

MEASURING SED; FOCUS ON DBDS, NDDS AND IMPAIRMENT

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Conflict of Interest

- No actual or potential conflict of interest

Objectives

- What are the current issues in the psychiatric epidemiology of SED?
- Illustrate these issues with an update on the OCHS-S currently underway
- Measurement of impairment (especially in 2-6 year olds)
- Tried to focus on questions highlighted in the documents

Do we need another epidemiological study of CAP Disorders?

- We have widespread agreement on prevalence estimates of many disorders with/without impairment
- Good estimates of DBDs (ODD, ADHD, CD) across development
- Meta-analysis (Polanczyk et al 2015); estimates of prevalence of disorder are roughly 17% lower when impairment is required

Unanswered Questions to Address MHA Policies

- SED=*any* disorder (of whatever severity) plus (*any*, not “substantial”) impairment makes sense
- Need more longitudinal data on onset, chronicity and course of disorder and impairment
- Need data on SED linked to health, education, community MH agency databases to guide resource allocation for assessment and treatment
- More nuanced understanding of modifiable risk factors for SED

What are we doing in Canada to measure SED and Impairment?

- National Longitudinal Study of Children and Youth; multiple waves, symptoms, impairment, 8 cycles, now inactive
- Early Development Instrument (EDI); every child in SK in most provinces, measures “school readiness” based on dimensions of motor, language, social, emotional-behavioural milestones
- Ontario Child Health Study 1987 and Sequel in 2014-15



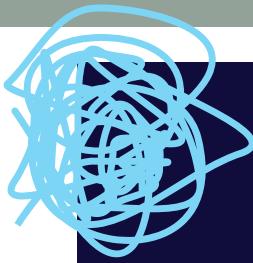
*Étude sur
la santé des jeunes
Ontariens 2014*

2014 Ontario Child Health Study (Pls Boyle and Georgiades)



Stakeholder Involvement in OCHS-S Study Design

- Literature review
- Policy makers in government
- Clinicians and other service providers
- Patient engagement in formulation of research question, study design, measurement, and interpretation is key for future studies of SED



Objectives of OCHS- S

- Document prevalence of mental disorders in 4-16 year old children
- Document child mental health need & assess health system response by linking children with SED to administrative data bases (education, social services etc)
- Explore the influence of poverty & income inequality on SED
- Identify modifiable environmental influences on SED (nested design)

Measurement of Disorder

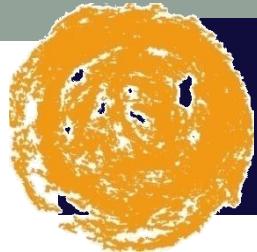
- Updated Survey Diagnostic Instrument to DSM IV measuring ADHD, CD, ODD, MDD, Specific phobia, social phobia, SAD, GAD, substance use disorders
- ASD and chronic medical disorders measured separately
- Sample randomly selected gets MINI KID (Parent and Youth version)
- Impairment measured independently in SDI, the BIS, and in MINI KID tied to each disorder
- Impairment; Family, peers, school and community



