

**CONNECTICUT EARLY PSYCHOSIS  
LEARNING HEALTH NETWORK**

Transforming Access, Care Quality, and Outcomes



## **Early Psychosis Overview**

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# What is psychosis?

- Difficulty with perceiving reality accurately and with coherent thinking “*What’s real? What’s not real?*”
  - Disturbances in perception (hallucinations)
  - Belief and interpretation of the environment (delusions)
  - Disorganized speech patterns (thought disorder)
- ~ 3 in 100 people will experience psychosis  
(*>2.2 million people*)
- Usually develops age 16-35 (earlier in men than women)
  - “Chronic diseases of the young” (*Insel, 2005*)

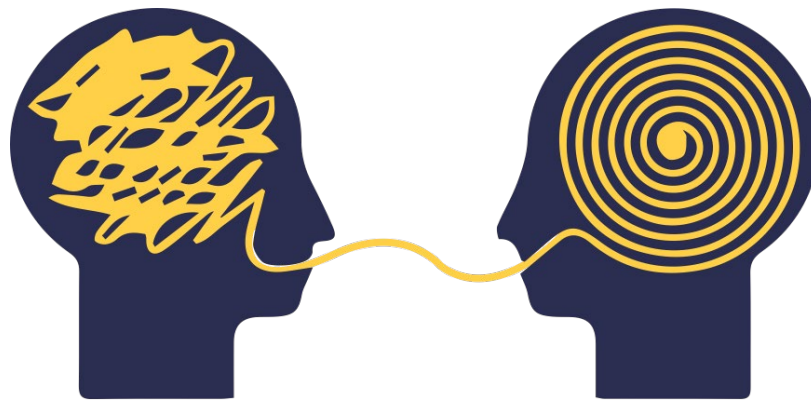
DREAM  
REALITY



# What is psychosis?

## Common causes of psychosis:

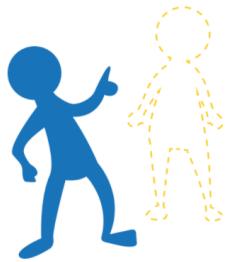
- Mental illnesses (such as schizophrenia)
- Medical illnesses (such as epilepsy)
- Substances (such as alcohol or drugs)



