School Mental Health Literacy : Some Key Considerations for Pre-Service Training

Dr. Stan Kutcher

UBC, Vancouver

September 2014

MHL in a nutshell

Mental health literacy is the knowledge, understanding and competencies that provide the foundation for mental health promotion, prevention, intervention and ongoing care that is developmentally appropriate, contextually applied and best evidence* supported.

What is Mental Health Literacy?

Also an evolving concept; informed by realization that it is: complex; must be developmentally appropriate; contextualized in its application (one size does not fit all); must be appropriately measured; must address: knowledge, attitudes and behavior; must be demonstrated to be effectively applied (best scientific evidence); must be part of health literacy (not a stand alone issue); underpinning of all mental health related activities.

What Mental Health Literacy must Embrace

MHL must be built on **context and developmentally appropriate, pedagogically substantiated** approaches and **best science demonstrated** results: addressing: Knowledge, Attitudes and Behaviours of the receiver

One size does not fit all!

Conceptual Caution

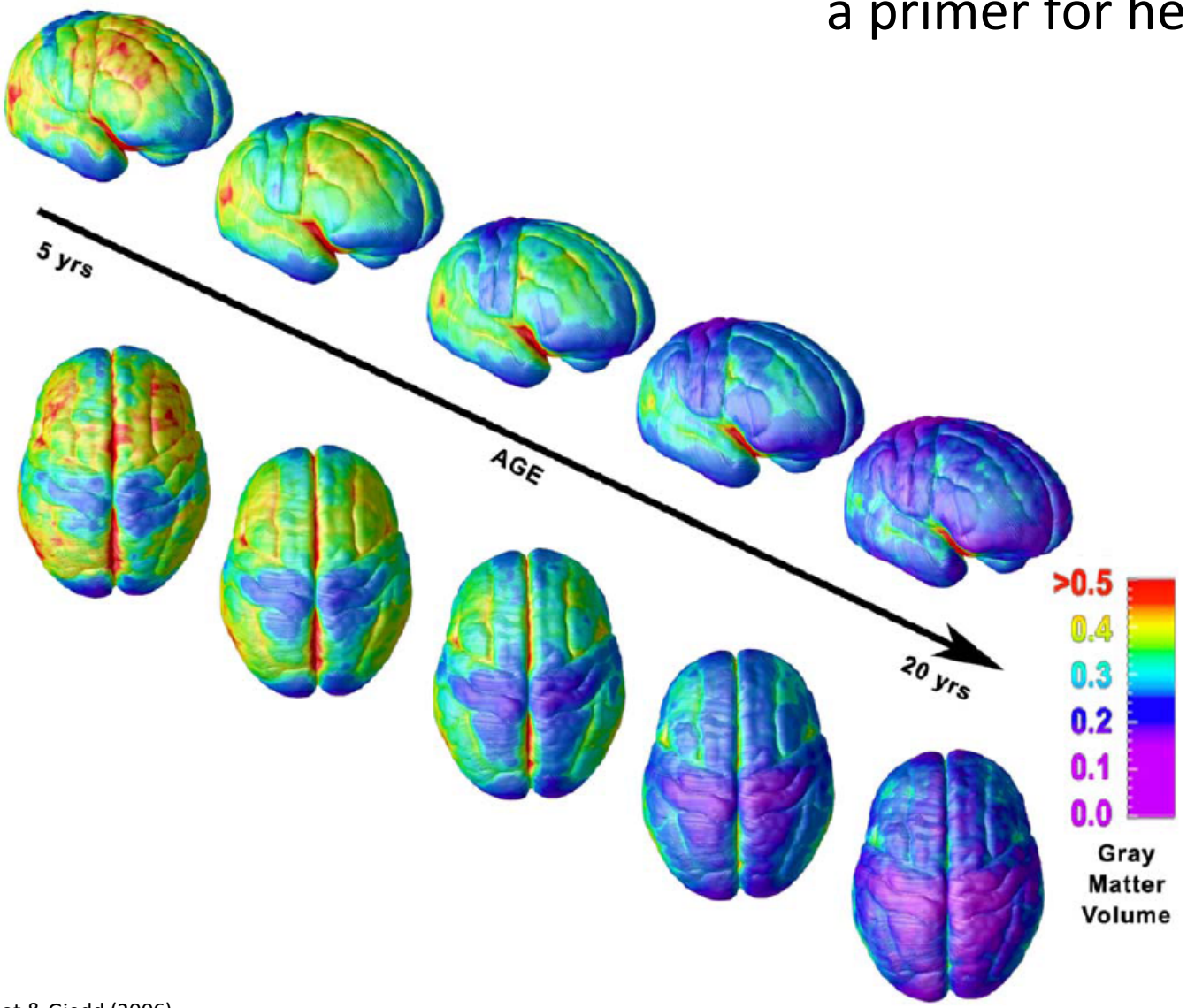
- Mental Health Awareness is not Mental Health Literacy – at best may be a pre-cursor to MHL, at worst may be an inhibitor of MHL
- Taking a course or getting information about mental disorders is not MHL
- Frenetic activity is not a substitute for knowledge, understanding and self-care competencies – beware simple solutions to complex problems

Some basic MHL

- Understanding the Human Brain (humbly as best as we can)
- Know how to evaluate and understand what you read about mental health (some common challenges)
- Understand foundations of how to think about treatments (apply to all kinds)
- How does what you are doing measure up?

Normal Teen Brain Development:

a primer for health providers

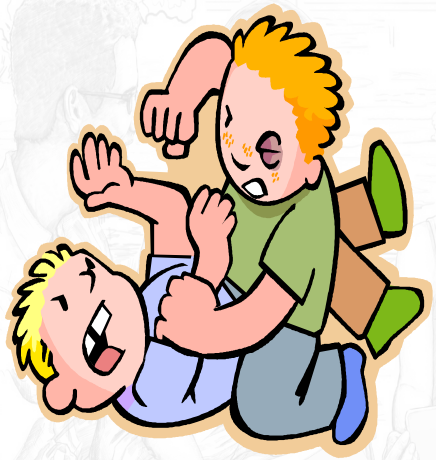


Lenroot & Giedd (2006)

