

Outreach and Support Intervention Services (OASIS)

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OASIS Mission

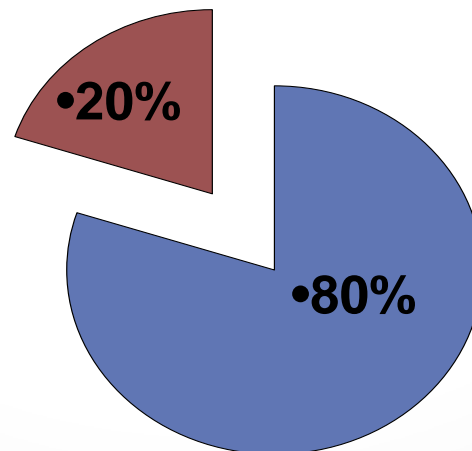
- Foster sustained recovery from early psychosis
- Increase public understanding of psychotic disorders
- Promote early identification of psychosis
- Conduct research to
 - investigate best treatment of early psychosis
 - investigate the etiology of psychosis.

The population we serve

Ages 16 to 36 years

Evaluated and found to be **at risk** for developing psychotic illness

Early years of psychosis
- up to 5 yrs after onset of psychotic symptoms



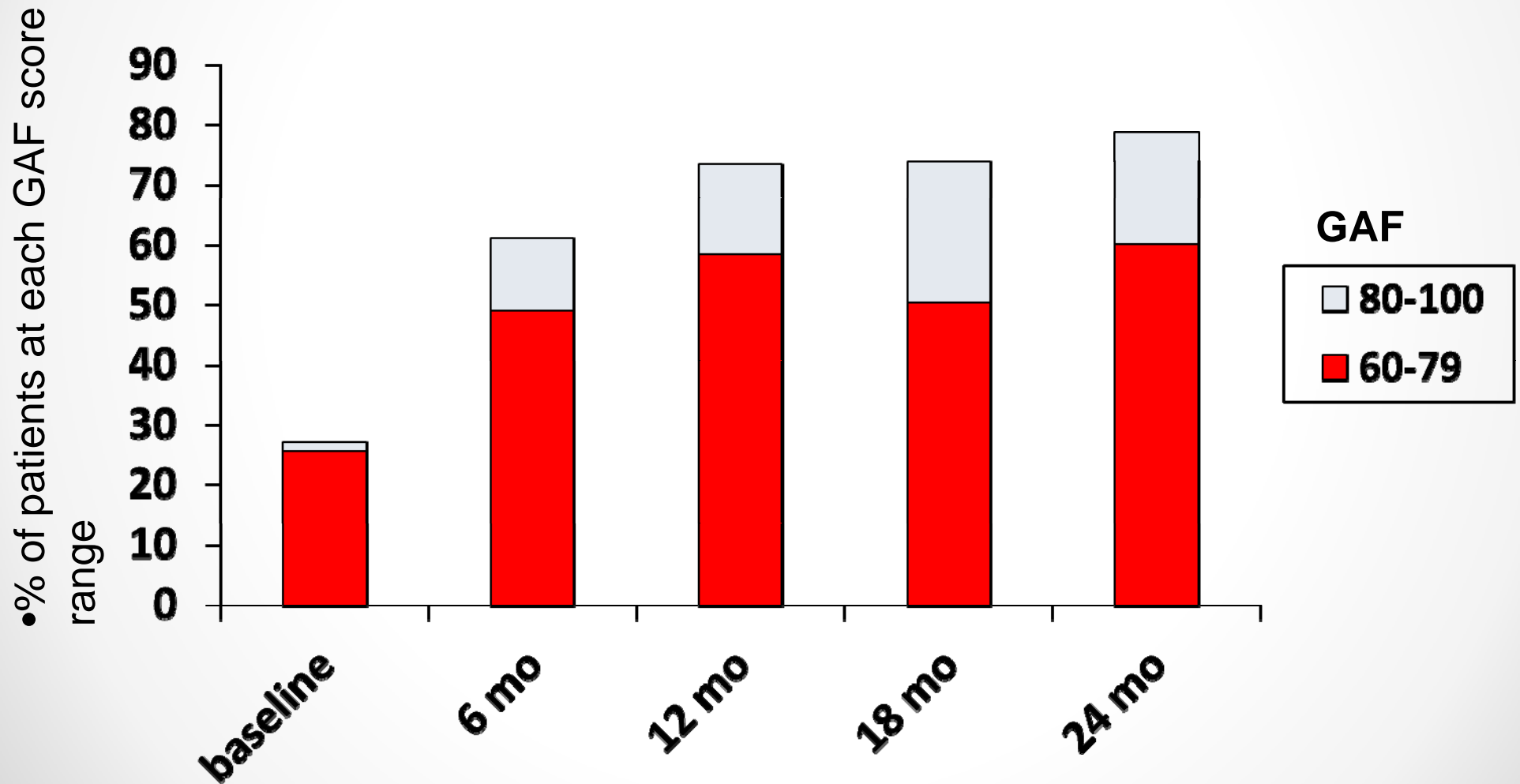
Treatment Philosophy

- **Treatment interventions must be individualized**
 - Stage of illness
 - Stage of person
- **Treatment interventions must be multimodal**
 - Address symptoms
 - Address function
 - Address meaning

