Schizophrenia and Other Psychotic Disorders

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Mountain Plains (HHS Region 8)
MHTTC Mental Health Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration

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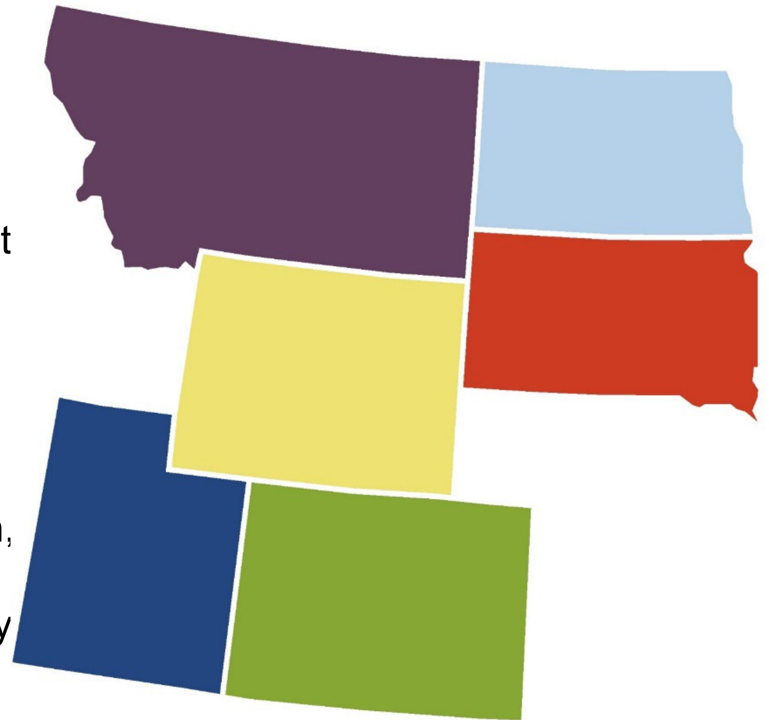
The Mountain Plains Mental Health Technology Transfer Center

The Mountain Plains Mental Health Technology Transfer Center (Mountain Plains MHTTC) provides training and technical assistance to individuals who serve persons with mental health concerns throughout Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming).

We belong to the Technology Transfer Center (TTC) Network, a national network of training and technical assistance centers serving the needs of mental health, substance use and prevention providers. The work of the TTC Network is under a cooperative agreement by the Substance Abuse and Mental Health Service Administration (SAMHSA).



Land Acknowledgement Statement

Today, the University of North Dakota rests on the ancestral lands of the Pembina and Red Lake Bands of Ojibwe and the Dakota Oyate - presently existing as composite parts of the Red Lake, Turtle Mountain, White Earth Bands, and the Dakota Tribes of Minnesota and North Dakota. We acknowledge the people who resided here for generations and recognize that the spirit of the Ojibwe and Oyate people permeates this land. As a university community, we will continue to build upon our relations with the First Nations of the State of North Dakota - the Mandan, Hidatsa, and Arikara Nation, Sisseton-Wahpeton Oyate Nation, Spirit Lake Nation, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa Indians.

The MHTTC Network uses affirming, respectful and recovery-oriented language in all activities. That language is:

Strengths-based and hopeful

Inclusive and accepting of diverse cultures, genders, perspectives, and experiences

Healing-centered and trauma-responsive

Inviting to individuals participating in their own journeys

Person-first and free of labels

Non-judgmental and avoiding assumptions

Respectful, clear and understandable

Consistent with our actions, policies, and products

Adapted from: https://mhcc.org.au/wp-content/uploads/2019/08/Recovery-Oriented-Language-Guide_2019ed_v1_20190809-Web.pdf

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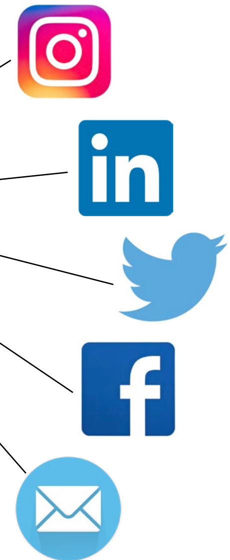