- Play brain video here

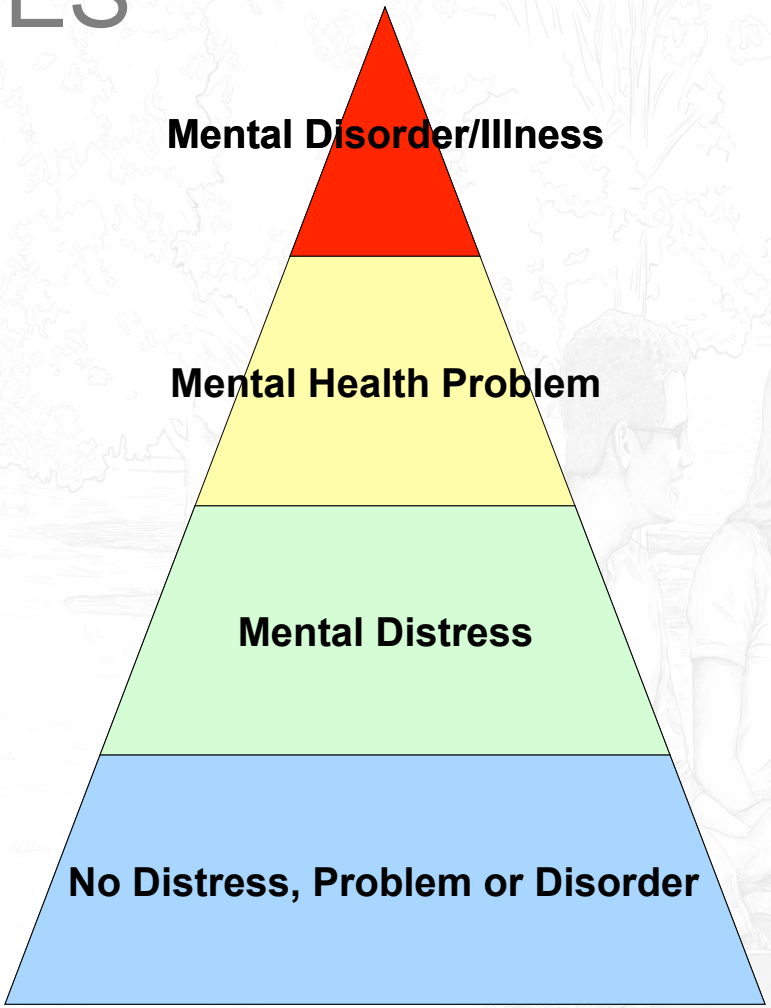
SEMANTIC CONFUSION

Mental health condition
Mental health issue
Mental health illness
Mental wellness illness
Mental illness
Mental health
Mental wellness
Mental well-being
Mental wholeness
Mental and social well-being
Mental health problem
Mental disorder
Mental happiness and well-being



teen mental health .org

UNDERSTANDING MENTAL HEALTH STATES



teen mental health .org

Clarity is essential: “depression”

Distress

- Unhappy
- Disappointed
- Disgruntled

Problem

- Demoralized
- Disengaged
- Disenfranchised

Disorder

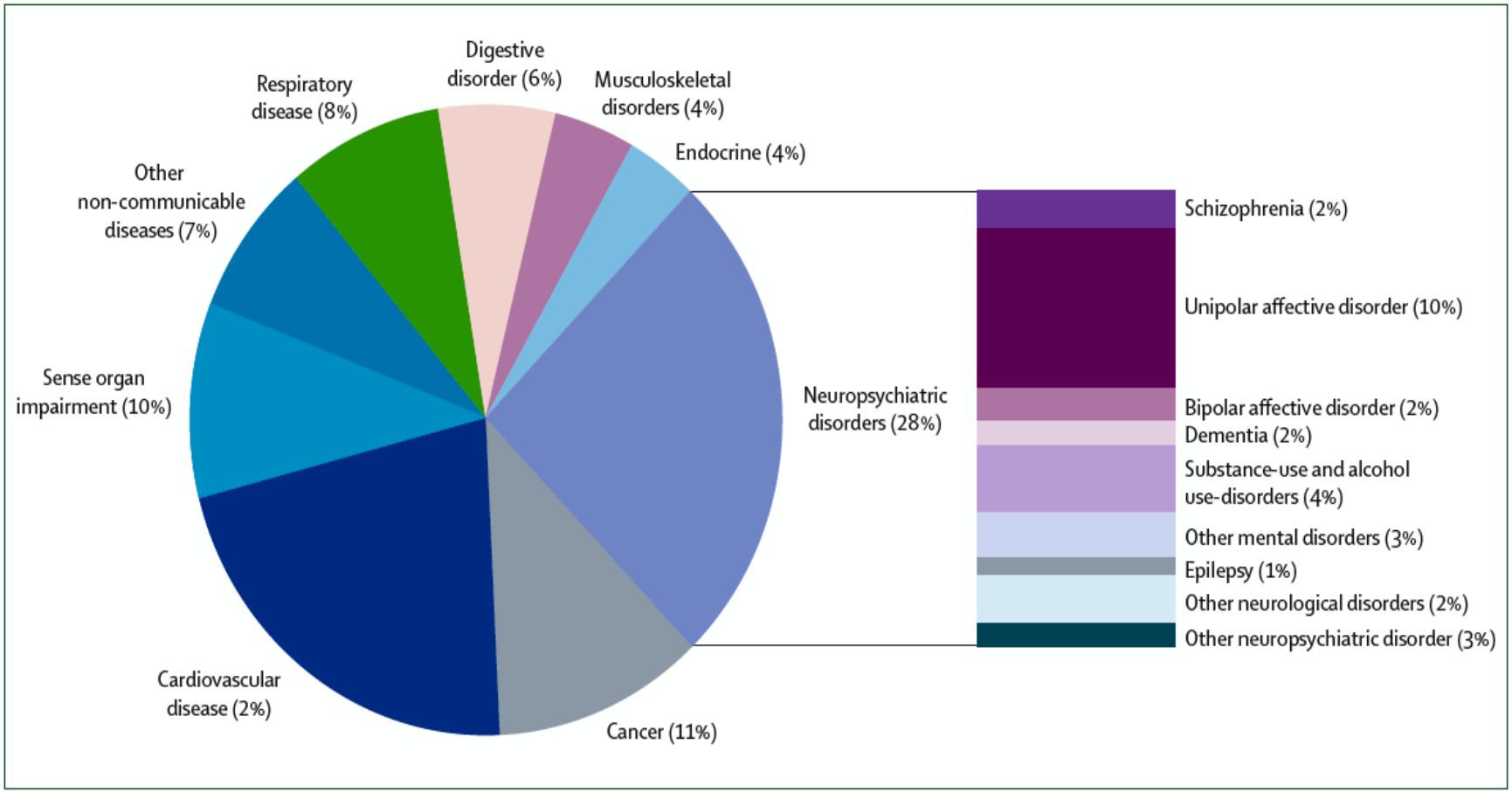
- Depressed

teen mental health .org

Mental Health State and Type of Action

- Enhancement of mental well being
- Health Promotion
- Addressing Distress
- Helping build resilience avoiding protection from stress
- Addressing Mental Health Problems
- Enhancing Supports, Prevention
- Addressing Mental Disorders
- Prevention, Best in Class Care

DALYs: Non-Communicable Disease Contribution – WHO 2005



Children and Adolescent Mental Health

Children and Youth Ages 9-17

Mental Disorder	Six Month Prevalence (%) Age = 9-17
Anxiety Disorder	13.0
Mood Disorder	6.2
Disruptive Behavioral d/os	10.3
Substance Use Disorders	2.0
Any Disorder	20.9

Child and Adolescent Health: Comparative Burden of Illness for Mental Illness

Table: World: DALYS in 2000 attributable to selected causes by age

	Ages 0-9	Ages 10-19
Neuro-psychiatric conditions (including self-inflicted injuries)	12	29
Malignant Neoplasms	3	5
Cardiovascular Diseases	2	4

Adapted from: World Health Organization (2003). Caring for children and adolescents with mental disorders. Setting WHO directions. Page 3, Figure 1. World: DALYs in 2000 attributable to selected causes, by age and sex.