Interventions

- Multidisciplinary Team Approach
- Therapeutic interventions (Individual, family, group)
 - Education
 - Process (individual, family)
 - Multifamily
 - Stress management (Meditation)*
 - Positive Living*
 - Social skills training*
 - Dating*
 - Vocation (school, work) readiness
 - Mediation

% of patients with **good** and excellent functioning as measured by the GAF score



Treatment Philosophy

- **“Psychosis” and Schizophrenia-spectrum disorders are heterogeneous**
 - Symptom characteristics
 - Etiology
 - Course
- **People who develop “psychosis” and schizophrenia-spectrum disorders are heterogeneous**
 - Experience (especially with the illness)
 - Personality
 - Culture
 - Resources

Treatment Philosophy

- **At the early stages of a psychotic illness prognosis:**
 - is variable generally and uncertain for the individual patient
 - may be influenced by treatment
- **The goals of treatment are:**
 - symptom remission
 - social and vocational functional recovery
 - development of an illness management strategy that maintains recovery lifelong

Variable Symptom Characteristics

- Positive Symptoms (Psychosis)
- Negative Symptoms
 - Secondary to dopamine blocking antipsychotics, depression, demoralization, psychosis
 - Primary to the disorder
- Disorganization
- Social Cognition
- Neurocognition
- Mood

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Etiology: Environmental Risk

- 1.9 times more common in urban than rural areas
- 2.7 times more common in first generation immigrants, 5 time higher in their offspring
- The farther away from the equator you live, the greater your risk
- Winter and spring birth increase risk by about 20%

Etiology: Perinatal Events

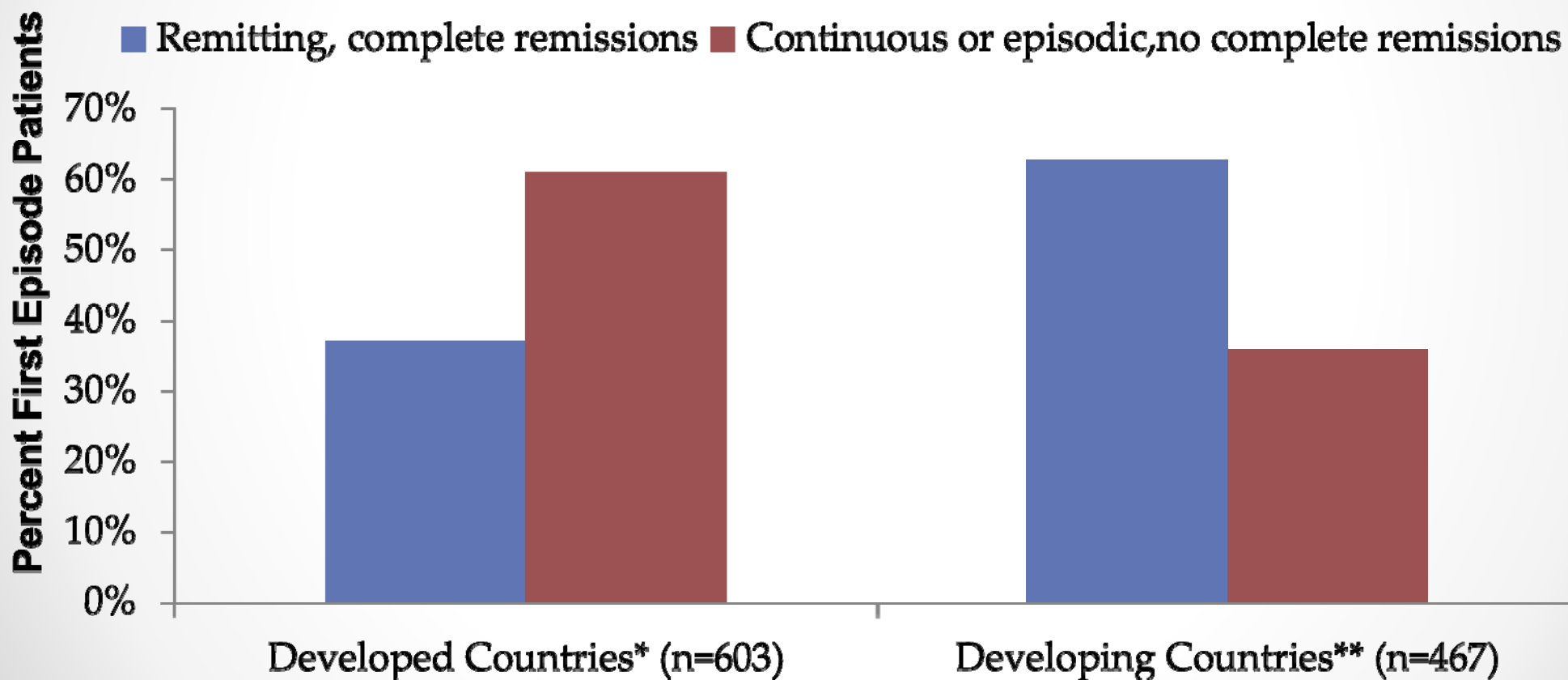
- 2-5 times more common with *in utero* exposure
- 2 times more common in persons who experienced hypoxia around the time of birth
- 1.5 times more common with *in utero* exposure to maternal stressors
- 2 times more common with *in utero* exposure to starvation
 - 2 times more common with maternal elevation of homocysteine (folic acid deficiency)
 - 4 times more common with 2nd or 3rd trimester *in utero* exposure to low maternal hemoglobin (iron deficiency)
- 2 times more common with Rh incompatibility

