# Chronic mental illness in LTCF

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## Chronic mental illness

- 1. Schizophrenia and Schizoaffective disorder.
- 2. Bipolar disorder (Type 1 and Type 2).
- Others: Major Depressive Disorder Recurrent and Post Traumatic Stress Disorder.
- This presentation will focus on the first two.

## Other psychiatric disorders.

- Psychiatric disorders in developmentally disabled residents, generalized anxiety disorder, social phobias, panic disorder with or without agoraphobia, somatoform disorders, personality disorders, drug and alcohol use disorders are also important cause of morbidity and mortality, more common than chronic mental illnesses and thus need to be recognized and treated aggressively.

## Prevalence in nursing homes

- 5% for major illnesses but actual prevalence may be higher. Higher prevalence in government owned/run facilities.
- Long past history of psychiatric treatment.
- Typically comorbid with stroke, dementia or other severe medical illnesses. Occasionally in long term care facility due to social reasons.
- Associated with high resource utilization, high risk of suicide, hospitalization, non-compliance and higher doses of psychotropics and other complications.

## Schizophrenia and Bipolar I.

- Extreme sensitivity to stress is a common factor. Even daily hassles may lead to deterioration and cognitive problems. The impact of stress on dopamine release may be the underlying mechanism in these disorders. Hence the potential benefits of dopamine blocking agents for both these disorders.
- Genetic factors. One parent: 10% risk of schizophrenia and 25% risk of bipolar disorder. Both parents: risk doubles. Twins: 50%, 60%.

## Schizophrenia and Bipolar I

- There is increased risk of schizophrenia among relatives of patients with bipolar disorder, and vice versa.
- Several genes involved in the development, stabilization, and function of synapses have been linked to both schizophrenia and bipolar disorder.
- Perinatal factors for both: obstetric complications, low birth weight, preterm birth, perinatal infection.

## Schizophrenia and Bipolar I

- Individuals born in late winter, early spring are at excess risk of both, possibly because of maternal infection.
- Maternal stress: increased risk for both.
- Paternal age a risk factor for schizophrenia. Children of fathers aged 45 and older are three times more likely to develop the disorder than those whose fathers were in their early 20s. Possibly due to higher incidence of mutations in the sperm of older fathers.

## Schizophrenia and Bipolar I

- 1% prevalence in general population for each.
- Both disorders increase risk of suicide, cigarette smoking, substance abuse.
- Brain imaging: ventricles are enlarged, frontal lobe and hippocampal volumes are reduced in both, as is cortical gray matter.
- Anatomical changes are more striking and progressive in schizophrenia.

## Schizophrenia

- Onset generally in late teens – early twenties.
- Late onset (onset after 45 years of age):10%
- High prevalence of smoking, alcohol and drug abuse, obesity, diabetes, heart disease.
- Cognitive impairment different from Alzheimer's.
- Need higher doses of antipsychotics (pills, capsules, liquid, orally disintegrating) then typically used for people with dementia and agitation.
- In 1/3$^{rd}$, the illness 'burns out'!!!

## DSM IV TR diagnostic criteria

- Delusions
- Hallucinations
- Disorganized speech (e.g. Frequent derailment or incoherence)
- Grossly disorganized behavior or catatonic behavior
- Negative symptoms (I.e. Affective flattening, alogia, or avolition).
- Duration: 6 months or longer.

## Risk factor for suicide

- Greatest risk early in the course but risk elevated throughout life. 50% attempt suicide, 10% complete it. Previous suicidal behavior.
- Symptoms: greatest risk during postpsychotic period (following hospitalization), command auditory hallucinations. Depression (50% have major depression).
- Social factors: premorbid social functioning, social trauma, social support (unemployed, single, living alone).

## Reducing risk of suicide.

- Close monitoring of those with high risk.
- Identification and treatment of depression.
- Identification and treatment of command auditory hallucinations.
- Increasing social support.
- Improving a sense of productivity in patients.

## Metabolic issues in schizophrenia

- High rates of smoking, poor dietary habits, inactivity, metabolic syndrome (abdominal obesity, hypertriglyceridemia, low HDL, HTN, Impaired fasting glucose or DM), obesity, DM.
- More for women than men.
- Clozapine and olanzapine (zyprexa) have the highest risk of metabolic complications.
- Doubling of mortality due to cardiovascular disease.

## Bipolar disorder

- History of hypomania or mania. Usually also history of depressive episodes.
- Need mood stabilizers (lithium) and / or anticonvulsants (valproate[depakote][pills, capsules, sprinkles, liquid], lamotrigine [lamictal]) and / or antipsychotics.
- High risk of suicide, hospitalization.
- Comorbid cardiovascular illnesses.

## DSM IV TR diagnostic criteria

- Manic and hypomanic episode
  - Period of elated or irritable mood, grandiosity/boastfullness/inflated self esteem, decreased need for sleep, increased psychomotor activity, excessive talking and flight of ideas/racing thoughts.
- Depressive episode.
  - Same as major depression.
- Mixed episode.
  - Combination of manic and depressive symptoms.

