Common Elderly Psychiatric Problem

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Depression

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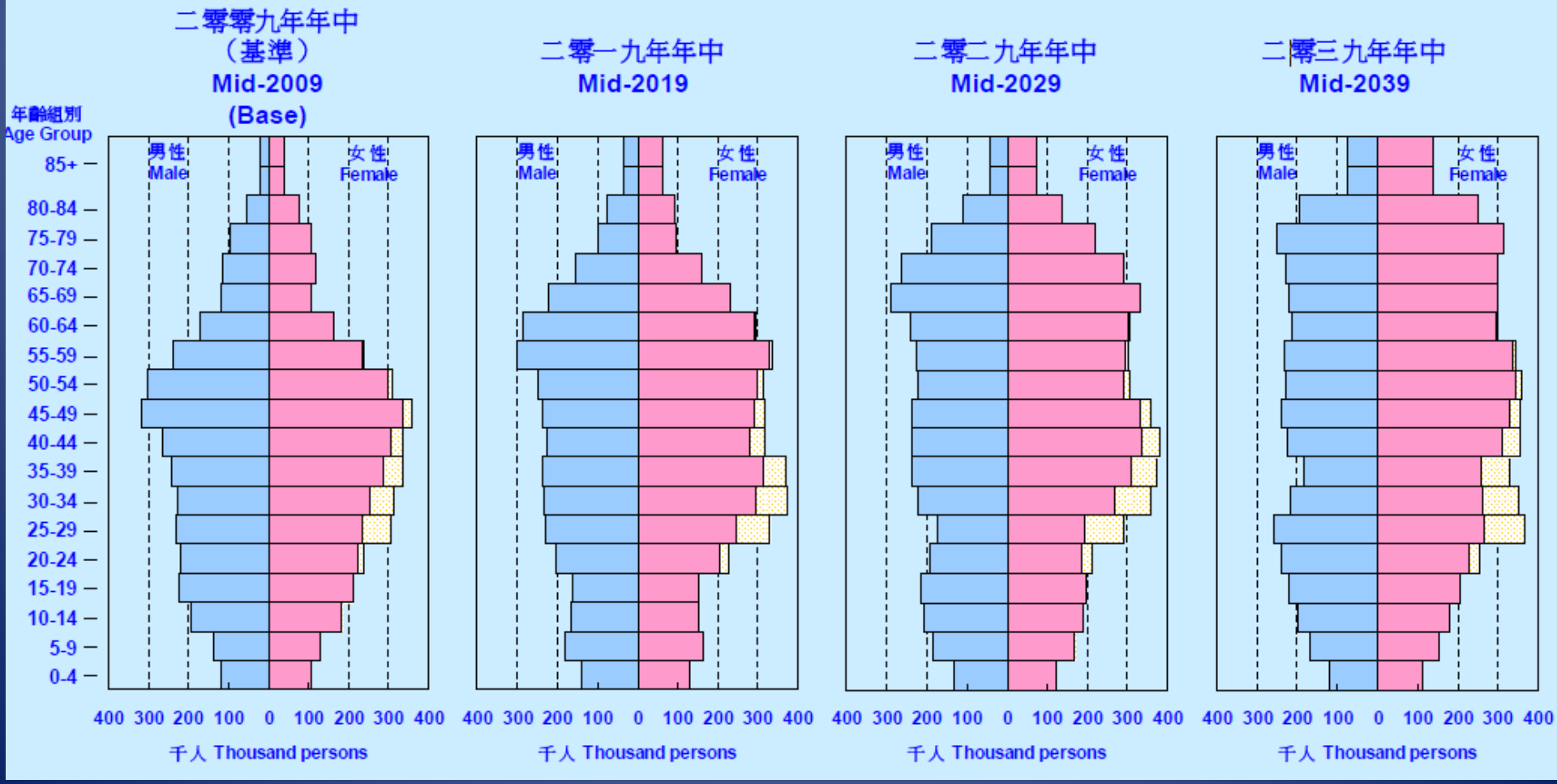
Population Pyramid



Depression in the Elderly

- Common
- Treatable
- Under-diagnosed & under-treated
- > 60% treated inappropriately
- Disease burden
- Morbidity & mortality

Prevalence of elderly depression in different care settings

Care setting	Prevalence of depressive symptoms	Prevalence of major depressive disorder
Community	15%	1-3%
Primary care	20%	10-12%
Acute hospital	20-25%	10-15%
Long term care	30-40%	16%

Global burden of diseases (WHO)

1996	2020
Lower respiratory diseases	Ischaemic heart disease
Diarrhoeal diseases	Unipolar depression
Perinatal conditions	Road traffic accidents
Unipolar major depression	CVA
Ischaemic heart disease	COAD

Depressive Symptoms and Mortality

- Depressive symptoms were associated with all-cause mortality (hazard ratio 1.21, 95% confidence interval: 1.08–1.37) in men only (*p* value for sex interaction <.05) and with suicide mortality in men (hazard ratio 2.81, 95% confidence interval: 1.13–7.01) and women (hazard ratio 2.40, 95% confidence interval: 1.18–4.82) but not with other major causes of death after adjusting for age, education, monthly expenditure, smoking, alcohol drinking, physical activity, body mass index, health status, and self-rated health. The associations did not vary with health status.

Risk factors of elderly depression

1. Female gender
2. Being widowed or divorced
3. Medical illness, e.g. stroke, neurological disorders
4. Functional disability
5. Family and personal history of depression
6. Social isolation
7. Life events
8. Medications, e.g. antihypertensives, steroids and antiparkinsonian drugs
9. Caregiving, e.g. carers of people with dementia

Aetiology (1)

- **Social**: reduced social networks, loneliness, bereavement, poverty, physical ill health
- **Psychological**: low self-esteem, lack of capacity for intimacy, physical ill health
- **Biological**: neuronal loss/neurotransmitter loss, genetic risk, physical ill health

Aetiology (2)

- **Disease:**
  - **Direct:** CVA, Parkinson's disease, thyroid disease, Cushing's disease, Hungtington's disease
  - **Indirect:** pain, disability, chronicity, poor diet, decreased activity

Aetiology (3)

- **Drugs**:
  - Digoxin, L-dopa, steroid
  - Beta-blockers, methyldopa
  - Chronic benzodiazepine use
  - Phenobarbitone
  - Neuroleptics in chronic use

Diagnosis

- A syndromal diagnosis
- Based on eliciting a specific cluster of symptoms through careful history taking and mental state examination, supplemented by relevant physical examination
- No confirmatory laboratory tests
- ICD-10 or DSM-IV

International Classification of Disease (ICD-10)