Genetic Risk

- Schizophrenia risk increases ~10-fold if your sibling or parent develops schizophrenia
- 70% of persons have no close relative with schizophrenia
- There are multiple common genetic variants that increase schizophrenia risk by ~10%.
- There are rare genetic variants that increase risk by ~30-50%
- Unexpected genes and pathways discovered
 - Immune system (MHC region on chromosome 6)

Highly Heterogeneous Prognosis

Symptomatic and Functional Prognosis at Two Years After a First Episode Schizophrenia



*Czech Republic, Denmark, Ireland, Japan, Russia, UK, USA

**Columbia, India, Nigeria

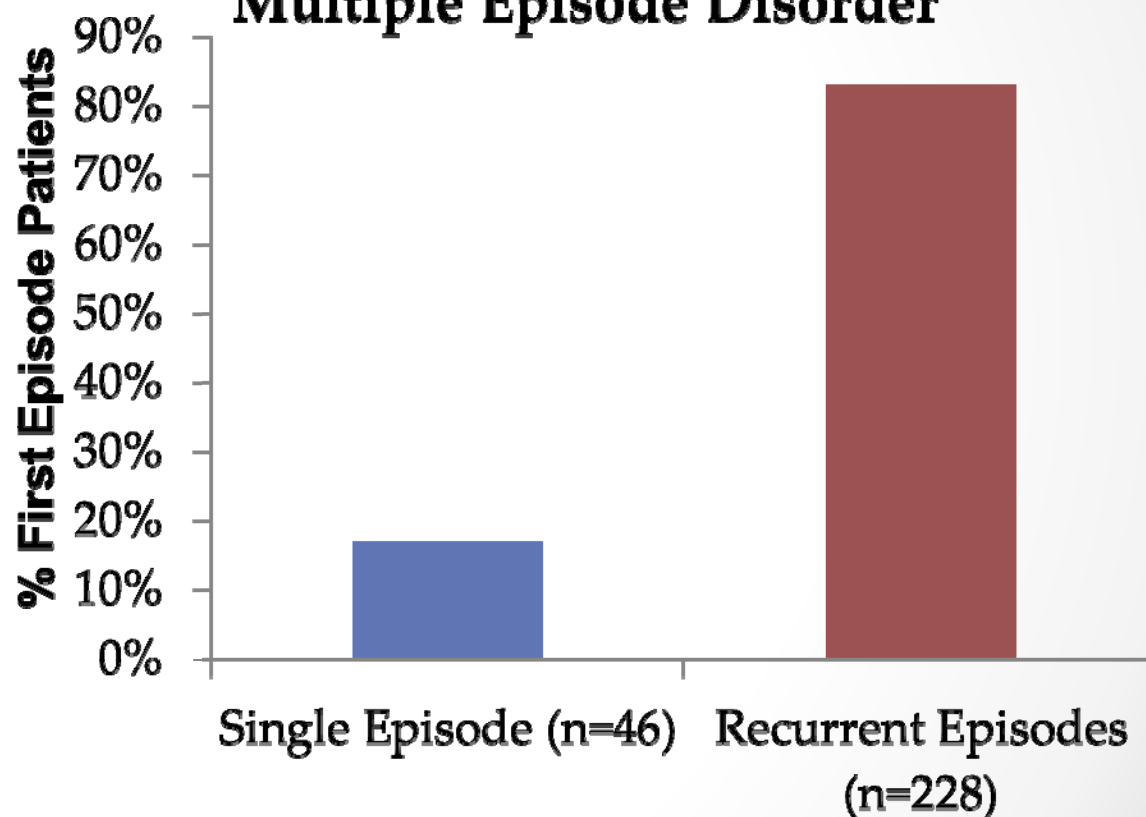
Jablensky 2000

Highly Heterogeneous Prognosis

Predictors

- Received antipsychotics medication within 3 months of onset (83% vs.56%)
- Affective psychosis (48% vs. 20%)
- Acute onset (72% vs. 49%)
- More rapid treatment response (24 days vs. 54 days)
- Both parents alive (96% vs. 83%)