Schizophrenia (Schizophrenia Spectrum and Other Psychotic Disorders)

AN OVERVIEW OF DIAGNOSIS AND TREATMENT

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Objectives

After the presentation, the participant will understand:

1) The criteria and treatment options for schizophrenia

2) Other types of psychotic disorders

3) Benefits of early intervention

Psychosis

Psychosis is a symptom, not a diagnosis…

It is essentially a "break with reality," typically with changes in:

- Perception (hallucinations/delusions). Hallucinations are things that an individual sees/hears which others don't. Delusions are fixed false beliefs
- Emotion (feelings)
- Cognition (thought; both form and content)
- Behaviors

Psychosis

Up to 3 % of the population will experience psychosis.

For many, it is a one-time event

For some, it is part of an ongoing illness

Be cautious in misinterpreting cultural beliefs for psychopathology…

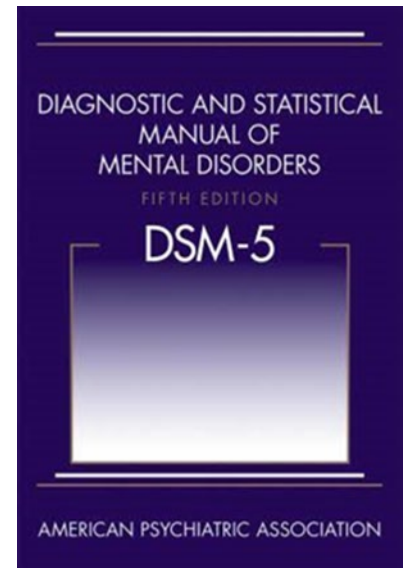
Diagnostic Elements of Many Psychiatric Disorders…

Duration

Specific symptoms

Functionality/impact

Not attributable to something else….



Scope:

- The age onset of most major psychiatric illnesses occurs in adolescence or early adulthood
- Roughly 1% of the population will develop schizophrenia.
- In the U.S., in 2013, the fiscal impact of schizophrenia was estimated at over $150 billion. (Cloutier et al., 2016)
- Individuals with such illnesses tend to have shorter life expectancy*

Scope:

Potentially impacted by schizophrenia and other serious mental illnesses

Individual goals and aspirations

Relationships

Employment

Education

Other behavioral health issues: (depression, anxiety, substance use, suicide)

Physical Health

Societal:

Lost productivity

Criminal Justice issues

Emergency Room Care

Long-term care

Mental Illnesses with psychosis as an ongoing symptom (usually intermittent)

Schizophrenia

Schizoaffective Disorder

Bipolar Affective Disorder

Severe Depression

Delusional Disorder (may be more fixed)

Episodes within trauma disorders and certain personality disorders (borderline personality disorder) can occasionally manifest in brief psychosis. "Cluster A" Personality Disorders (Paranoid, Schizotypal, Schizoid) may share traits with certain thought disorders.

Substance Induced….

Medical Masqueraders

Neurologic

Endocrinologic

Autoimmune

Infectious

Cancer/Tumor

Metabolic

Delusional Disorder

Greater than 1 month. **If less, Brief Psychotic Episode…**

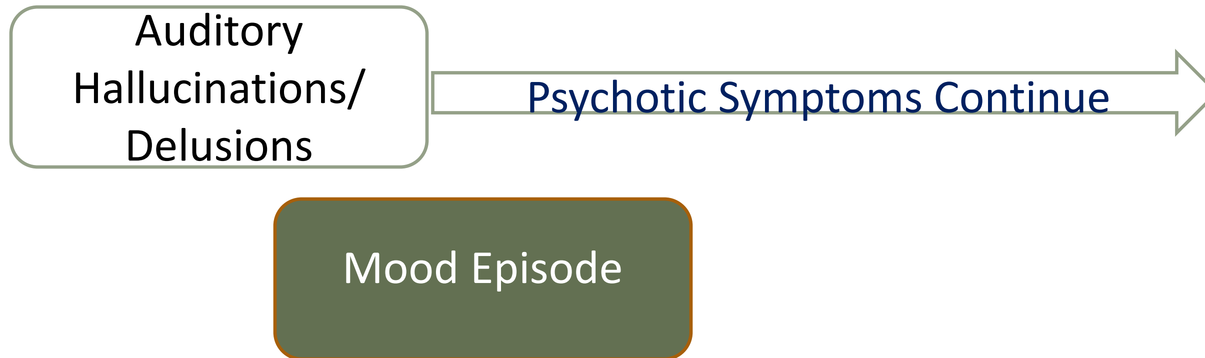
Fixed false beliefs (vs. overvalued ideas?)