Child and Adolescent Mental Disorders

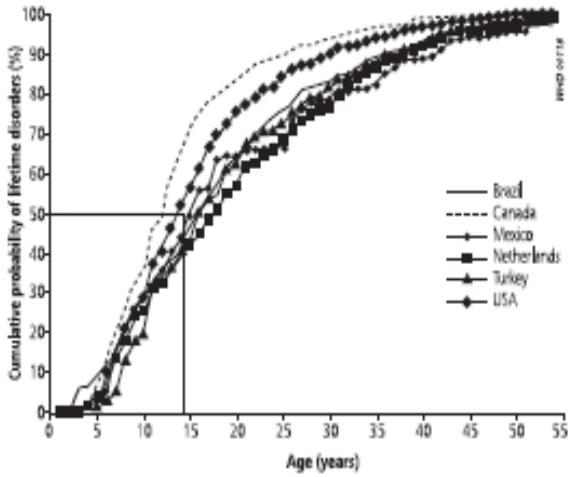
Up to 21% of children and youth age 9-17 in the US suffer from a mental disorder (including addictive disorders) associated with at least minimal functional impairment

11% of children and youth age 9-17 in the US suffer from a mental disorder associated with significant functional impairment

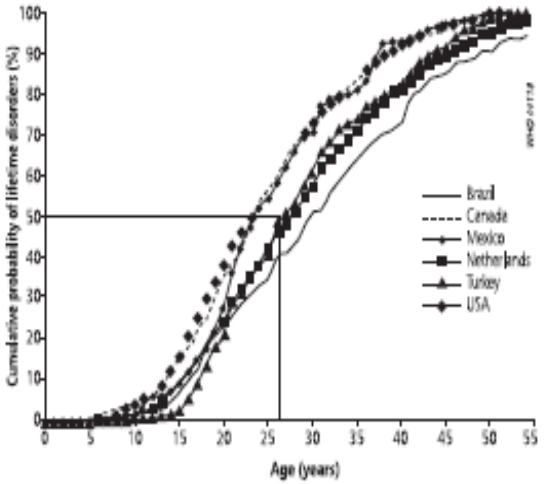
5% of children and youth age 9-17 in the US suffer from a mental disorder associated with extreme functional impairment

Cross-national Comparisons of the Onset of Psychiatric Disorders

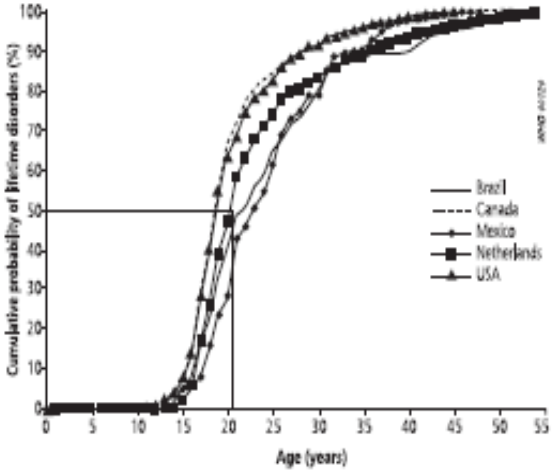
Age of onset distributions of any anxiety disorders*



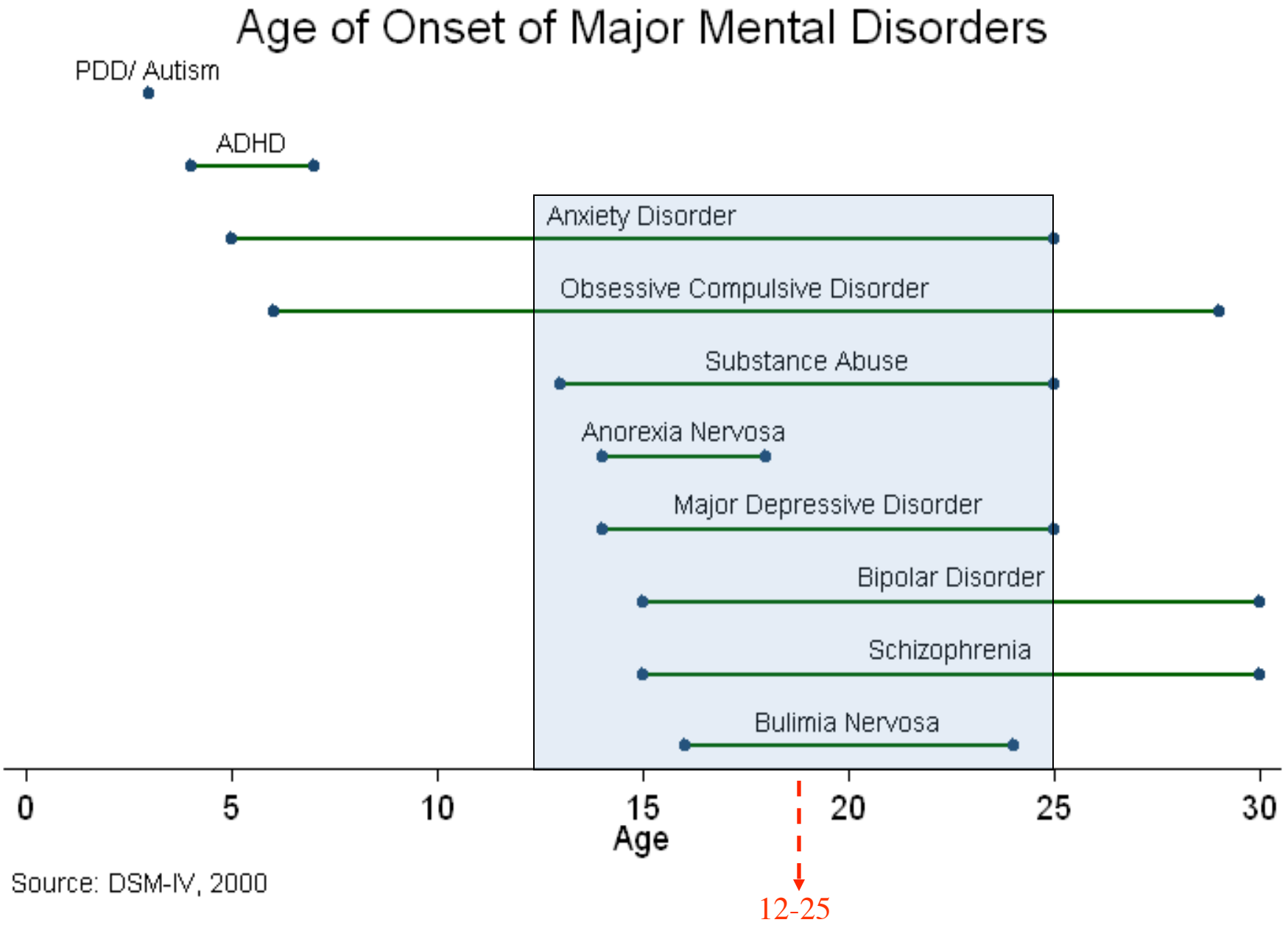
Age of onset distributions of any mood disorders*



