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Abstracts from the 2013 CAPE Scientific Symposium

Scott B. Patten

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CAPE 2013 ANNUAL SCIENTIFIC SYMPOSIUM
Canadian Academy of Psychiatric Epidemiology
Académie canadienne d'épidémiologie psychiatrique

***Understanding Mental Illness
Across the Life Course***





L'Institut de recherche de l'Hôpital Montfort (IRHM)

Wednesday, September 25th 2013

CAPE 2013

713, chemin Montréal Road, Ottawa, (Ontario), K1K 0T2
(<http://www.hopitalmontfort.com/index.cfm>)

Montfort Hospital Auditorium, Room 1D211
Main Entrance Hall
& 2D Hallway of the Department of University Affairs

One of the critical directions of the Mental Health Commission of Canada's Mental Health Strategy for Canada released in 2012 is to "Promote mental health across the lifespan in homes, schools, and workplaces, and prevent mental illness and suicide wherever possible". Thus, it is fitting that the CAPE 2013 symposium will address the issues and possibilities that frame our understanding of mental illness across diverse life stages.

The symposium will begin with a presentation by this year's invited keynote speaker, **Dr. Stephen Gilman** from the Harvard School of Public Health. His talk entitled, "*A developmental pathological stress response model of depression*" will set the stage for this year's research showcase. This keynote conference will be followed by poster viewings and oral presentations. New this year: one full student-only oral presentation session!

The CAPE community of scientists and students were invited to submit oral and poster presentation proposals on topics pertaining to this year's lifespan theme. Two awards of \$200 will be attributed to the students who make the best oral presentation (The Roger Bland Award) and the best poster presentation (The Jane Murphy Award).

WELCOME TO OTTAWA.

CAPE 2013 Convenors

Ian Colman

Raymond Tempier

With local Ottawa help from the research coordinators at l'Institut de recherche de l'Hôpital Montfort.

Schedule CAPE 2013

8:00 – 8:45	Registration (breakfast and refreshments will be provided)
8:45 – 9:00	Welcoming Statements <ul style="list-style-type: none"> • Raymond Tempier – Co-Convenor CAPE 2013 • Ian Colman – Co-Convenor CAPE 2013 • John Cairney – CAPE President
9:00 – 10:00	Keynote address by Stephen Gilman, Harvard School of Public Health <i>“A developmental pathological stress response model of depression”</i>
10:00 – 11:00	Break/ Poster Presentations (moderated) - Session A – Concurrent groups (presentations within groups proceed in numerical order; See pp.4-6) <ul style="list-style-type: none"> • Group 1: Psychiatric comorbidity • Group 2: Childhood exposures • Group 3: Suicidal behaviour
11:00 – 12:00	Oral Presentations – Session B <ol style="list-style-type: none"> 1. James Bolton: Risk of Suicide and Suicide Attempts associated with Physical Disorders: A Population-Based, Propensity Score-Matched Analysis 2. Jean Caron: The social and psychiatric epidemiological catchment area of Montreal: realisation and future development 3. Mark A. Ferro: Epilepsy-related ambiguity in the Attention Problems subscale of the Youth Self-Report 4. Paul Kurdyak: Impact of a Promotional Campaign on Psychiatric Emergency Department and Ambulatory Clinic Volumes
12:00 – 1:00pm	Lunch & Poster Viewing/change
1:00 – 1:45 pm	Alex Leighton Prize Awarded by CAPE president John Cairney & winner's speech
1:45 – 2:30 pm	Oral Presentations - Session C <ol style="list-style-type: none"> 1. Roger Bland: Are the mentally ill well served in the present system? 2. Tracie O. Afifi: An Examination of Child Maltreatment in Canada: Insight into Child and Household Characteristics and Child Functional Impairments 3. Javad Moamai : First Criminal Behavior among Older Adults with Serious Mental Illness: The Role of Comorbid Alcohol Use Disorder
2:30 – 3:25 pm	Break/ Poster Presentations (moderated) - Session D – Concurrent groups (presentations within groups proceed in numerical order; See pp.4-6) <ul style="list-style-type: none"> • Group 4: Physical comorbidity • Group 5: Depression • Group 6: Treatment issues • Group 7: Public health and mental health promotion
3:30 – 4:45 pm	Student Oral Presentations – Session E <ol style="list-style-type: none"> 1. Michael Martin: The role of stress and community belonging in the association between food insecurity and mental illness 2. Leslie A. Roos: Child Adversity Typologies and the Mediating Role of Axis I and II Disorders and Substance Use in Predicting Adult Incarceration 3. Yunquia Wang: Predictors of Future Suicide Attempts among Individuals Presenting to Psychiatric Services in the Emergency Department: A Longitudinal Study 4. Shelley Wepruk: Trends in Male Suicide in Canada 5. Joanna Bhaskaran: Method of Attempt and Reaction to Survival as Predictors of Repeat Suicide Attempt within 6 months
4:45 – 5:00 pm	Poster and Oral Awards
5:00 – 5:45 pm	CAPE Annual Meeting
7:00 pm	Diner at Courtyard Restaurant, 21 George St (Byward Market), 613-241-1516

