Learning Objectives

- Gain understanding about high-risk psychosis
- Understand the benefits and challenges of early detection and treatment of those at high- or ultra-high risk for psychosis
- Understand the latest treatment approaches
- Discuss these treatment approaches as they might apply in Native communities
Risk Factors of Psychosis

Can young people be reliably identified who are at high and imminent risk of developing a first episode of psychosis?

1. Current research suggests that a combination of biological and environmental factors create a situation where a person is vulnerable to, or at a greater risk of, developing psychotic symptoms.

2. A number of brain chemicals, including dopamine and serotonin, may play a role in how psychosis develops.

3. A stressful event may trigger psychotic symptoms in a person who is vulnerable.

4. Risk factors linked to psychosis are far from definitive; caution is recommended to avoid false positives.

5. It is important for the individual to have a thorough medical and psychological assessment to rule out any physical illness that may be the cause of the psychosis.

Though it is Unknown, the Prevalence and Incidence of High Risk Psychosis is Probably Similar or Higher to the General Population Youth

Running Strong for American Indian Youth
Native Health Morbidity: Disparity

1. Alcoholism 6X
2. Tuberculosis 6X
3. Diabetes 3.5 X
4. Accidents 3X
5. Poverty 3x
6. Depression 3x
7. Suicide 2x
8. Violence?
9. Trauma?

1. Same disorders as general population
2. Greater prevalence
3. Greater severity
4. Much less access to Tx
5. Cultural relevance more challenging
6. Social context disintegrated

What is Psychosis?

- Severe and persistent disturbances in thinking, mood and behavior that very seriously impact the daily functioning of the person
- Presence of one or more:
  - Delusions (fixed false beliefs)
  - Hallucinations (Auditory most common, but can be with any of the senses)
  - Disorganized speech (sometimes to incoherence)
  - Disorganized behavior
  - Catatonia

2. https://medicine.yale.edu/psychiatry/step/psychosis/firstepisode.aspx
Three Phases of Psychosis

Prodromal Phase (subclinical, early signs)

- These early signs may be subtle and hardly noticeable. Common signs (which vary among individuals in this phase)
  1. reduced concentration
  2. decreased motivation
  3. withdrawal from friends and family
  4. sleep problems
  5. deterioration in functioning
  6. unusual beliefs/magical thinking

2. https://medicine.yale.edu/psychiatry/step/psychosis/firstepisode.aspx
Symptoms of this phase (which may vary among individuals)
1. confused thinking
2. false beliefs
3. hallucinations
4. changed feelings
5. changed behavior

2. https://medicine.yale.edu/psychiatry/step/psychosis/firstepisode.aspx
Symptoms of Psychosis in Children

Positive and Negative Symptoms of Psychosis

- Hallucinations (illusory perceptions), especially auditory
- Delusions (illusory beliefs), especially persecutory
- Disorganized thought and nonsensical speech
- Bizarre behaviors

- Flat affect (no emotion showing in the face)
- Reduced social interaction
- Anhedonia (no feeling of enjoyment)
- Avolition (less motivation, initiative, focus on tasks)
- Alogia (speaking less)
- Catatonia (moving less)
About 1-2% of people will experience psychosis at some time in their lives.

But a psychotic disorder is very devastating to the individual and significant others.

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Effective treatment can lead most individuals to recover from their first episode of psychosis, and many without a return of severe symptoms.

Treatment works!

2. https://medicine.yale.edu/psychiatry/step/psychosis/firstepisode.aspx
Normal adolescent behavior can be confused with early symptoms of psychosis

Some common features of adolescence
- Inattention
- Repetitive or distressing thoughts
- Difficulties thinking clearly
- Unpredictable and disruptive behavior
- Rapid changes in mood
- Functioning issues in social and academic settings

Source: US News & World Report, 2005
The “Gray” Nature of Adolescent Behavior

- A challenge in measuring and detecting HR criteria: Normal adolescent behaviors can mimic these criteria of early psychosis

Distinguishing normalcy from ER criteria

- Does the behavior meaningfully disrupt social and role functioning?
- Are the behaviors persistent?
- Do the behaviors cause distress to the individual and others?
- Does context not explain or moderate the behavior?
This is What We See in Progression of Untreated Psychosis

Disruption of Critical Developmental Period

Loss of protective factors for Work and Support

Disability
Welfare

This is What We Want to See in Treatment of Psychosis

Cognitive Engagement in work and personal relations

Positive emotions; Lower sensitivity to stress

Social/vocational support and a purposeful life
Burden of Disease 2013

Disease Burden across Age

(NeGoy, 2007)
MH Prevalence /Service Use Gap greatest for young people

Is There Rational for Increased Youth Services?

