sensitivity to antipsychotic agents; postural instability; repeated falls; syncope or other ,transient episodes of unresponsiveness; severe autonomic dysfunction, e.g., constipation orthostatic hypotension, urinary incontinence; hypersomnia; hyposmia; hallucinations in other modalities; systematized delusions; apathy, anxiety, and depression

criteria for the clinical diagnosis of probable and possible dementia with Lewy bodies (DLB

Indicative biomarkers

Reduced dopamine transporter uptake in basal ganglia demonstrated by SPECT .or PET

.Abnormal (low uptake) 123iodine-MIBG myocardial scintigraphy

Polysomnographic confirmation of REM sleep without atonia

a. Two or more core clinical features of DLB are present, with or without the presence of

indicative biomarkers, or

b. Only one core clinical feature is present, but with one or more indicative .biomarkers

.Probable DLB should not be diagnosed on the basis of biomarkers alone

:Possible DLB can be diagnosed if

a. Only one core clinical feature of DLB is present, with no indicative biomarker evidence, or

b. One or more indicative biomarkers is present but there are no core clinical .features

Treatment of LBD

A palliative care approach to LBD entails comprehensive symptom management to maximize quality of life for the person with LBD and the family caregiver. In addition to pharmacological treatments, physical, occupational, and .speech therapy may also be helpful

- Early and aggressive treatment of cognitive symptoms with cholinesterase inhibitors is supported by research data suggesting that LBD patients (specifically those with dementia with Lewy bodies) may respond better than AD patients. Cholinesterase inhibitors may help reduce psychosis and should be part of a long term treatment strategy. If additional intervention is needed, cautious trial of quetiepine or clozapine for psychosis may be warranted. There is less evidence .to support the use of memantine in LBD
- Treating all sleep disorders is necessary for optimal cognitive function. Melatonin and clonzepam are suggested for .treatment of REM sleep behavior disorder
- Levodopa may provide some improvement in motor function and is the safest of the dopaminergic drugs. Dopamine .agonists are more likely to cause psychiatric and behavioral side effects

IMPORTANT NOTE: Traditional, or typical, antipsychotics, such as haloperidol, fluphenazine or thioridazine should be avoided. About 60% of LBD patients experience increased Parkinson symptoms, sedation, or neuroleptic malignant breakdown syndrome (NMS). NMS is a life-threatening condition characterized by fever, generalized rigidity and muscle .following exposure to traditional antipsychotics

Dementia due to Creutzfeldt-Jakob disease

Clinical symptoms typical of syndrome of - dementia

Symptoms also include involuntary movements, muscle rigidity, and ataxia

Onset of symptoms typically occurs between ages 40 and 60 years; course is extremely rapid, with progressive deterioration and death within 1 year

Etiology is thought to be a transmissible agent known as a “slow virus.” There is a genetic component in 5 to .15 percent

Gerstmann–Sträussler–Scheinker syndrome

- Gerstmann–Sträussler–Scheinker syndrome (GSS) is an extremely rare, usually familial, fatal neurodegenerative disease that affects patients from 20 to 60 years in age. It is exclusively heritable, and is found in only a few families all over the world
- It is, however, classified with the transmissible spongiform encephalopathies (TSE) due to the causative role played by PRNP, the human prion protein
- Symptoms start with slowly developing dysarthria (difficulty speaking) and cerebellar truncal ataxia (unsteadiness) and then the progressive dementia becomes more evident. Loss of memory can be the first symptom of GSS.[6] Extrapyramidal and pyramidal symptoms and signs may occur and the disease may mimic spinocerebellar ataxias in the beginning stages. Myoclonus (spasmodic muscle contraction) is less frequently seen than in Creutzfeldt–Jakob disease. Many patients also exhibit nystagmus (involuntary movement of the eyes), visual disturbances, and even blindness or deafness.[7] The neuropathological findings of GSS include widespread deposition of amyloid plaques composed of abnormally folded prion protein

Gerstmann–Sträussler–Scheinker syndrome

- GSS can be identified through genetic testing.[7] Testing for GSS involves a blood and DNA examination in order to attempt to detect the mutated gene at certain codons. If the genetic mutation is present, the patient will eventually be afflicted by GSS, and, due to the genetic nature of the disease, the offspring of the patient are predisposed to a higher risk of inheriting the mutation
- Duration of illness can range from 3 months to 13 years with an average duration of 5 or 6 years
- There is no cure for GSS, nor is there any known treatment to slow the progression of the disease. However, therapies and medication are aimed at treating or slowing down the effects of the symptoms. Their goal is to try to improve the patient's quality of life as much as possible.