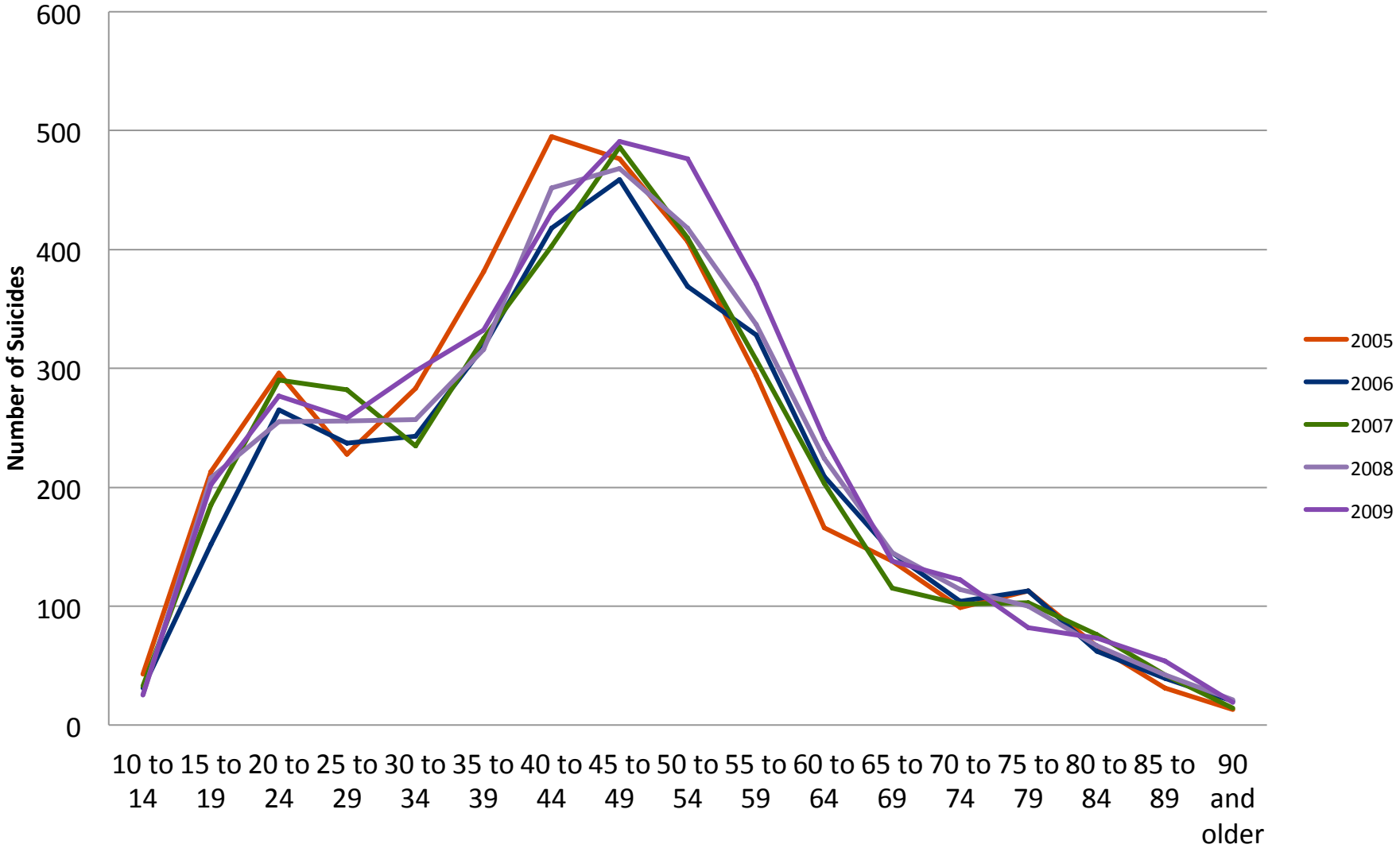
Age of onset distributions of any substance use disorders*



*Data for Germany were omitted because of the narrow age range of the sample


Age of Onset of Major Mental Disorders
PDD/ Autism
ADHD
Anxiety Disorder
Obsessive Compulsive Disorder
Substance Abuse
Anorexia Nervosa
Major Depressive Disorder
Bipolar Disorder
Schizophrenia
Bulimia Nervosa
0
5
10
15
20
25
30
Age
Source: DSM-IV, 2000
12-25

Number of Suicides by Age Group Canada, 2005-2009



Source: Statistics Canada

What is the Evidence you Need?

What do the following have in common?

- 1 – Lemon juice soaked sponges
- 2 – Pessaries made from: acacia root and honey; donkey milk; crocodile dung
- 3 – Libations of: hot mercury; camel spittle

What do these have in Common?

- Charles Goodyear
- Margaret Sanger
- Katherine McCormick
- Frank Cotton/Carl Djerassi/John Rock and Edris Rice-Wray/Celso Ramon-Garcia
- The Barbasco Yam
- FDA
- Searle

And there is more!

The Social Context of ENOVID

1 – FDA 1957 – “menstrual disorders”

2 – FDA 1960 – “contraception”

3 - “The Doctors Case Against the Pill’ (1969)

4 – The Nelson Pill Hearings (1970)

5 - Eisenstein vrs Baird (1972) – crimes against chastity

6 – Our Bodies Ourselves (1970 – Boston Women’s Health Collective)

7 – The Roman Catholic Church

Enhancing Evidence Based Interventions

- Necessity to practice/work within a BEST evidence based framework
- Absence of evidence is not evidence of absence
- Best evidence based practice is not the same as evidence based best practice
- “Promising”, “Best Practice” and “Evidence Informed” – what exactly do those words mean?

Common Conceptual Challenges

1 – Risk factor and protective factor consideration as the justification for outcome expectations

2 – The primacy of “linear causation” – “that which came before caused what happened next”

3 – Wish to find simple solutions to complex problems (the emotional drive for certainty - doing something vrs doing the right thing)

4 – The attributional bias

5 – Confusing “symptoms” with “syndrome”- for example: “depression” with “Depression”

teen mental health
TeenMentalHealth.org

Linear Causality = Error

Common Critical Reading Challenges

1 – Percentages as reported results

2 – Within group comparisons instead of between group comparisons

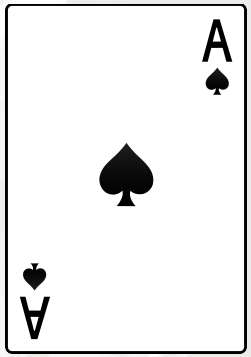
3 – Use of “proxy measures” instead of the key measure

4 – No “placebo” group (attentional controls)