Adult mental health disorders begin in adolescence
Early intervention model
Preventive strategies
Developmental perspective
Access/engagement/retention
Appropriate setting/clinical staff/service configuration
Family involvement
Social/vocational
Economic
Reform

Rickwood & Greenwood - Research in Youth Mental Health 2013
Is There Evidence for Youth Services?

Adult mental health disorders begin in adolescence – Insel 2005, Jones 2013
Early intervention – Mihalopoulos 2009, McGorry 2013
Preventive strategies – Yung 2013, Stallard 2013, Chanen 2013
Developmental perspective – Lamb 2013
Access/engagement/retention – Singh 2009
Appropriate setting/clinical staff/service configuration – McGorry 2009
Family involvement – Bebbington 2011
Social/vocational – Killacky 2010
Reform - ???

1. What is High-Risk or Ultra-High Risk for Psychosis?

- Some individuals, by virtue of possessing several risk factors, are at high risk or ultra-high risk of developing a first episode psychosis.
- A first episode psychosis will occur among 15-30% of HR individuals within 12 months, and over 36% after 3 years.
- These “transition rates” are several hundredfold above that of the general population.

2. https://medicine.yale.edu/psychiatry/steps/psychosis/firstepisode.aspx
2. What is High-Risk or Ultra-High Risk for Psychosis?

- Main risk factors
  - Family history of psychosis
  - Several behavioral indices....
    - attenuated psychotic symptoms
    - widespread cognitive deficits
    - poor school performance
    - unusual thoughts (including high suspicions/paranoia)
  - low social functioning
  - substance abuse
  - overall functioning difficulties

Source: Fusar-Poli et al., 2013, JAMA Psychiatry

3. What is High-Risk or Ultra-High Risk for Psychosis?

- Measuring risk factors – several structured and semi-structured interviews
  - Structured Interview for Prodromal Symptoms (SIPS)
  - Comprehensive Assessment of At-Risk Mental State (CAARMS)
  - Early Recognition Inventory for the Retrospective Assessment of the Onset of Schizophrenia (ERIraos)
  - Basel Screening Instrument for Psychosis (BSIP)

Source: Fusar-Poli et al., 2013, JAMA Psychiatry
4. What is High-Risk or Ultra-High Risk for Psychosis?

- **Onset:**
  - *HR signs* usually emerge in the teenager years
  - *Symptoms of psychosis* typically first begin in late adolescence and early adulthood

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**Pular-Fosi et al., 2017**

- First-wave hits
- Second-wave hits
- ‘Booster’ hits

- Pre-clinical
- UHR

- Childhood trauma, emotional abuse, physical neglect
- High perceived stress
- Traumatic brain injuries?
- Family history of mental disorders?
- Perceived ethnic discrimination?

- Functional impairment
- Cognitive complications

- Childhood or adolescence low functioning?
- Tobacco use
- Male gender
- Single status

- Unemployment
- Affective comorbidities
- Physical inactivity
- Social deficits?
- Ethnic minority?
- Personality traits?

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**Age of Onset of Prodromal and Psychotic Symptoms**

![Graph showing age of onset of prodromal and psychotic symptoms](image)

- Behavioral change
- Psychosis

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### Ultra High-Risk Criteria

<table>
<thead>
<tr>
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<td>1: Attenuated positive psychotic symptoms</td>
<td>Presence of ≥1 of the following symptoms: ideas of reference, odd beliefs or magical thinking, perceptual disturbance, paranoid ideation, odd thinking and speech, odd behavior, and appearance</td>
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<td>Frequency of symptoms: at least several times a week</td>
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<td>Transient psychotic symptoms: presence of ≥1 of the following: ideas of reference, magical thinking, perceptual disturbance, paranoid ideation, odd thinking or speech</td>
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<td>Frequency of symptoms: at least several times per week</td>
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<tr>
<td></td>
<td>Symptoms resolve spontaneously</td>
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<td>Recency of symptoms: must have occurred within the past year</td>
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<tr>
<td>3: Trait and state risk factors</td>
<td>Schizotypal personality disorder in the identified individual or a first-degree relative with a psychotic disorder</td>
</tr>
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<td></td>
<td>Significant decline in mental status or functioning (30% drop in GAF score), maintained for at least ≥1 mo and ≤5 y</td>
</tr>
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<td>This decline in functioning must have occurred within the past year</td>
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* Ultra high-risk criteria: (1) must be aged between 15 and 30 years, (2) have been referred to a specialized service for help, and (3) meet the criteria for 1 or more of the 3 groups.