Dementia due to other medical conditions

Endocrine disorders

Pulmonary disease

Hepatic or renal failure

Cardiopulmonary insufficiency

Fluid and electrolyte imbalance

Nutritional deficiencies

Frontal lobe or temporal lobe lesions

CNS or systemic infection

Uncontrolled epilepsy or other neurological conditions

Substance-induced persisting dementia

Related to the persistent effects

:of abuse of substances such as

Alcohol

Inhalants

Sedatives, hypnotics, and anxiolytics

Medications (e.g., anticonvulsants, intrathecal (methotrexate

,Toxins (e.g., lead, mercury, carbon monoxide (organophosphate insecticides, industrial solvents

Normal Pressure Hydrocephalus

Normal pressure hydrocephalus (NPH) is a clinical symptom complex caused by the build-up of cerebrospinal fluid. This condition is characterized by abnormal gait, urinary incontinence, and (potentially reversible) dementia

depression

Depression is the most frequent cause of emotional suffering in later life and .frequently diminishes quality of life

A key feature of depression in later life is ---COMORBIDITY

e.g., with physical illness such as stroke, myocardial infarcts, diabetes, and cognitive disorders (possibly bi-directional causality)

depression

:Predisposing risk factors for depression include

.Female sex •
.Widowed or divorced status •
.Previous depression •
.Brain changes due to vascular problems •
.Major physical and chronic disabling illnesses •
.Polypharmacy •
.Excessive alcohol use •
.Social disadvantage and low social support •
Caregiving responsibilities for person with a major disease •
.(e.g., dementia)
.Personality type (e.g., relationship or dependence problems) •

depression

Precipitating risk factors for depression should also be considered. These include:

- Recent bereavement.
- Move from home to another place (e.g., nursing home).
- Adverse life events (e.g., loss, separation, financial crisis).
- Chronic stress caused by declining health, family, or marital problems.
- Social isolation.
- Persistent sleep difficulties.

depression

:Prevalence of depression among older persons in various settings

Medically and surgically hospitalized persons—major depression 10-12% and an additional 23% experiencing significant depressive .symptoms

Primary Care Physicians: 5-10% have major depression and another .15% have minor or subsyndromal depression

PCPs may not be aggressively identifying and treating depression

Long-Term Care Facilities: 12% major depression , another 15% have .minor depression. Only half were recognized

Major Depression

Similar across lifespan but there may be some differences. :Among older adults

Psychomotor disturbances more prominent (either agitation or ,retardation)

Higher levels of melancholia(symptoms of non-interactiveness, psychological motor retardation or agitation, weight loss)

Tendency to talk more about bodily symptoms

Loss of interest is more common

Social withdrawal is more common

Irritability is more common

Somatization (emotional issues expressed through bodily complaints)is more common

Major Depression

:Emphasis should be

less on dysphoria(depressed mood) and guilt

more on fatigue, sleep and appetite changes, vague GI complaints , somatic worries, memory or concentration problems, .anxiety, irritability, apathy, withdrawal

Normal grief reaction versus Major Depression

Suggestive Symptoms

- Guilt about things other actions taken at time of death
- Thoughts of death other survivor feelings
- Morbid preoccupation with worthlessness
- Marked psychomotor retardation
- Hallucinations other than transient voices or images of dead person
- Prolonged & marked functional impairment

Pseudodementia—"depression with reversible dementia" syndrome: dementia develops during depressive episode but .subsides after remission of depression

Mild cognitive impairment in depression ranges from 25% to 50%, and cognitive impairment often persists 1 year after .depression clears

Treatment of Depression in Older Adults

Use same antidepressants as younger patients—however, start low, go slow, keep going higher, and allow more time(if some response has been achieved, may allow up to 10-14 weeks before .switching meds)

Older patients may have a shorter interval to recurrence than younger patients. Thus, they may .need longer maintenance of medication

Data are not clear if the elderly are more prone to .relapse

Treatment of Depression in Older Adults

Principles of treatment

When selecting an antidepressant it is important to consider the elderly patient's previous response to treatment, the type of depression, the patient's other medical problems, the patient's other medications, and the potential risk of overdose. Psychotic depression will likely not respond to antidepressant .monotherapy, while bipolar depression will require a mood stabilizer

Antidepressants are effective in treating depression in the face of medical illnesses, although caution is required so that antidepressant therapy does not worsen the medical condition or cause adverse events

For example, dementia, cardiovascular problems, diabetes, and Parkinson disease, which are common in the elderly, can worsen with highly anticholinergic drugs

Such drugs can cause postural hypotension and cardiac conduction abnormalities. It is also important to minimize drug-drug interactions, especially given the number of medications elderly patients are often taking. Tricyclic .antidepressants are lethal in overdose and are avoided for this reason

Treatment of Depression in Older Adults

The selective serotonin reuptake inhibitors (SSRIs) and the newer antidepressants buproprion, mirtazapine, moclobemide, and venlafaxine (a selective norepinephrine reuptake inhibitor or SNRI) are all relatively safe in the elderly. They have lower anticholinergic effects .than older antidepressants and are thus well tolerated by patients with cardiovascular disease

Common side effects of SSRIs include nausea, dry mouth, insomnia, somnolence, agitation, diarrhea,excessive sweating, and, less commonly, sexual dysfunction.[17] Owing to renal velopingfunctioning associated with aging, there is also an increased risk of elderly patients de hyponatremia secondary to a syndrome of inappropriate antidiuretic hormone secretion. This is seen in approximately 10% of patients taking antidepressants, and is associated particularly with SSRIs and venlafaxine.[19]