- **Cardinal symptoms**: depressed mood, loss of interest (anhedonia), loss of energy (anergia)
- **Additional symptoms**: reduced concentration, reduced self esteem (present), guilty feelings (past), hopelessness and pessimism (future), self harm or suicidal ideas, sleep disturbance, decreased appetite, loss of libido, psychomotor changes

Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)

- Depressed mood most of the day
- Marked diminished interest or pleasure in normal activities
- Significant weight loss or weight gain
- Insomnia or hypersomnia
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Feelings of worthlessness or excessive guilt
- Recurrent suicidal thoughts or attempts
- Reduced ability to concentrate

Diagnostic difficulties

- Primary care physicians could identify no more than 50% of patients with a diagnosable depressive syndrome (Mulsant & Ganguli, 1999)
- Presentation of depression in the elderly may be modified by factors associated with old age

Clinical presentation of elderly depression

- Compared with young depressives, older people have (Weisman,1991):
  - Less disturbed sleep (19% vs 25%)
  - Less appetite disturbance (16% vs 27%)
  - Less disturbed energy (11% vs 18%)
  - Less guilt (5% vs 13%)
  - Less diminished concentration (8% vs 16%)
  - Fewer thought about death (22% vs 31%)

Clues to Depression in elderly

- Being more confused or forgetful.
- Eating less. The refrigerator may be empty or contain spoiled food.
- Not bathing or shaving as often. Visitors may notice smells of urine or stool. Clothes may be dirty and wrinkled.
- Not taking care of the home.
- Stopping medicines or not taking them correctly.
- Withdrawing from others. Not talking as much, and not answering the phone or returning phone calls

Key questions to ask (1)

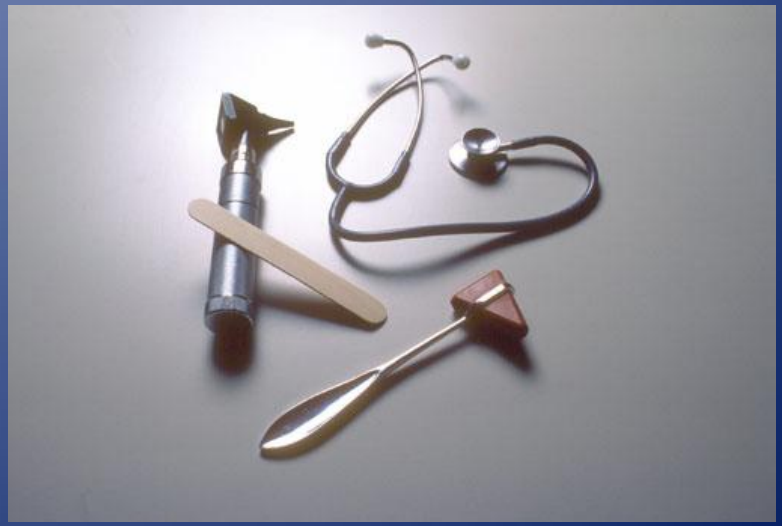
- How is your mood?
- Have you lost interest in anything?
- Do you get less pleasure from things you usually enjoy?
- How long have you had these symptoms?
- Have you been diagnosed before with a depressive disorder?

Key questions to ask (2)

- Any important health changes within the past year?
- Any major changes in your life in the preceding 3 months?
- Any symptoms to suggest underlying physical illness?
- Have you ever thought you would be better off dead?

Assessment

- History
- Mental state examination
- Use of standardised instruments, e.g. Geriatric depression scale (GDS)
- Cognitive assessment
- Physical examination
- Investigation



Geriatric Depression Scale (GDS)

- Validated standardised scales available locally for screening of depression: 15-item Chinese Geriatric Depression Scale Short Form (GDS) (Lee *et al*, 1993)
- Cut-off point of 8/15
- Can be applied by trained non-medical personnel

Hospital Anxiety and Depression Scale (HADS)

- 14 questions
- 7 for anxiety and 7 for depression
- Total score: 21 for anxiety and 21 for depression
- The cutoff score is 8

Principles of management

1. Monitoring the risk of self-harm
2. Educating the patient (and care givers) about depression and involving him or her in treatment decisions
3. Treating the whole person - coexisting physical disorder; attention to sensory deficits and other handicaps; reviewing medication with a view to withdrawing those unnecessary
4. Treating depressive symptoms with the aim of complete remission (as residual symptoms are a risk factor for chronic depression)
5. Prompt referral of patients requiring specialist mental health services

When to refer for specialist advice? (WPA, 1999)

- When the diagnosis is in doubt (e.g. is this dementia?)
- When depression is severe, as evidenced by:
  - Psychotic depression
  - Severe risk to health because of failure to eat or drink
  - Suicide risk
- Complex therapy is indicated (e.g. in cases with medical comorbidity)
- When first-line therapy fails (although primary care physicians may wish to pursue a second course of an antidepressant from a different class)

Treatment

- Physical treatment
  - Pharmacological treatment
  - Electroconvulsive therapy
- Psychosocial treatment