When Healthcare does not Follow the Evidence: The Case of the Lack of Early Intervention

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Traditional Diagnostic Approach Verses Continuous Measures

Best Approach is Prevention and Public Health

Developmental Trajectories

Typically Developing

Healthy

at Risk

Psychosis

Ages

Multimodal Maturation Index

doi:10.1038/npj schizophrenia.2016.3; published online 9 March 2016
Symptom – Disability (S-D) Gap

Psychosis Development
Early Interventions in Risk Groups for Psychosis

Developmentally Sensitive Interventions

Clinical Risk Symptoms

Conception
- Good prenatal care to reduce maternal infection & substance misuse, stress, obstetric complications

Birth
- Good supportive parental care, early mother-child interaction

Preschool
- Support for language, social, cognitive development

Elementary school age
- Screening for cognitive, social, motor deficits
- Prevention of trauma and bullying
- Participation in sports, recreation, music, art

Puberty & Teens
- CBT
- Family therapy
- Medication
- Supported employment for clinical conditions

Late teens & 20's age of risk
- Avoidance of drugs
- Managing risk taking
- Pro-social activities
- Forming identity

Familial Risk for Psychosis 2015
Long Term Treatment Approach

2.1 Psychoeducation

Key messages for the person and their carers:

1. Explain that the symptoms are due to a mental health condition, that psychiatric and bipolar disorders can be treated, and that the person can recover. Clarify common misperceptions about psychiatric and bipolar disorders.
2. Do not blame the person or their family or accuse them of being the cause of the symptoms.
3. Educate the person and the family that the person needs to take the prescribed medications and return for follow-up regularly.
4. Explain that return and/or worsening of symptoms are common and that it is important to recognize these early and not to the health facility as soon as possible.
5. Plan a regular work or school schedule that avoids sleep deprivation and stress for both the person and the carers.

CLINICAL TIP

Talk to the person.

a. About the person who is healthy and the person who is not healthy.

b. About the treatment adherence and long-term outcomes.

2.2 Reduce stress and strengthen social supports

- Coordinate with available health and social resources to meet the patient's physical, social, and mental needs.
- Identify the person's personal social activities that, if continued, would have the potential to provide direct and indirect psychological and social support, e.g., family gatherings, outings with friends, visiting neighbors, social activities at work sites, sports, and community events.
- Encourage the person to continue these social activities and advise family members about this.
- Encourage the person and carers to improve social support systems.

CLINICAL TIP

Ensure that the person and their carers are trained in support and they receive the support they need.

2.3 Promote functioning in daily living activities

- Continue regular social, educational, and occupational activities as much as possible. It is best for the person to have a job or to be otherwise meaningfully occupied.
- Facilitate inclusion in social activities, including culturally appropriate supported employment.
- Offer life skills training and social skills training to enhance independence in skills for people with psychiatric and bipolar disorders and for their families and carers.
- Facilitate, if available and needed, independent living and supported housing that is culturally and contextually appropriate in the community.

2.4 General advice for carers

- Do not try to convince the person that his or her beliefs or experiences are false or not real. Try to be neutral and supportive, even when these persons show unusual behaviour.
- Avoid expressing concern or cause criticism or hostility towards the person with psychiatric.
- Give the person freedom of movement. Avoid restraining the person, while also ensuring that their basic security and their safety of others is met.
- In general, it is better for the person to be with family or community members in a supportive environment outside of the hospital setting. Long-term hospitalization should be avoided.

Coordinated System of Care

Thresholds June 10, 2016

National Council for Behavioral Health
Approaches to Cognitive Enhancement

Key Messages in Treatment of High Risk Psychosis

1. Life Function – Improved vocational preparation
2. Life Fulfillment – CBT, MET
3. Financial stability – work and financial planning
4. Fun – Recreation, Art therapy
5. Family/peers – Education, support groups
6. Physical Health – Public health and preventive care
7. Focus on the other problems – Anx, Dep, PTSD, SUD
8. Maximize personal choice CBT, MET
Psychotropic Medications not Seen as choice in Ultra High Risk Psychosis

- Evidence suggests that minimizing antipsychotic load during recovery allows for optimal functional recovery, despite an increasing risk of relapse.