5 – Abstract and Conclusions are not supported by the data in the article

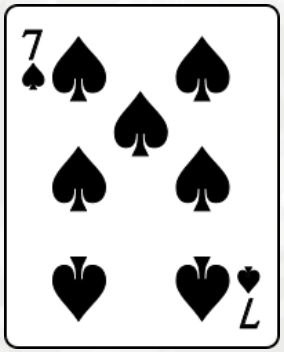
Evidence is Hierarchical

RCT



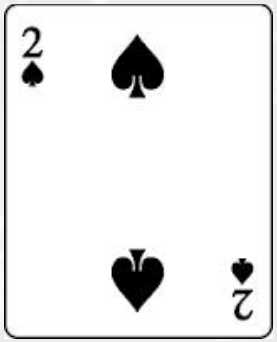
Case Controlled

Natural Prospective

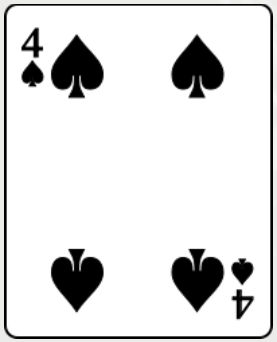


Case

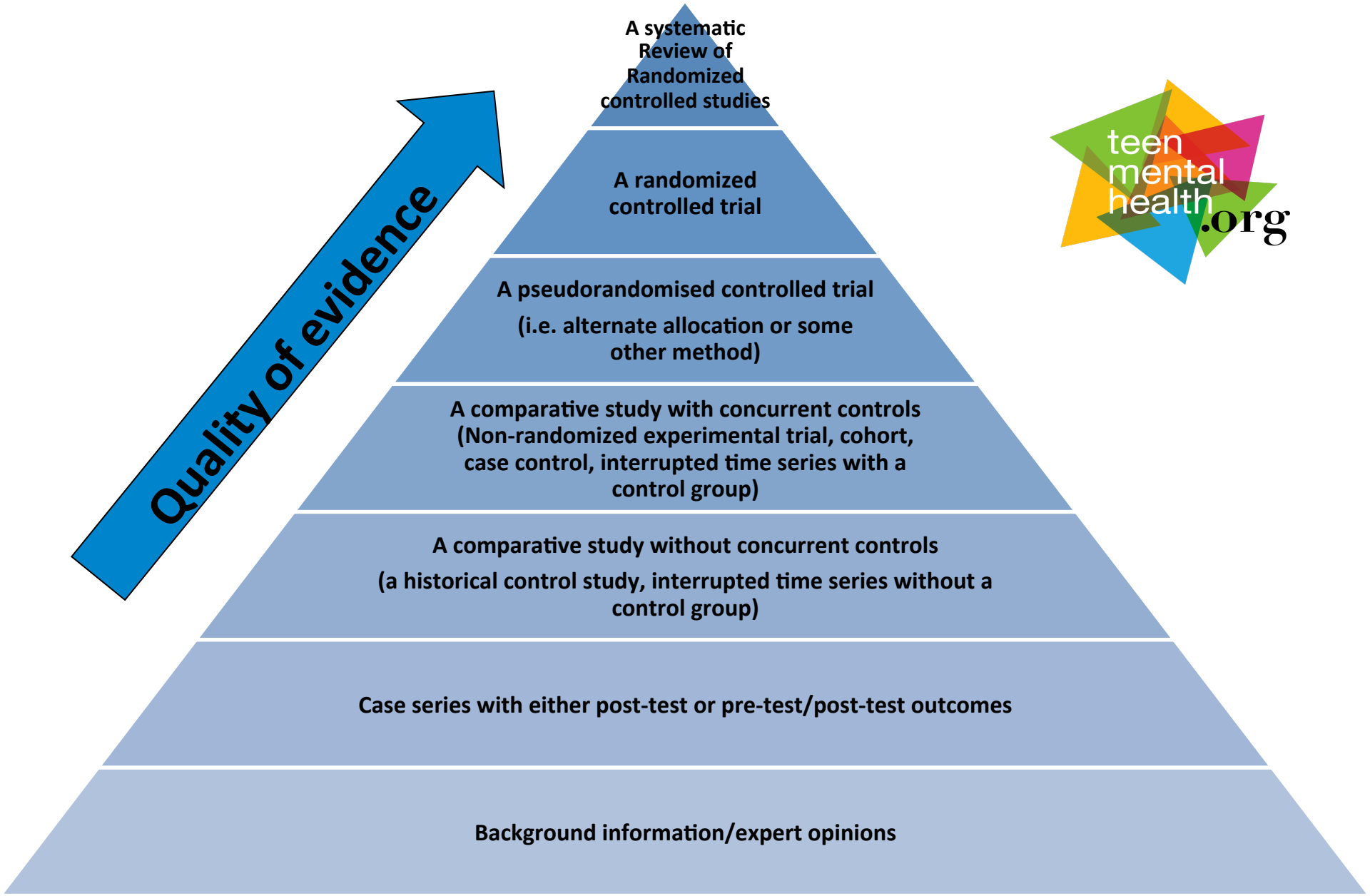
Case Series



Natural Retrospective



Evidence Level of Health Programmes



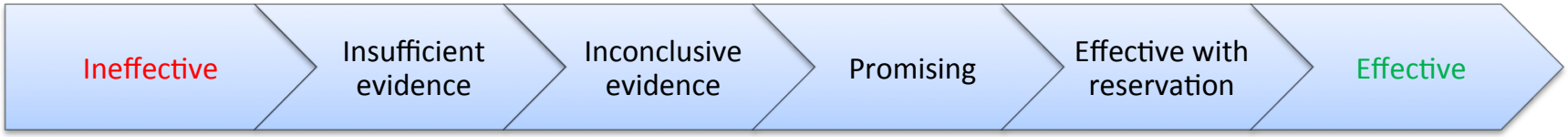
teen mental health .org

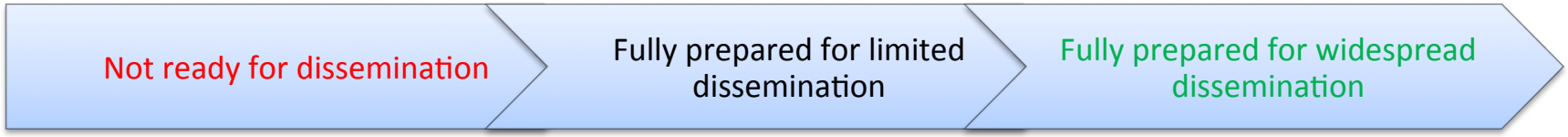
OJP "What Works Repository" Classification Framework

RCT
No known harmful side effects
Adequately addressed threats to internal validity
Random assignment
Large sample (Sufficient power?)
Intervention described
Independent evaluation
Adequate outcome measure
Differences described
Modest attrition (≤20%)
Intent-to-treat analysis
Accurate interpretation of results
Statistically significant positive effect of program
Effect sustained for ≥1 year post-program
≥1 external replication (RCT)

OJP "What Works Repository"

Note:
The OJP What Works Repository classifies programs into 6 levels of evidence of effectiveness and 3 levels of readiness for dissemination, using rigorous scientific criteria.