Cognitive Organization/Reality Testing relatively intact

Can be bizarre or non-bizarre

- Grandiose-great talent/important discovery ("I created the Internet…")
- Jealous-Partner has been unfaithful
- Persecutory-self explanatory; conspired against
- Somatic-bodily functions (odor/parasites, etc…)
- Erotomanic-another person is in love with them

Schizoaffective Disorder (bipolar or depressive type)



Months

1 2 3 4 5 6 7 8

Symptoms

Experiencing

Thinking

Behaving

DSM 5-Schizophrenia

A) 2 or more symptoms during a significant portion of a 1 month period: (less if treated)

delusions*, hallucinations*, disorganized speech*, disorganized or catatonic behavior, negative symptoms (avolition, expression)

*one of these "positive symptoms" must be present

B) Dysfunction

C) > 6 months, including 1 month of "A" (so, some "prodrome")

Schizophrenia

Positive Symptoms:

Hallucinations

Delusions

Disorganized speech

Catatonia

Affective Symptoms:

Mood

Aggression

Cognitive Deficits:

Executive Functions

Attention

Memory

Negative Symptoms:

Blunting

Amotivation

Social Isolation

Poverty of Speech

Phases of Schizophrenia

Prodromal----6 months or more; often unrecognized

Active---overtly symptomatic; most visible

Residual---less severe symptoms

Prodromal Phase of Schizophrenia

Often subtle, often identified in hindsight after acute episode; Can last months to years, and might include:

-Social withdrawal

-Difficulty with concentration

-Sleep disturbance

-Odd beliefs/behavior

-Mood changes

-Anxiety

-Deterioration in functioning

Examples of symptom types

Persecution/Paranoia- intentional harm

Ideas of Reference- special meaning

Loose Associations- don’t logically relate

Thought broadcasting- others can read/hear thoughts

Thought insertion- have been placed

Command hallucinations-

Catatonia-*usually* immobile

Co-Morbidity is the Rule

A person can have more than one mental illness.

Individuals with mental illness can also be at higher risk for substance use issues*, and vice versa.