# What is psychosis?

## Common signs and symptoms

**Positive symptoms:** add to or distort an individual's normal functioning, perception or behavior



Hallucinations

Hearing, seeing, tasting, or smelling things that are not there



Delusions

Believing in things that are not true, and may be impossible



Thought Disorder

Trouble putting thoughts in order or keeping track of usual tasks

# What is psychosis?

## Common signs and symptoms

**Negative symptoms:** a reduction or loss in an individual's normal functioning, perception or behavior



### Withdrawal

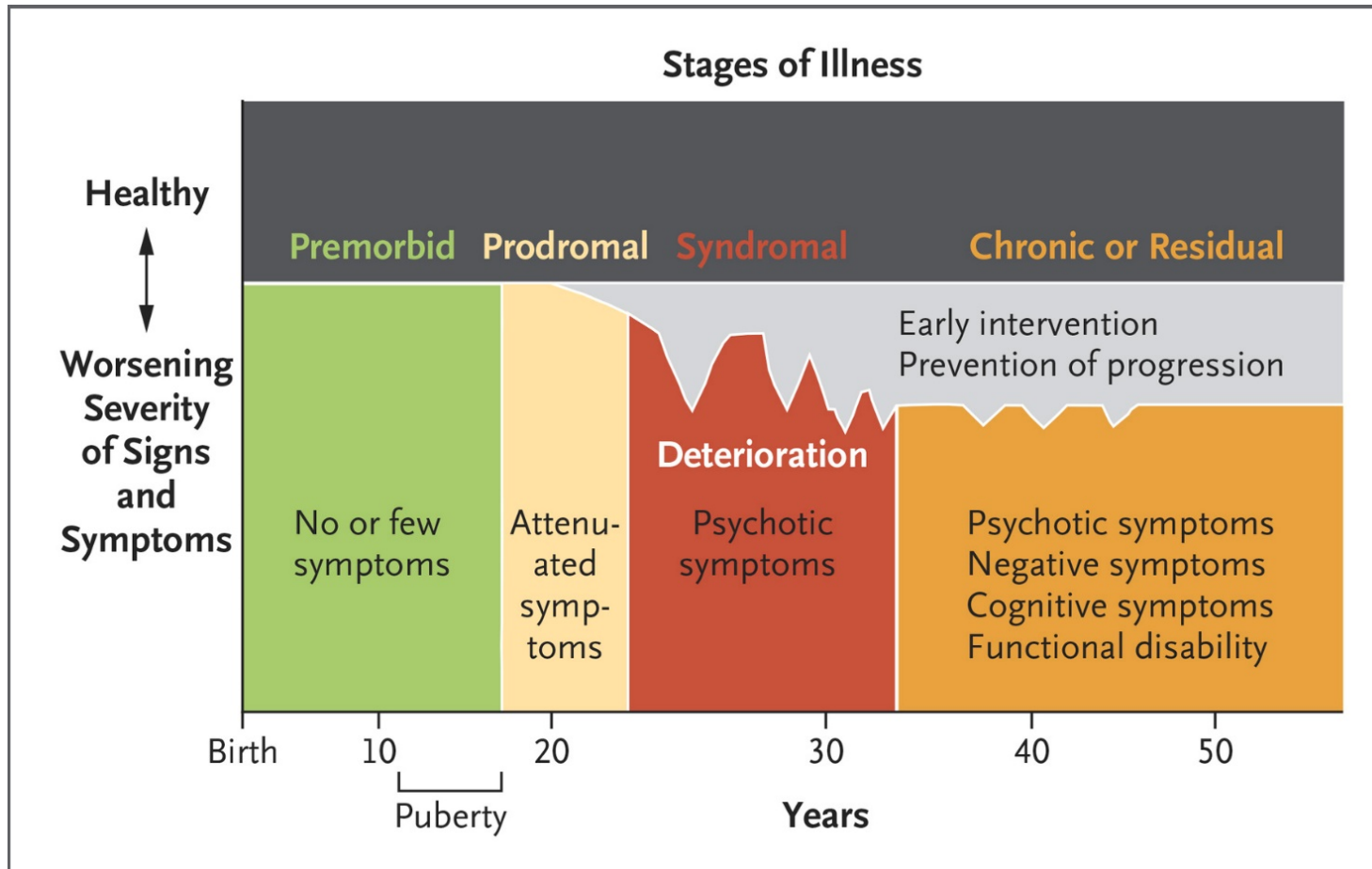
Distancing oneself from people or previously enjoyable activities



### Increased Distractibility

Decline in cognitive abilities including memory and attention

# Course of Schizophrenia



Jeffrey A. Lieberman, and Michael B. First. Psychotic Disorders. *N Engl J Med* 2018; 379:270-280

# What is the prodrome?

- Many terms... “prodrome” “clinical high-risk (CHR)” “ultra high-risk (UHR)”
- *Pre-psychotic* phase of illness
  - Early “warning” signs & symptoms before full illness onset
    - First **noticeable behavioral changes/symptoms** (decline in fx)
  - Often 1-3 year period before onset of first episode of psychosis
- Prodrome is *retrospective* term
  - Cannot be “diagnosed” with certainty (~20-40% at CHR develop full psychosis)
    - Pluripotential “non-psychotic” outcomes (e.g., depression, anxiety, substance use disorders)
  - However, *clinical* characteristics that *imply* risk can be reliably identified → SIPS

# Symptoms on a Spectrum

## Positive Symptom SOPS

0	1	2	3	4	5	6
Absent	Questionably Present	Mild	Moderate	Moderately Severe	Severe but Not Psychotic	Severe and Psychotic



### “NORMAL” LIMITS

“ I don’t completely trust my new roommate, my mom told me not to trust people right away”



### CLINICAL HIGH RISK

“ I think my roommate might be poisoning my food in the fridge; sometimes I throw it out just in case... but I’m probably just being paranoid”



### CONVERSION

“ I’m certain that my roommate is out to get me and is poisoning my food. Sometimes, I don’t eat for days.”



