Maine Pediatric & Behavioral Health Partnership

Psychosis

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MPBHP is a partnership between Maine CDC, Northern Light Acadia Hospital and MaineHealth

Northern Light Acadia Hospital

Department of Health and Human Services

MaineHealth

Learning Objectives

Providers will:

1. Understand basic knowledge about psychosis and psychotic experiences
2. Recognize prodromal and clinical high risk
3. Learn the relationship between substance and the development of psychosis, psychosis as part of a continuum of experience
4. Understand what can be done to help manage these symptoms in primary care

Integrity & Independence in Continuing Interprofessional Development

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All relevant financial relationships have been mitigated.

psychosisscreening.org

Psychosis Screening

HOME | OVERVIEW | KNOW THE SIGNS | FIND THE WORDS | MAKE THE CONNECTION | RESOURCES

Psychosis Screening in Primary Care

DOWNLOAD BOOKLET

This website was designed to help providers working with teenagers & young adults to:

KNOW THE SIGNS	FIND THE WORDS	MAKE THE CONNECTION
that are common early indicators of psychosis	to ask about warning signs and psychotic-like experiences	to appropriate assessment and treatment resources

What is psychosis?

- A condition that affects the way the brain processes information
- Includes
  - Sensory distortions
  - Hallucinations (visual, auditory, olfactory)
  - Delusions or unusual beliefs: persecutory, paranoid, grandiose
  - Difficulties thinking or concentrating
  - Neurological ‘soft signs’ (twitches, feeling hot or cold, electrical jolts)

What causes psychosis?

- Genetics
- Medical conditions
- Psychiatric conditions
- Sensory and sleep deprivation
- Stress
- Trauma (developmental and acute)
- Substances (intoxication or withdrawal)
  - More than 25% of those with amphetamine-induced psychosis later develop psychotic disorders
  - Cannabis is involved in roughly half of cases

https://medicine.yale.edu/psychiatry/research/programs/clinical_people/prodome/?organizationId=109519&locationId=460

What causes psychosis?

- Life events and circumstances
- Inherited tendencies
- The way we make sense of the world
- Deprivation and trauma often play a large role
- Constant interactions for every experience between biology, psychology, and society
- An experience is both a brain-based event and a human interaction with the greater environment (like every medical condition)

Medical Conditions Associated with Psychosis

CONDITION	EXAMPLES
Delirium	Sleep deprivation, Serum electrolyte abnormalities, Sepsis
Seizure Disorders	Particularly temporal lobe
Central Nervous System Lesions	Brain tumors, Head trauma, Congenital malformations
Infections	Encephalitis, Meningitis
Metabolic Disorders	B1, B3, or B12 deficiency, Hypocalcemia, Hypomagnesemia

Medical Conditions Associated with Psychosis

CONDITION	EXAMPLES
Endocrine Disorders	Cushing Disease, Diabetes mellitus, Thyroid disease
Genetic Syndromes	Wilson's, Huntington's
Autoimmune Disorders	Lupus, Multiple sclerosis, Anti-NMDA receptor or other encephalitis
Toxic Exposures	Carbon monoxide, Organophosphates, Heavy metals
Pharmacologic	Stimulants, Cannabis, Dextromethorphan, Lysergic acid, Diethylamide, Hallucinogenic mushrooms, Psilocybin, Peyote, Solvents & inhalants, Serotonin syndrome
Nutritional	Hypoglycemia, Uremia, Acute intermittent porphyria

MARIJUANA AND PSYCHOSIS

- Daily cannabis use associated with increased odds of developing a psychotic disorder compared to never users (OR 3.2 95% CI 2.2-4.1)
- Daily use of high potency cannabis increased the odds to almost 5 times that of never users (OR 4.8, CI 2.5-6.3)
- Eliminating high potency MJ would decrease incidence of first episode psychosis by 12.2% in all 11 sites, 30.3% in London and 50.3% in Amsterdam

How common is psychosis?

- 10% of the population has at some point heard voices
- Most do not seek out mental health treatment because experiences are not distressing
- Focus on those distressing experiences
- A large percentage of the population holds beliefs that others may see as absurd or paranoid
- Others have puzzling experiences that may be considered bizarre or eccentric
- Not necessary to treat those beliefs or delusions that are not causing harm

PRODROME AND CLINICAL HIGH RISK

- Early symptoms that indicate someone may be at risk of developing a full-blown psychotic illness
- Certain constellations of psychotic symptoms predict the onset of psychotic illness
- Prodromal time frame can be days to years
- Early identification of symptoms leads to a better prognosis in the short and long term

What are the signs of prodromal illness?