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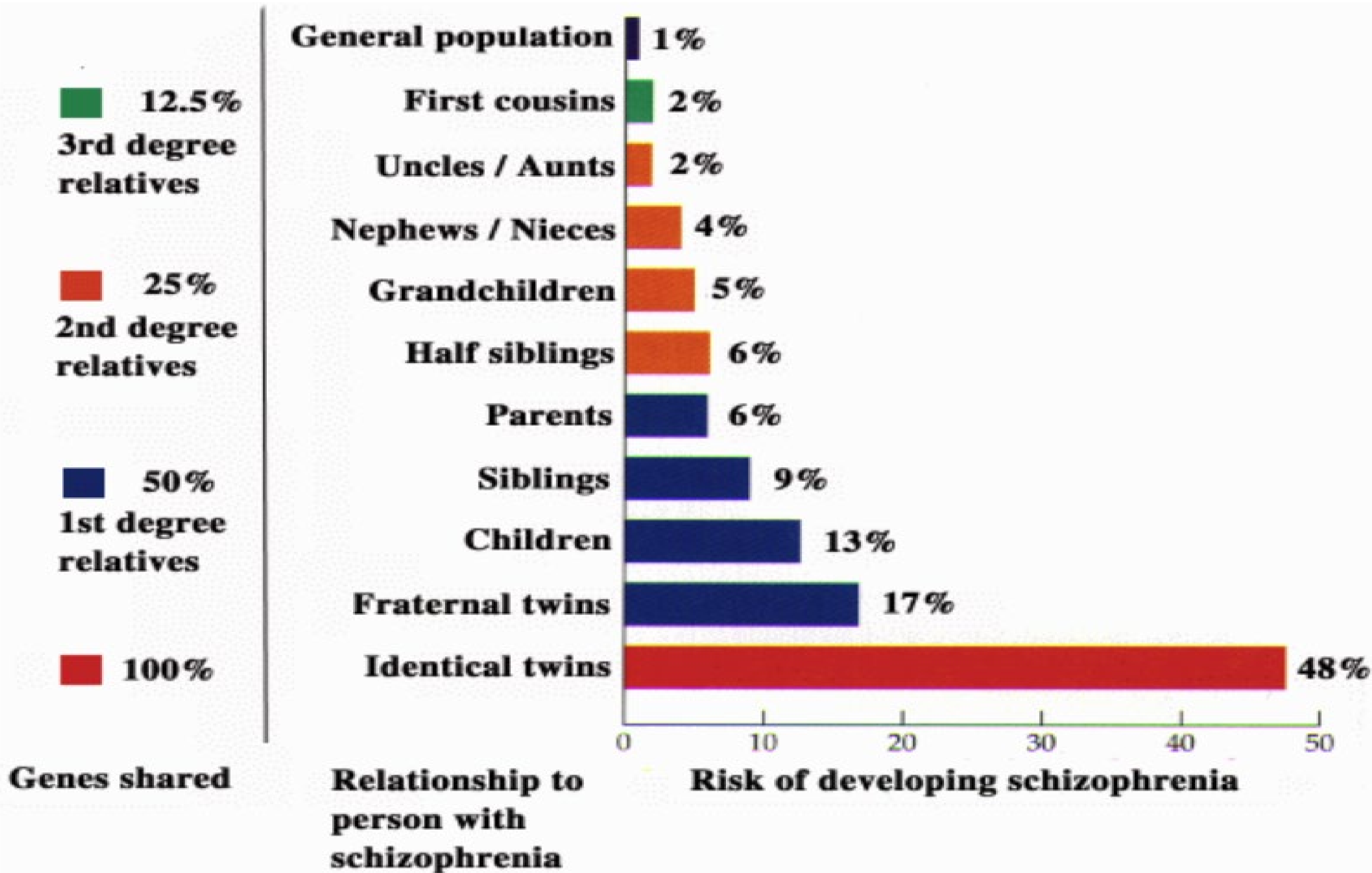
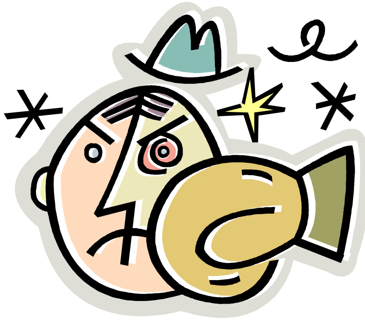


(Source: Gottesman, 1991)

Causes of severe mental illness, such as schizophrenia

Unknown.

? Multi-hit hypothesis



Theories:

Genetic predisposition

Early environmental insults, with some brain changes

Later insults with further brain changes

Neurodegeneration and subsequent illness/disorder

Odds Ratio

0 1 2 3 4 5 6 7 8 9 10

Place/time of birth
Winter
Urban

Infection
Influenza
Respiratory
Rubella
Poliovirus
CNS

Prenatal
Famine
Bereavement
Flood
Unwantedness
Maternal depr

Obstetric
Rh incompatibility
Hypoxia
CNS damage
Low birth weight
Pre-eclampsia
Family history

Success? Rates:

30% poor response rate

Non-adherence rate 1st year-50%

Relapse rates- 1st year

treated: 25%

inadequately treated: 70%

Schizophrenia and Violence

Violence is not a common attribute, though a small subset do have a higher incidence [particularly those who are 1) angry, 2) with persecutory delusions who are 3) inadequately/untreated].