Special considerations in the elderly

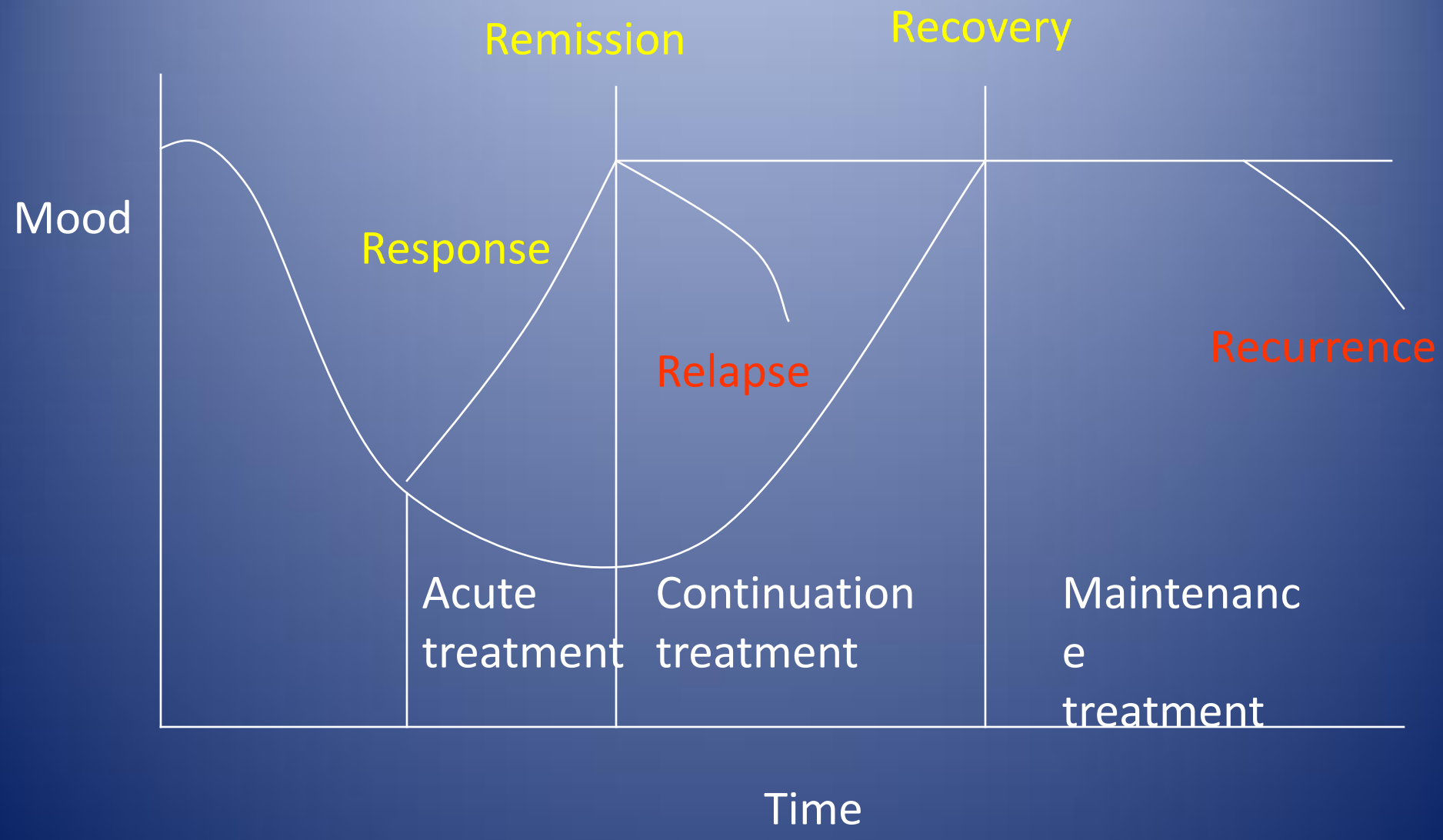
- Pharmacokinetics (change in volume of distribution , metabolism, elimination)
- Co-morbid physical illnesses
- Drug interactions
- Dosing

Pharmacological treatment

- Information for patients and carers:
  - Start low, go slow
  - Typical side effect
  - Delay in onset of therapeutic action
  - Lack of dependence potential
  - Need for continuation treatment following initial response

The Five “R”s of antidepressant treatment

- Response
- Remission
- Recovery
- Relapse
- Recurrence


Remission
Recovery
Mood
Response
Relapse
Recurrence
Acute treatment
Continuation treatment
Maintenanc e treatment
Time

Principles of antidepressant treatment

1. Ascertain diagnosis
2. The ultimate aim of treatment is ***remission***
3. Treatment has to be ***adequate*** in dosage, duration and compliance has to be ensured
4. If there is ***no response*** after an adequate trial, switch to another class of antidepressant
5. If there is ***partial response***, further increase dosage and/or persist for a longer duration or augmentation

Principles of antidepressant treatment

6. Address psychosocial issues and psychoeducation
7. ***Continuation treatment*** – at least 6 to 9 months after remission, longer for elderly (12 to 24 months) at the ***same dose***
8. ***Maintenance treatment*** – prophylactic treatment for patients with multiple past episodes, serious ill health, chronic social difficulties and very severe depressive symptoms. No consensus on length of maintenance.

Risk factors for recurrence (WHO, 1989)

1. Comorbidity
2. Chronic medical conditions
3. Chronic affective symptoms
4. Older age of onset of first episode
5. Severe functional impairment during depression
6. Psychotic depression
7. Previous suicide attempt
8. Family history of suicide and bipolar disorder

Other pharmacological treatment

- Others:
  - Antipsychotics
  - Lithium augmentation
  - Tri-iodothyronine (T3) augmentation
  - Antidepressant combination
  - Anticonvulsant augmentation
  - Buspirone augmentation
  - Pindolol augmentation

Electroconvulsive therapy (ECT)

- Safe and effective
- Indication in food refusal, suicidal risk, severe retardation and poor response to drug treatment
- 71-88% with good outcome
- Post ECT confusion 18-52%
- Twice or three times weekly for 6 to 12 sessions

Psychosocial interventions

- Basic psychotherapeutic processes:
  - Listening and talking
  - Release of emotion
  - Giving information
  - Providing a rationale
  - Restoration of morale
  - Suggestion
  - Guidance and advice
  - The therapeutic relationship

Psychoeducation

- Nature and pathogenesis of depression
- Use of a “Stress-diathesis” model
- Proposed treatment, expected side effects, delay in onset of therapeutic response
- Expected duration of continuation and maintenance treatment

Evidence-based psychosocial treatments

- Interpersonal therapy
- Cognitive behavioural therapy
- For moderate to severe depression, the combination of pharmacotherapy and psychological treatment has been found to be superior to either treatment given alone (Reynolds *et al*, 1999)

