A Revolutionary Approach to Treating Psychosis: Identifying Youth "At Risk"

Barbara C. Walsh, Ph.D.

PRIME Research Clinic - Yale University School of Medicine

THE BASICS

Psychological and emotional difficulties are like other medical problems; early signs and symptoms usually occur before serious illnesses develop. As with other medical illnesses, the sooner psychological problems are identified and treated, the less likely they are to disrupt a person's ability to study, work, make friends and be with others. Early identification and treatment can lead to a better prognosis.

The Genetics of Mental Disorders

- Psychotic disorders are complex and appear to involve multiple susceptibility genes interacting with multiple environmental factors throughout the development of the person. It is believed to be both a neurodevelopmental and neurodegenerative disorder.
- In order to avoid the deterministic viewpoint of mental illness, it is crucial to emphasize the importance of the environment and lifestyle choices and that there is hope for recovery.
- Taking illicit drugs or certain prescription drugs is a preventable risk factor, as is excess stress.

Possible Neurodevelopmental Factors

- Maternal illness
- Maternal life style
- Complications in pregnancy
- Complications in delivery
- Genetic abnormalities

Possible Environmental and Neurodegenerative Factors

- Hormones and puberty
- Neuroplasticity in the brain
- Stress and transitions – either for the patient or their parents
- Substances – illicit or prescribed

Prodromal (At Risk) Phase

- Also known as Clinical High Risk (CHR), Ultra High Risk (UHR), Psychosis Risk Syndrome (PRS), At Risk Mental State (ARMS) or pre-psychotic
- Most vulnerable period are ages 12 – 25
- It can be conceptualized as the earliest form of psychosis
- It can also be conceptualized as a heightened vulnerability to becoming psychotic that does not invariably lead to psychosis
- Prodromal patients are experiencing distress, are help-seeking and are in need of treatment whether they go on to develop a fully psychotic disorder or not.

AT RISK

- Many illnesses have at risk phases
- Diabetes example

- Historically a retrospective concept
  - Retrospective prediction 100% accurate
  - Risk of prospective application is nonspecificity or false positive predictions

What Is Psychosis?