Expressed Emotion (EE) and High-Risk for Psychosis

- What is EE?
Expressed Emotion (EE) and High-Risk for Psychosis

- Why is EE important?
  - 30 years of research has established a strong relationship between EE in the home and the course of schizophrenia.
  - ~50% relapse rate in families with high EE and ~20% relapse rate in families with low EE (Butzlaff & Hooley, 1998; Kavanagh, 1992).
  - EE’s negative impact more pronounced with chronic cases

![Graphs showing the relationship between EE and relapse rate](image)

**Figure 1** The correlation analysis. Notes: (A) The association between objective burden and time. (B) The association between subjective stress burden and time. (C) The association between subjective demand burden and time. (D) The association between hospitalization rate and time.
**Expressed Emotion (EE) and High-Risk for Psychosis**

- Why is high EE deleterious to a patient’s course?
  - over-stimulates the patient
  - impairs ability to cope
  - contributes to social withdrawal
  - leads to perception of poor family support

**Exploring Schizophrenia**

- Schizophrenia disrupts perception of the world, thought, speech, movement, and almost every other aspect of daily functioning.

**Biological Components**
- Inherited tendency (multiple genes)
- Neurological disease
- Infections—viral or bacterial
- Infection during pregnancy
- Brain chemistry—high levels of stress hormones
- Brain structure—altered connectivity

**Behavioral Components**
- Positive symptoms:
  - Delusions, hallucinations, disorganized speech, and abnormal movements
- Negative symptoms:
  - Apathy, lack of emotional expression
- Emotional and cognitive influences:
  - Interaction styles that are rigid, critical, hostile, and emotional overinvolvement can trigger a relapse.
Expressed Emotion (EE) and High-Risk for Psychosis

Five features of High EE
1. criticism
2. hostility
3. emotional over-involvement
4. warmth (absence)
5. positive comments (absence)

1. Criticism = comments about the behavior or characteristics of the patient which he or she clearly resents or is annoyed by.

2. Hostility = patient receives generalized criticisms and perceives rejection by family members.
3. Emotional over-involvement = over-emotionality, excessive self-sacrifice, over-identification, and extreme overprotective behavior with the patient.

4. Warmth (absence) = lack of kindness, concern, and empathy from the caregiver.

5. Positive comments (absence) = lack of appreciation or support via verbal/nonverbal behavior by the caregiver.

Expressed Emotion (EE) and the Client’s Caregiver

- Addressing caregivers with high EE
  - decrease criticism, hostility and emotional over-involvement
  - increase warmth and positive comments
    - Listen and emphasize rather than argue
    - Keep statements short
    - Ask questions one at a time; don’t rush response
    - Stay calm; be patient
    - Use “I” statements
    - Avoid name-calling and criticizing
    - Recognize your own limits
Expressed Emotion (EE) and the Client’s Caregiver

- Addressing caregivers with high EE
  
  ✓ Reduce the direct contact to less than 35 hours per week
  
  ✓ Challenge misperception that the patient lacks self-efficacy

- The earlier the better
  
  ✓ Educating caregivers about the “EE effect” is more likely to be useful if provided when onset of first episode

- Strength-based focus
  
  ✓ Patient’s potentials, skills, wisdom, goals, and ability to grow and change
  
  ✓ Social support networks and resources
Expressed Emotion (EE) and Treatment Setting and Staff

- Are patients also sensitive to EE by staff and the milieu treatment setting?
  - limited evidence, but indications that clients may be sensitive to negative perceptions by staff and to chaos in a treatment setting

Expressed Emotion (EE) and Other Disorders

- EE may be related to the course of other disorders
  - depression
  - bipolar disorder
  - eating disorder
Who First Recognized the Symptoms of Your Early Onset Psychosis?

Who was Most Helpful to You?
Suggestions for People in Psychosis

By:

Individuals who had experienced psychosis

- Find the right doctor, keep appointments and take your medication
- Find your spiritual strength
- Know what “triggers” your psychosis; avoid them
- Learn stress reduction and management
- Keep a sense of humor
- See a doctor right away when it starts
- Get cognitive behavioral therapy
- Be selective about whom and what you tell, but stay connected to others
- Do what you can incrementally
- Do puzzles and read books
- Yoga
- Don’t look back; move forward
- Take care of all the areas of your life: sleep, proper diet, spiritual and social needs, relaxation
- Listen to or read stories of positive role models; people who have had similar experiences
- Learn to trust and cooperate; don’t fight
Thank You!

QUESTIONS?

Both