Advice for Depressive Elderly

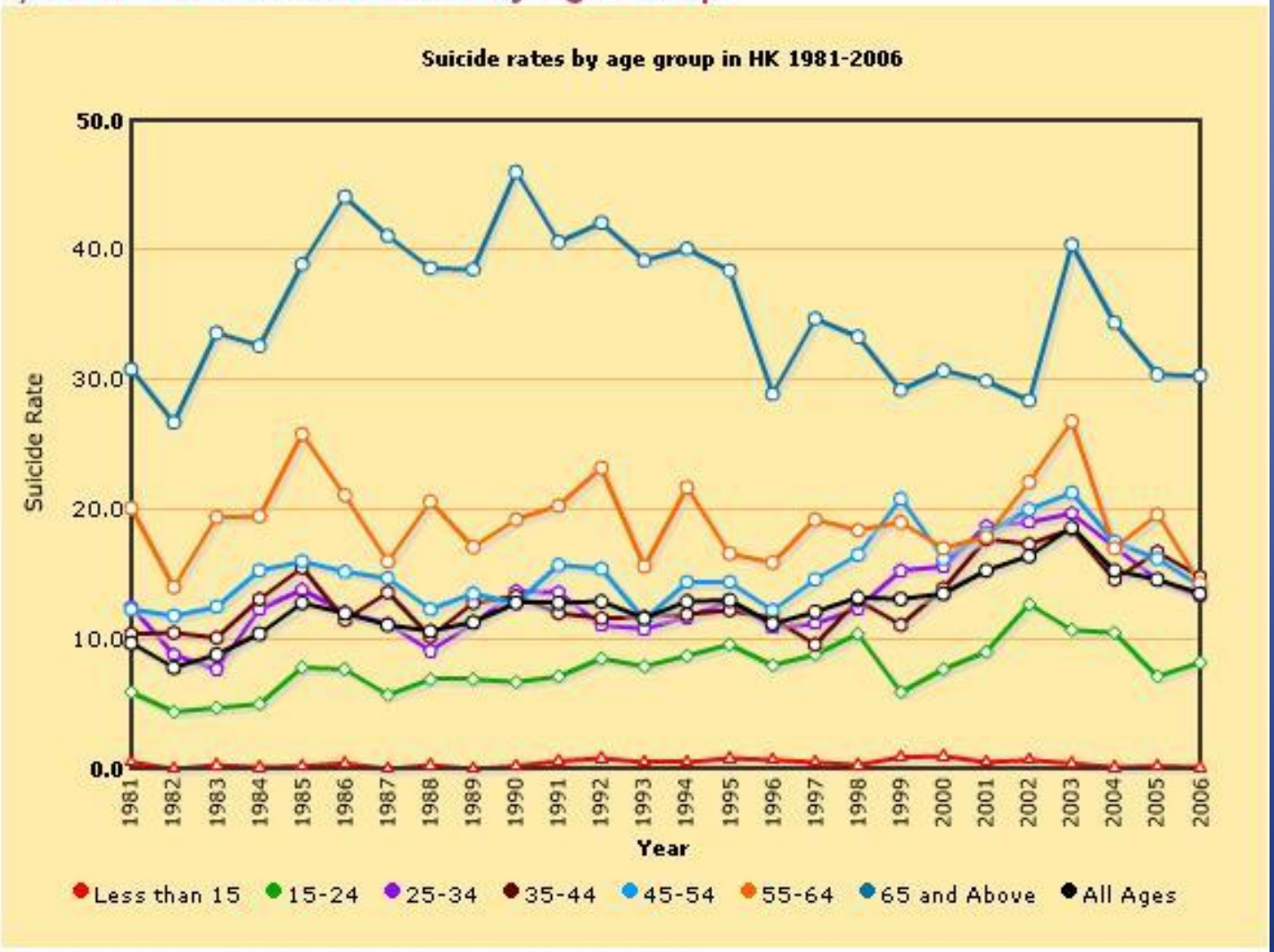
- Exercise regularly, seek out pleasurable activities, and maintain good sleep habits.
- Learn to watch for the early signs of depression, and know how to react if it gets worse.
- Minimize alcohol use and avoid illegal drugs. These substances can make depression worse over time, and they may also impair judgment about suicide.
- Surround themselves with people who are caring and positive.
- Talk about their feelings to someone they trust.
- Take medications correctly and learn how to manage side effects

Elderly suicide

Elderly suicide in Hong Kong
Extent of the problem

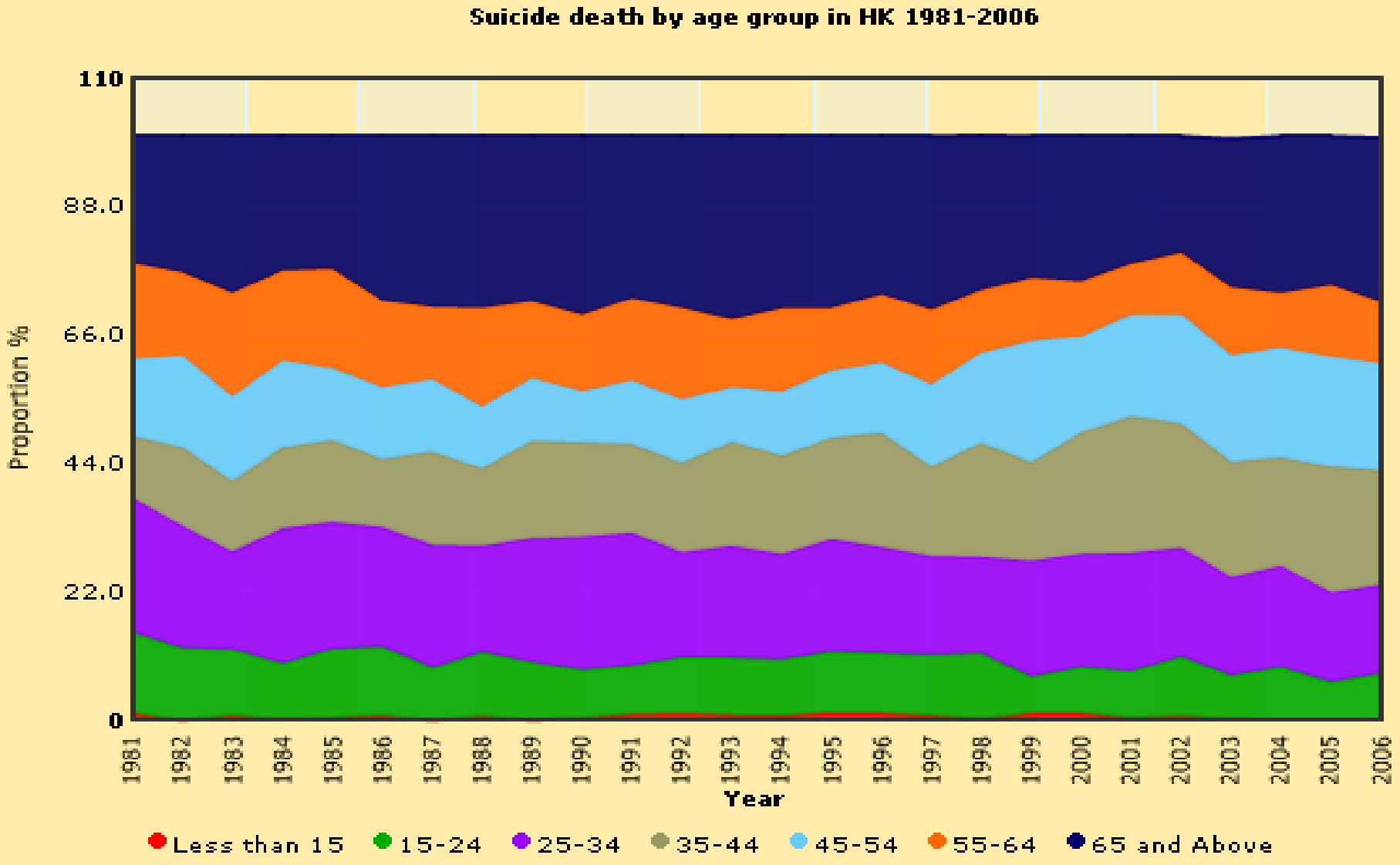
- High rate of elderly suicide:
  - Two to three times higher in the elderly (25–35 per 100,000) than the general population (10-13 per 100,000)
  - 30% of all suicide deaths were aged 60 or above
- High rate of success
- Ageing population
  - Population aged 65 or above increased from 0.63 million in 1996 to 0.76 million in 2000 (21% increase)