Any Severe Mental Disorder in Which Contact With Reality Is Lost or Distorted

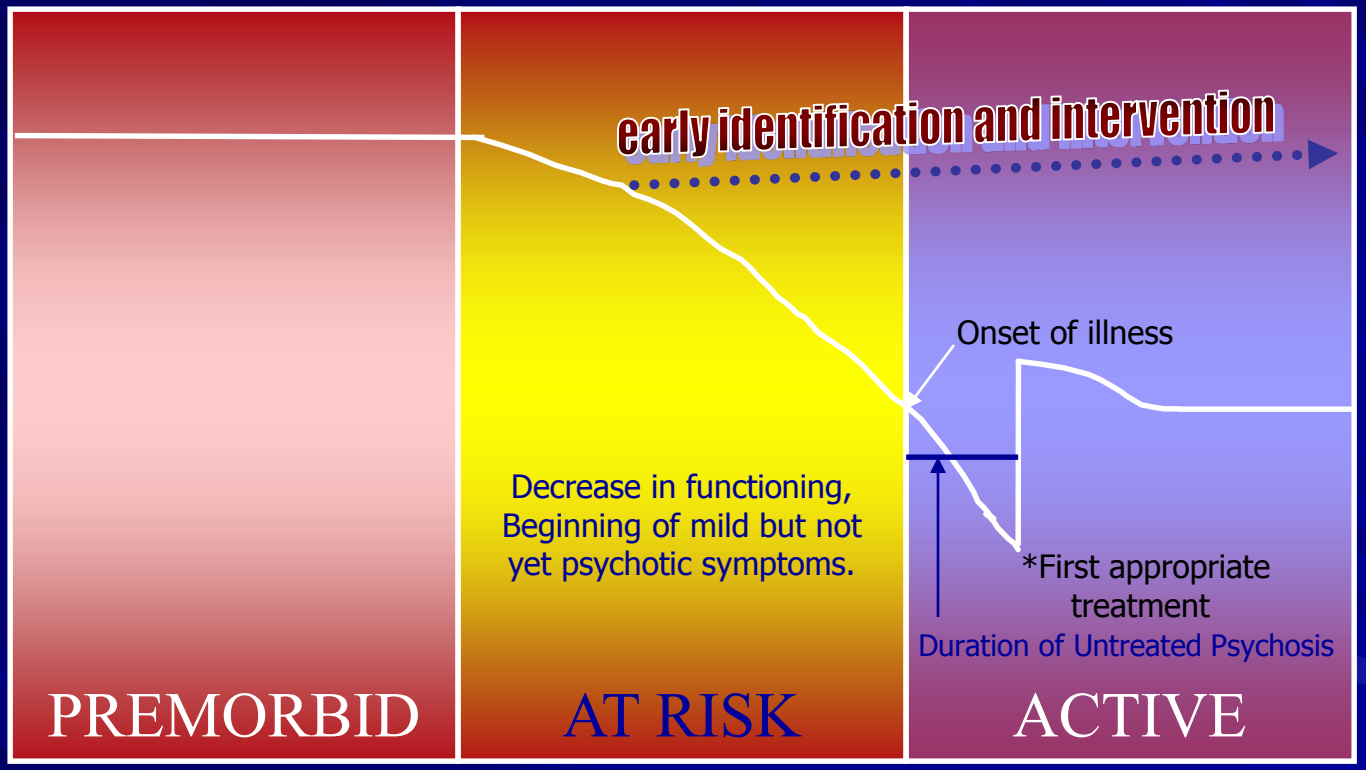
Schizophrenia Is the Most Common Psychosis

- Described by Kraepelin 100 years ago
- Prevalence 1% worldwide
- Median age of onset 19
- Onset by age 25 -- 85%
- Monozygotic twin concordance 50%
- First degree family history 10%

Schizophrenia

Positive Symptoms	Negative Symptoms
Hallucinations	Lack of interest
Delusions	Lack of motivation
Thought Disorder	Lack of pleasure
Bizarre Behavior	Social withdrawal
	Blunted affect
	Lethargy
	Apathy

Phases of Schizophrenia



Phases of a Psychotic Disorder (cont.)

- Prodrome comes from the Greek work “prodromos” meaning the forerunner of an event (Fava & Kellner, 1991);
- Length of prodrome; several months to several years
- Highest risk for conversion (first 1-2 years) and continued risk (up to 10 years) (Nelson, Yuen et al 2013)
- More recent authors have also stressed the importance of early diagnosis and management to reduce or prevent the psychological and social disruption that results from psychosis (Falloon, 1992; Birchwood & Mac Millan, 1993);
- Longer duration of prodromal symptoms may be indicative of poor prognosis (Chapman et al., 1961; Vaillant, 1962, 1964a, 1946b; Fenton & McGlashan, 1987).

Summary of Relevant Research

1) Early Identification and early intervention appear to lead to better prognosis.
   Australian EPPIC Program
2) It is possible to reduce the duration of untreated Psychosis.
   Norwegian TIPS Project
3) It appears to help to identify people "at risk" for serious mental illness.
   British Early Intervention Study
4) It is possible to identify people in a pre-psychotic state.
   PACE, TOPS, and PRIME Data

TIPS LATE-BREAKING FINDINGS

Baseline ED vs UD Differences

- Less suicidality with ED
- Less involuntary hospitalization with ED
- Holds true even 10 years out

Case for Early Intervention

- Despite recent advances in treatment and rehabilitation, most patients follow a chronic course with poor social and occupational functioning
- At onset, already present are:
- Measurable cognitive impairment
- Measurable gray matter volume loss
- Damaging social development losses
- Diminished capacity to actively engage in treatment

How Can We Identify Young People Who May Be At Risk?