It is important to check sodium levels 1 month after starting treatment on SSRIs, especially in patients taking other medications with a propensity to cause hyponatremia, such as diuretics. Of course it is also important to check sodium levels if symptoms of hyponatremia arise, such as fatigue, malaise, and delirium. There is also an increased risk of gastrointestinal bleeding associated with SSRIs, particularly in higher-risk individuals, such as those with peptic ulcer .disease or those taking anti-inflammatory medications

Of the SSRIs, fluoxetine is generally not recommended for use in the elderly because of its long half-life and prolonged side effects. Paroxetine is also typically not recommended for use in the elderly as it has the greatest anticholinergic effect of all the SSRIs, similar to that of the tricyclics desipramine and nortriptyline

Treatment of Depression in Older Adults

SSRIs considered to have the best safety profile in the elderly are citalopram, escitalopram, and sertraline. These have the lowest potential for drug-drug in teractions based on their cytochrome P-450 interactions. Venlafaxine, mirtazapine, and bupropion are also considered to have a good safety profile in terms of drug-drug interactions

Tricyclic antidepressants are no longer considered first-line agents for older adults given their potential for side effects, including postural hypotension, which can contribute to falls and fractures, cardiac conduction abnormalities, and anticholinergic effects. These last can include delirium, urinary retention, dry .mouth, and constipation

Many medical conditions seen in the elderly, such as dementia, Parkinson disease, and cardiovascular problems can be worsened by a tricyclic antidepressant. If a tricyclic is chosen as a second-line medication, then nortriptyline and desipramine are the best choices given that they are less anticholinergic

Factors Possibly Associated with Reduced Antidepressant Response

Older age(>75 yrs)

Lesser severity

Late onset(≥60)

First episode

Anxious depression

Executive dysfunction

Psychotherapy

Originally thought to be ineffective over 50, e.g., Freud

:Controlled trials indicated useful for

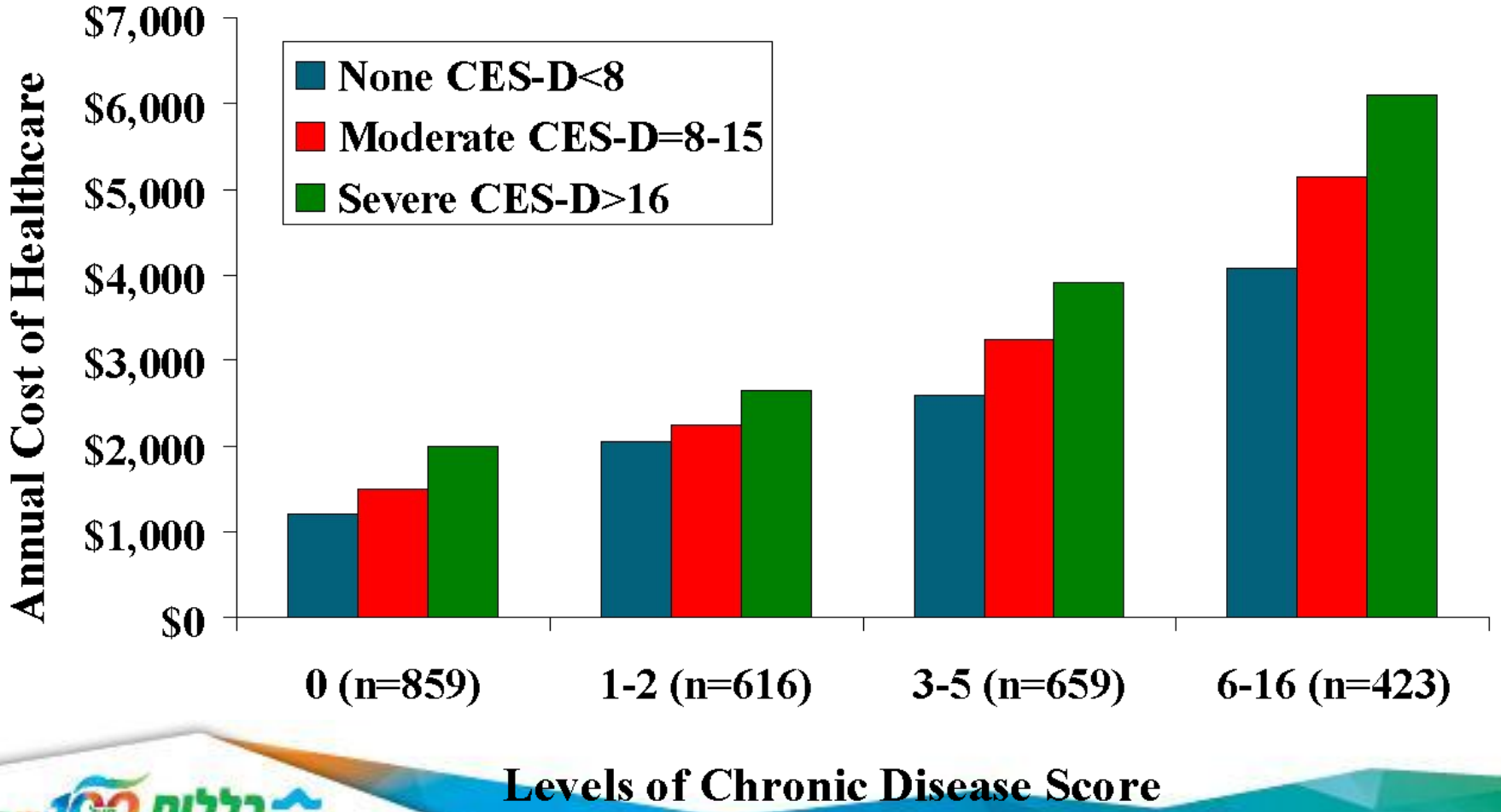
Major and minor depression

Recurrent depression, especially with meds

Prevent depression after stroke

Good evidence for Cognitive Behavior Therapy, Reminiscence and Life Review, Interpersonal Therapy, Problem Solving, Psychodynamic, Dialectical Behavioral Therapy (as adjunct to meds), Bibliotherapy (mild types) (Frazier et al, 2005)

