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Early Psychosis: A Novel Gateway for Suicide Prevention

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Early Psychosis: A Novel Gateway For Suicide Prevention

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Declaration

No stocks or bonds

- Janssen Group
- Eli Lilly
- Astra Zeneca
- Nicholas Piramal-Rosch
- Pfizer
- Sun Pharma- India
- Consultant
- Advisor
- Drug trial coordinator
- Research Investigator
- Reviewer
- Speaker
- Educational Groups

WHO: Challenges and obstacles

- Lack of awareness
- Taboo in societies
- Reliability, Reporting
- Intervention from outside the health sector.
- Innovative, comprehensive multi-sectoral approach,
- Health and non-health sectors,
- e.g. education, labour, police,
- Justice, religion, law,
- Politics, the media.

Suicide

every 40 seconds...



**somebody dies
from suicide**

The time to act is now

Provide support and restrict access to pesticides and other suicide means

Young people: not as healthy as they seem

Suicide is the second largest cause of mortality in the 10-24 age group.



Contemporary Issues

- Is there a correlation of early psychosis and suicide?
- Does early intervention of psychosis prevent suicide as well?
- Whether treatments for psychosis also work for suicide?
- What is the public health implication of EI with respect to suicide prevention?

**Injuries both intentional & non intentional,
by 2020 could rival infectious disease as a source for all ill health.**

1. Is there a correlation of early psychosis and suicide?

A decorative graphic consisting of several horizontal lines of varying lengths and colors (teal, light blue, white) extending across the bottom of the slide.

Case

- 16+ female , brought by her dad and step mother for counseling.
- Her mother had discussed 3 years about 'suicidal ideation' and odd words on the eve of her X std. exam. She was advised to bring her for assessment after the exams.
- The clients mother is on treatment for schizophrenia for 15 years.
- "When i saw the girl now she was very depressed, dejected and

- i called the parents and told them that it could be schizophrenia or major depression needing medication.
- The father got very angry with me. He told, "Doctor, I brought her for counselling to you. She was seen roaming with a boy cutting classes. When i questioned, she insisted on going to hostel. Later in the night, she has slashed her forearm. Don't make her mad. Don't even tell her about medications”
- our psychologist was to call her and convince her for assessment with a promise that she has no licence for drugging (medications) .
- The psychologist went for a conference and called the girl only after 14 days.
- The girl's mobile was not reachable. So she called her father who cried telling that the girl hung herself to death. He felt guilty that he did not listen to the Dr.

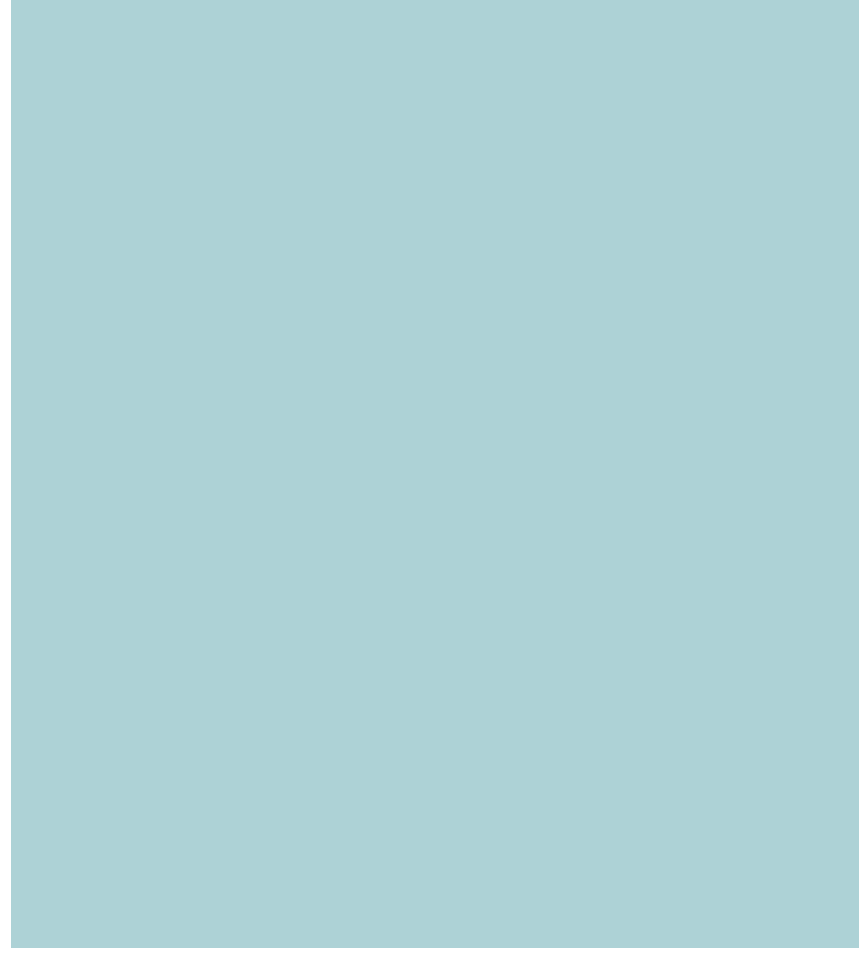
Preventive psychiatry

Need for early Intervention across diagnosis

- **EI opens up a window of opportunities:**
- **Non-affective psychosis cluster**
- **Psychosis of schizophrenia spectrum disorder**
- **Conversion to classical schizophrenia**
- **Several conditions present as early psychosis enhancing opportunity to treat**

Why do people kill themselves?

At best we can say, we do not know?



Known causes of suicide

Risk and causation of psychosis

90% have psychiatric illness (WHO)

Suicide

Mental disorders : 71.9%
depression (38.9%),
psychoactive
substances (21.9%),
PTSD (20.8%),
alcohol abuse (17.7%),
Schizophrenia (15.6%)

Mental Illness

Current MDD (27%),
Schizophrenia SD (22%),
SUD (16%).
CMD 24%

Psychosis

- Mortality in schizophrenia X 2 to 3 times
- lifetime risk of about 5%
- 10%–15% of individuals die by suicide, completed suicide (4% to 13%),
- 20%–40% making suicide attempts,

then
I'd rather be





- Suicidal behavior may result from discomfort with psychotic symptoms
- Previous attempts - significant predictors
- Greatest risk: younger and earlier in their course

Having symptoms of psychosis does NOT mean having schizophrenia, it opens the window for intervention across a number of disorders!