## Major depression

- Past history of recurrent depression (post partum depression, 'nervous breakdown').
- Past history of suicide attempt.
- Need for aggressive medication treatment strategies (antidepressants, etc). Even ECTs.
- Need for counseling in cognitively intact residents.

## DSM IV TR diagnostic criteria

- 2 weeks of depressed mood and/or lack of interest.
  - Lack of pleasure in activities that were previously pleasurable (anhedonia)
  - Increased or decreased appetite.
  - Increased or decreased sleep.
  - Psychomotor agitation or retardation.
  - Thoughts of suicide.
  - Decreased energy.

## Differential diagnosis

- Drug and alcohol related psychotic and mood disorders.
- Medical illness related psychotic and mood disorders (dementia, strokes, endocrine disorders, brain tumors).
- Medications induced psychotic and mood S/S.
- Pervasive developmental disorders
- Mental retardation with psychotic and mood symptoms.
- Dual diagnosis.

## Differential diagnosis

- Age of onset.
- Past history.
- Family history.
- Nature and course of symptoms.
- Laboratory tests.
- Neuroimaging.
- Neuropsychological testing.

## Suicide: risk factors

- Similar to schizophrenia.
- Additionally: impulsivity, period immediately after hospital admission, mixed state or mania with depressive symptoms, four or more depressive episodes, comorbid anxiety disorder, cluster B personality disorder, early age of onset.

## Assessment

- MDS (Minimum Data Set) is not suitable rating instrument to evaluate the symptoms and functional characteristics of older patients with chronic mental illness.
- Consider Neuro-Psychiatric inventory – nursing home version (NPI-NH).

## Treatment

- 3 basic concepts
  - Biopsychosocialspiritualcultural approach. Address the biological, psychological, social and spiritual needs.
  - Rehabilitation. Focus on maintaining existing strengths and accommodating deficits.
  - Person centered. Knowing the person well and individualizing the treatment plan to reflect the values and strengths of the person.

## Treatment

- Involve a psychiatrist with geriatric expertise (such as a fellowship trained geriatric psychiatrist).
- Obtain previous records.
- Get input of previous treatment providers.
- Involve the family/staff familiar with the resident to decide treatment plan.
- Medication changes after careful review of all the above.

## Treatment

- Team approach
  - Primary care provider.
  - Psychiatrist
  - Social worker
  - Nurse
  - Nursing assistant
  - Occupational therapist.

## Psychosocial interventions.

- Social skills training and cognitive remediation aimed at improving memory and attention may be helpful for negative symptoms.
- Family intervention: Education and improved communication (particularly listening and negotiating skills), problem solving, and processing of emotions such as anger, reducing criticism, hostility, over-involvement.
- Cognitive behavior therapy for refractory psychotic symptoms. 40% have distressing symptoms despite medications.

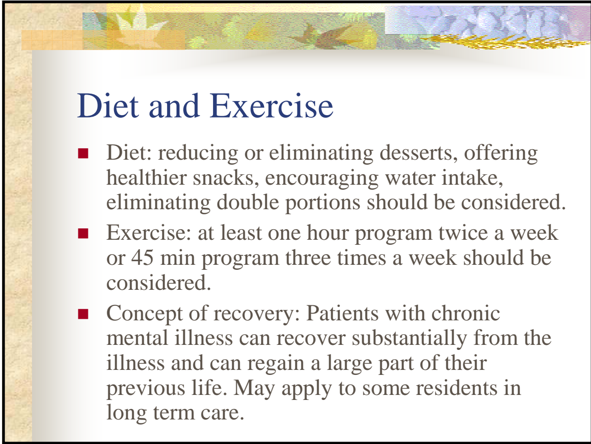
## Psychosocial interventions

- CBT: eg. Normalizing of symptoms (hearing of voices is not restricted to people with psychiatric disorders alone), correcting long standing schemas (eg 'I am useless') and linking their effect to depression and delusions, tackling belief about voices, such as their perceived power, apologizing for inadvertently upsetting the patient, addressing problems with self-monitoring, attribution biases, reasoning biases (such as jumping to conclusions), finding alternative explanations, disconfirmation strategies.

## Psychosocial interventions

- CBT: for example: if a person does go out and no one follows, does that mean that it is an unusual day, that they have been "mad" to have worried about this, or that perhaps it is possible to go out because not all of their fears may be justified.
- Supportive therapy: Talking about distress and symptoms of psychosis can be helpful, taking patient's views seriously about the difficulties that voices or delusions cause, while trying to improve their understanding of the issues, encouraging socialization to reduce isolation, etc.

Psychosocial interventions
Behavior therapy: or Behavior cognitive therapy: Many experts believe that behavioral strategies (focused on activation in depressed patients) more important than cognitive strategies.
Interpersonal social rhythm therapy (IPSRT): Interpersonal issues plus ensuring daily rhythm of sleep, work and family life.
Program structure: workshop, individualized pleasant/meaningful activity schedule, group activities.


Diet and Exercise
Diet: reducing or eliminating desserts, offering healthier snacks, encouraging water intake, eliminating double portions should be considered.
Exercise: at least one hour program twice a week or 45 min program three times a week should be considered.
Concept of recovery: Patients with chronic mental illness can recover substantially from the illness and can regain a large part of their previous life. May apply to some residents in long term care.