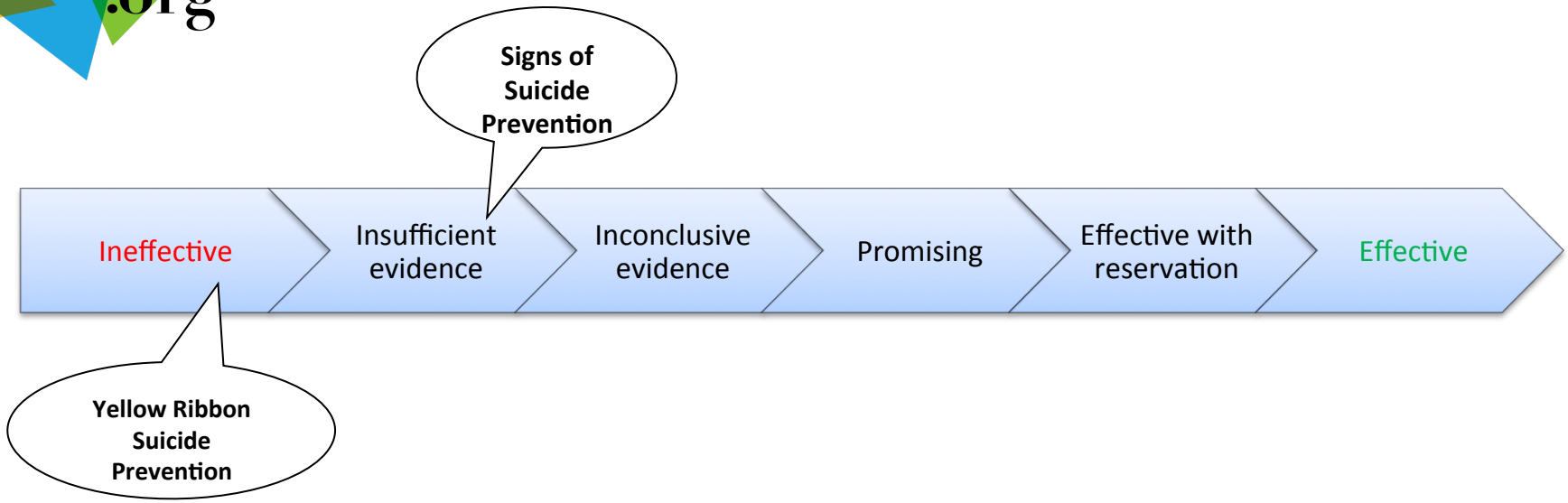


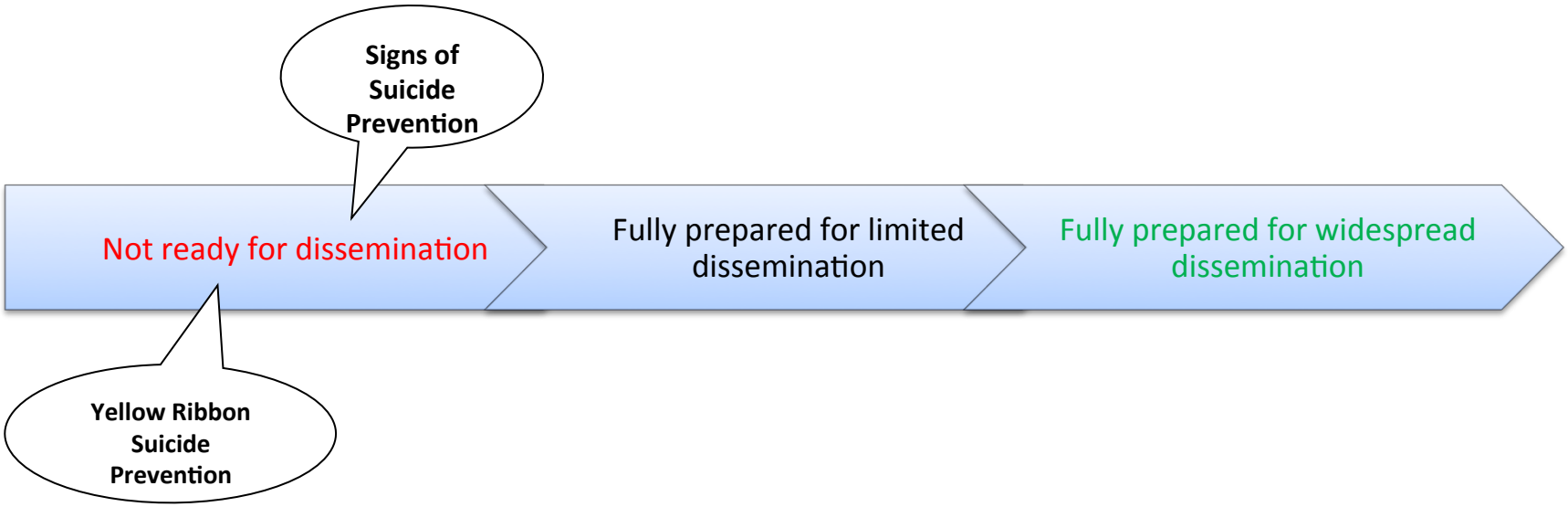


teen mental health .org

OJP "What Works Repository"

Two Examples of School Based Suicide Prevention Programs





Treatment Categories

1) Standard
2) Complementary
3) Alternative

1) Standard Treatments

- Scientific evaluations (RCT)
- Effective/Safe*/Pure*
- Usually regulated (medicine therapy)
- Ongoing systematic reviews
- Professional endorsement/standards of care
- Ongoing monitoring (medicine therapy)
- Big business - good return on investment (ROI)

2) Complementary Treatments

- In addition to Standard Treatments, usually does not qualify as a Standard Treatment
- Big business - excellent ROI
- Adds value:
  - Improves Standard Treatment effect
  - Decreases Standard Treatment side effect
  - Targets different domain

3) Alternative Treatment

- Instead of a Standard Treatment
- Does not qualify as a Standard Treatment
- Is not used as a Complementary Treatment
- May or may not add value (effective, safe, pure)?
- Big business – outstanding ROI