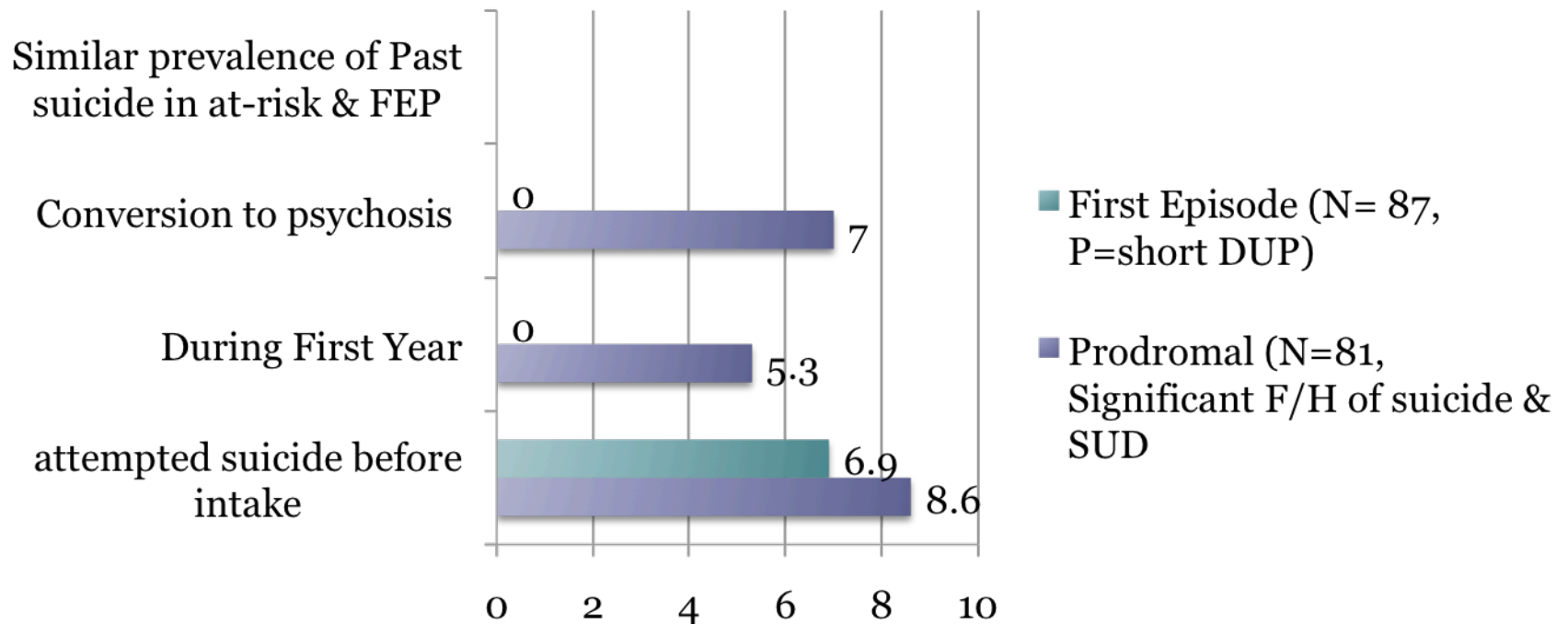
Severe mood changes

- **Persistence of symptoms**
Untreated psychosis

- breakdown in relationships,
- loss of family and social support,
- loss of employment or study interruption,
- denial of disease,
- depression,
- suicide, substance abuse and
- violence.

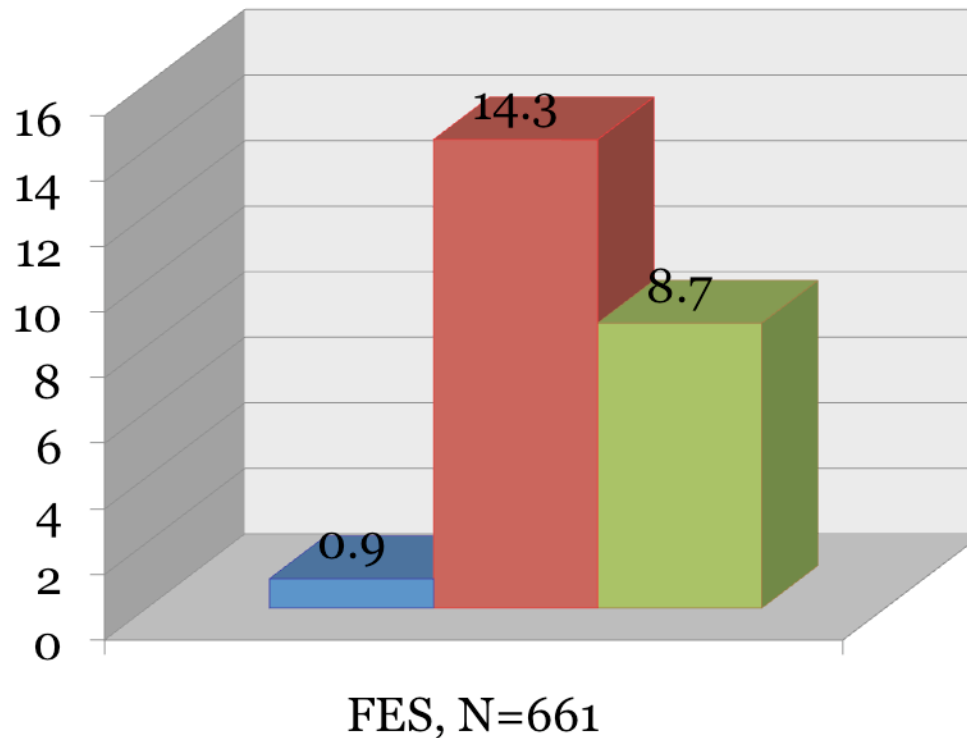


Risk of suicide and suicidal ideation in psychosis & At-Risk clients: Italian study



Suicide in First episode

- Died (06)
- Attempted prior to entry (93)
- Attempted during treatment (57)



Robinson J Prevalence and predictors of suicide attempt in an incidence cohort of 661 young people with first-episode psychosis. , Aust N Z J Psychiatry. 2009 Feb;43(2):149-57

Rates of suicide in early psychosis

	Prior to contact	During	Death
Aust N Z J Psychiatry. 2009	14.3%	8.7%	0.4%
Acta Psychiatr.Scand. 2004 Feb;109(2):116-120	15%	2.9	
Harvey SB, Br J Psychiatry. 2008	11.3%		
Bertelsen M, Br J Psychiatry Suppl. 2007			67/547 in 5 years
Can J Psychiatry. 2006	18.8%		

Acta Psychiatr.Scand. 2004 Feb;109(2):116-120

Can J Psychiatry. 2006 Jan;51(1):42-7.

Suicidal behavior :Event precipitating the first treatment contact (9, 13)

- Striking difference in suicide rates between first-episode and chronic schizophrenia patient groups,
- First admissions have rates three times higher (1).
- 15%–26% - at least one attempt by first treatment contact
- 2%–11% - one more during their first year of treatment (7–9).
- Seriousness of suicide attempts is high for patients with schizophrenia spectrum psychoses (3, 10).
-

What predicts suicidal behaviour in early psychosis?

- Lifetime history of parasuicide before first admission
- Lower Positive And Negative Symptom Scale- positive subscores
- Longer duration of first admission
- Longer duration of psychotic symptoms
- Greater risk of being readmitted
- Substance misuse
- Prior attempts or ideation,
- Severity of depressive symptoms and thought disorder,
- Lifetime substance abuse,
- Younger age.
- **Early insight predicts**

Acta Psychiatr Scand. 2001 May;103(5):347-54.

Acta Psychiatr Scand. 2005 Dec;112(6):449-55

Challenges in clinical Practice of Suicide Behavior.