- **Withdrawal/Isolation** - Absenteeism/Staying in Room
- **Social Difficulties** - Poor Concentration/Spacing Out/Difficulty thinking clearly
- **Poor Hygiene** - Hypervigilance
- **Bizarre Behavior/Appearance** - Decrease in Work Performance/Activity Level
- **Increased difficulty at school or work** - Becoming Neglectful and Unfeeling
- **Falling Asleep in Class Repeatedly** - Suspiciousness or mistrust of others
- **Sadness/Tearfulness** - Changes in the way things look or sound
- **Excessive Anxiety** - Emotional Outbursts/Emotional Flatness

What are ‘negative’ symptoms?

- Person experiencing psychosis may interact as normal or may appear listless, withdrawn, have difficulty caring for themselves
- May be result of being overwhelmed by psychotic experiences
- May be depression or anxiety
- May be having cognitive changes that are interfering with functioning

FIRST, psychotic and psychotic-like symptoms are much more common than psychotic disorders, particularly in children and adolescents. They often require specialized assessment and time to judge their significance as indicators of risk for a future disorder.

SECOND, symptom presentations evolve over time, such that what may at first appear to be an anxiety disorder may eventually emerge as schizophrenia. Similarly, psychotic and psychotic-like experiences may be brief and remitting or intermittent, initially suggesting an imminent acute psychosis or psychotic disorder but with time being better understood as, for instance, panic, OCD, or substance-induced psychosis

THIRD, although there are some very common early symptoms of major psychotic disorders, the early course of schizophrenia and related disorders is quite varied. In most young people, acute psychotic symptoms are preceded by "negative" or "non-specific" symptoms such as amotivation, challenges with attention and learning, and social withdrawal. Only a subset of youth who develop major mental illness experience psychotic symptoms in the absence of negative or non-specific symptoms.

FOURTH, comorbidity should be expected. In addition to assessing "either/or" differentials, clinicians should consider "both/and" possibilities. Young people can have both PTSD and schizophrenia, both OCD and Delusional Disorder, both Cannabis Use Disorder and Bipolar I Disorder. In many cases, one disorder may increase the risk of a subsequent or comorbid disorder.

What are the rates of psychotic disorders (not symptoms)?

- Schizophrenia:
  - Prevalence rate of 1% worldwide
  - Median age of onset is 19 years old
  - Most vulnerable age is 12 to 25
  - 85% of people have onset by 35 years old
- Psychosis also part of many other psychiatric conditions (depression, bipolar disorder, substance use, PTSD)
- Sometimes difficult to distinguish psychosis from other conditions (OCD, autism)
- Early treatment of psychosis can reduce relapse of acute symptoms by 50% (WHO)
- https://medicine.yale.edu/psychiatry/research/programs/clinical_people/prodome/?organizationId=109519&locationId=460

Recommended Medical Workup for First Presentation of Symptoms

1

CAREFUL HISTORY

- Temporal pattern of onset of psychiatric symptoms
- Recent drug ingestion, infectious disease, head injury, or seizure
- New or worsening headaches
- Family history of psychiatric disorders (Review of specific symptoms and treatment may be needed to identify history of psychosis; see **Asking about Family History**)
- Collateral history from family to clarify behavioral changes and timeline
- Suicidal or violent thoughts and actions

2

PHYSICAL EXAMINATION

- Mental status, including cognitive functioning
- Neurological examination; note emergence of new signs or symptoms, subtle involuntary movements
- Signs of fever, endocrinopathies, metabolic illness
- Tachyccardia or severe hypertension

Recommended Medical Workup for First Presentation of Symptoms

3

LABORATORY STUDIES

- CBC with differential to consider possible infectious illness
- Urine toxicology
- Imaging and EEG are not indicated in the absence of specific indicators (new, severe, unremitting headache, focal neurological deficits, or history of recent head trauma)
- Further assessment if initial observations and studies suggest pathology

Comprehensive metabolic panel, including:
- Electrolytes: Na, K, CO2, Chloride
- Glucose
- BUN
- Creatinine
- Albumin, Total Protein
- Ca, Mg
- Alkaline phosphatase (ALP)
- Alanine amino transaminase (ALT or SGOT)
- Aspartate amino transaminase (AST or SGOT)
- Bilirubin
- Parathyroid hormone
- Vitamin B12, Folate, Niacin