Summary of Presentations

(Listed by first author's name)

Last Name	First Name	Title	Session-Poster group (#)	Page
Afifi	Tracie O	An Examination of Child Maltreatment in Canada: Insight into Child and Household Characteristics and Child Functional Impairments	C	8
Au	Bonnie	The relationship between C-reactive protein with metabolic syndrome and depressive symptoms: results from the English Longitudinal Study of Ageing	D-5 (#23)	9
Babineau	Vanessa	The interplay of prenatal depression and MAOA genotype in the development of early childhood dysregulation	A-2 (#12)	10
Berzins	Sandy	Psychosocial Coping and Depression in MS	D-4 (#19)	11
Bhaskaran	Joanna	Trends in Substances used in Deliberate Self Poisonings between 2000 and 2010	A-3 (#17)	12
Bhaskaran	Joanna	Method of Attempt and Reaction to Survival as Predictors of Repeat Suicide Attempt within 6 months	E	13
Blair	Alexandra	A realist review of the causal linkages between neighborhood characteristics and depression outcomes in adults	D-7 (#33)	14
Bland	Roger	Are the mentally ill well served in the present system?	C	15
Bolton	James	Risk of Suicide and Suicide Attempts associated with Physical Disorders: A Population-Based, Propensity Score-Matched Analysis	B	16
Campeau	Aimée	Population Representative Health, Social, & Victimization Surveys since 1990 that Assessed Childhood Maltreatment: A Systematic Review	A-2 (#7)	17
Caron	Jean	The social and psychiatric epidemiological catchment area of Montreal: realisation and future development.	B	18
Chartrand	Hayley	Is Non-Suicidal Self-Injury a Useful Distinction in Self-Harm Behavior? (presented by Joanna Bhaskaran)	A-3 (#14)	19
Clyde	Matthew	The association between smoking and major depression in a Canadian community based sample with Type-2 Diabetes.	A-1 (#5)	20
D'Arcy	Carl	Preventing mental illnesses: using epidemiological tools to provide an evidence-based based approach for population intervention to reduce the prevalence of depression	D-5 (#24)	21
Doré	Isabelle	Physical activity and mental health among college students in Quebec	D-7 (#34)	22
El-Gabalawy	Renée	Predominant Typologies of Psychopathology in the United States: A Latent Class Analysis	A-1 (#6)	23
El-Gabalawy	Renée	Anxiety Disorders and Major Depression are Correlates of Suicide Ideation and Attempts in Younger and Older Canadian and American Adults	A-3 (#13)	24
Ferro	Mark A.	Epilepsy-related ambiguity in the Attention Problems subscale of the Youth Self-Report	B	25
Gariépy	Genevieve	Neighbourhood factors increase the risk of depression in adults with diabetes	D-5 (#26)	26
Guedo	Carla	Trends in adherence to antipsychotic medications between 1994 and 2005 in Saskatchewan: an ecological analysis	D-6 (#28)	27
Henriksen	Christine A.	Childhood Maltreatment and Mental Health Across the Lifespan: Findings from a Nationally Representative Sample	A-2 (#8)	28