Risk estimates

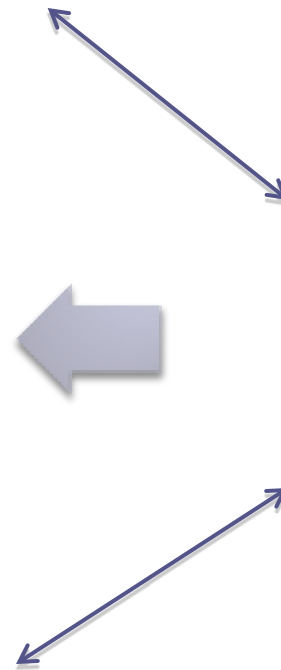
- Risk
 - Risk periods:
 - In-patient , Post-discharge
 - Risk candidates:
 - Borderline comorbidity,
 - Schizophrenia,
- Previous attempts
 - Risk situations:
 - Loss,
 - Disaster,
 - Recent trauma,
 - abuse

Risk factors for suicide in young people a long-term follow-up study, A case-control study

No Axis I or axis II diagnosis is free from risk of suicide.
Psychiatric morbidity remains the major risk factor for suicide

- Risk factors for suicide
- Male gender,
- Chronic illness with frequent relapses
- Frequent short hospitalization,
- Negative attitude towards treatment,
- Impulsive behavior
- Parasuicide
- high pre-morbid IQ,
- psychosis
- depression

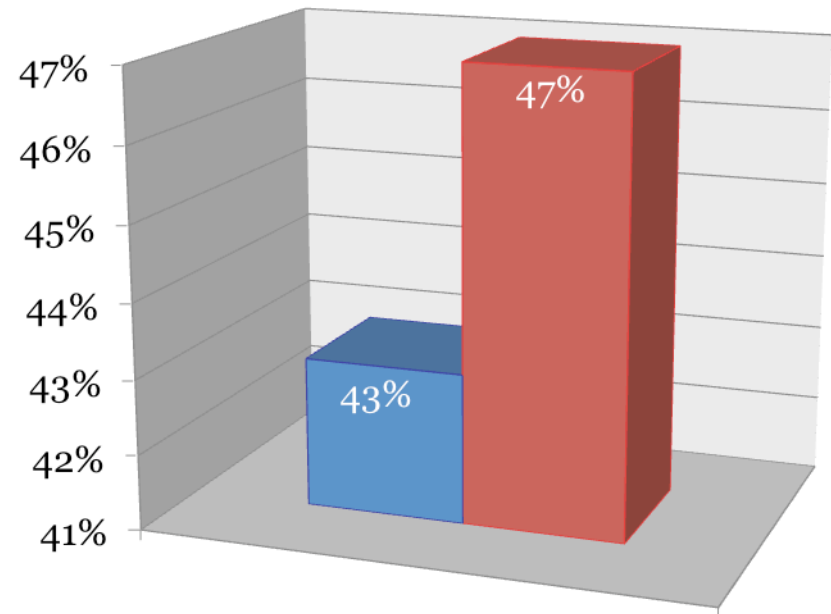
A schematic depiction of the putative key relationships between information processing biases, schema and appraisal system



High suicide in recently discharged patients

- The first week
- First day after discharge
- Risk factors :
 - history of self-harm,
 - Expressing clinical symptoms at last contact
- Suicide cases
 - 1) More likely to have initiated their own discharge
 - 2) Missed last appointment
- Less likely to die by suicide
 - compulsory treatment
 - Enhanced levels of aftercare,

■ Died within one month ■ Died before FIRST F/U



N=238, death y suicide within 3 months of discharge



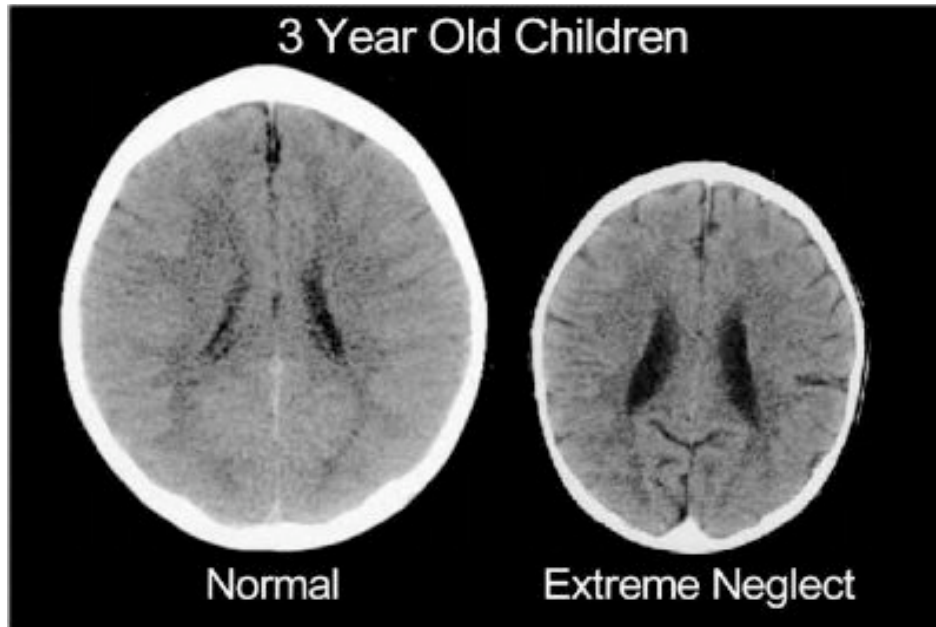
What does Early intervention mean?

Early intervention Programs

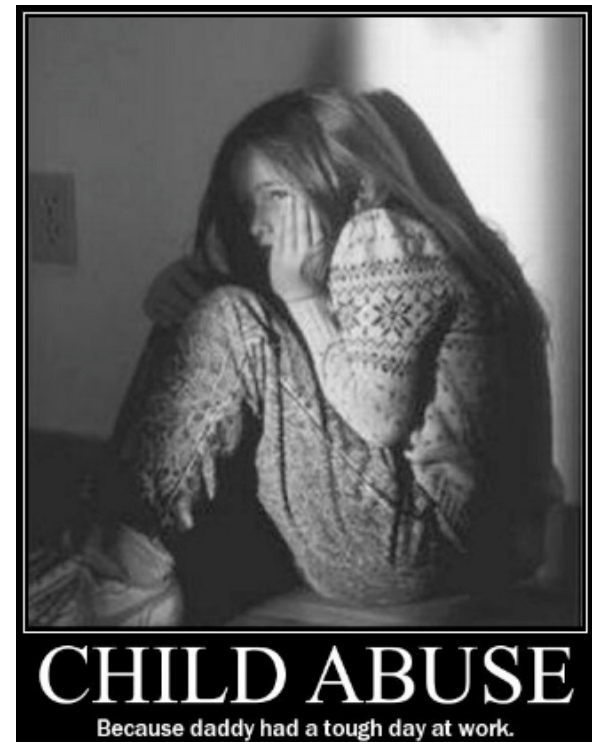
Outside the
Programs,
advantage is
lost?