- Genetic High Risk

  No relatives: 1 – 3 %

  Sibling: 10%

  One Parent: 13%

  Two Parents: 45%

  Monozygotic twin: 50%
- Clinical High Risk (ultra high risk)

  Sub-threshold psychotic experiences or genetic risk and functional decline

Structured Interview for Prodromal Syndromes (SIPS) (now Psychosis risk Syndrome) (American Journal of Psychiatry, May 2002)

- Semi-structured
- Diagnoses prodromal states
- Diagnoses presence of psychosis
- Translated & validated into 14 different languages

Structured Interview for Psychosis-Risk Syndrome

Valid for persons 12 - 45

Must have a minimum IQ of 70

Differential Diagnosis

- Schizotypal Personality Disorder
- Obsessive Compulsive Disorder
- Depression
- Bipolar Disorder
- Post Traumatic Stress Disorder
- Substance Use
- Psychotic Disorder

Comorbidity in the Prodrome

- In a meta-analysis of CHR patients:
- 73% had a comorbid Axis I disorder
- 41% depression
- 15% anxiety
- (Fusar-Poli et al., 2014).
- 33 – 54 % substance use
- (Addington et al., 2014).

The prodromal patient: Both symptomatic and at risk.

Woods SW, Miller TJ, McGlashan TH
CNS Spectrums 2001;6(3)223-232

- Diagnosable
- Symptomatic
- Cognitively impaired
- Functionally impaired
- Treatment seeking
- At risk

Prodromal Research Findings

- Supports continuing research
- Positive benefit to risk ratio
- Currently, clinical strategies should include frequent, careful follow-along evaluations with psychoeducation and support over the course of the prodrome to its "resolution" either in remission or in the development of a treatable syndrome

(APA Treatment Guidelines for Schizophrenia, 2004)

* *Further data needed to reach medication treatment guideline status.*

Behaviors of Concern

- Withdrawal/Isolation
- Ongoing Social Difficulties
- Poor Hygiene
- Bizarre Behavior/Appearance
- Falling Asleep in Class Repeatedly
- Sadness/Tearfulness
- Excessive Anxiety
- Absenteeism/Staying in Room
- Poor Concentration/ Spacing Out
- Hypervigilance
- Decrease in Work Performance/Activity Level
- Becoming Neglectful and Unfeeling
- Emotional Outbursts/Emotional Flatness

Behaviors of Concern

- Identify recent changes
- Identify more than one behavior of concern
- Identify distress level associated with behavior of concern
- Identify interference with functioning associated with behavior of concern

Early Warning Signs of Psychosis:

Increased difficulty at school or work
Withdrawal from friends or family
Difficulty concentrating or thinking clearly
Suspiciousness or mistrust of others
Changes in the way things look or sound
Odd thinking or behavior
Emotional outbursts or lack of emotion
Poor personal hygiene

Is someone you know at risk?

Some Typical Queries and Responses

- Have you felt that you are not in control of your own ideas or thoughts?
- Do you ever feel that your mind is playing tricks on you? Déjà vu, minding reading?
- Your ears? More sensitive to sounds? Ringing in your ears? Name being called? Cell phone ringing?
- Your eyes? More sensitive to light? Flashes, flames, vague figures or shadows out of the corner of your eyes?
- Do you seem to be having trouble getting your point across? Following multi-step directions?

Changes in the Way Things Look or Sound

- Wind rushing by ears
- Noisy pipes
- Hall to the Cafeteria

Odd Thinking

- School class watching him
- Traffic lights have meaning
- Friends might be only pretending
- Teachers might be against

STRUCTURED INTERVIEW F OR PSYCHOSIS RISK SYNDROMES

Semi-structured

At PRIME 12 – 35 (valid 10 – 45)

Minimum IQ = 70

Phone screen first

No waiting list

Free – no insurance issues or copays

Dr. Barbara Walsh
203-974-7052

Call (TOLL FREE) **1-866-at PRIME**

or **203-785-2100**