Last Name	First Name	Title	Session-Poster group (#)	Page
Iskric	Adam	Anxiety and Impulsivity in Bipolar Disorder: A Case Report and Literature Review	A-1 (#1)	29
Iskric	Adam	Prevalence and Familial Aggregation of Migraine and Mood Disorders: A Literature Review	D-4 (#18)	30
Iskric	Adam	Cognitive Styles in Mood Disorders	D-5 (#27)	31
Kurdyak	Paul	Impact of a Promotional Campaign on Psychiatric Emergency Department and Ambulatory Clinic Volumes	B	32
Lamoureux-Lamarche	Catherine	Health-Related Quality of Life and Quality of life associated with common mental health disorders	A-1 (#4)	33
Lamoureux-Lamarche	Catherine	Effect of antidepressant use on two dimensions of Health-Related Quality of Life in older adults: The EQ-5D-3L and the Visual Analog Scale	D-6 (#31)	34
Lebaron	Nissa	The Effects of Stressful Life Events and Coping Styles on Suicidal Ideation in Young Adults	A-3 (#16)	35
Lesage	Alain	Types, Count and per capita costs of psychiatric residential facilities	D-6 (#29)	36
Lungu	Ovidiu	Clustering of Neuropsychiatric Symptoms of Dementia in the Long-Term Care Setting across the 24-hour Circadian Cycle: Preliminary Findings	A-1 (#2)	37
Mahdanian	Abolfazl Artin	Pemphigus and Psychiatric Morbidity	D-4 (#21)	38
Martin	Michael	The role of stress and community belonging in the association between food insecurity and mental illness	E	39
McRae	Louise	Positive Mental Health in Canada	D-7 (#37)	40
Meng	Xiangfei	Comorbidity between lifetime eating disorders and mood and anxiety disorders: a population-based cross-sectional study	A-1 (#3)	41
Moamai	Javad	First Criminal Behavior among Older Adults with Serious Mental Illness: The Role of Comorbid Alcohol Use Disorder	C	42
Mogosanu	Andreea	Psychological distress and gender-norm adherence in a sample of mental health institute workers	D-5 (#25)	43
O'Donnell	Siobhan	Survey on Living with Chronic Diseases in Canada: Mood & Anxiety Disorders	D-4 (#20)	44
Perlman	Chris	Exploring the Concept of Clinical Efficiency for Evaluating Quality of Mental Health Services	D-6 (#32)	45
Roos	Leslie A.	Child Adversity Typologies and the Mediating Role of Axis I and II Disorders and Substance Use in Predicting Adult Incarceration.	E	46
Sloan	Matthew	The Effect of Stressful Life Events and Coping on Alcohol Use in Young Adults	A-2 (#9)	47
Sloan	Matthew	The Effect of Stressful Life Events and Coping on Cannabis Use in Young Adults	A-2 (#10)	48
Smith	Kimberly	Diabetes distress as a risk factor for transition from oral medication to insulin medication in people with type 2 diabetes	D-4 (#22)	49
Thompson	Angus	Measuring workplace productivity: Test quality and mental health confounds	D-7 (#35)	50
Thompson	Angus	Creative sentencing and the delivery and evaluation of a workplace mental health promotion intervention: A pilot project	D-7 (#36)	51
Viner	Rebecca	Prevalence and Risk Factors of Suicidal Ideation in the MS Population	A-3 (#15)	52

Last Name	First Name	Title	Session-Poster group (#)	Page
Wang	Yunquia	Clinician Prediction of Future Suicide Attempts: A Longitudinal Study	D-6 (#30)	53
Wang	Yunquia	Predictors of Future Suicide Attempts among Individuals Presenting to Psychiatric Services in the Emergency Department: A Longitudinal Study	E	54
Weeks	Murray	Childhood cognitive ability and its relationship with anxiety and depression in adolescence	A-2 (#11)	55
Wepruk	Shelley	Trends in Male Suicide in Canada	E	56

*****Note: Within each poster group, presenters will proceed in numerical order *****

Please see the full program on the CAPE website for complete abstracts accompanied by lists of all authors, co-authors and affiliations: <http://www.psychiatricepidemiology.ca/>

Keynote Address

Dr. Stephen E. Gilman, ScD

Associate Professor

Department of Social and Behavioral Sciences, and Department of Epidemiology,
Harvard School of Public Health, Boston, MA