Risk for Schizophrenia

Childhood Experience & the Expression of Genetic Potential: What Childhood Neglect Tells Us About Nature and Nurture? ^{1, 2}



Neuronal development & Child abuse



1. Chen TJ, *Med Hypotheses*. 2006;66(5):1043-4.
2. Anda RF, *Eur Arch Psychiatry Clin Neurosci*. 2006 Apr;256(3):174-86. 2005



Psychosis

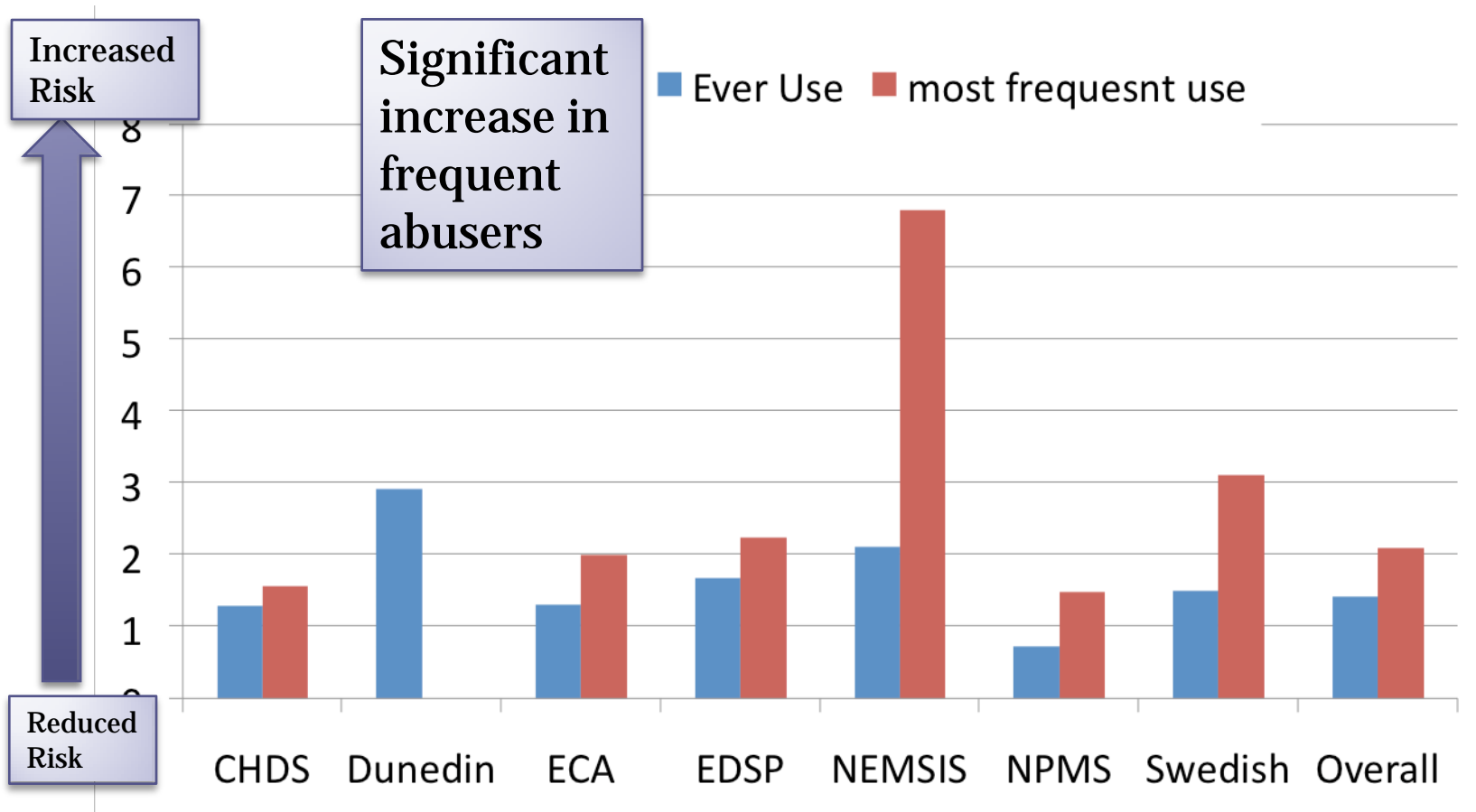
Cannabis

Suicide

Acta Psychiatr Scand. 1999 Nov;100(5):389-95
J.Psychiatr.Res. 2008 Aug;42(10):822-826

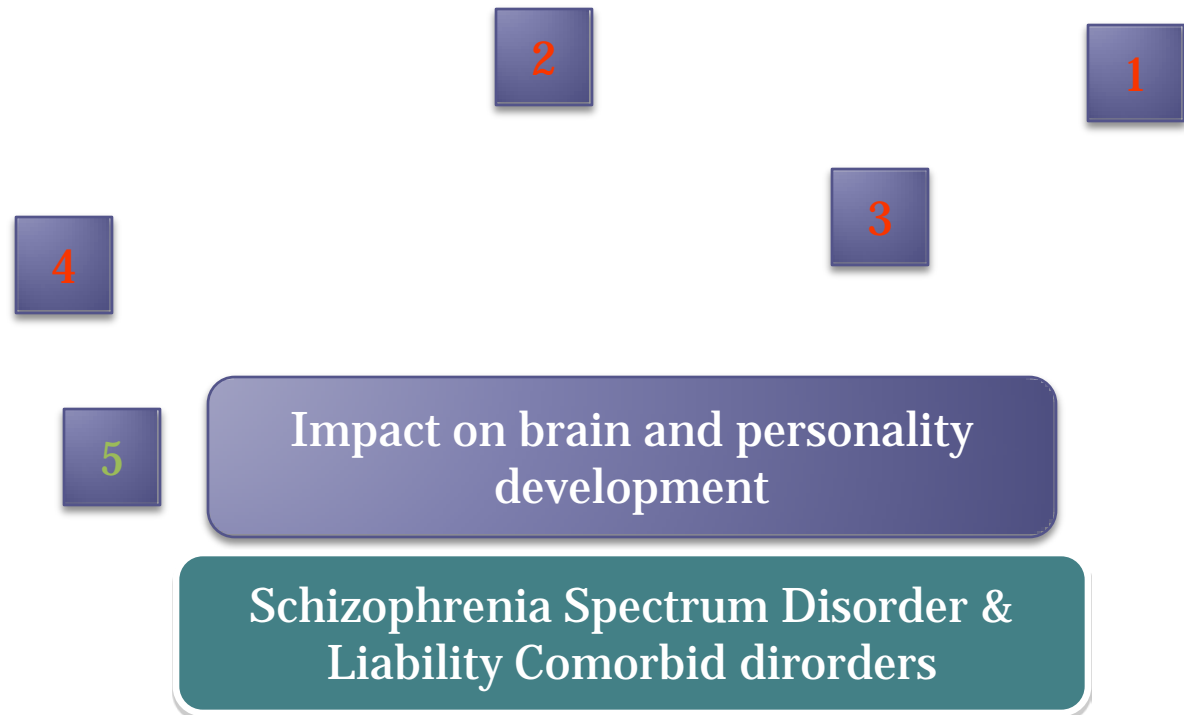
Risk of Psychosis & Cannabis

Adjusted odds ratio for any psychosis outcome according to ever use verses 'Frequent use' of Cannabis in individual studies at 95% CI



Theresa et al , Lancet, 2007

A risk-vulnerability model for prevention of schizophrenia: Possibilities of preventive sites in process of 'causation'



Risk syndrome of Psychosis with suicide risk – an indication for APD

Opening up windows of opportunities for identification & treatment'

- To decide Need for medication
- Medication trial = Medication free challenge
- Ongoing functional decline
- Suicide
- Homicide or risk

Preventive Family intervention; Expressed Emotion (EE)

- Predictive of psychotic relapse (Bebbington & Kuipers,1994)
- 'Not an artifact of patient morbidity' (Leff and Vaughn,1995)
- 'Family intervention is recommended to reduce relapse risk' (NICE, 2003)



The First Episode Can Be the Best Episode!

2. Does early intervention of psychosis prevent suicide as well?

Early detection of the first episode of schizophrenia and suicidal behavior. Melle Study

1. Suicidal behavior is present in the early phases of psychotic disorders
2. Precedes the first treatment contact.
3. The rate of severe suicidality (plans or attempts) was significantly higher in subjects from communities without the early detection program,
4. May reduce suicidality risk at first treatment contact.
5. Beyond the decrease in duration of untreated psychosis.