Depression in Older Adults and Health Care Costs



Unutzer, et al., 1997; JAMA

Depression Associated with Worse Health Outcomes

Worse outcomes

Hip fractures

Myocardial infarction

Cancer (Mossey 1990; Penninx et al. 2001; Evans 1999)

Increased mortality rates

Myocardial Infarction (Frasure-Smith 1993, 1995)

Long term Care Residents (Katz 1989, Rovner 1991, Parmelee 1992; Ashby1991; Shah 1993, Samuels 1997)

Suicide in Older Adults

highest suicide rate of any age group :+65

2X the national average (CDC 1999) :+85

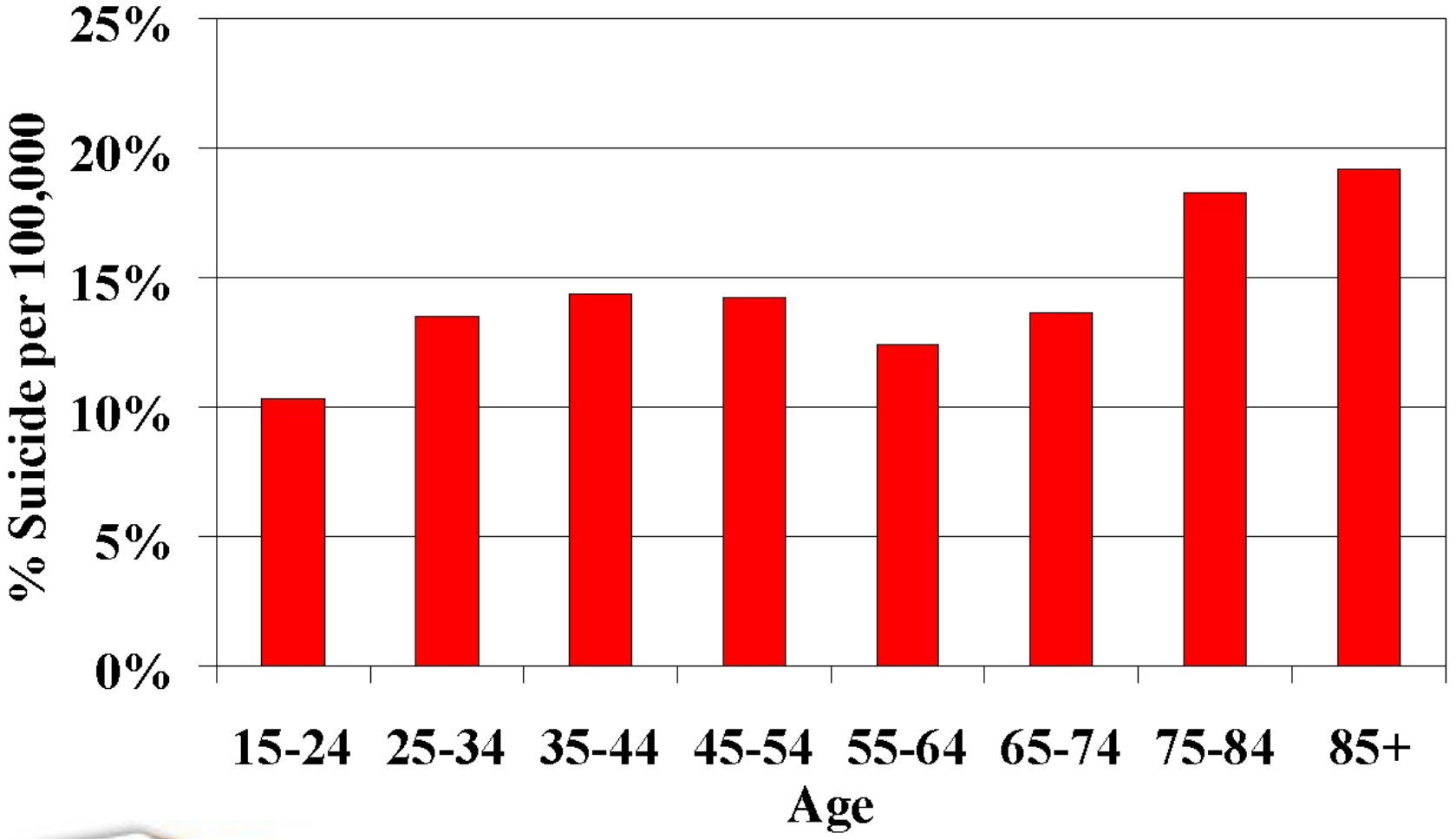
:Peak suicide rates

Suicide rate goes up continuously for men

Peaks at midlife for women, then declines

of older men saw their primary care physician in the 1/3 week before completing suicide;
70% within the prior month