At 7 Year Follow-up: Single vs. Multiple Episode Disorder

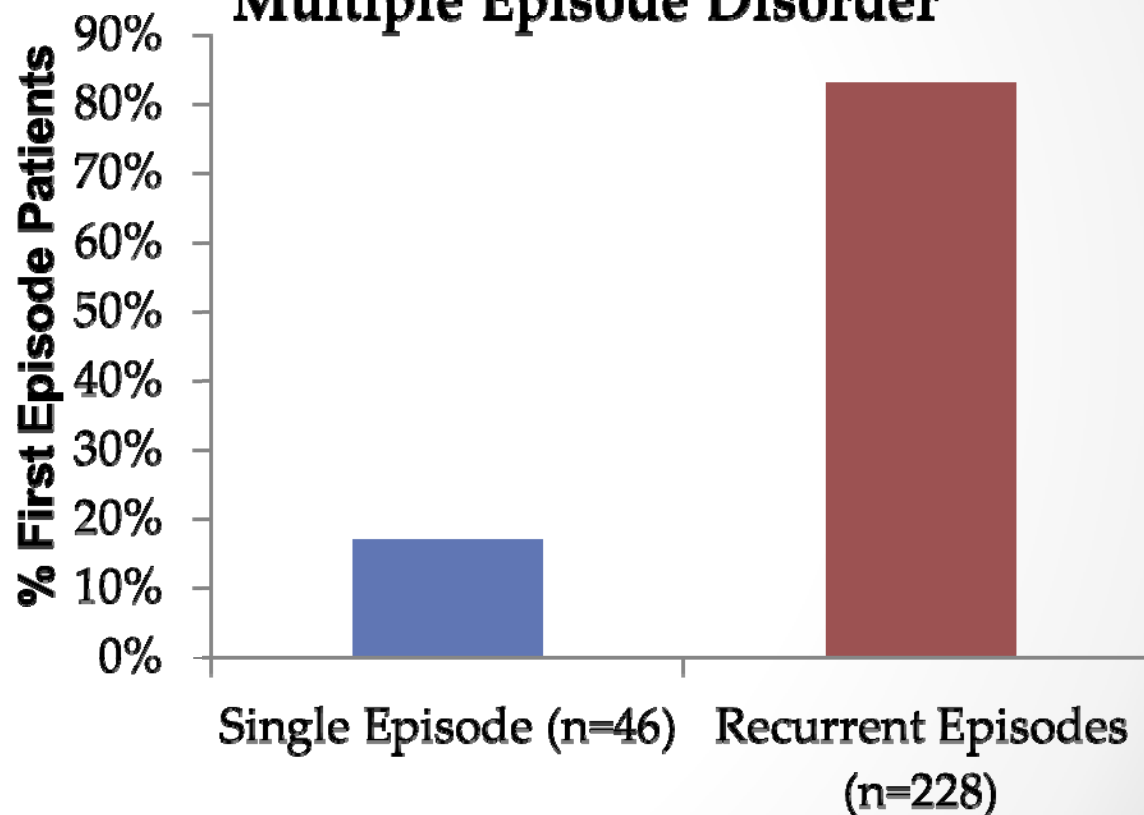


Highly Heterogeneous Prognosis

Not Predictors

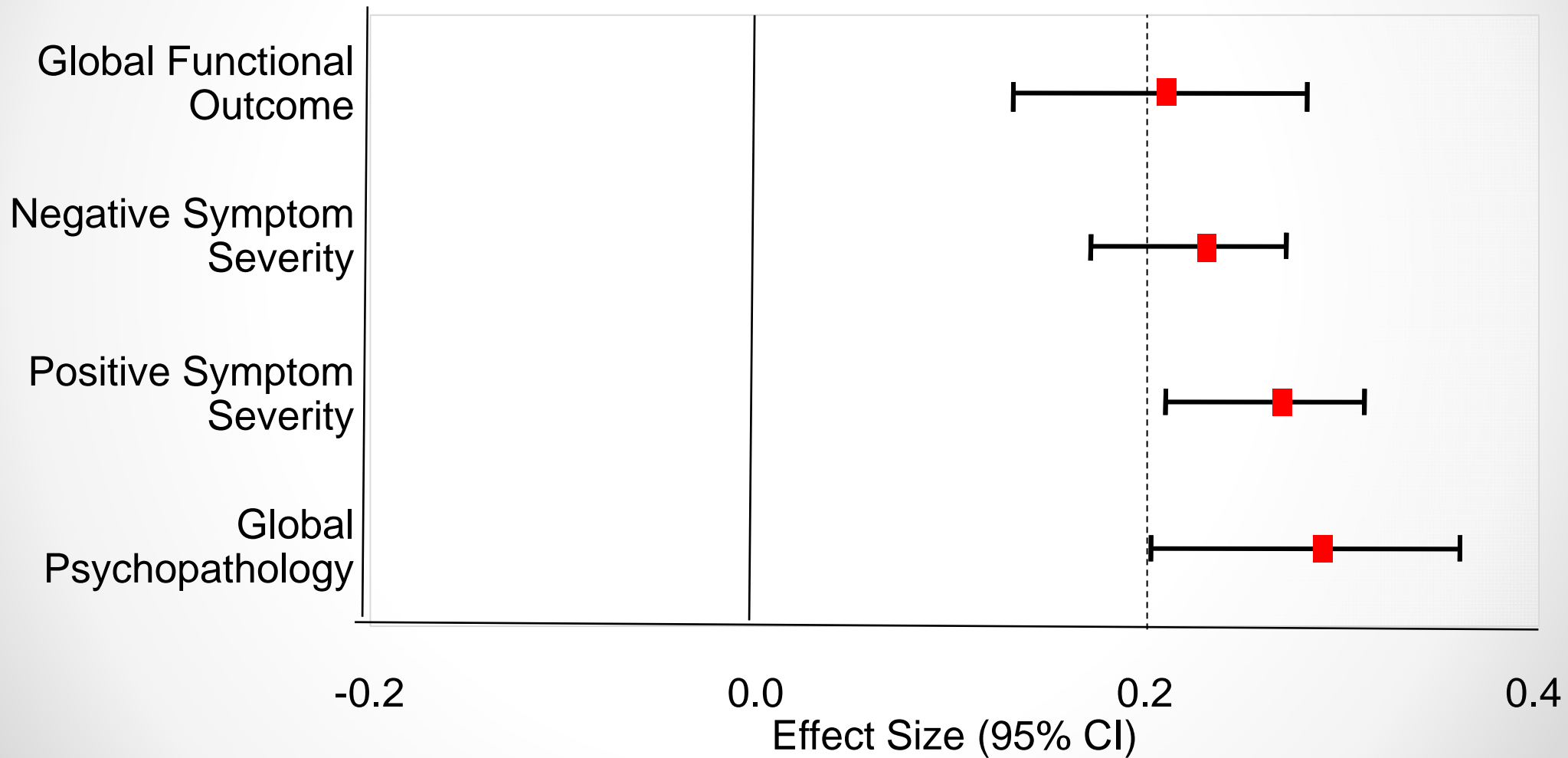
- Symptom severity
- Family history
- Age of onset
- Sex
- Preceded by stressor
- Drug use
- Maintenance antipsychotic (only 10% of single episode took antipsychotics after their initial recovery)