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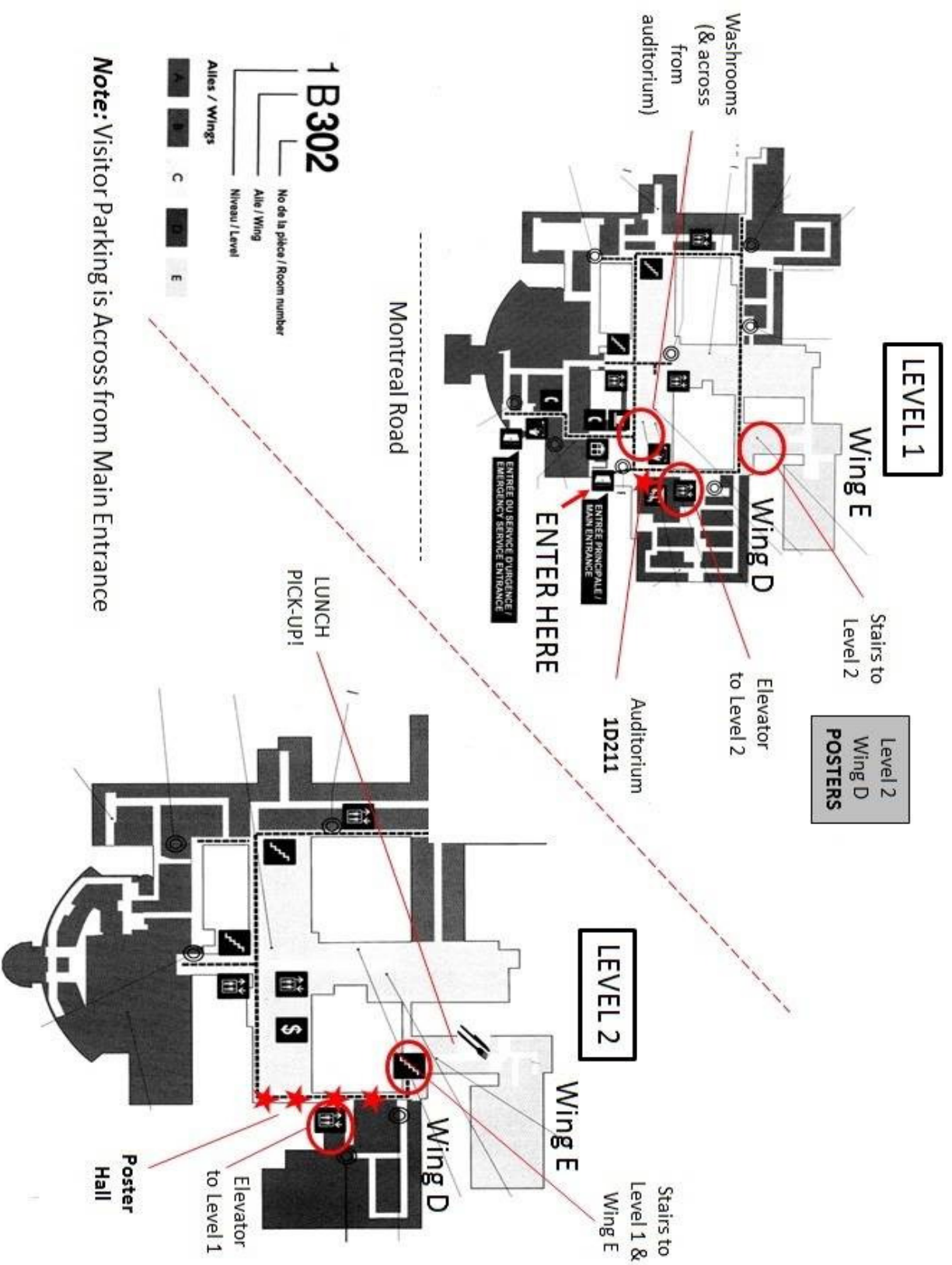


Stephen Gilman is a psychiatric epidemiologist focusing on social inequalities in major mental disorders, trying to understand how they emerge and persist over the life course. His research seeks to address the problem of social inequalities by investigating the early childhood determinants of depression, anxiety, and substance use disorders. Dr. Gilman's research demonstrates the importance of the childhood environment for the onset and subsequent recurrence of major depression in adults. His work on the prenatal and developmental origins of social inequalities in major depression is funded by the National Institute of Mental Health.

Dr. Gilman is co-investigator of the New England Family Study, a three-generation cohort study of individuals born in Massachusetts and Rhode Island in the early 1960's, their parents, and their children.

Dr. Gilman is also investigating the long-term outcomes of depression, including social inequalities in anti-depressant treatment outcomes, and the physical health consequences of depression including mortality. This work is based on the Stirling County Study, a landmark study in psychiatric epidemiology, and is supported by the Canadian Institutes of Health Research.

Dr. Gilman is an associate professor in the departments of Social and Behavioral Sciences, and Epidemiology, at Harvard School of Public Health, and is affiliated with the Department of Psychiatry at Massachusetts General Hospital.



Note: Visitor Parking is Across from Main Entrance

ABSTRACTS

(Alphabetical by last name of presenter)

Session C

Name: Tracie O. Afifi, Ph.D, University of Manitoba, Tracie.Afifi@med.umanitoba.ca

Co-Authors: Tamara Taillieu, MSc¹, Laurence Katz, MD¹, Lil Tonmyr, PhD², Jitender Sareen, MD¹
University of Manitoba¹ and the Public Health Agency of Canada²

Title: An Examination of Child Maltreatment in Canada: Insight into Child and Household Characteristics and Child Functional Impairments

Background: Child maltreatment is a major public health problem worldwide. Compared to other countries, knowledge of child maltreatment in Canada is limited. The objectives of this study were to examine: 1) the distribution of child and household characteristics among specific types of substantiated child maltreatment cases (physical abuse, sexual abuse, emotional maltreatment, neglect, exposure to intimate partner violence (IPV), and more than 1 type of maltreatment); 2) to examine the relationship between child and household characteristics with child functional impairment (i.e., mental, physical, behavioural, and cognitive impairments) among children in Canada.

Methods: Data were from the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS; collection 2008) from 112 child welfare sites across Canada (n = 5,611 of substantiated cases).