Suicide Rate by Age Per 100,000



(Hoyert, 1999)

Agitation and Aggression in the Elderly

Agitation (increased verbal and/or motor activity as well as restlessness, anxiety, tension, and fear) and aggression (self-assertive verbal or physical behavior arising from innate drives and/or a response to frustration that may manifest by cursing/threats and/or destructive and attacking behavior toward objects or people) are symptoms commonly present in patients with central nervous system (CNS) disorders

(Hoyert, 1999)

Abuse of the elderly

Physical .1

Non-accidental use of force against an elderly person that results in physical pain, injury, or impairment. Such• abuse includes not only physical assaults such as hitting or shoving but the inappropriate use of drugs, .restraints, or confinement

Emotional (Verbal) .2

.Intimidation through yelling or threats•

.Humiliation and ridicule•

.Habitual blaming or scape-goating•

Psychological (Non-verbal) .3

.Ignoring the elderly person•

.Isolating an elder from friends or activities•

.Terrorizing or menacing the elderly person•

Neglect .4

Failure to fulfill a caretaking obligation constitutes more than half of all reported cases of elder abuse. It can• be active (intentional) or passive (unintentional, based on factors such as ignorance or denial that an elderly .charge needs as much care as he or she does)

Fraud .5

.Misuse of an elder's personal checks, credit cards, or accounts•

.Steal cash, income checks, or household goods•

.Forge the elder's signature•

.Engage in identity theft•

Scams .6

.Announcements of a "prize" that the elderly person has won but must pay money to claim•

.Phony charities•

.Investment fraud•

Delusional disorders (psychoses)

Late onset schizophrenia (over 40 y)

Very late onset schizophreniform disorder (over 60 y)

Other delusional disorders

Organic delusional disorder

Delusional symptoms of dementia (BPSD)

Multiple etiology, multiple syndromatology (schizophreniform, persecutory, hallucinosis, coenaesthesias, etc.)

Anxiety disorders

High prevalence

Atypical symptoms

Somatoform/behavioural symptoms

Psychosocial stressors

Comorbidity

somatic

psychiatric

Substance abuse

Alcohol/medication abuse

Common comorbidity

somatic

psychiatric (anxiety, depression, etc.)

Psychiatric patients getting old

Schizophrenia / bipolar disorder

Personality disorder

Neurotic disorders

.anxiety, somatoform, etc

Changes in clinical picture, therapeutical response, .etc

Bio-psycho-social changes

Multidimensional approach

Psychiatric therapies in the elderly

Pharamcotherapy

Other biological therapies (ECT)

Psychotherapies –social therapies

Improving cognitive functioning

Rehabilitation

Treating primary or associated mood-anxiety disorder

Pharmacotherapy

Aspects of pharmacotherapy

Mental status, neurological/somatic status

Social status

Etiology

Special aspects

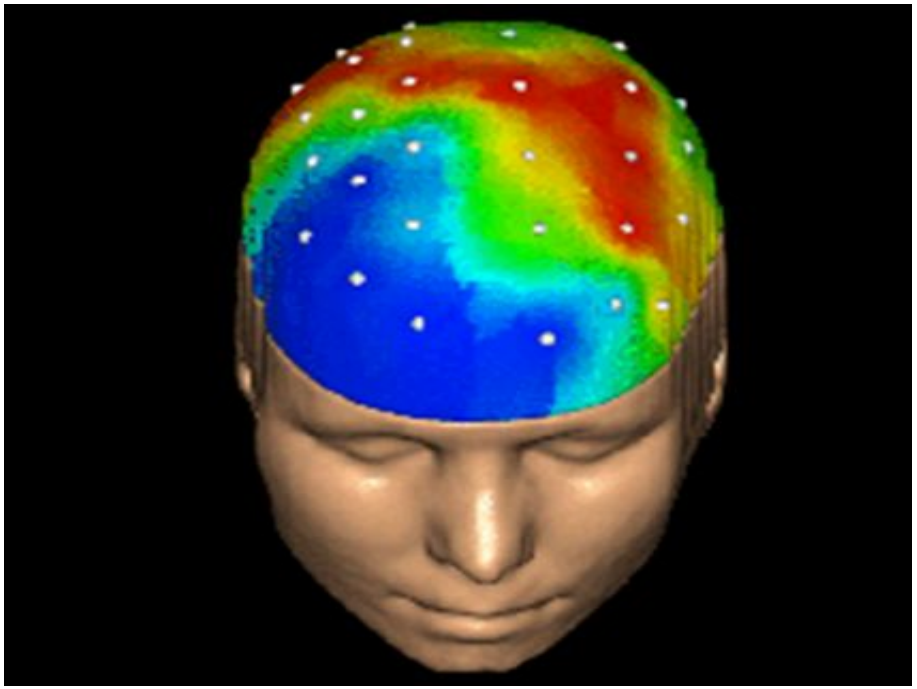
Polimorbidity

Pharmacokinetics (interactions)