The power of clinical contact in life-and-death situations

	Community with EI	Community without EI
Rates of suicidal ideation & attempt	56%	39%
Previous attempt	16%	5%
Decrease in Rates after first clinical contact	Similar	Similar
SUD	High	Low
Suicidal behaviors	Low	High

- early detection and intervention have the potential of reducing one of the most dangerous and permanent complications of schizophrenia.



Earlier Intervention Improves the Chances of Recovery!



3. Whether treatments for psychosis also work for suicide?

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El: The role of the Case Manager:



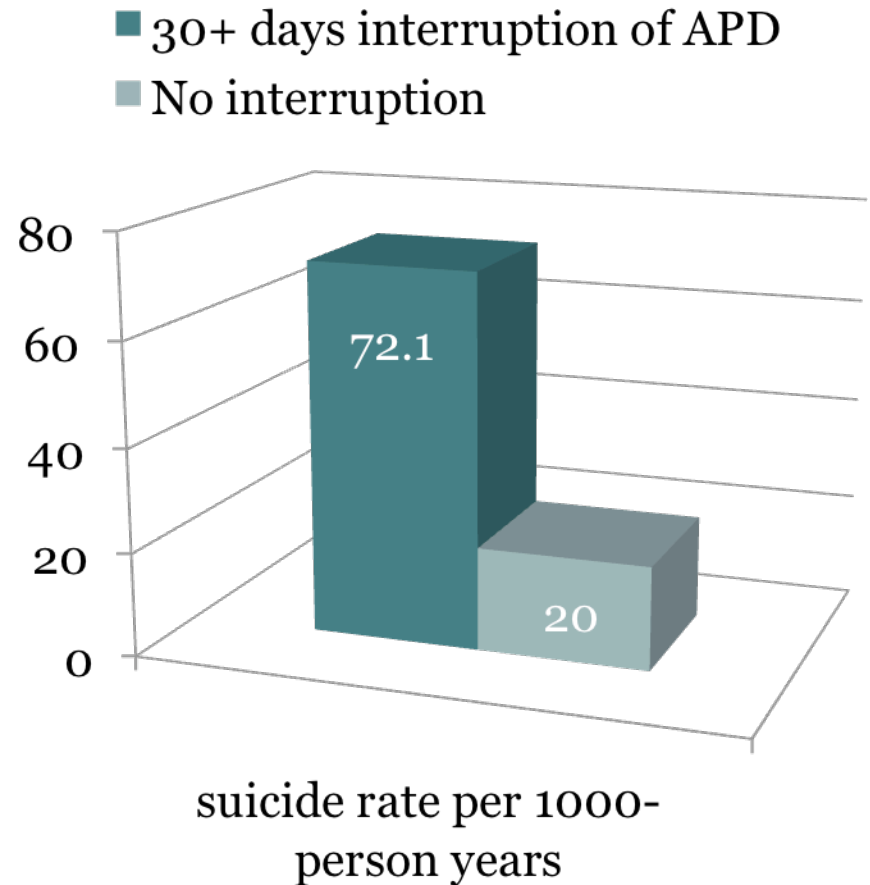
[Click to zoom out.](#)

Do Antipsychotic Drugs Influence Suicidal Behavior in Schizophrenia?

- **First Hypothesis: Negative Influence**
 - Depressive Symptoms Related to Extrapyrarnidal Side Effects
EPS, depressogenic effect
- **Second Hypothesis: Positive Influence**
 - Specific effect on suicide, e.g. Clozapine, but can it be applied to suicide across diagnosis, NOT clear
- **Third Hypothesis: No Influence**
 - Lindenmayer et al. suggest that suicidality may represent a separate symptom domain that is related to, but independent of, depression or psychosis

Increase in suicide Attempt rate when Atypical Antipsychotic Therapy is Interrupted.

- Drug dispensing and Hospital discharge databases in The Netherlands (N=865 K)
- Patients with schizophrenia (n=603) interruption of 30+ days in Tx (n=204)
- Relative risk increased by 4.2 times (95%CI: 1.7-10.1)



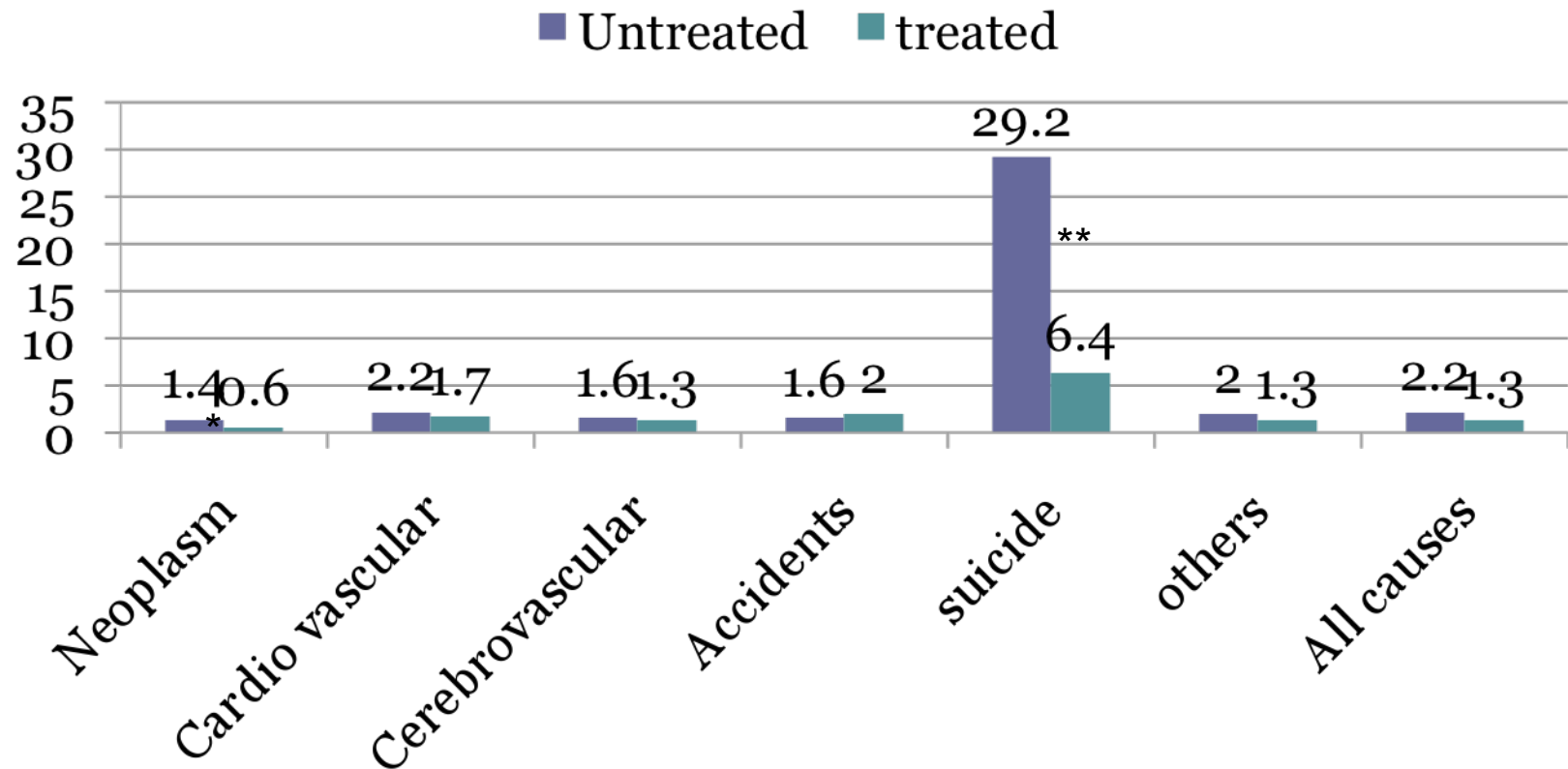
Medication Compliance



- The Quebec data -- significant association between
- good versus poor compliance and a
- decreased risk of death and
- suicide

Treatment effects for Suicide

- Increased overall suicide mortality in bipolar disorder
- Zurich Cohort, n=406, 1959-1997



Adopted from Angst et al 2002

Treatment of suicidality in schizophrenia.