Most likely victim: family member

Being male and a substance user in society brings a much higher risk of violence than having mental illness

Individuals are much more likely to be victims of violence rather than perpetrators

Outcomes…

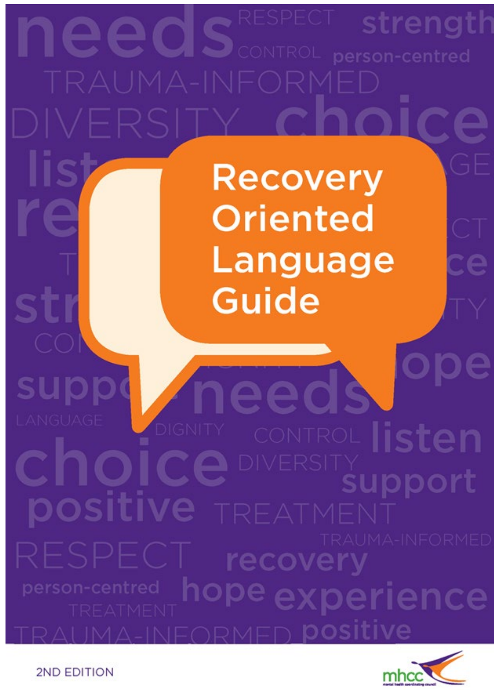
You will hear different data, but the numbers roughly fall into the "law of thirds" or "law of fourths."

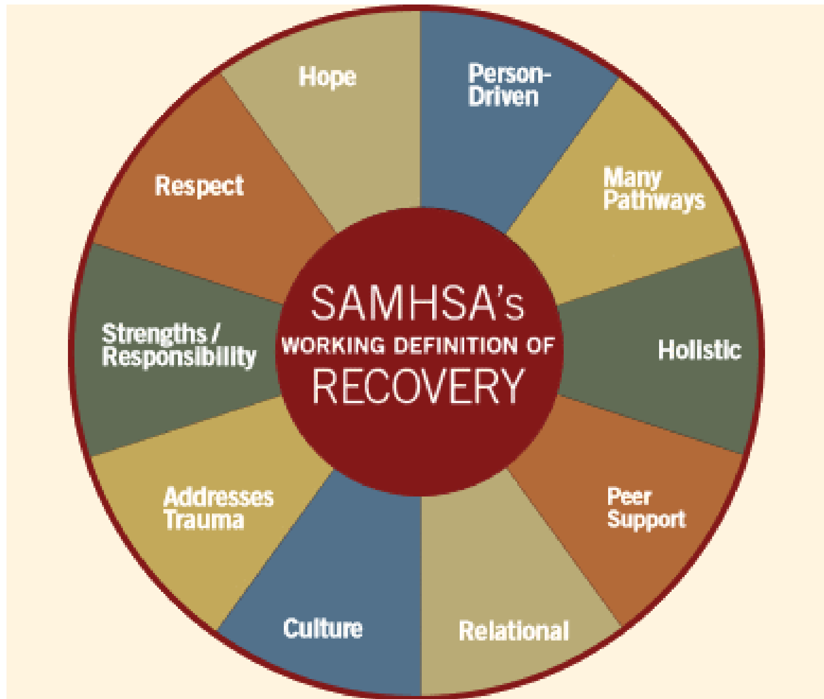
In other words, of individuals with schizophrenia; over time, 1/3 will do very well, 1/3 will be improved, and 1/3 will require significant assistance

Some use ¼ will fully recover, ¼ will be improved and relatively independent, ¼ will require robust support, and ¼ will be unimproved or have died early.

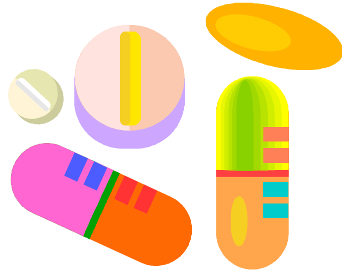
The goal is obviously to move towards recovery… HOPE IS HUGE!

Recovery





Treatment



Non-Medication Treatments

Cognitive and Behavioral Therapy

Family Education and Support

Education/Vocational Rehabilitation

Social Rhythms

Electroconvulsive Therapy

FUTURE

Deep Brain Stimulation*

?Gene therapy

What do you call "following the program?"