Stress management techniques
Simple breathing exercises.
Visualization exercises.
Relaxation exercises / training.
Yoga, meditation, tai chi.
Mindfulness based stress reduction.
Books, Relaxation CDs and other resources to reduce stress.

## Pharmacotherapy

- Antipsychotics and mood stabilizers: often on high doses for years, often on older antipsychotics and mood stabilizers, often on multipile drugs, often with extrapyramidal symptoms (drug induced parkinsonism) and tardive dyskinesias, often other adverse effects (constipation, dry mouth, blurred vision, overweight/obesity, metabolic syndrome, diabetes, hyperlipidemia, kidney dysfunction, liver disease).

## Antipsychotics

- Antipsychotics: consider reducing the dose, changing to safer and less toxic antipsychotics. Do so over period of months if the resident is on the previous antipsychotic for years/decades.
- In some residents, combination of two antipsychotics may be necessary.

## Antipsychotics

- New antipsychotics in general may be better for residents with chronic mental illness in long term care facilities because older antipsychotics have higher incidence of adverse effects (especially parkinsonism and tardive dyskinesias) in this population particularly.
- If resident is stable on older antipsychotic and has no obvious adverse effects, do not reduce the dose or change the medication but review tolerability every 6 months or if new problems arise.

## Antipsychotics

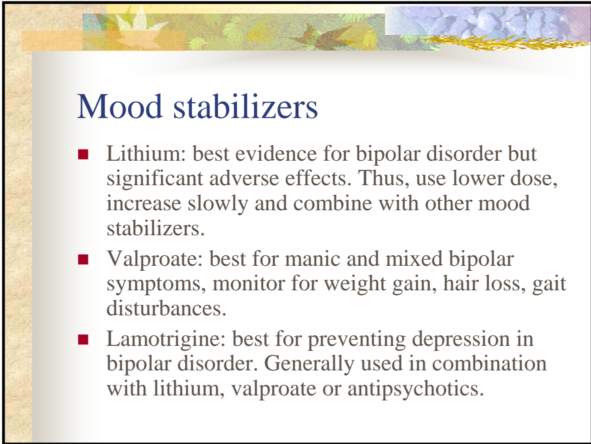
- Abilify (aripiprazole) and Geodon (ziprasidone) are weight neutral (no weight gain) and probably do not increase cholesterol and have the least risk of diabetes.
- Risperidone (risperdal) and seroquel (quetiapine) have less risk of metabolic complications compared to zyprexa and clozapine but more risk compared to abilify and geodon.
- Risperidone has the highest risk of parkinsonism and tardive dyskinesias among newer antipsychotics.

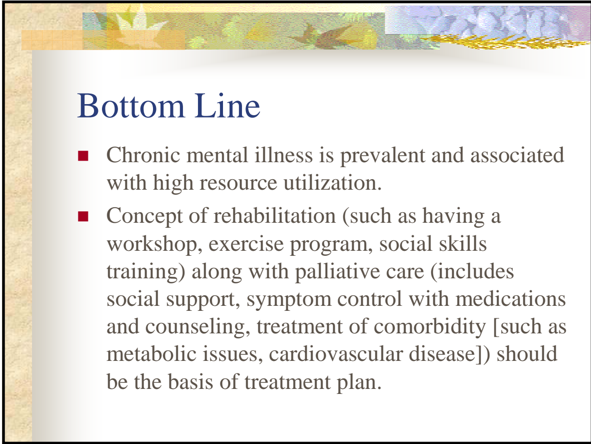
## Adverse effects

- Abilify: anxiety, insomnia, akathisia (motor restlessness, need to keep moving).
- Geodon: anxiety, insomnia, akathisia
- Seroquel: weight gain, sedation, orthostatic hypotension, increased blood sugar.
- Zyprexa: weight gain, increased blood sugar, increased lipids.
- Risperdal: tremors, stiffness, weight gain.

## Daily therapeutic doses

- Abilify: 10-30mg.
- Zyprexa: 5-40mg.
- Risperdal: 1-8mg
- Geodon: 80-240mg (on full stomach)
- Seroquel: 200-1200mg
- Clozapine: 100-600mg
- Haloperidol: 2-12mg
- Perphenazine: 4-32mg
- Fluphenazine: 2-10mg


Mood stabilizers
Lithium: best evidence for bipolar disorder but significant adverse effects. Thus, use lower dose, increase slowly and combine with other mood stabilizers.
Valproate: best for manic and mixed bipolar symptoms, monitor for weight gain, hair loss, gait disturbances.
Lamotrigine: best for preventing depression in bipolar disorder. Generally used in combination with lithium, valproate or antipsychotics.


Bottom Line
Chronic mental illness is prevalent and associated with high resource utilization.
Concept of rehabilitation (such as having a workshop, exercise program, social skills training) along with palliative care (includes social support, symptom control with medications and counseling, treatment of comorbidity [such as metabolic issues, cardiovascular disease]) should be the basis of treatment plan.