Meltzer HY.2001

- Insight
- less severe cognitive impairment
- feelings of hopelessness.
- Typical neuroleptic drugs: No evidence.
- evidence suggest that clozapine, reduces
 - the suicide attempt
 - completion rates in schizophrenia and schizoaffective disorder,
 - perhaps by as much as 75-85%.
- Other atypical antipsychotic drugs may have a similar effect, but direct evidence is lacking.

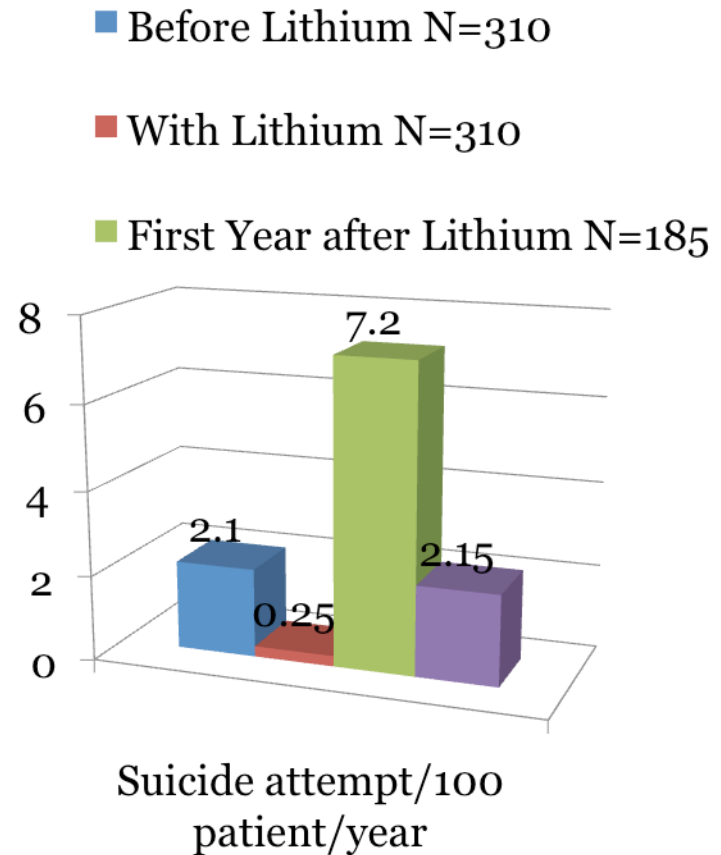
Clozapine has been approved by
US FDA for suicide in schizophrenia
Feb,2003

- **Improvement in positive and negative symptoms,**
- **Reduced (EPS),**
- **Direct antidepressant action,**
- **Improved cognitive function, and**
- **Improved compliance may contribute to reduced suicidality.**

Adding Lithium or Anticonvulsants to Antipsychotics for the Treatment of Schizophrenia: Useful Strategy or Exercise in Futility? June 2009 JCP

- Lithium is perhaps the best-known mood stabilizer,
- A Cochrane review of RCTs concluded that, despite some evidence supporting the efficacy of lithium augmentation among 11 studies testing this, Overall results were inconclusive.

Leslie Citrome, M.D., M.P.H., AMERICAN SOCIETY OF CLINICAL PSYCHOPHARMACOLOGY



Meltzer & Baldessarini, 2003

4. What is the public health implication of EI with respect to suicide prevention?

Management of psychosis & suicide



Effective interventions

* Strategies involving restriction of access to common methods of suicide, such as firearms or toxic substances like pesticides, have proved to be effective in reducing suicide rates;

* There is compelling evidence indicating that adequate prevention and treatment of depression and alcohol and substance abuse can reduce suicide rates, as well as follow-up contact with those who have attempted suicide

WHO

Is it possible to reduce 'suicidality'?

- Reducing suicide is a World Health Organization priority.
- Risk reduction programs in general youth populations and the U.S. Armed Forces have given indications of positive results
- Positive effects on suicide rates of educating general practitioners about patients with depression
- 'Defeat depression' program Royal college of Psychiatrists UK

Successful Treatment Options





Poor Awareness

**Continuous
Education**

Prevention of Suicide in Psychotic Disorders: General principles and strategies.

**Assessment,
Care Plan,
Discharge Plan,
Risk Management &
Transfer of care**

Documentation

A survey of general practitioners' knowledge of symptoms and epidemiology of schizophrenia.

GPs had a fair theoretical knowledge of schizophrenia symptoms, but underestimated the prevalence and the risk of suicide.

Eur Psychiatry. 2006 Jun;21(4):238-44.

Can early detection of psychosis prevent suicidal behavior?

[Am J Psychiatry. 2006]

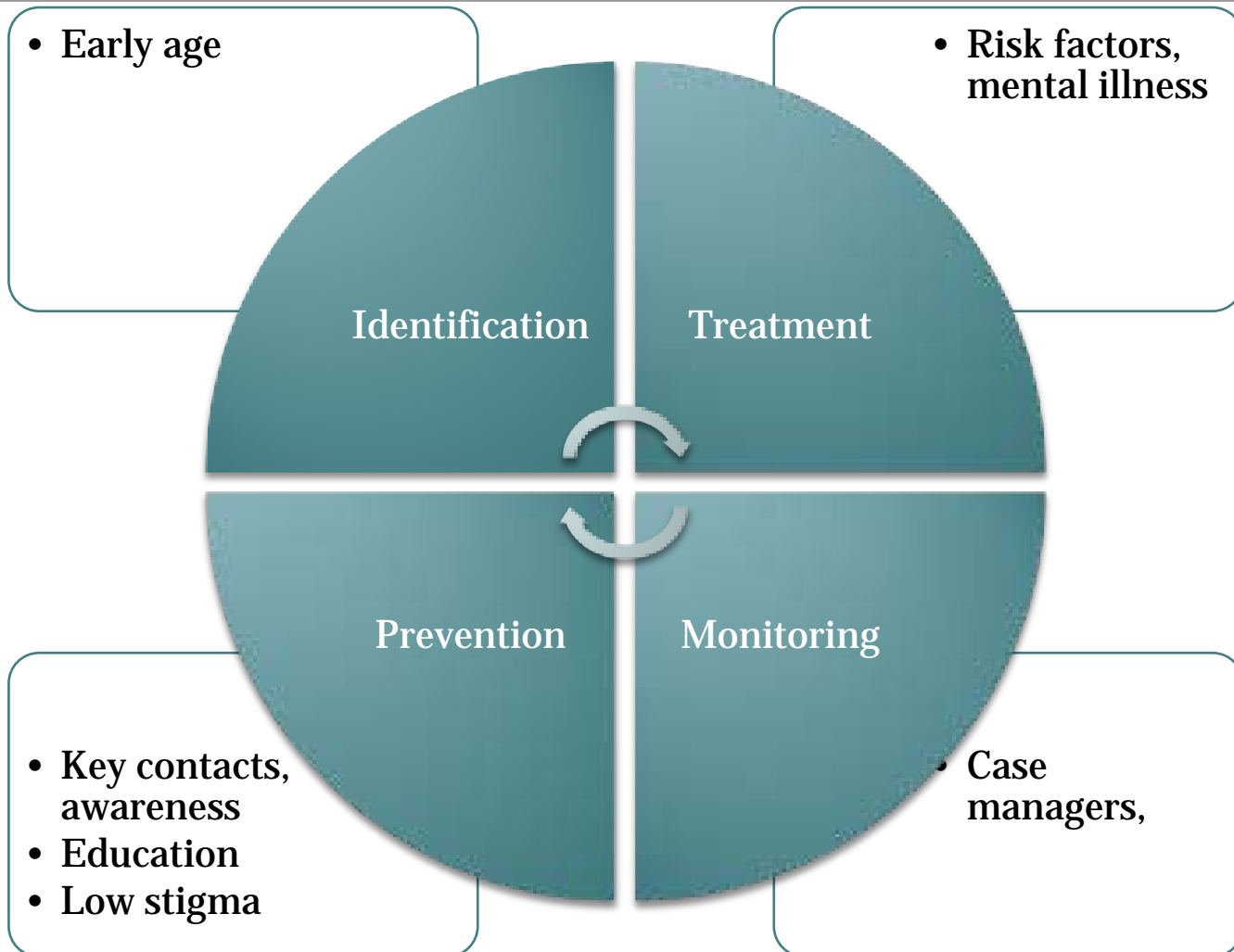
Early Intervention program offers opportunity for suicide prevention