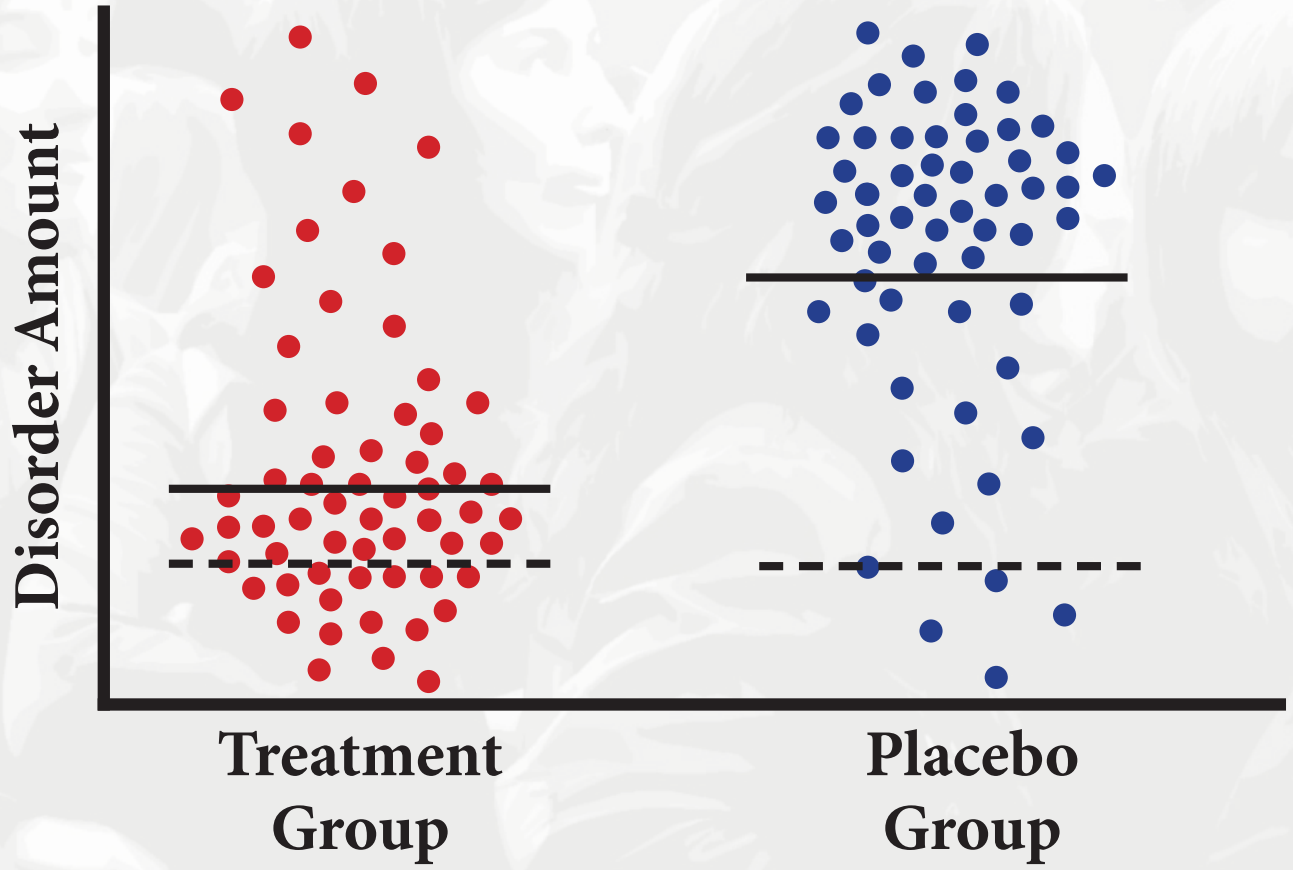
More Key Treatment Concepts

Placebo

Nocebo

Body System/ Adverse Events	Percentage of Patients Reporting Event	
	PROZAC (N=2444)	Placebo (N=1331)
Dry mouth	10	7
Dyspepsia	8	5
Flatulence	3	2
Vomiting	3	2
Metabolic and Nutritional Disorders		
Weight loss	2	1
Nervous System		
Insomnia	20	11
Anxiety	13	8
Nervousness	13	9
Somnolence	13	6
Dizziness	10	7
Tremor	10	3
Libido, decreased	4	-
Respiratory System		
Pharyngitis	5	4
Yawn	3	-
Skin and Appendages		
Sweating	8	3
Rash	4	3
Pruritus	3	2
Special Senses		
Abnormal Vison	3	1