At 7 Year Follow-up: Single vs. Multiple Episode Disorder



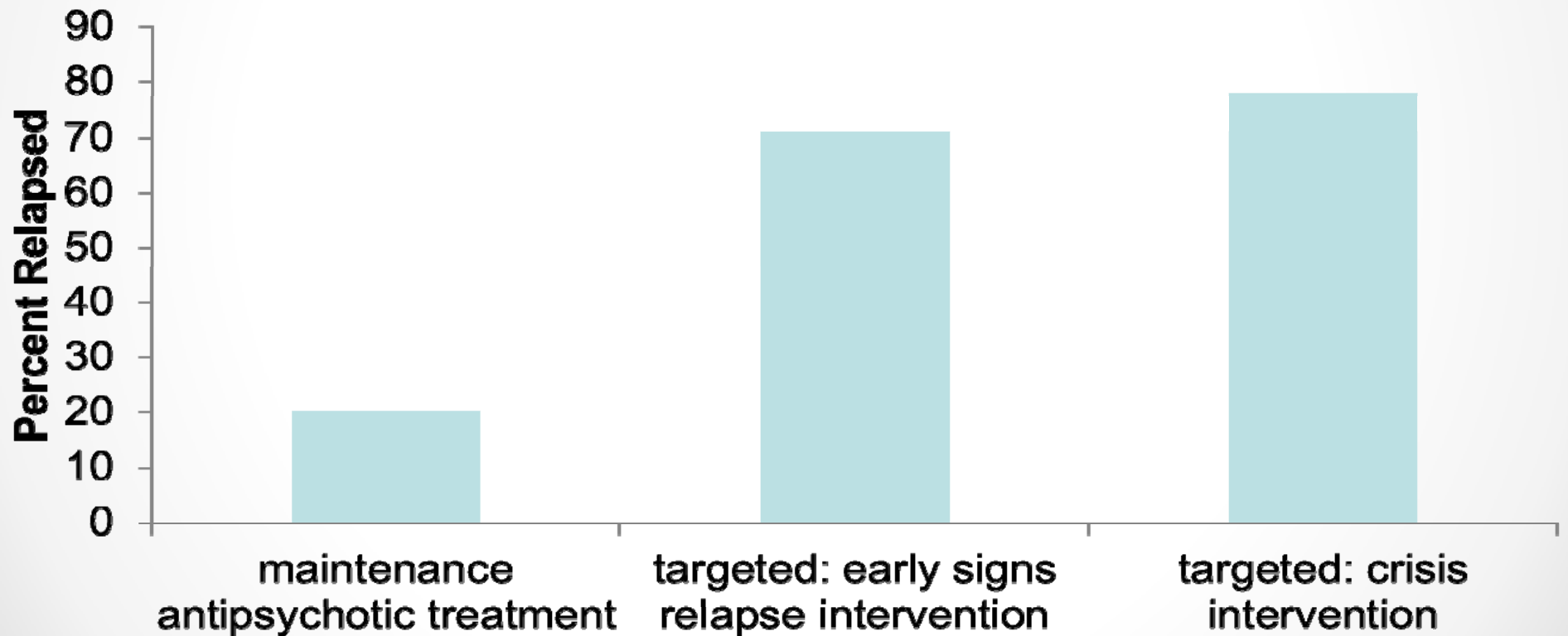
The Relationship Between Duration and Severity of Untreated Psychosis and Treatment Response

Meta-analysis of 43 publications



Relapse Risk in Continuous versus Targeted Maintenance Antipsychotic Treatment

Proportion of Schizophrenia Patients with Relapse During Two Year Follow-up



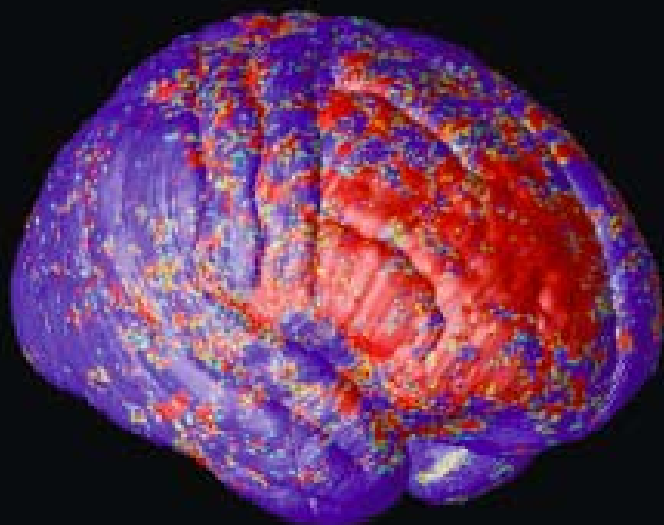
Costs of Psychosis

- Psychosis interferes with normal psychosocial development
- Psychosis interferes with educational and vocational achievements
- Risk of harm to self, others, or property higher during active psychosis
- Risk of involuntary hospitalization increases
- Prognosis may be negatively impacted