2014 OCHS Sample



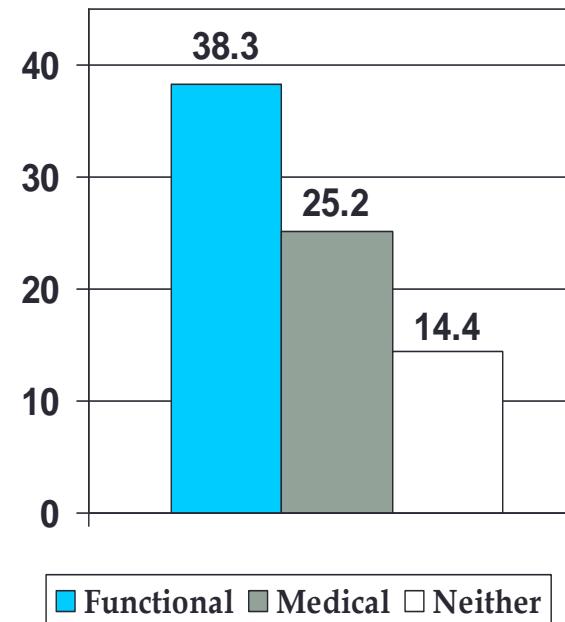
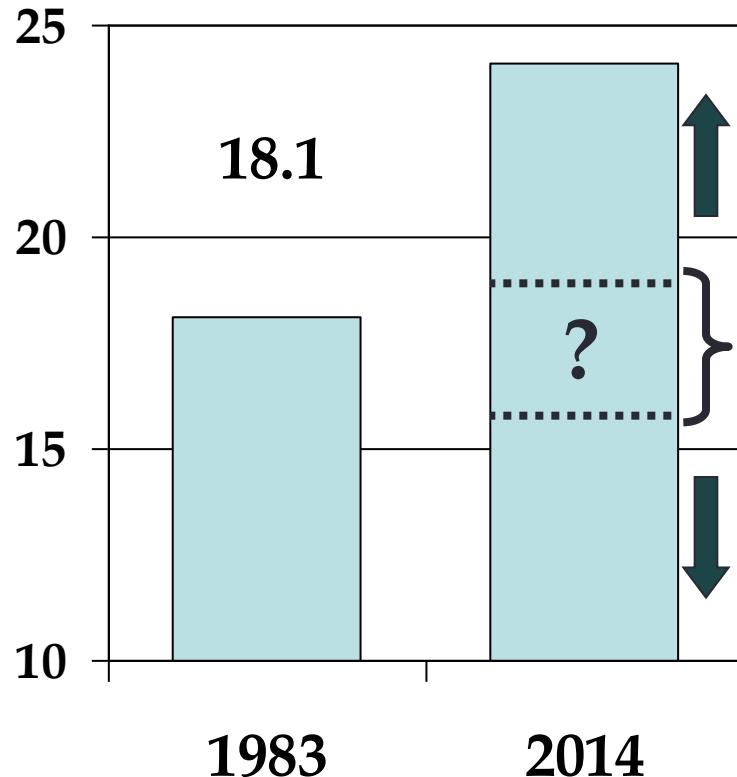
- Children ages 4-17
- PMK and spouse/partner
- Siblings

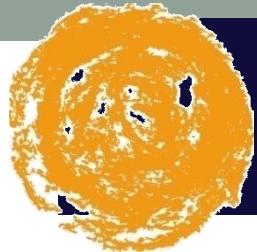


What will we learn?

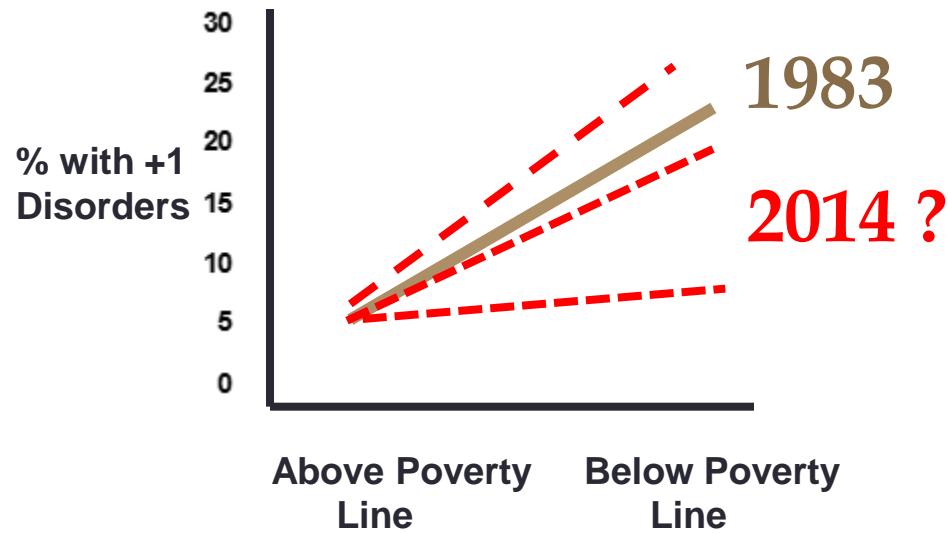
Levels of child
mental disorder...