Tips for Differential Diagnosis

1. **Symptoms due to intoxication** typically have an abrupt onset in the context of substance use and resolve within days to weeks of drug discontinuation.
2. **Isolated symptoms** (e.g., hearing voices) in the absence of depression, anxiety, decline in function, or of familial psychiatric illness are less likely to inidicate a serious illness.
3. **Visual hallucinations in conjunction with neurologic signs**, headache or seizures are more consistent with a neurologic disorder.
4. **Consciousness and awareness** are usually, if not always, intact in major psychotic disorders such as schizophrenia, bipolar disorder, schizoaffective disorder, etc.

Tips for Differential Diagnosis

5. Consider the pattern of onset:
    1. **Acute onset** (days or weeks) may be more likely to be associated with drug effects, infection, or other specific medical states. It may also be associated with psychiatric states resulting from discrete stressors. More rapid onset is also more typical of major depressive disorder or bipolar disorder (vs. schizophrenia), particularly as mood symptoms intensify.
    2. **Subacute onset** (less than 12 weeks) may also be associated with neurological or medical illnesses (e.g., autoimmune encephalitis, which is uncommon but requires immediate assessment and treatment).
    3. **Insidious or more gradual onset** is more frequently seen in schizophrenia and more characteristic of child or adolescent onset. This is considered one of the reasons that accurate diagnosis is often delayed years in this age group, with unfortunate long-term consequences.

Managing Early Psychosis within Integrated Practice

Responding to symptoms of psychosis and psychosis risk in an effective, balanced way, one that neither under- nor over-reacts to a patient's experiences, typically requires specialized training. To assess your practice's capacity to provide appropriate care, we recommend you consider the degree to which you have staff who:

- Are knowledgeable about psychotic/psychosis risk symptoms and best practices
- Are able to provide thorough, targeted assessment of psychotic/psychosis risk symptoms and common comorbid or differential diagnoses
- Have access to consultation/supervision with colleagues knowledgeable about psychotic/psychosis risk symptoms and best practices

Family Guidelines

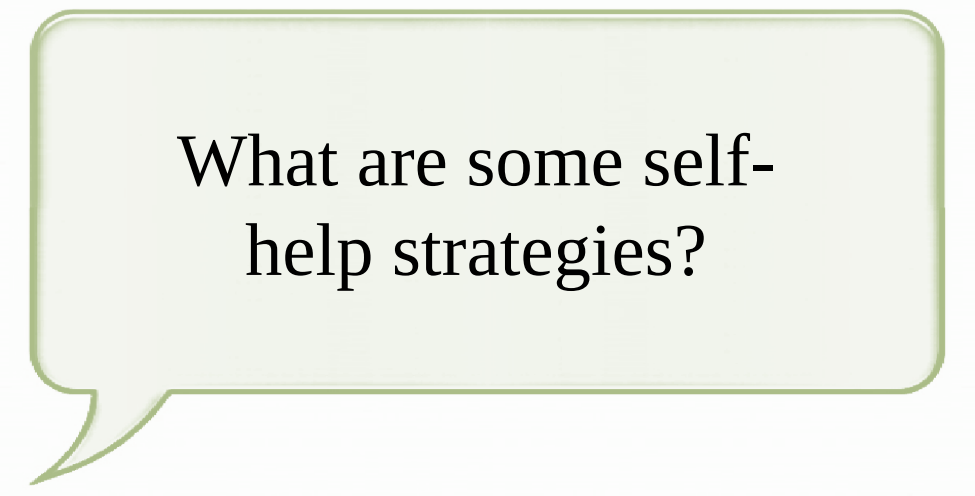
1. **Go slow** *recovery can take time*
2. **Keep it cool** *try to avoid over-loading, information processing can be hard during this time, especially if under stress*
3. **Give each other space** *alone time can be self-care, try not to hover*
4. **Observe limits** *clear rules can help everyone*
5. **Ignore what you can't change** *let some things slide, just not violence*
6. **Keep it simple** *say what you need to as simply, clearly, and positively as possible*
7. **Carry on business as usual** *re-establish family routines, stay in touch with family and friends*
8. **Consider medication use** *medication can help symptoms, work with your doctor to see what might work for you*
9. **Consider not using drugs and alcohol** *they can worsen symptoms*
10. **Attend to early warning signs** *know what your triggers are*
11. **Lower expectations temporarily** *see incremental progress*
12. **Solve problems step by step**

What is some advice to give to family and friends?