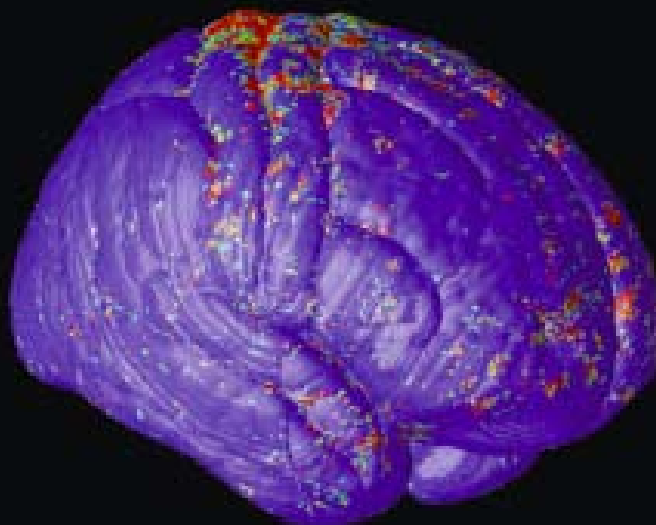
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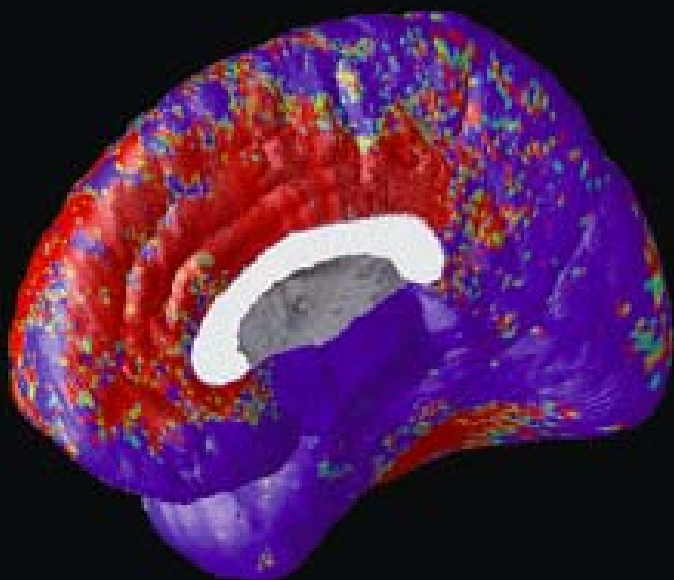


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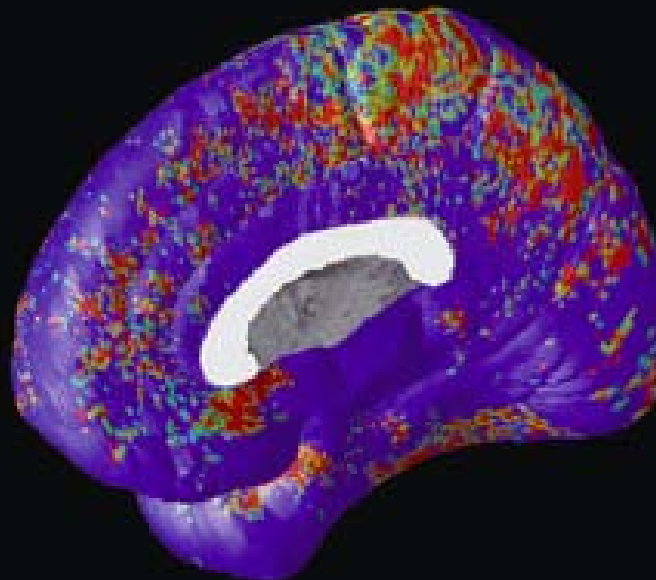
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Significance

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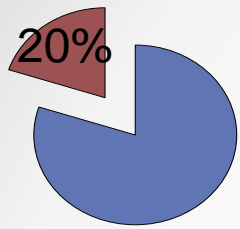


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Significance

The Schizophrenia “Prodrome”



- ~90% of patients with schizophrenia experienced a “prodromal stage”
- ~35% of persons who experience prodromal symptoms will develop a psychotic disorder
- Characteristic symptoms: at least one of the following in attenuated form with intact reality testing, but of sufficient severity and/or frequency so as to be beyond normal variation:
 - (i) delusions
 - (ii) hallucinations
 - (iii) disorganized speech

Thought Content

Attenuated delusion

A 15 year old high school student starts to sit in the back of the class because if she sits in the front she has an uncomfortable feeling that other students are whispering about and laughing at her. She knows this is "silly", but feels better in the back.

Delusion

A 15 year old high school student believes that other people are talking about her and making fun of her wherever she goes. She is sure this is happening, and she is isolating herself at home because she is uncomfortable in public.

Perception

Attenuated hallucination

About 2 or 3 times a week a 22 year old cashier sees shadows, movements, and sometimes formed figures (like an animal) out of the corner of his eye, but when he turns to look nothing is there. He has started hearing beeping sounds that can last for minutes, and last week he heard a momentary (a second or two), faint, unintelligible voice. He is not sure, but thinks it is most likely his mind playing tricks on him.