Dosage (low)

Side effects (cognitive, other)

Organic Disorder



Neuropsychiatry

Biological psychiatry

Cognitive neuroscience

Neuropsychology

(Neurology – Psychiatry)

Neuropsychiatry

DSM IV TR

Delirium, dementia, amnestic disorders and .other cognitive disorders

DSM V: Major/mild neurocognitive disorder

Mental disorders due to a medical condition

ICD 10

Organic and symptomatic mental disorders

Dementia

Organic amnestic syndrome

Delirium

Other mental disorders caused by brain lesion and dysfunction or somatic disorder

Organic hallucinosis, organic catatonia, organic delusional .disorder, organic mood disorder, organic anxiety disorder, etc

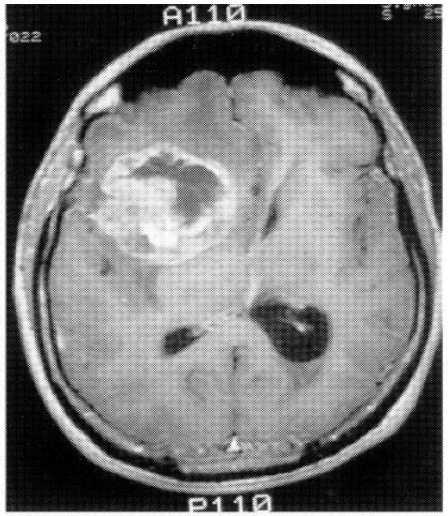
Mental and behavioural disorders caused by psychoactive substances

Etiology, causes, pathology

Central nervous system
Neurodegeneration
Cerebrovascular origin
Inflammation, tumor
Demyelination
Epilepsy
Trauma
Other

Outside the central nervous system
Endocrine
Metabolic, cardio-vascular diseases
Nutritional disturbance
Infection

Drug intoxication, drug withdrawal
Alcohol, illegal drugs, medication



From neurological point of …view

Cerebrovascular diseases

Neurodegenerativ diseases

.Parkinson's disease, other movement dis

Epilepsy

Head trauma –brain injuries

Tumors

Neuroinfections

Neuroimmunology (multiple sclerosis)

Classification of syndromatology

Acute – chronic

Diffuse (global) – focal (local) - multifocal brain disfunction

Lobe syndromes

FRONTAL

hibition, lack of initiative and spontaneity,

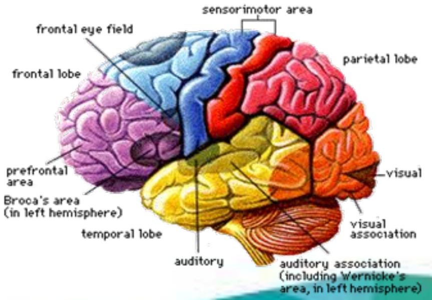
motivation, perseveration, impulsivity,

TEMPORAL

affective, agression, fear, explosion, psychosis, disorientation

PARIETAL

gnostic and cognitive dysfunctions (alexia, acalculia, agraphia), apraxias



Delirium - Syndromatology

Acute course – (sudden onset, short episode)

Impairment of consciousness

Global impairment of cognitive functions (memory, attention, orientation, thinking, etc.)

Perceptual disturbance (multimodal illusions and hallucinations)

Behavioural changes (agitation)

Fluctuating course

Delirium - Etiology

- Any cause, resulting in global dysfunction
- General medical condition (e.g. infection, metabolic reasons, hypoxia)
- Substance induced
- Multiple cause

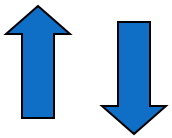
tomatological)

(BZD, Na)

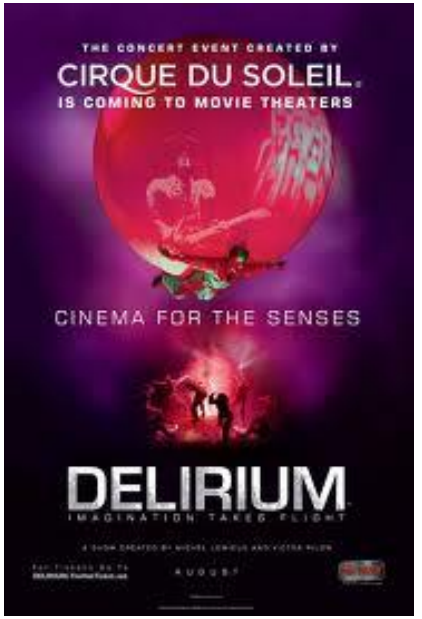
Etiology

?Etiological factors

Risk (predisposing) factors



Trigger (precipitating) factors



Hyperactive, hypoactive, mixed form

.Risk factors 1

Age: 65+ sex: male
Dementia (+++), other cognitive disorder
Depression
Vision-, hearing impairment
Dehydration, malnutrition
Medication (multiple drugs, psychoactive drugs), alcohol
Immobility, pain, constipation
Sleep deprivation