Results: Significant differences in the distribution of child and household characteristics existed across child maltreatment types. For example, IPV exposed and neglected children were more likely to be younger than children experiencing other maltreatment types. Physical abuse, sexual abuse, neglect, and more than 1 type of maltreatment compared to all other single types of maltreatment were associated with increased odds of child functional impairment after adjusting for child age and gender. Finally, being male, older age, living in a single parent home, and a household running out of money was associated with increased odds of child functional impairment after adjusting for child and household variables and child maltreatment types.

Conclusion: These findings should be considered when developing prevention policies and programs aim at reducing child maltreatment in Canada.

Name: Bonnie Au, Student, McGill University, bonnie.au@mail.mcgill.ca

Co-Authors: Norbert Schmitz

Title: The relationship between C-reactive protein with metabolic syndrome and depressive symptoms: results from the English Longitudinal Study of Ageing

Introduction: The metabolic syndrome is a cluster of risk factors comprised of elevated glucose levels, insulin resistance, central obesity, low levels of high-density lipoprotein cholesterol, hypertriglyceridemia, and hypertension. Depression is a common co-morbidity in individuals with metabolic syndrome. Inflammatory mechanisms have been suggested to be involved in depression and metabolic syndrome. C-reactive protein (CRP), a biomarker for inflammation, has been found to be independently associated with metabolic syndrome and depression.

Objective: To assess the association between C-reactive protein with metabolic syndrome and depressive symptoms in a representative sample of British people ≥ 50 years old.

Methods: Participants were 8643 community-dwelling men and women from the English Longitudinal Study of Ageing (ELSA). Associations between CRP with metabolic syndrome and depressive symptoms were examined using stratified multivariate logistic regression adjusted for socioeconomic and lifestyle variables. Metabolic syndrome was based on the International Diabetes Federation (IDF) criteria. Elevated depressive symptoms were based on a score ≥ 4 using the 8-item Center for Epidemiologic Studies Depression Scale (CES-D) scale.

Results: High CRP levels are associated with elevated depressive symptoms in individuals without metabolic syndrome (adjusted OR: 1.44, 95% CI: 1.10-1.88), but not in individuals with metabolic syndrome. High CRP levels are associated with metabolic syndrome in individuals with low (adjusted OR: 3.07, 95% CI: 2.47-3.81) and elevated (adjusted OR: 1.94, 95% CI: 1.32-2.84) depressive symptoms.

Conclusions: Metabolic syndrome and depressive symptoms are independently related to CRP. A better understanding using longitudinal data will help assess the directionality between depression, inflammation, and metabolic syndrome.

Name: Vanessa Babineau, Student, McGill University, vanessa.babineau@mail.mcgill.ca

Co-Authors: C. Gordon Green¹, A. Jolicoeur-Martineau², K. Minde⁸, R. Sassi³, M. St-Andre⁴, N. Carrey⁵, J.L. Kennedy⁶, M. Meaney¹, & A. Wazana⁷

¹McGill University, Montreal, Qc., ²UQAM, Montreal, Qc., ³St-Joseph's Healthcare, Hamilton, On., ⁴CHU Ste-Justine, Montreal, Qc., ⁵Dalhousie University, Halifax, NS., ⁶Center for Addiction and Mental Health, Toronto, On., ⁷Institute of Community and Family Psychiatry, Montreal, Qc., ⁸Douglas Mental Health University Institute, Montreal, Qc.

Title: The interplay of prenatal depression and MAOA genotype in the development of early childhood dysregulation

Dysregulation is associated with psychopathology throughout childhood and into adulthood (Althoff et al., 2010). We examined whether prenatal depression and child MAOA genotype exerted a joint influence on the development of early childhood dysregulation, and whether maternal education further moderated this association. The prenatal period is linked to postnatal development and has been defined as prenatal programming. MAOA genotype is associated with behavioural regulation and antisocial behaviour, thus a likely candidate to interact with prenatal depression to predict dysregulation. Maternal education can act as a protective factor against environmental and genetic susceptibilities. Our sample is from the Maternal Adversity, Vulnerability and Neurodevelopment (MAVAN) project, N = 91 mother-child pairs. Mothers reported the CBCL at 48 and 60 months, from which measures of dysregulation were extracted. Mothers self-reported symptoms of depression on the CES-D at 24-36 weeks gestation, and at 48 and 60 months postnatal. MAOA genotype was obtained with buccal swabs. Covariates: postnatal maternal depression, child gender and age. The joint influence of prenatal depression and MAOA genotype, moderated by maternal education in the prediction of dysregulation was significant at 48 months and marginally significant at 60 months. Carriers of low-level MAOA enzymes, exposed to prenatal depression, were most likely to develop dysregulation if their mother had a lower level of education. Higher maternal education acted as a protective factor, even in face of risk genes and exposure to prenatal depression. We provide researchers and clinicians with findings that inform the development of dysregulation to support intervention and early prevention.