Review of early intervention, 2006, 2009

Cochrane Review

- Treating people presenting with prodromal symptoms of schizophrenia provides any benefits???
- Ethical issues are less intense in FEP
- Little evidence:
 - Intervention in FEP
 - Support the 'standard care'. (NICE2002) as well.
 - Phase specific treatment of FEP
- Family therapy is effective.
- No evidence from clinical trials to support early detection of patients in their first episode of psychosis.
- It is premature to implement wide-spread treatment programs

Opportunities from early psychosis and the health systems





**‘Care needs to reach where people
live, where problems arise’**



Mental health in primary care

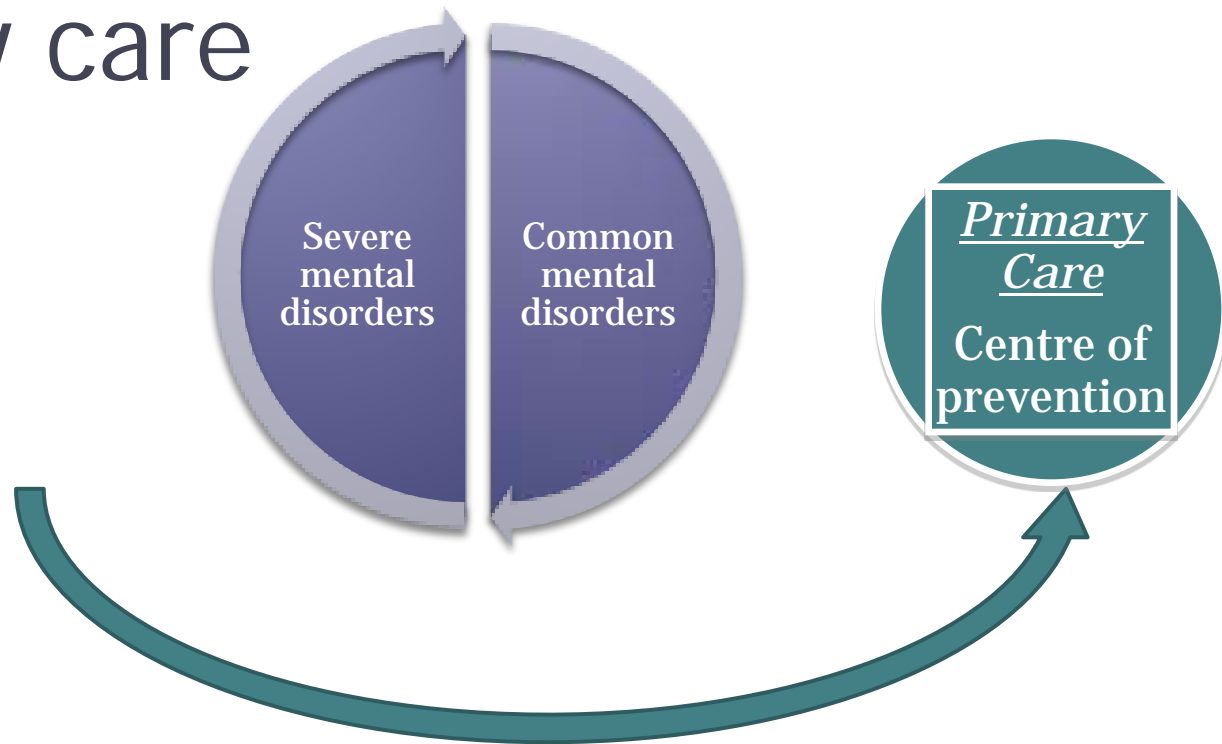
Integrating
mental health
into primary care

A global perspective

- **Treatment gap**
- **Enhances access**
- **Mental and physical health problems are interwoven**
- **Burden of mental disorders**
- **Affordable and cost effective**
- **Generates good health outcomes**