II) Suicide Rates and Deaths by Age Group



Source: HKJC Centre for Suicide Research and Prevention, HKU

Burden of elderly suicide in HK



Source: HKJC Centre for Suicide Research and Prevention, HKU

Characteristics of elderly suicide completers

- Low attempt to completion ratio – 4:1
- Greater determination as evidenced by:
  - Lethal methods: 52% by jumping from height, 36% by hanging (Chi & Yu, 1997)
  - Fewer warning signs
  - Greater planning and resolve
- Prevention after onset of a suicidal crisis may be less successful for the elderly

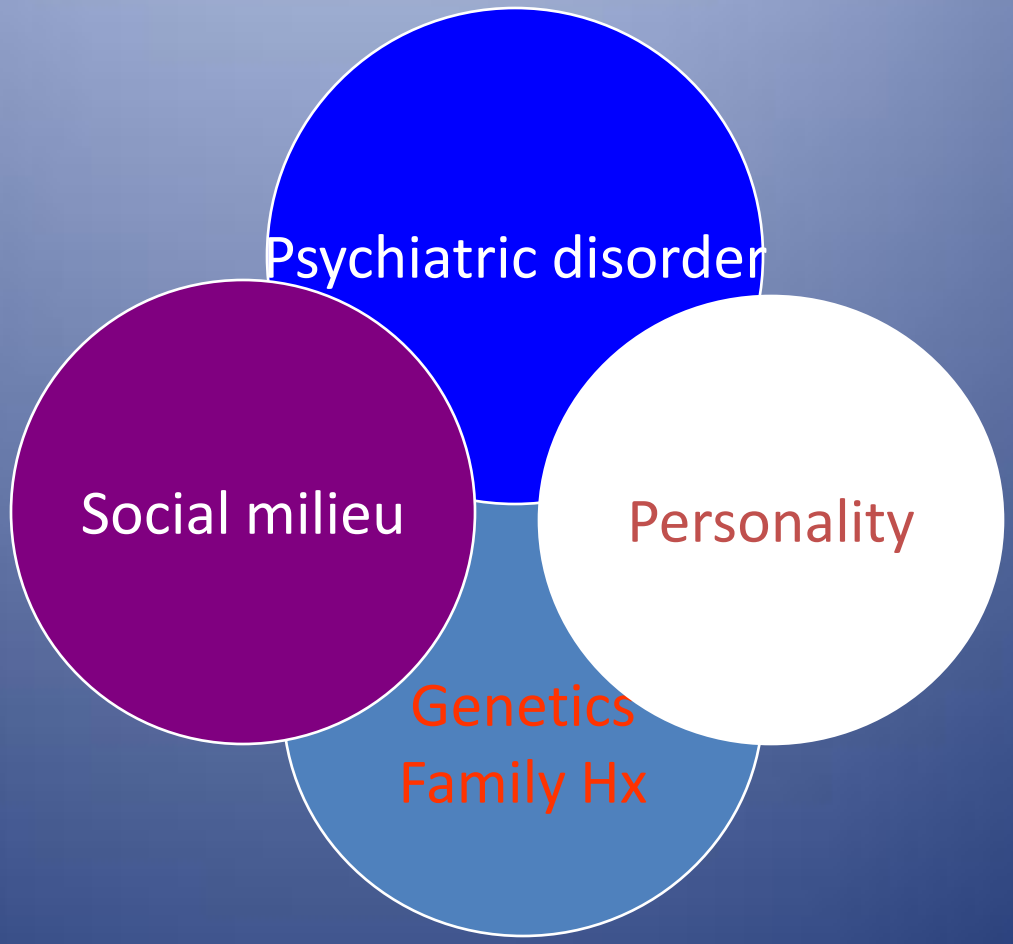
Characteristics of elderly suicide completers

- Evidence from psychological autopsy studies:
  - 71-95% of suicide victims aged 65 or above had a major psychiatric disorder (Conwell *et al*, 2002)
  - 86% of HK Chinese elderly suicide victims had a diagnosable psychiatric disorder compared with 9% in controls, with depression being the most common diagnosis (Chiu *et al*, 2004)

Characteristics of elderly suicide completers

- Elderly suicide completion is also associated with:
  - Past history of suicide attempt
  - Physical illness and functional impairment
  - Social isolation
  - Recent life event
  - Rigid, anxious and obsessional personality style