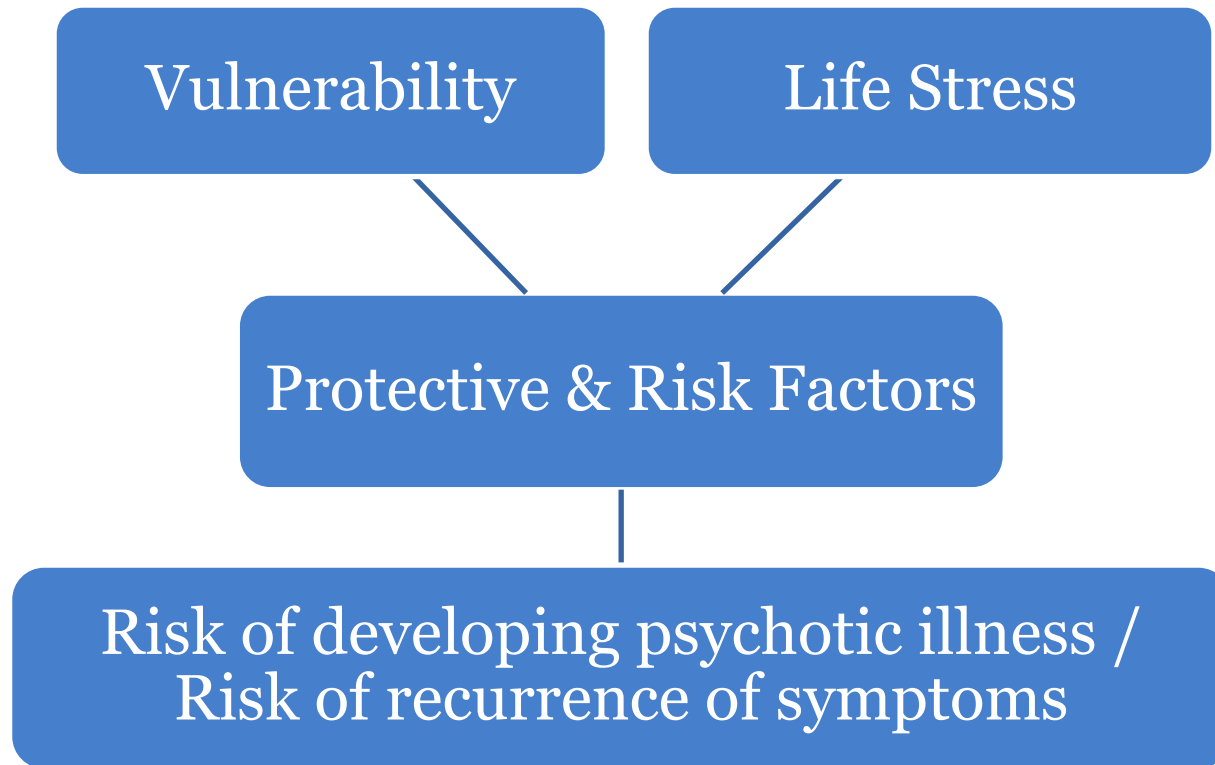
Interviewer “throws a rope”

#### QUALIFIERS

- Description, onset, freq., duration
- Distress & interference
- Conviction/”insight”



# What contributes to the development of psychosis?



# What are the risk factors for psychosis onset?

1<sup>st</sup> degree relative = 6-13x more likely

Adolescent cannabis exposure = 2-4x more likely to develop schizophrenia spectrum disorder