Name: Sandy Berzins, Student, University of Calgary, berzins@ucalgary.ca

Co-Authors: Dr. Andrew Bulloch, Dr. Jodie Burton, Dr. Keith Dobson, Dr. Gordon Fick, Dr. Scott Patten

Title: Psychosocial Coping and Depression in MS

Mental illness is an important dimension of multiple sclerosis (MS). People with MS have an elevated prevalence of anxiety, psychotic and mood disorders. The objective of this study was to estimate the incidence and potential determinants of depression in people with MS.

Methods: Participants in this prospective cohort study (n=190) were followed for six months, starting with two baseline risk factor assessments then completing a depression screening instrument, the PHQ-9, every 2 weeks. At monthly intervals, information was collected on potential risk factors, using standard items from existing validated scales and instruments. Associations were estimated using prevalence ratios (PR) and hazard ratios (HR).

Results: Baseline cross-sectional analyses found a depression prevalence estimate of 22% using the PHQ-9 cut-point. Psychosocial predictors for depression prevalence included low self-esteem (PR=5.1), a perceived inability to cope with unexpected problems (PR=3.8) and negative life events (PR=4.0); task oriented (PR=0.34) and social diversion coping (PR=0.37) were protective factors. Predictors of incidence risk included self-esteem (HR=4.9), perceived inability to cope with demands of daily life (HR=5.4) low self-efficacy (HR=5.0) and task oriented coping (HR=0.2). Coping style was a key determinant that ameliorated the risk associated with factors such as childhood trauma and stressful events.

Conclusion: Depression in MS is often regarded as being neurologically induced due to brain lesions, inflammation or axonal loss. While these results do not obviate this possibility, they provide a clear indication that depression in MS exhibits a risk factor profile characterized prominently by psychological and social factors. Future research should adopt a greater focus on such determinants, particularly coping with stress style, which may provide unrecognized opportunities for prevention and/or treatment of depression in this population.

Name: Joanna Bhaskaran, Student, Department of Psychology, University of Manitoba,
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Co-Authors: Eric Johnson, Natalie Mota, Cara Katz, Jitender Sareen, Julie Mojica, Claudia Rigatto, Sat Sharma, Dan Roberts.

Title : Trends in Substances used in Deliberate Self Poisonings between 2000 and 2010

Objectives: To examine trends in serious intentional overdoses leading to admission to an Intensive Care Unit (ICU) over a 10- year period.

Introduction: Suicide is a leading cause of mortality. Deliberate Self Poisonings (DSP) are a large proportion of suicides and suicide attempts (SAs). Patients admitted to the ICU with DSPs are at increased risk for a completed suicide. Antidepressants such as TCAs and SSRIs have been implicated in ICU admissions due to self-poisonings however; literature suggests that there has been a change in rates of substances used in DSPs.

Participants: Individuals presenting to any of the 11 ICUs in Winnipeg, Canada with self-poisonings (SPs) (*n deliberate* = 1011; *n accidental*= 370).

Method: Six categories of substances were used as main outcome variables: Poisons, Over the Counter Medications (OTC), Prescription Medications (PM), TCAs, Sedatives and Antidepressants, Anticonvulsants, Lithium and Cocaine. Year of DSP was used as a predictor of change over time as evaluated by binary logistic regressions, adjusted for sex and age.

Results: Multiple overdoses (65.7%) increased over time (AOR= 1.054, 95% CI (1.010-1.099)). However, rates of other substances decreased over time such as, rates of Poison use (AOR= .886, 95% CI (.813-.947)), OTC use (AOR= .886 95% CI (.823-.954)), PM use (AOR= .888, 95% CI (.819-.962)) decreased over time. Presence of TCAs (AOR= .887 95% CI (.842-.934) and Sedatives (AOR= .873 95% CI (.833-.916)) also decreased over time.

Conclusions: This study provides insight into rates of substances used for serious suicide attempts by DSP.

Name: Joanna Bhaskaran, Student, Department of Psychology, University of Manitoba,
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Co-Authors: Yungqiao Wang, Leslie Roos, James Bolton, Jitender Sareen, Kurt Skakum

Title : Method of Attempt and Reaction to Survival as Predictors of Repeat Suicide Attempt within 6 months

OBJECTIVES: Individuals presenting to emergency services with suicide attempts are at an increased risk for completed suicide. This study sought to examine whether the method of attempt and the person's reaction to attempt survival predicted future repeat suicide attempt within 6 months.

METHOD: Participants consisted of individuals presenting to psychiatric services with suicide attempts at the emergency departments of the two main tertiary care hospitals in Winnipeg, Canada between January 2009 and December 2012. Individuals with suicide attempts that bypassed emergency services and were admitted directly to medical wards were also included. The primary outcome measure was repeat suicide attempt within the next six months. Reaction to survival and lethality of the method of the initial attempt were used as predictors of future suicide attempts evaluated by binary logistic regression, adjusting for confounders such as presence of depression, presence of substance abuse, age and sex of the individual.