Risk factors

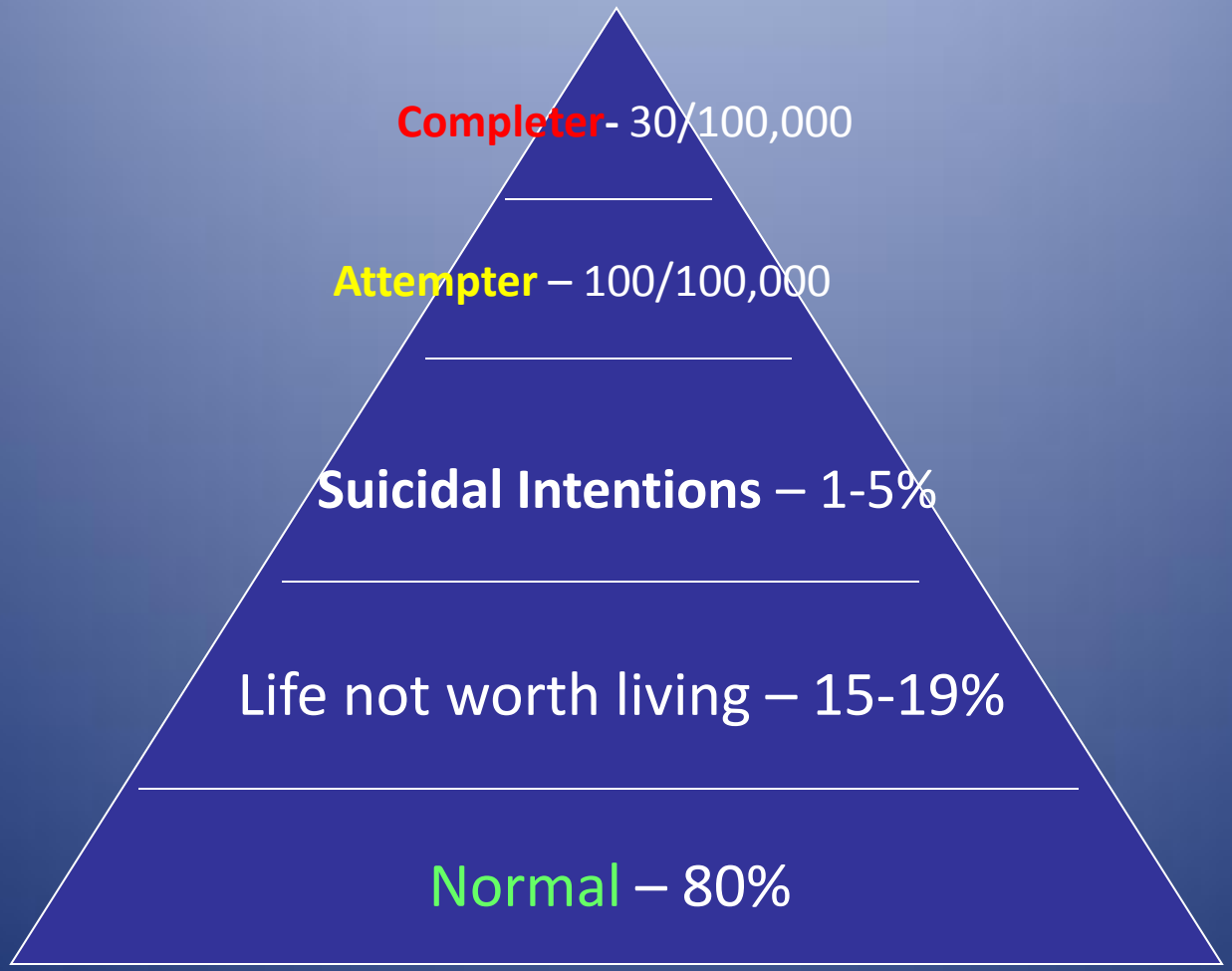


Service utilisation of elderly suicide completers

- Locally, 77% of suicide completers had consulted a doctor one month before death, compared to 39% in controls (Chiu *et al*, 2004)
- Most were because of non-psychiatric problems
- Only 37% of the suicide completers had a life time history of consulting a psychiatrist although 86% of them suffered from a psychiatric problem (Chiu *et al*, 2004)
- The rate of consulting a psychiatrist is 65% in a Swedish psychological autopsy study (Waern *et al*, 2002)

Studies on suicidal ideations

- Among 516 elderly aged 70 or above in Berlin (Linden & Barnow, 1997):
  - 14.7% said that life is not worth living (77.5% had depression)
  - 5.4% wished to be dead or thought about suicide (95.7% had depression)
  - 1.0% showed suicidal ideas or gestures (100% had depression)


Completer- 30/100,000
Attempter – 100/100,000
Suicidal Intentions – 1-5%
Life not worth living – 15-19%
Normal – 80%

Normal

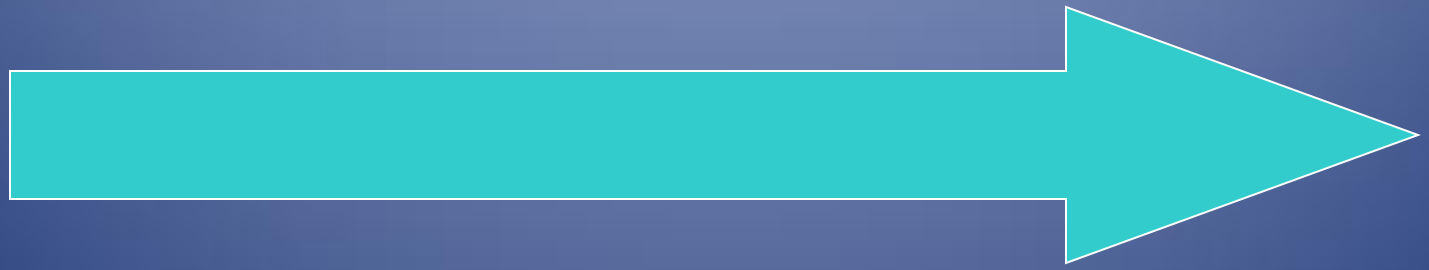
Slightly depressed

Life Not Worth Living

Suicidal Intentions

Attempters

Completers



TIME-LINE

What do we know about elderly suicide?

1. Elderly suicides are characterised by a higher rate than the general population, higher lethality, greater determination and fewer warning signs
2. They are consistently associated with a number of risk factors, e.g. past history of suicide, physical illness, psychiatric illness and certain personality traits
3. Some of these factors are modifiable, e.g. depressive illness
4. The majority of elderly who eventually commit suicide would make contact with a primary care physician one month before their suicide (but not necessarily for a mood problem) and most remain undetected

What do we know about elderly suicide?

5. Low utilisation rate of psychiatric service among elderly suicide completers may reflect lack of awareness and stigmatisation in the community
6. Suicidal ideations and intentions are highly correlated with depressive disorder and are useful key markers for identification of at-risk individuals
7. Programme aimed at educating primary care physicians about depression has been shown to reduce suicide rate.
8. Telecheck shown to be a useful tool in providing care for elderly at risk of suicide and reduce suicide rate
9. Relevant and locally validated instruments are available, e.g. GDS

Suggested questioning sequence

- Whether the patient:
  - hopes things turn out well
  - gets pleasure out of life
  - feels hopeful from day to day
  - feels able to face each day
  - ever despairs about things
  - feels life to be a burden
  - wishes it would all end

Suggested questioning sequence

- Whether the patient:
  - knows why he/she feels this way
  - has thought of ending life
  - has thought about the possible methods
  - has ever acted on any suicidal thoughts or intentions
  - feels able to resist any suicidal thoughts

Patient factors

- Somatic presentation of complaints
- Physical co-morbidities make recognition difficult
- Beliefs: fear of stigmatization or anti-depressant is addictive
- Misattribution of symptoms for “old age”, “ill health” or “grief”
- Under-detection especially in men

Provider's factors

- Lack necessary consultation skills or confidence
- Time limited consultation
- Therapeutic nihilism : normal response to difficult circumstances, illnesses or life events
- Dissatisfaction with the type of treatments that can be offered i.e. psychological interventions

Societal factors

- Age discrimination?
- Longer life expectancy means longer years with morbidity?
- Loneliness? Low birth rate & smaller households means fewer children and families for support in later years
- Lack of support for elderly?
- Adverse life events: death of loved ones

Dementia

Dementia Overview

- Dementia is most common in elderly people; it used to be called senility and was considered a normal part of aging.
- We now know that dementia is not a normal part of aging but is caused by a number of underlying medical conditions that can occur in both elderly and younger persons.
- In some cases, dementia can be reversed with proper medical treatment. In others, it is permanent and usually gets worse over time.