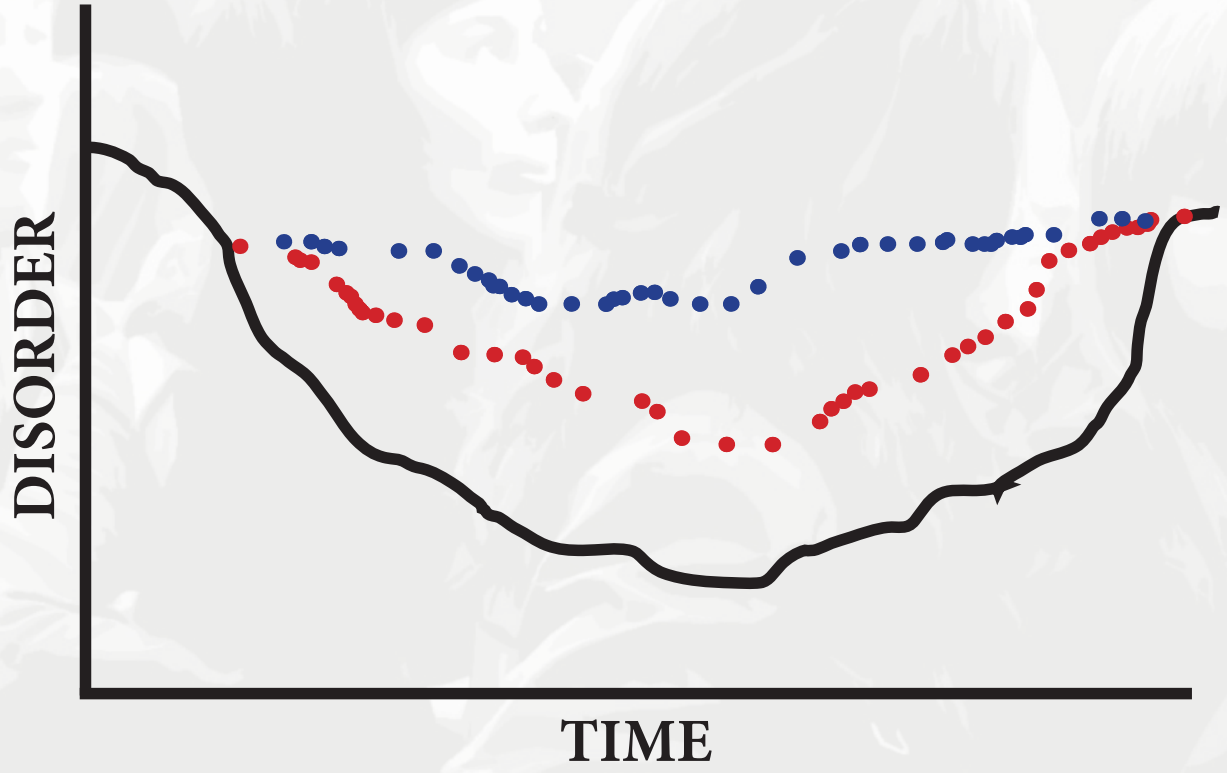
Treatment: Person or Group



teen mental health
TeenMentalHealth.org

teen mental health .org

The Treatment Impact

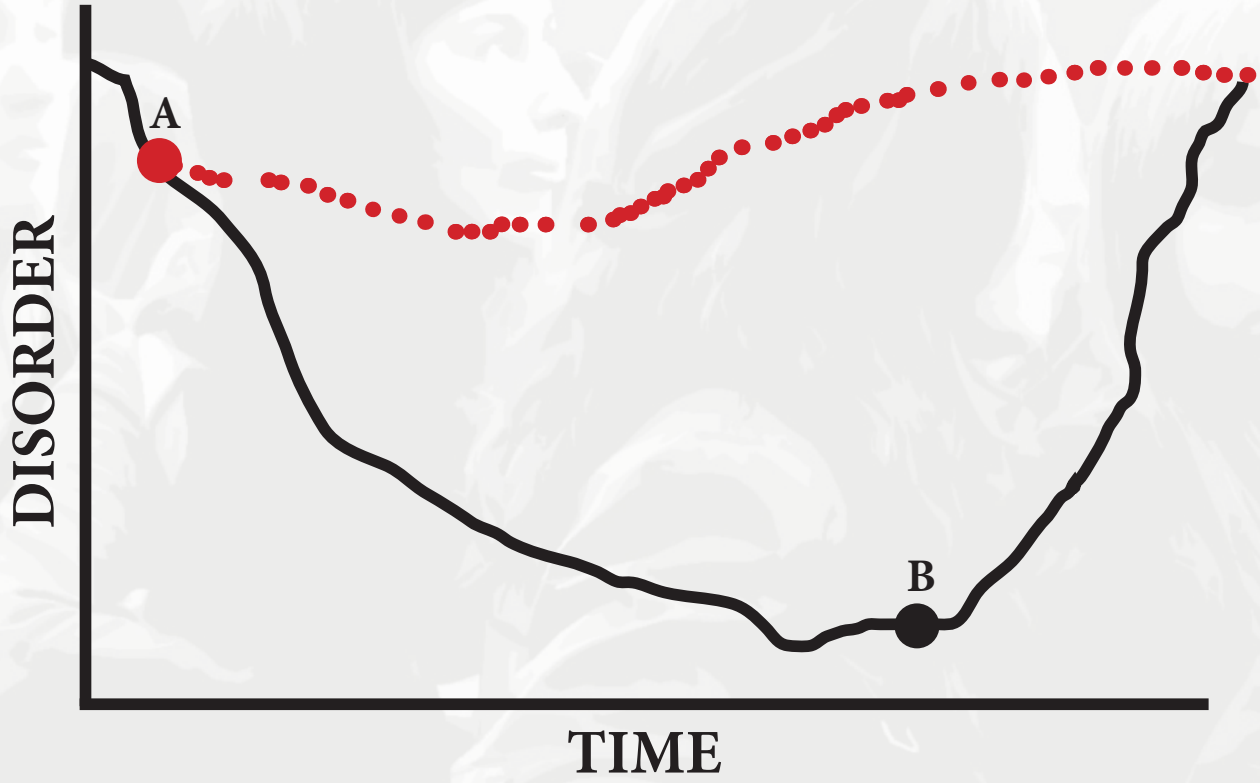


TeenMentalHealth.org @TMentalHealth YouTube TeenMentalHealth1

teen mental health
TeenMentalHealth.org

teen mental health .org

Time of Treatment



TeenMentalHealth.org @TMentalHealth YouTube TeenMentalHealth1

How do we determine intervention impacts?

- Odds ratio
- Effect size
- NNT
- NNT, NNH

Intervention: Magnitude of Effect

Hurricane Juan, Halifax, 2003

Intervention: Magnitude of Effect

Hurricane Katrina, New Orleans, 2005

What Must Programs Demonstrate?

- Effectiveness
- Safety
- Cost effectiveness
- Feasibility

ESCeF Criteria

Working within EXISTING Systems

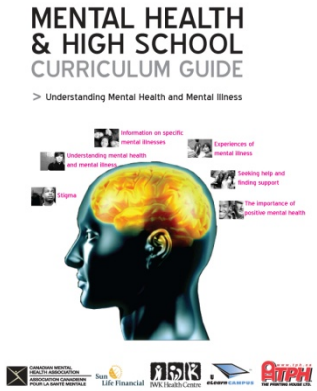
- Use a system – strengthening model instead of developing a parallel system model
- Focus on reproducibility of results not on fidelity of application
- Build on existing strengths (in schools: teachers; administrators; community links; etc.)
- Integrate interventions as much as possible into existing site ecologies (embed not parachute)

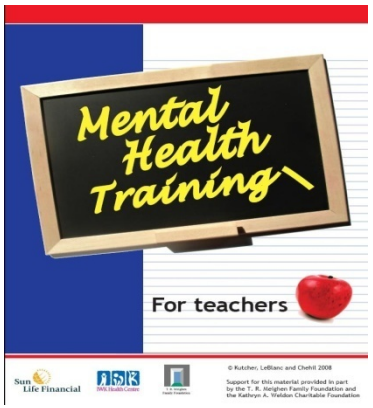
What is Mental Health Literacy for Youth and Educators (Middle and Secondary Schools)?

- Understand how to obtain and maintain good mental health
- Understand and identify mental disorders and their treatments
- Decrease stigma
- Enhance help-seeking efficacy: know where to go; know when to go; know what to expect when you get there; know how to increase likelihood "best available care" (skills and tools)

Mental Health & High School Curriculum Guide

A Mental Health Literacy Program for Students and Teachers





Mental Health & High School Curriculum Guide is the first and only evidence based mental health literacy resource to address youth mental health in a systematic manner for Canadian schools, with the focus on students and teachers

Guide: Curriculum Resource

- Builds on the three core components of schools globally: students; teachers; curriculum
- A resource that can be embedded into existing health or other appropriate courses – not a program in a box
- Delivered by usual classroom teachers who have been trained in the use of the resource – builds on traditional pedagogic practices
- Imparts MHL to students and teachers using existing resources and in school activities
- Mental Health by Stealth

teen mental health .org

Table 1: The Guide Outcomes

Province	Study type	Year	Participants	Increased Knowledge		Improved Attitudes	
Nova Scotia	Program evaluation	2012-2013	218 Educators	Yes	p<0.0001, d=1.85	Yes	p<0.0001, d=0.51
Ontario	Cross-sectional study	2012	409 Students	Yes	p<0.001, d=0.9; p<0.001*, d=0.73*	Yes	p<0.001, d=0.25; p<0.007*, d=0.18*
	Program evaluation	2013	74 Educators	Yes	p<0.001, d=1.48	Yes	p<0.03, d=1.26
	Cross-sectional study	2013	175 Students	Yes	p<0.0001, d=1.11; p<0.001*, d=0.91*	Yes	p<0.001, d=0.66; p<0.001*, d=0.52*
Alberta	Program evaluation	2013	25 Educators	Yes	p<0.0001, d=2.03	Yes	NS, d=0.21

*: two month follow-up results

Your Challenge Now

- From the following list of well – known programs, decide: evidence is: high; medium; low/unknown for effectiveness and safety
- Guess at the cost: $$$; $$; $
- Rank order (1 to 5)
- Programs: Drug Abuse Resistance Education (DARE); Tribes; Stop Now and Plan (SNAP); Lion's Quest; The Virtues Project (UN endorsed)

LeBlanc et al. Social and Emotional Learning Programs for Schools; CPSC Atlantic; 2013

teen mental health .org

WRAP UP DISCUSSION

teen mental health .org

TeenMentalHealth.org

teenmentalhealth1

@TMentalHealth

info@TeenMentalHealth.org