"Adherence" implies following a plan

"Compliance" implies following a command

Early Intervention Programs

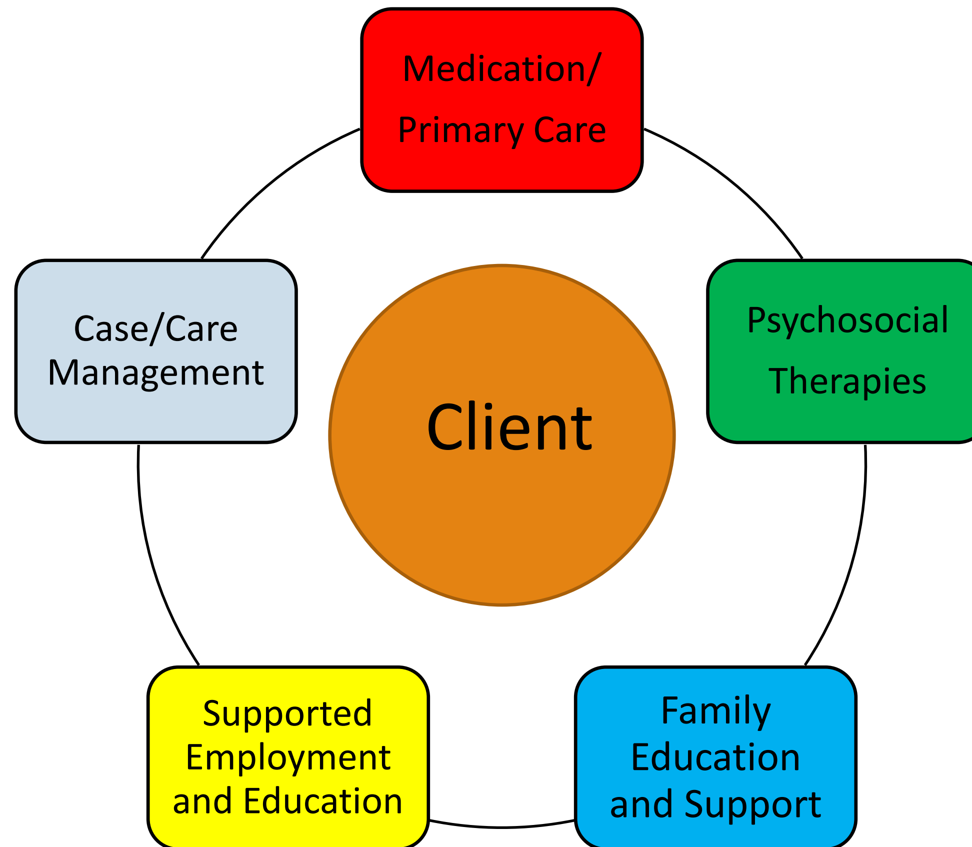
Identify and treat at risk individuals

(first episode/prodrome)

Non-medication treatments previously listed, in addition to low dose anti-psychotic medication

Team -based approach

Coordinated Specialty Care



National Council

Antipsychotic ("Neuroleptic") Medications

They have wonderful benefits

They can have troublesome side effects

Antipsychotic medications

CONVENTIONALS

ATYPICALS

The History of Antipsychotics

Typical antipsychotics → Atypical antipsychotics →

1950s	1960s	1970s	1980s	1990s	2000s	2006+
chlorpromazine	haloperidol	molindone		clozapine	ziprasidone	paliperidone
trifluoperazine	fluphenazine	loxapine		risperidone	aripiprazole	asenapine
prochlorperazine	thioridazine			olanzapine		iloperidone
mesoridazine	perphenazine			quetiapine		lurasidone
	thiothixene					brexiprazole
						cariprazine
						lumateperone
					risperidone- long acting I.M.	-paliperidone long-acting IM*
						-olanzapine long-acting IM
						-aripiprazole long acting IM

fluphenazine and haloperidol decanoates

Atypicals

- Clozapine
- Risperidone
- Paliperidone
- Olanzapine
- Quetiapine
- Ziprasidone
- Aripiprazole
- Asenapine
- Iloperidone
- Lurasidone
- Brexiprazole
- Cariprazine
- Lumateperone

- Most atypicals are useful in treating mania
- Often used for augmentation with treatment resistant depression.