- Everyone in the system is experiencing a stressful time
- Family sometimes can be overly critical or actively hostile
- Family may also treat the individual like a child instead of helping them become more independent
- These attitudes can be exhausting and unhelpful for all involved
- When family and friends can maintain a calm, relaxed attitude, it is most helpful for everyone
- Don’t be scared to say the wrong thing-just be present

What is some advice to give to family and friends?

- Provide an opportunity to explain the experience and tell what they need
- Develop a shared understanding of what is happening and how everyone is effected
- Separate problems from the person
- Explore vicious circles (the more, the more)
- Improve relationships
- Explore strengths
- Work out solutions to problems
- Negotiate how friends and family can be supportive and live their own lives



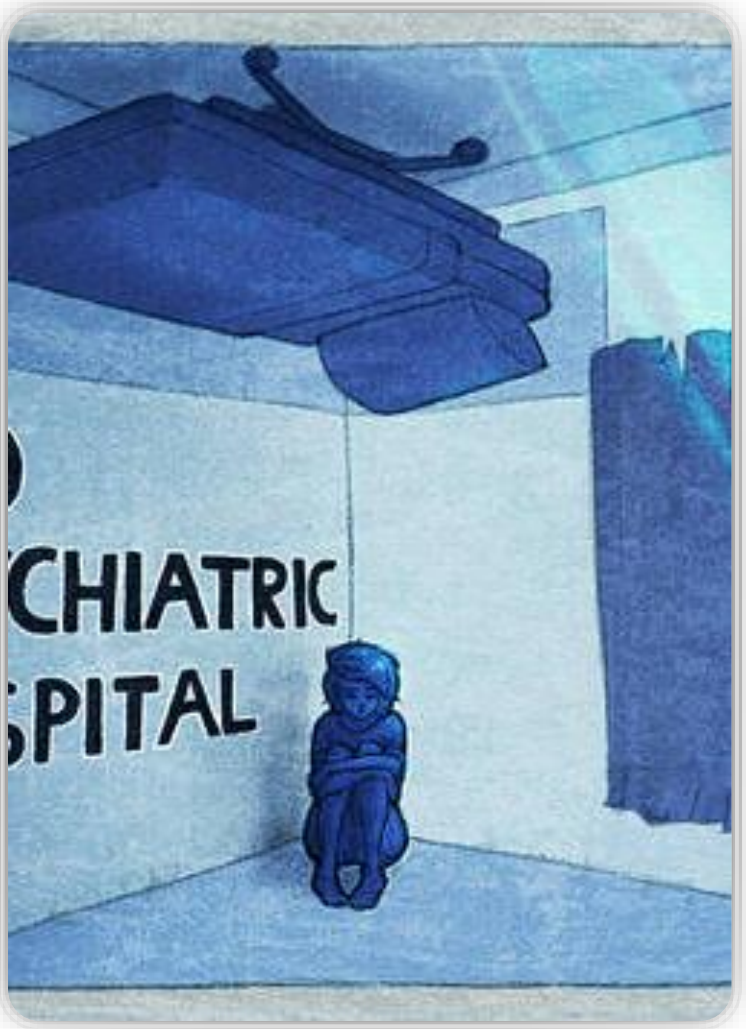
- Meeting people with similar experiences to feel less alone (groups or individuals, NAMI)
- Using one's own experiences to reach out to others
- The "Hearing Voices" network
- Exercise, rest, diet, massage, yoga
- Staying connected to friends and family
- Peer support

POSITIVE REGARD AND SUPPORT

- Behavioral activation: Focus on person's own goals and ambitions
  - Help plan how to reach those goals and plan for pitfalls along the way
- Cognitive remediation: increase problem solving capacity to work towards what the individual wants to do
- Continued supports as needed, moving towards increased independence
- Crisis planning for the future
- Give time to talk about what happened and how to improve the situation

KEEPING SAFE

- Being aware of self-neglect, self-harm and suicide
- Risk to other people
  - Most people with psychosis are not violent
- Most violence comes with feeling powerless
- Most incidents in a controlled setting come from staff limits such as denying a request, placing a restriction, or insisting on medication
- Learn how to negotiate disputes and resolve conflicts
- Learn how to empathize with people when they are feeling overwhelmed, scared, or angry



THANK YOU!

QUESTIONS

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COMMENTS?

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