Radical reform in Primary care

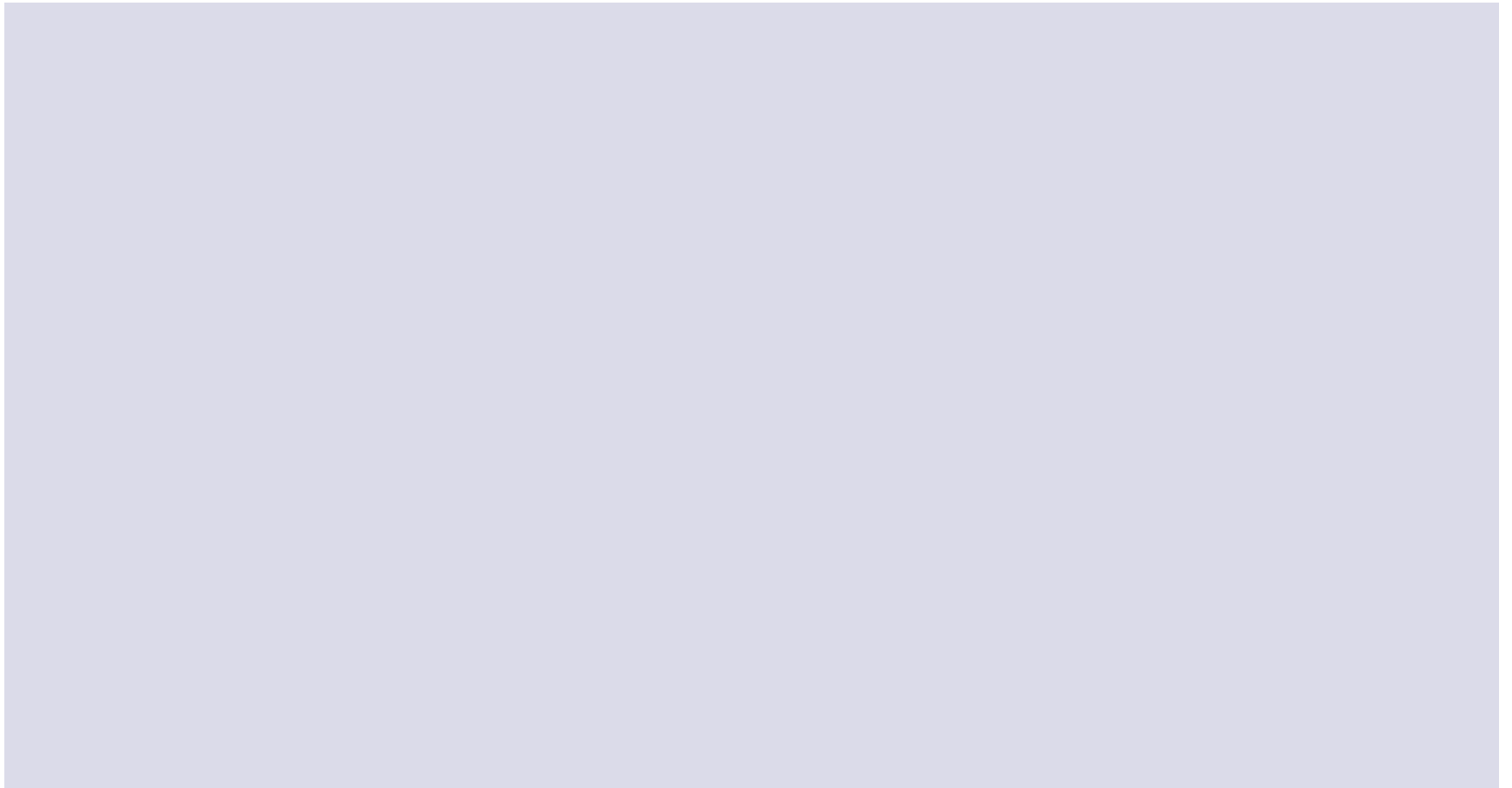


Proactive prevention

- Almost 90% of suicides occur - DSM-IV diagnosis of a major mental health disorder,
- 83% of these patients have at least one contact with a medical practitioner within 1 year of completed suicide
- More than 60% have had contact within 1 month,
- Physician education has been a valid target in suicide prevention strategies.
- Physician education has been shown to increase the detection rate and prescription of antidepressant medication in the community,

Need for paradigm shift in prevention

Gateway for prevention:



Crisis help line: Mumbai experience

- Study of suicidal ideation (2341, N= 15.4%)
- DSM-IV,
- 25%, had schizophrenia,
- 17%, had depression
- 13% had personality disorder,
- 7% had diagnosis of addiction.
- Rest 38% clients had no Axis I or Axis II diagnosis
-
- Suicide in Schizophrenia
- 5-14% die
- 14-18% attempt before first contact
- 25% make at least one attempt
- 50% contemplate suicide
-

Future of mental health
lies in primary care

Future of primary
care lies in mental
health

Mental Health

No health without
mental health



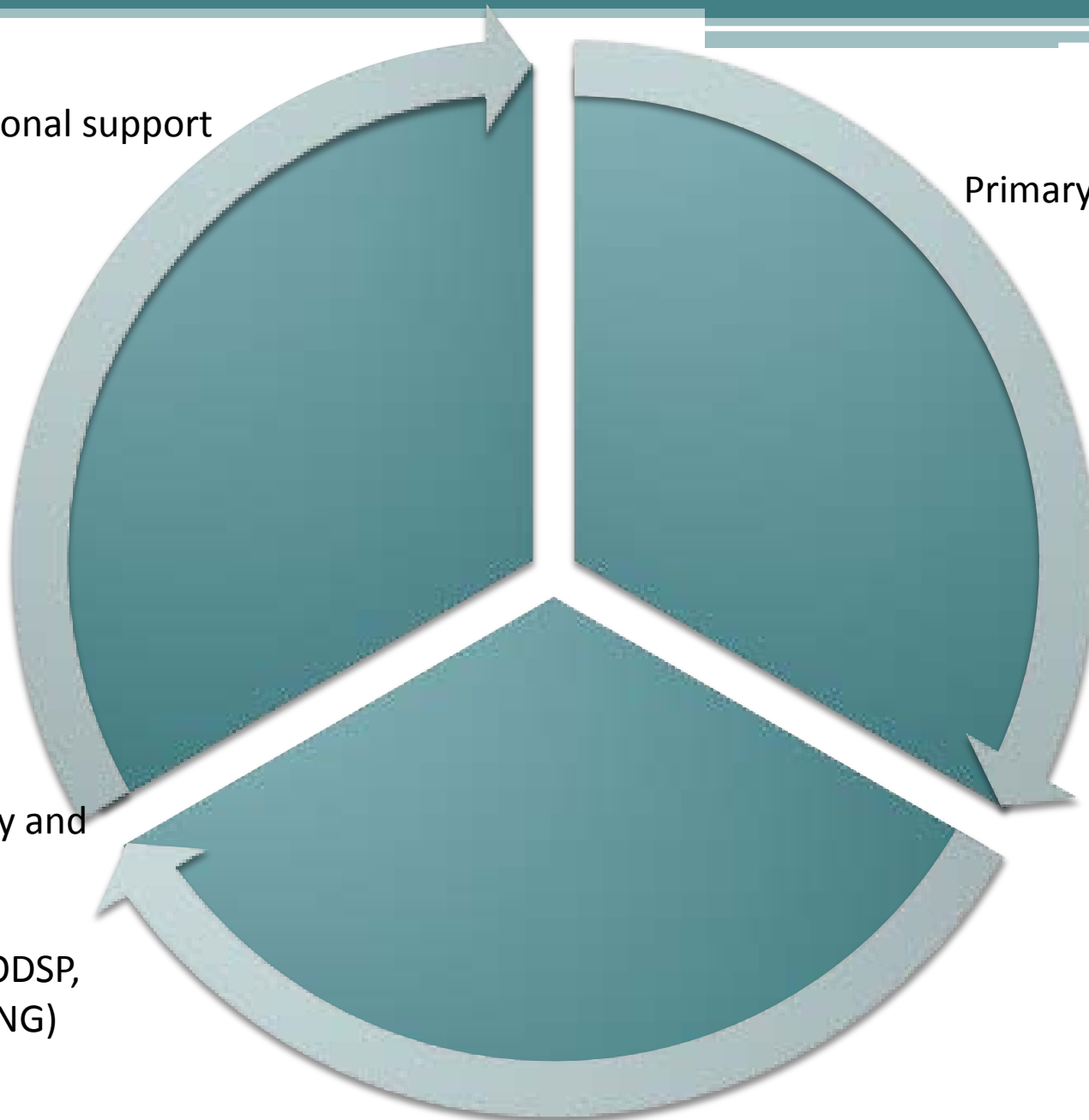
The time to act is now

Integrate mental health in primary
health care

Institutional support

Primary Care

voluntary and
social
support(
CMHA, ODSP,
HOUSING)



Human Rights

**HUMAN
WRONGS**



The time to act is now

Empower people with mental disabilities
to protect their rights

**Consequences
of missed
opportunities.**

**Suicide
prevention is
about
breaking the
barriers**