Greater freq, duration, earlier first use, and higher potency THC = greater risk

## Distal (premorbid) risk factors

### Foetal life:

- Maternal pregnancy complications/perinatal trauma, (especially foetal hypoxia)[51]
- Family history of psychotic disorder (for a review, see Olin & Mednick, 1996 [52])
- Candidate genes (DTNBP1, NRG1, DAOA, RGS4, COMT, DISC1, DISC2, BDNF; for a review, see Weinberger & Berger, 2009 [53])
- Developmental delay (for a review, see Rustin et al., 1997 [54])
- Season of birth (late winter/early spring)[55, 56])
- Ethnic minority group membership [57]

### Early life:

- Quality of early rearing environment (e.g., parental abuse or neglect) [58]
- Personality (e.g., schizoid personality)

## Proximal risk factors

### Late childhood/adolescence:

- Age [61]
- Urbanicity [62]
- Substance (especially cannabis) use [63]
- Traumatic head injury (for a review, see Kim et al., 2007 [64])
- Stressful life events (for a review, see Phillips et al., 2007 [65])
- Subtle impairments in cognition (for a review, see Pantelis et al., 2009 [66])
- Poor functioning [67, 68]
- Cognitive, affective, and social disturbances subjectively experienced by the individual ('basic symptoms')[69]
- Migration [70]

34% of people with FEP experienced childhood sexual / physical abuse

PTSD 10x higher than general population

2-4x risk with childhood migration in minority folks

# Why is treating psychosis important?

- **Individual and Family Impact:**
  - often leads to frequent hospitalization, and can derail functioning in school, career, and family
    - Risk of suicide (~1/100 w/FEP complete suicide, as many as 10% attempt suicide within the first 5 years)
    - Long-term cardiovascular and other physical health risks (shorter life expectancy)
  - Family / caregiving burden
- **Societal/Economic Impact:**
  - A top 10 leading cause of disability (*WHO*)
  - Criminal justice involvement
  - Homelessness (20% of have SMI) (*NAMI, Mental Health Ripple Effect*)
  - \$193.2 billion in lost earnings in US / year (*Kessler, et al., 2008*)
- ***Early identification and intervention can greatly minimize the disability and improve lives!***

# Case example

- 20 y/o black, straight, cis male (Josh\*), sophomore in college, living in the dorm
- Grades began dropping, skipping class, isolating from his friends, poor hygiene
- Believes classmates & professors are all in on a plan with the government to hurt him; convinced he is being monitored
- Noticing signs just for him in school assignments and on YouTube
- Hears voices saying *“they’re out to get you” “they are in on” “you need to stop them or they will ruin you”*
- Smoking cannabis regularly for several years, recently increased his use to “help deal with the stress”
- Hospitalized after causing a disturbance during an exam; yelling in a verbally aggressive and disorganized way, that he knows they are all in on it; appeared disheveled, hadn’t showered in some time, lost a lot of weight
- After inpatient hospitalization, prescribed antipsychotic, discharged home to family, and referred to STEP...

# Case example

- 20 y/o black, straight, cis male (Josh\*), sophomore in college, living in the dorm (typical time of onset)
- Grades began dropping, skipping class, isolating from his friends, poor hygiene (fx decline, negative sx?)
- Believes classmates & professors are all in on a plan with the government to hurt him; convinced he is being monitored (Paranoia/Persecutory delusions)
- Noticing signs just for him in school assignments and on YouTube (Ideas of Reference)
- Hears voices saying “they’re out to get you” “they are in on” “you need to stop them or they will ruin you” (auditory hallucinations)
- Smoking cannabis regularly for several years, recently increased his use to “help deal with the stress” (sustained cannabis use)
- Hospitalized after causing a disturbance during an exam; yelling in a verbally aggressive and disorganized way, that he knows they are all in on it; appeared disheveled, hadn’t showered in some time, lost a lot of weight (acute episode, poor self-care)
- After inpatient hospitalization, prescribed antipsychotic, discharged home to family, and referred to STEP...