.Saxena et al, 2009

.Risk factors 2

Somatic illnesses

Severe illness

Many illnesses

Chronic liver or kidney failure

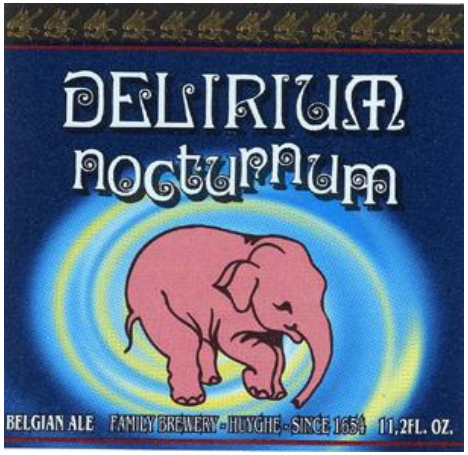
Stroke, other neurological disorder

Metabolic disorder

Trauma, bone fracture

Terminal state

HIV infection



Saxena et al, 2009

.Precipitating 1

Comorbid disorders

Infection

Hypoxia

Severe acute disorder (pl. AMI)

Liver, kidney disorder

Urinary retention, constipation

Anaemia

Fever

Shock

.Saxena et al, 2009

.Precipitating factors 2

Iatrogenic complication

Metabolic imbalance

Neurological disease (head trauma)

Surgery

Medication

overdose, politherapy

sedatives, hypnotics, anticholinergic drugs, antiepileptics

Enivironmental factors (ICU, phycical restraint, bladder catheters, multiple/invasive manipulations, emotional stress)

Pain

.Saxena et al, 2009

Delirium

Diagnostic Criteria

.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

Diagnostic Criteria

.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

Dementia - Syndromatology

Chronic course (10% above 65 y, 16-25% above 85 y)

Multiple cognitive deficits incl. memory impairment (intelligence, learning, language, orientation, perception, attention, judgement, problem solving, social functioning)

No impairment of consciousness

Behavioural and psychological symptoms of dementia (BPSD)

Progressive - static

Reversible (15%) - irreversible

Mental disorders due to a General Medical Condition (DSM IV)

Psychotic disorder due to a general medical condition

Mood disorder

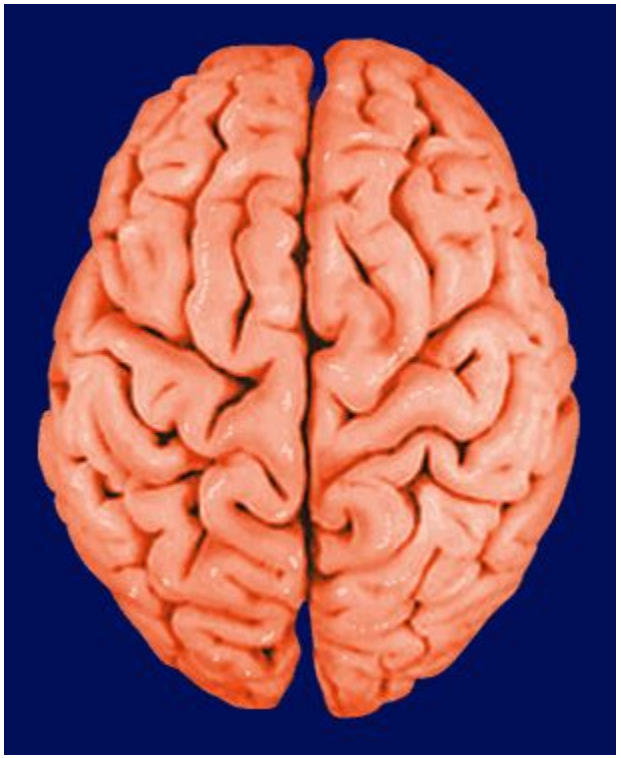
Anxiety disorder

Sexual disfunction

Sleep disorder

Catatonic disorder

Personality change



Amnestic Disorders

Amnestic disorders are characterized by an inability to

Learn new information despite normal attention

Recall previously learned

information

Symptoms

Disorientation to place and time (rarely to self)

Confabulation, the creation

of imaginary events to fill

in memory gapsDenial that a problem exists or acknowledgment that a problem exists, but with a lack of concern

Apathy, lack of initiative, and emotional blandness

Amnestic Disorders

Onset may be acute or insidious, depending .on underlying pathological process

Duration and *course* may be quite variable and are also correlated with extent and .severity of the cause

Korsakoffs syndrom

Korsakoff's syndrome, or Wernicke-Korsakoff syndrome, is a brain disorder caused by extensive thiamine deficiency, a form of malnutrition which can be precipitated by over-consumption of alcohol and alcoholic beverages compared to other foods. It main symptoms are anterograde amnesia (inability to form new memories and to learn new information or tasks) and retrograde amnesia (severe loss of existing memories), confabulation (invented memories, which are then taken as true due to gaps in memory), meagre content in conversation, lack of .insight and apathy

Therapy in neuropsychiatry

Pharmacotherapy

Psychotherapy, psycho-social treatment

Improving cognitive abilities

Rehabilitation

Treating affective and anxiety symptoms

Treating other psychological symptoms

Amnestic Disorder due to a General Medical Condition

- Head trauma
- Cerebrovascular disease
- Cerebral neoplastic disease
- Cerebral anoxia
- Herpes simplex virus–related encephalitis
- Poorly controlled diabetes
- Surgical intervention to the brain