RESULTS: Of the 934 individuals who presented at the Emergency Department (ED) with an index attempt, 82 individuals presented with a suicide reattempt within 6 months. Ambivalence about survival and wishing to be dead after the index attempt were demonstrated to be robust predictors of future suicide attempt even when adjusting for age, sex, depression, substance abuse and method of the initial attempt [Adjusted odds ratio] (AOR)=2.82, 95% confidence interval (CI) 1.44-5.52; AOR=2.66, 95% CI 1.16 to 6.13, respectively).

CONCLUSION: This study underscores the importance of assessment of the patient's reaction to survival to suicide attempt to identify individuals at higher risk for future repeat attempts.

Name: Alexandra Blair, Student, McGill University, alexandra.blair@douglas.mcgill.ca

Co-Authors: Nancy Ross, Geneviève Gariepy, Norbert Schmitz
McGill University, Douglas Hospital Research Centre

Title : A realist review of the causal linkages between neighborhood characteristics and depression outcomes in adults

Background: Depression is one of the leading causes of disease burden worldwide, and is related to a reduction in quality of life, increased functional disability, somatic diseases, and early mortality. Previous research linking disciplines of psychiatric epidemiology and urban social geography suggests that neighborhoods can act as stressors or mediate social connections to affect depression outcomes. The causal mechanisms at play are not yet fully understood.

Objective: This study employs systematic realist review methods to determine which characteristics of neighborhoods impact depression outcomes in adults, and in through which causal pathways.

Methods: Studies were identified using Medline, PubMed, PsycInfo, Geobase, and Web of Science databases, and chosen using reproducible selection criteria and systematic critical appraisal.

Results: A total of 14 longitudinal studies, published between 2003 and 2011, were included in this review. Eleven of the fourteen articles observed a significant relationship between depression and at least one of the following neighborhood-level variables: deprivation, disorder, instability, and social ties. These variables affected depression by: 1) placing stress on individuals, 2) affecting networks of support, 3) shaping the resiliency of residents to stress and negative affects, 4) affecting how residents perceived the aesthetic and form of their neighbourhoods, and 5) shaping residents' sense of control and agency in their neighbourhoods.

Conclusions: Future research requires a more systematic use of longitudinal design, relevant control variables, and a diversity of neighborhood-level measures that account both for the physical and social environment. Interventions aimed at improving affective resiliency along the pathways discussed above need to be tested.

Name: Roger Bland, Professor, University of Alberta, Waterloo@Shaw.ca

Co-Authors: Angus Thompson, Inst. for Health Economics

Title: Are the mentally ill well served in the present system?

Introduction.

The last 50 years have seen the substantial elimination of mental hospitals with care provided in the community and in general hospital settings in most Western countries. While this has also been a period of rapid pharmacological developments, the question remains of whether patients are better served in this system

Method.

Review of the number of beds available for the mentally ill in Canada, observations regarding the growth of homelessness, the mentally ill in the prison system and the outcome for people with severe persistent mental illness.

Results.

The reduction in the number of psychiatric beds with a decreasing length of stay associated with some expansion of community services has corresponded with growth in homelessness and increased incarceration in prisons with no improvement in outcome for people with schizophrenia, which has changed little with modern management. Despite the fact that mental illnesses account for up to 40% of disability in developed countries, in Canada only 5% the health budget is spent on mental health.

Conclusions.

Deinstitutionalization has been a mixed blessing. Most people appreciate the additional freedom of being able to live in the community, but the anticipated improvement in outcomes is not being achieved. Increasing numbers of the mentally ill are to be found in the prisons and the homeless population. The recent evidence that the lives of those with schizophrenia, even when treated, are bleak, suggests that a review of the way in which we do things is in order.

Name: James M. Bolton, MD, Department of Psychology, University of Manitoba,
jbolton@exchange.hsc.mb.ca

Co-Authors: Randy Walld, Greg Finlay, Jitender Sareen

Title: Risk of Suicide and Suicide Attempts associated with Physical Disorders: A Population-Based, Propensity Score-Matched Analysis

Background: The risk of suicide independently associated with physical disorders is unclear. The objective of this study was to examine the relationship between physical disorders and suicide after accounting for the effects of mental disorders.

Method: Individuals who died by suicide (n=2100) between 1996-2009 were matched 3:1 by propensity score to general population controls (n=6300). Multivariate conditional logistic regression compared the two groups across physical disorders, adjusting for mental disorders and comorbidity. Secondary analyses examined the risk of suicide according to time since diagnosis (1-90, 91-364, 365+ days). Similar analyses also compared individuals with suicide attempts (n=8641) to matched controls (n=25,923).