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Hallucination

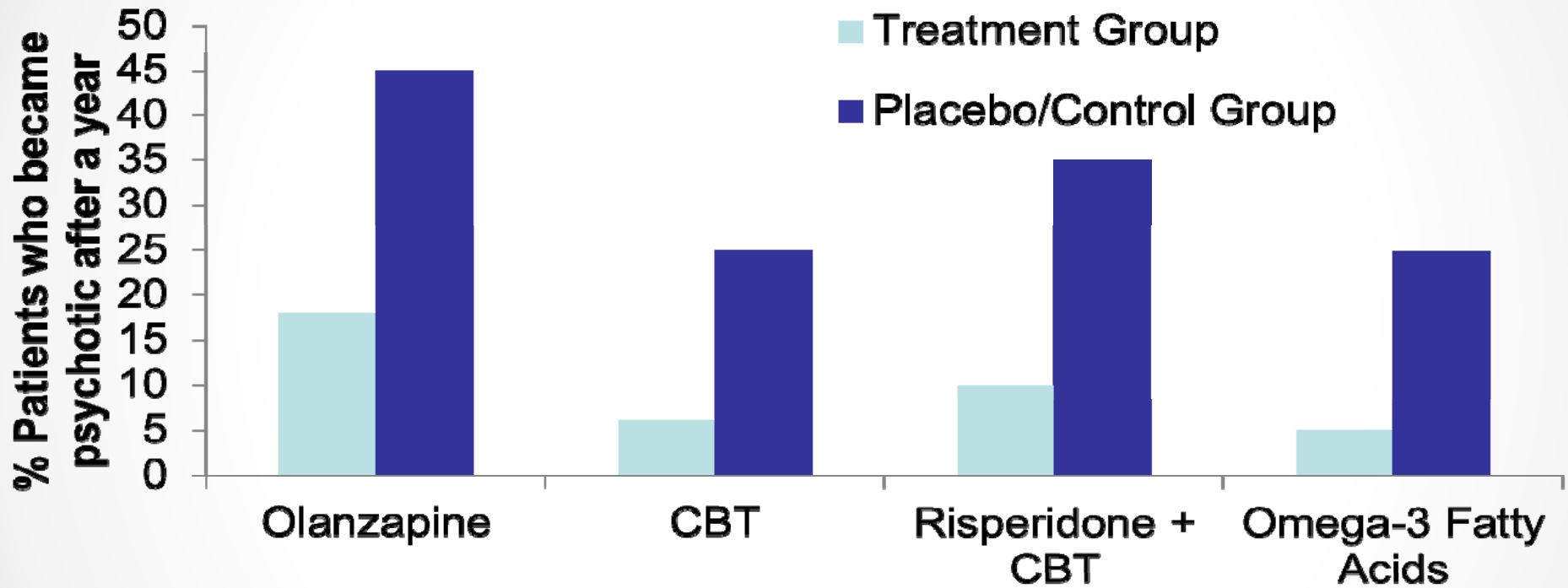
On an almost daily basis a 22 year old cashier sees a fully formed figures that he calls a "shadows". The shadows remains for minutes to hours. He hears the "shadows" speak to each other about him, and sometimes criticize him or tell him to do something silly, like "pat the cat". He believes these shadows are real and he is very frightened of them.

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“Prodromal” Stage Interventions Studies with Randomized Clinical Trials

- Antipsychotic medication
- Cognitive behavioral therapy
- Omega-3 fatty acids

Similar Benefits



Different Risks

- **Antipsychotics**
 - Weight gain/metabolic effects
 - Sedation
 - Unknown risks for 65% of patients who were not really prodromal for psychosis
- **CBT**
 - Time intensive
- **Omega 3 fatty acids**
 - Fishy burp

Clinical Summary

- **First Episode:**

- Early intervention with antipsychotics improve likelihood of sustained recovery
- Low doses of antipsychotics may be very effective to prevent relapse
- A sub-group of good prognosis patients (~15-20%) may not need maintenance antipsychotics, but there are no clinical features that can reliably identify these patients.
- Alternative treatments may increase proportion of patients who do well without maintenance antipsychotic treatment
 - Stress management, inflammation (meditation, yoga, aspiring, etc.)
 - Persons at elevated risk for psychosis, and persons with psychosis have altered cardiovascular, endocrine, and immune indices of stress

Clinical Summary

- **“Subclinical” (Prodromal) Symptoms:**
 - Emerging evidence base
 - Psychotherapy
 - Omega-3 Fatty acids
 - Alternative interventions (need evidence base)
 - Stress management, inflammation (meditation, yoga, aspiring, etc.)
 - Persons at elevated risk for psychosis, and persons with psychosis have altered cardiovascular, endocrine, and immune indices of stress
 - Antipsychotic risk outweigh benefits