Substance-Induced Persisting Amnestic Disorder Related to

Alcohol abuse

,Sedatives, hypnotics

and anxiolytics

,Medications (e.g., anticonvulsants

(intrathecal methotrexate

Toxins (e.g., lead, mercury, carbon

,monoxide, organophosphate insecticides

(industrial solvents

.Pharmacotherapy in neuropsychiatry 1

Targets of pharmacotherapy

Etiological background

Progression

Psychiatric symptoms

:Target symptom

Cognitive

Agitation/aggression

Mood

Psychotic

Other behavioural

Neurologic symptoms

.Pharmacotherapy in neuropsychiatry 2

Aspects of pharmacotherapy

Mental status

Neurological status

Social status

Etiological background

Typical v. atypical symptoms

.Pharmacotherapy in neuropsychiatry 3

Special aspects

Age

Polimorbidity

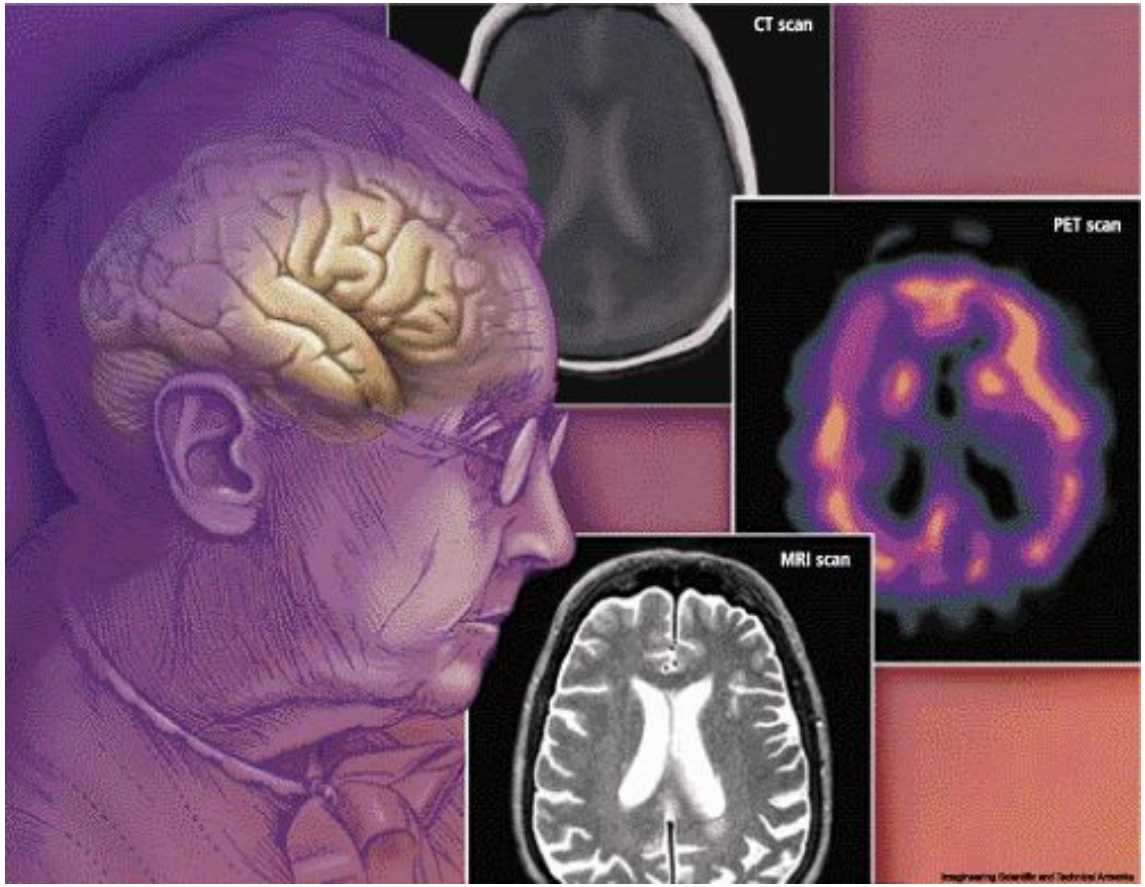
Pharmacokinetics (interactions)

(-/+) Optimal dosing

Side effects (cognitive, other)

COVID-19 and the consequences of isolating the elderly

- The COVID-19 pandemic is impacting the global population in drastic ways. In many countries, older people are facing the most threats and challenges at this time
- However, it is well known that social isolation among older adults is a “serious public health concern” because of their heightened risk of cardiovascular, autoimmune, neurocognitive, and mental health problems
- Self-isolation will disproportionately affect elderly individuals whose only social contact is out of the home, such as at daycare venues, community centres, and places of worship. Those who do not have close family or friends, and rely on the support of voluntary services or social care, could be placed at additional risk, along with those who are already lonely, isolated, or secluded.
- Although all age groups are at risk of contracting COVID-19, older people face significant risk of developing severe illness if they contract the disease due to physiological changes that come with ageing and potential underlying health conditions.


CT scan
PET scan
MRI scan