Route of Administration

Oral

Short-acting intramuscular

Long-acting intramuscular

Sublingual

Inhaler

Long-Acting Injectable (LAI) Antipsychotic Medications

In the U.S., unfortunately, they are often prescribed as a lastresort, or in a punitive fashion due to non-adherence.

Many other countries do a better job of informed consent and choice of these types of medications as options. Overall, outcomes may be better, and side-effects less, with LAI than oral medications.

Serious Side Effects that both conventional and atypical meds can cause

Neuroleptic Malignant Syndrome

Seizures

Heart Problems

Eye Problems

Hormonal Problems

Jaundice

Temperature Dysregulation

Teratogenicity

Swallowing problems

Tardive Dyskinesia

Motor/Muscle Movements

Short term-often reversible

(akathisia, akinesia, etc…)

Long-term, sometimes reversible/readily manageable, sometimes not.

(tardive dyskinesia)

Metabolic Syndrome

3 of the following:

Abdominal obesity

Elevated triglycerides

Low HDL

Hypertension

Elevated Fasting Glucose

Black Box Warnings

(reasonable evidence of an association of a serious hazard with a drug)

WARNING:

INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS TREATED WITH ANTIPSYCHOTIC MEDICATION

Stigma and Labels

Do not:

Define a person as their illness (i.e. a “diabetic”, a “schizophrenic”)

Do:

See the patient as a person dealing with an illness

Do not:

See the person presenting with symptoms as “chronic”

Try to imagine what it would be like to be in their shoes

Remember that anyone you speak with knows someone with a mental illness

Potential Team Players

Individual

Family

Therapists

Peer supports

Care/Case Managers

Nurses

Lab staff

Receptionists

Schools

Career/work counselors

Prescribers

Pharmacists

Mental Health Courts

Case:

You are visiting with John, an 18-year old individual who has started to display some odd beliefs and behaviors, has had difficulty in school, has been more socially isolated for some time, and is somewhat moody. He is a bit more disheveled than in the past. There are no indications he has been using drugs, and while he is frustrated, he does not endorse being depressed. His uncle and grandfather have diagnoses of schizophrenia.

Given the above, John is most likely experiencing:

A) Prodromal Syndrome

B) Bipolar Affective Disorder

C) Autism

Case, continued

The best treatment for John would probably be:

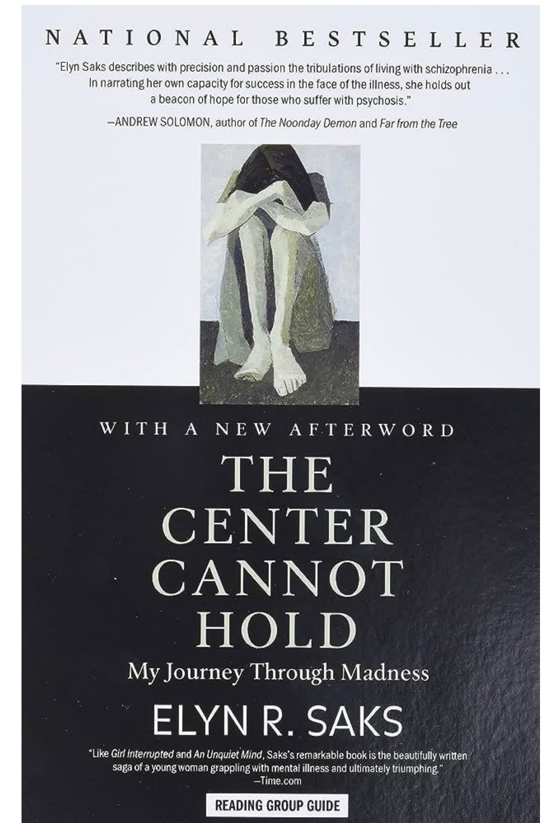
1) High dose antipsychotic medication

2) Involuntary hospitalization

3) An Early Intervention Program

Hope

Perhaps of interest



TED Talk:

https://www.ted.com/talks/elyn_saks_seeing_mental_illness?language=en#t-862041

Resources

Q+A