...among children with
different health conditions

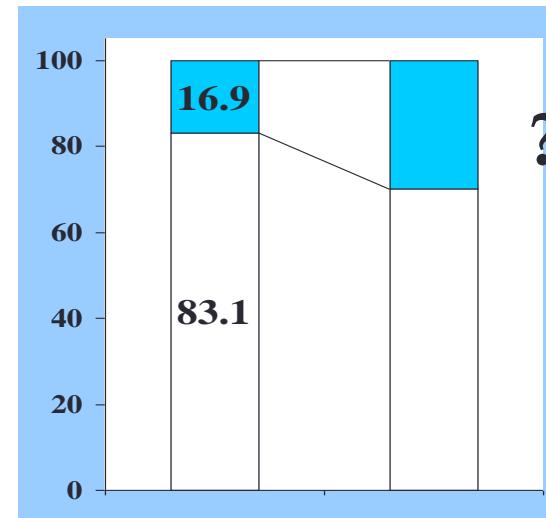




What will we learn?



Effects of Income Inequality
on Child Mental Health



1983 2014
% with Disorder Using
MH Social Services

What is Impairment?

- Distress, impairment (impact), burden and quality of life
- Measurement structure of impairment is stable and defined by context (Goodman et al)
- Relationship with symptoms;
 - cross-sectional studies demonstrate a linear association (Kinnear et al)
 - longitudinal? Experimental?
- SR of RCTs by Becker et al 2011, shows that improvement in symptoms not always accompanied by improvement in functioning

Measurement of Impairment

- Two theoretical frameworks;
- DSM where symptoms **cause** impairment
- ICF-CY where there is a complex bi-directional relationship between impairment, symptoms and environment (Cramm et al 2012)
- Making causal inferences are impossible therefore best to be agnostic,
- And have an independent global measure of impairment (not “contaminated” by symptoms ie CGAS)

Measurement Issues (I)

- When comorbidity occurs; how does one assess impairment over and above impairment due to primary dx?
- Informant differences; P-C (Bella study) and P-T (Sanford et al OCHS) disagreement on ratings of impairment
- Can have impairment but no disorder due to NDD (ASD) or chronic medical condition

Measurement Issues (II)

- ICF framework; disability/impairment varies by sex/gender, culture, context (school, home, community) etc
- Functioning is a continuous measure; cut-offs determine “impairment” need to be validated
- Does it need to be disorder specific?
- Does it need to be specific to developmental stage; 2-6 year olds?

Measures of Impairment in 2-6 y/o

- Differing impact on family, peers, school, community
- Caregiver burden, ie PSI
- Pre-school peer relationships and siblings
- Developmental tasks, VABS, ABBS
- School readiness at sk; EDI
- The overlap of DBDs, ASD and impairment are difficult to disentangle in this developmental stage

Conclusions

- Measuring impairment is important as it indicates need for treatment
- ICF framework is more nuanced than DSM
- But the measurement of impairment is complex; multi-dimensional, multi-informant, influenced by multiple factors not just “disorder”
- One construct of impairment over all child/adolescent development is an oversimplification

Some Suggestions

- Count children with any dx (not specific diagnoses) plus **any** impairment as SED
- Multiple informants for impairment (P, C/Y, and T)
- Measurement of SED and impairment appropriate to developmental stage
- Both global measure of impairment “independent” of symptoms and disorder specific

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