Prevalence

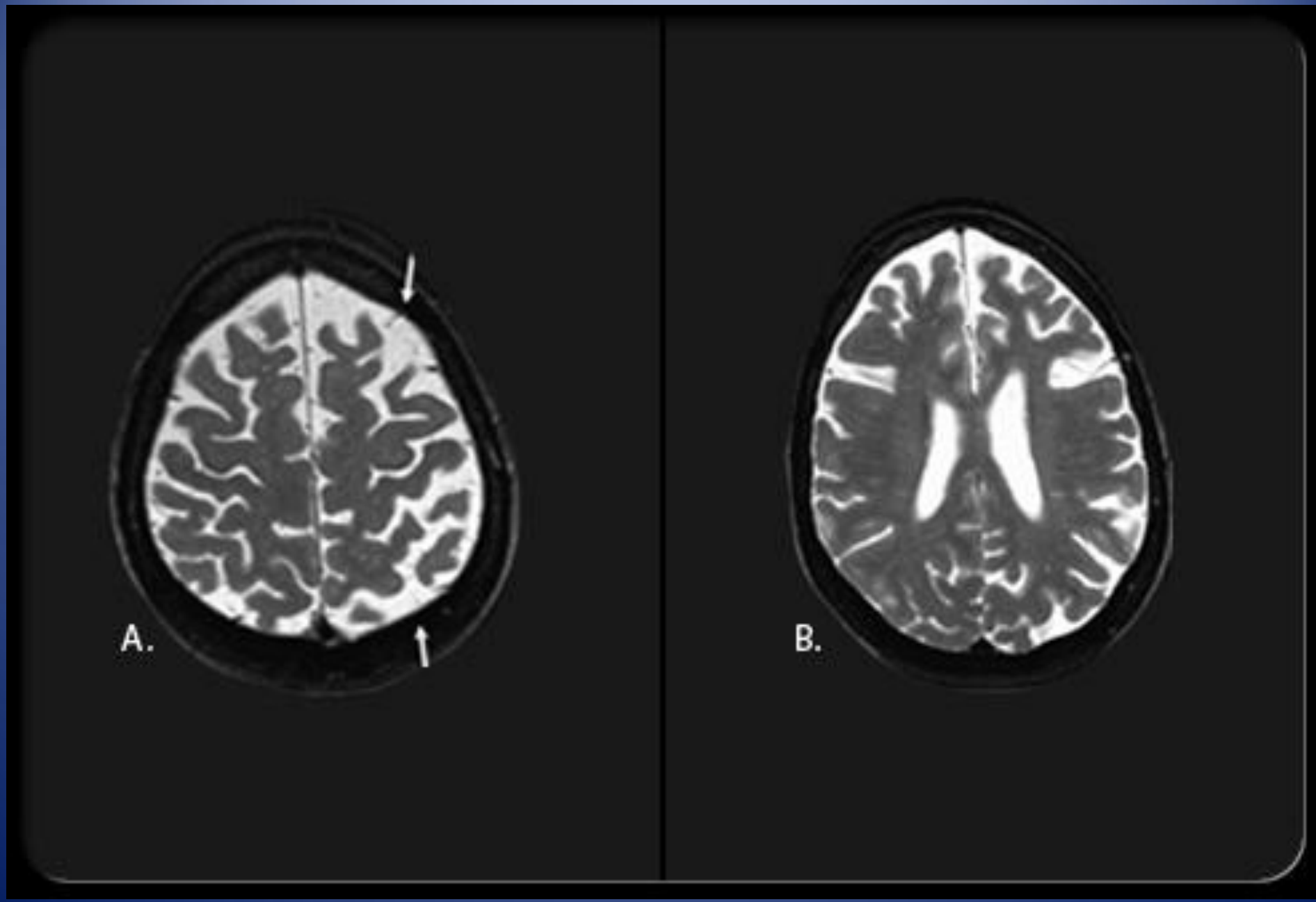
- Dementia affects about 1% of people aged 60-64 years and as many as 30-50% of people older than 85 years.
- It is the leading reason for placing elderly people in institutions such as nursing homes.

Irreversible Causes of Dementia

- Alzheimer Disease
- Vascular Dementia
- Lewy body Dementia
- Huntington disease
- Creutzfeldt-Jakob disease
- Pick disease
- Parkinson disease

Treatable Cause of Dementia

- Head Injury
- Infection
- Normal pressure hydrocephalus
- Simple hydrocephalus
- Brian tumors
- Toxic exposure
- Metabolic disorder
- Hormone Disorders
- Poor Oxygenation
- Drug reaction
- Nutritional Deficiencies
- Chronic Alcoholism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Symptoms of MCI

- Forgetting recent events or conversations
- Difficulty performing more than one task at a time
- Difficulty solving problems
- Taking longer to perform more difficult mental activities

Symptoms of Early Dementia

- Word-finding difficulty - May be able to compensate by using synonyms or defining the word
- Forgetting names, appointments, or whether or not the person has done something; losing things
- Difficulty performing familiar tasks - Driving, cooking a meal, household chores, managing personal finances
- Personality changes (for example, sociable person becomes withdrawn or a quiet person is coarse and silly)
- Uncharacteristic behavior
- Mood swings, often with brief periods of anger or rage
- Poor judgment
- Behavior disorders - Paranoia and suspiciousness
- Decline in level of functioning but able to follow established routines at home
- Confusion, disorientation in unfamiliar surroundings - May wander, trying to return to familiar surroundings

Symptoms of Intermittent Dementia

- Worsening of symptoms seen in early dementia, with less ability to compensate
- Unable to carry out activities of daily living (e.g., bathing, dressing, grooming, feeding, using the toilet) without help
- Disrupted sleep (often napping in the daytime, up at night)
- Unable to learn new information
- Increasing disorientation and confusion even in familiar surroundings
- Greater risk of falls and accidents due to poor judgment and confusion
- Behavior disorders - Paranoid delusions, aggressiveness, agitation, inappropriate sexual behavior
- Hallucinations
- Confabulation (believing the person has done or experienced things that never happened)
- Inattention, poor concentration, loss of interest in the outside world
- Abnormal moods (anxiety, depression)

Symptoms of Severe Dementia

- Worsening of symptoms seen in early and intermediate dementia
- Complete dependence on others for activities of daily living
- May be unable to walk or move from place to place unassisted
- Impairment of other movements such as swallowing - Increases risk of malnutrition, choking, and aspiration (inhaling foods and beverages, saliva, or mucus into lungs)
- Complete loss of short- and long-term memory - May be unable to recognize even close relatives and friends
- Complications - Dehydration, malnutrition, problems with bladder control, infections, aspiration, seizures, pressure sores, injuries from accidents or falls

When to Seek Medical Care

- Marked loss of short-term memory
- Behavior or personality changes
- Inappropriate or uncharacteristic behavior
- Depressed mood
- Marked mood swings
- Inability to carry out daily tasks such as bathing, dressing, feeding, using the toilet, or household chores
- Carelessness in personal hygiene
- Persistent word-finding difficulties
- Persistent or frequent poor judgment
- Persistent or frequent confusion or disorientation, especially in familiar situations
- Inability to manage personal finances

Assessment (History)

- The individual's health care provider will conduct a detailed medical interview to develop a picture of the symptoms. The interview will address the symptoms and when they began, the person's medical problems now and in the past, family medical problems, medications, work and travel history, and habits and lifestyle.
- Family members, especially those who live with the affected person, will also be asked about his or her symptoms.
- The review of medications is very important, especially for seniors, who are more likely to take several medications and to experience side effects.
- A thorough physical examination will look for evidence of illness and dysfunction that might shed light on what is causing the symptoms.
- This evaluation is designed to identify reversible, treatable causes of dementia symptoms.

Assessment (MSE)

- Mental status examination or neuropsychological testing pinpoints the nature and measures the severity of the person's mental problems. This can help give a more accurate diagnosis of the problems and, thus, can help in treatment planning.
- Testing includes noting the individual's appearance, mood, anxiety level, and experience of delusions or hallucinations.
- Testing assesses cognitive abilities such as memory, attention, orientation to time and place, use of language, and abilities to carry out various tasks and follow instructions.
- Reasoning, abstract thinking, and problem solving are also tested.

Assessment (chemical test)

- Routine blood tests include a complete blood cell (CBC) count, blood chemistry, liver function tests, thyroid function tests, and vitamin B levels (especially folic acid and Vitamin B-12). Other blood tests (for example, syphilis and HIV testing, levels of intoxicating drugs, arterial blood gases [in hypoxia], specific hormone tests, or measurement of heavy metals) are used only when a person is at high risk for specific conditions.
- Urine tests may be needed to assess blood abnormalities further, to detect certain drugs, or to rule out certain kidney and metabolic disorders.
- Cerebrospinal fluid testing may be necessary to rule out brain infections, brain tumors, and hydrocephalus with elevated fluid pressure. A sample of the fluid is obtained by a procedure called a lumbar puncture (spinal tap), in which a long needle is inserted between 2 vertebrae of the spine at the lower back.

Assessment (Others)

- CT scan is usually adequate, although MRI may be used if greater detail is needed.
- Single-photon emission CT (SPECT) imaging detects blood flow in the brain and is used in some medical centers to distinguish Alzheimer disease from vascular dementia.
- Electroencephalography (EEG) is not an imaging study but a recording of the electrical activity in different parts of the brain. It is used in people who are having seizures but may help diagnose other disorders as well.

Mini-Mental Status Examination (MMSE)

- It tests orientation, immediate and short term memory, concentration, etc.
- Total score: 30
- Mild Dementia: 21 – 26
- Mild Moderate Dementia: 15 – 20
- Severe Moderate Dementia: 10 – 14
- Severe Dementia: < 10

Psychogeriatric Assessment Scale (PAS)

- Semi-structured interview
- Patient interview and informant interview
- Its refer to patient aged > 70
- It presented with percentile of the score

Medical Treatment

- Cholinesterase is an enzyme that breaks down a chemical in the brain called acetylcholine. Acetylcholine acts as an important messaging system in the brain.
- Cholinesterase inhibitors, by stopping the breakdown of this neurotransmitter, increase the amount of acetylcholine in the brain of a person with dementia and improve brain function.
- These drugs not only improve or stabilize mental functions, they may also have positive effects on behavior and activities of daily living.
- They are not a cure, and in many people the effect is fairly modest. In others, these drugs do not have much of a noticeable effect. Moreover, the effects are temporary, since these drugs do not change the underlying medical condition.

Help with memory loss

- Ask the person you are talking with to repeat what they said, or repeat what they said to yourself 1 or 2 times. This will help you remember it better.
- Write down your appointments and other activities in a planner book or calendar. Keep it in an obvious place, such as beside your bed.
- Post messages around your home where you will see them, such as the bathroom mirror, next to the coffee pot, or on the phone.
- Keep a list of important phone numbers next to every phone.
- Have clocks and calendars around the house so that you stay oriented to time and the date.
- Label important items.
- Develop habits and routines that are easy to follow.

Eating and nutrition

- Help the person get enough exercise. Ask them to go outside with you for a walk.
- Have someone the patient likes, such as a friend or relative, prepare and serve them food.
- Reduce distractions around the eating area, such as the radio or TV.
- Do not give them foods that are too hot or too cold.
- Give the patient finger foods if they have problems using utensils.
- Try different foods. It is common for people who have dementia to have decreased smell and taste, and this will affect their enjoyment of food.

Talking with Dementia patient

- Turn off the radio or TV.
- Close the curtains.
- Move to a quieter room.
- Break down instructions into small and simple steps.
- Allow time for the person to understand.
- If they get frustrated, consider changing to another activity

Personal care

- A tub or shower seat
- Handrails
- Antiskid mats
- Do not give them too many choices about what to wear.
- Velcro is much easier than buttons and zippers to use. If they still wear clothes with buttons and zippers, they should be in the front.
- Get them pullover clothes and slip on shoes, especially as their dementia gets worse

Safety - Wandering

- Place alarms on all doors and windows that will sound if the doors are opened.
- Place a "Stop" sign on doors to the outside.
- Keep car keys out of sight
- Have the patient wear an identification bracelet or necklace with their name, address, and phone number.
- Tell neighbors and others in the area that the person who has dementia may wander. Ask them to call you or to help them get home.
- Fence and close off any areas that may be dangerous, such as a stairwell or deck, or a hot tub or swimming pool.
- Consider giving the person a GPS device or a cell phone (which will have a GPS locator embedded in it).

Thank you

Q&A