Results: Cancer was associated with increased risk of suicide [Adjusted Odds Ratio (AOR)=1.39, 95% Confidence Interval (CI) 1.02-1.88] even after adjusting for all mental disorders. The risk of suicide with cancer was particularly high in the first 90 days after initial diagnosis (AOR=4.19, 95% CI 1.78-9.84) and decreased to non-significance after one year. Women with respiratory diseases (asthma and COPD) had elevated risk of suicide whereas men did not. COPD, ischemic heart disease, hypertension, diabetes, and cancer were each associated with increased odds of suicide attempts in adjusted models.

Conclusion: People with cancer are at increased risk of suicide and suicide attempt, especially in the 3 months following initial diagnosis. Increased support and psychiatric involvement should be considered for the first year after cancer diagnosis.

Name: Aimée Campeau, Public Health Agency of Canada, cairnej@mcmaster.ca

Co-Authors: Wendy Hovdestad, Lil Tonmyr, Dawn Potter

Title: Population Representative Health, Social, & Victimization Surveys since 1990 that Assessed Childhood Maltreatment: A Systematic Review

This poster presents a systematic review of representative population health, social and victimization surveys conducted anywhere in the world that include childhood maltreatment questions since 1990. Such surveys allow exploration of the importance of child maltreatment to health research (including psychiatric epidemiology). A comprehensive summary and evaluation of these surveys is needed.

Peer-reviewed articles and the childhood maltreatment measures from survey instruments were identified and described. Searches of databases (from January 1990 to February 2013) including Cinahl, Embase, ERIC, Global Health, MEDLINE, PsycINFO, Scopus, Social Policy and Practice were conducted with librarians' assistance to identify English-language articles using pertinent survey data. Additional searches for surveys were conducted using Internet search engines, queries to electronic discussion lists, reference searches of retrieved articles, and other means. Translations of non-English survey content were verified by fluent readers of survey languages.

Our research reveals that evidence available to explore the public health relevance of child maltreatment is large. Forty-six surveys met inclusion criteria. About a quarter assessed childhood neglect, emotional abuse, and/or exposure to family violence; 22 physical abuse; 41 sexual abuse. Twenty-two surveys included questions on more than one type of childhood maltreatment. Inclusion of multiple types provides researchers and policy makers with a broader evidence base.

Many general population survey instruments have included childhood maltreatment questions. Given that childhood maltreatment has been identified as a key risk factor for later negative health outcomes (e.g. psychiatric illness), inclusion of all five types of childhood maltreatment measures on future surveys is recommended.

Name: Jean Caron, PhD, Professor, McGill University; Institut universitaire en santé mentale Dougals, jean.caron@mcgill.ca

Co-Authors: l'Équipe des IRSC en épidémiologie sociale et psychiatrique

Title: **The social and psychiatric epidemiological catchment area of Montreal: realisation and future development.**

Nous avons développé depuis 2006 la première zone circonscrite d'épidémiologie sociale et psychiatrique au Canada grâce au soutien des Instituts de recherche en santé du Canada. Cette zone se situe dans le sud-ouest de Montréal qui regroupe les quartiers de Verdun, St-Henri, Pointe St-Charles, Lasalle et Dorval. Il s'agit d'une étude longitudinale réalisée auprès d'un échantillon aléatoire représentatif de chacun des 5 quartiers. Lors de la 1^{ère} collecte de données à T1, 2434 personnes ont été interviewées et 1823 (75%) de celles-ci ont acceptés d'y participer deux ans plus tard à T2. À T3, 1050 nouvelles personnes ont été recrutées afin de combler l'attrition portant ainsi le nombre de participant à 2355. La 4^{ième} collecte de données débutera en octobre 2013. Plus d'une trentaine de questionnaires standardisés sont administrés pour mesurer les troubles mentaux, la détresse psychologique, la criminalité, la qualité de vie, le bien-être psychologique et leurs déterminants individuels, sociaux et communautaires. Nous utilisons de plus un système d'information géographique permettant d'évaluer les effets plus objectifs de l'environnement social et bâti qui vient compléter des questionnaires portant sur la perception du quartier. Cette présentation permettra de connaître le modèle théorique à la base de ce programme de recherche, les méthodes et analyses utilisées de même que les retombées scientifiques du programme. Par la suite, nous explorerons avec les scientifiques du CAPE, la possibilité d'étendre cette méthodologie afin de créer d'autres zones circonscrites dans d'autres villes et provinces canadiennes permettant ainsi d'avoir une nouvelle approche de l'étude de la santé mentale de la population canadienne.

Cette présentation sera bilingue.

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Co-Authors: *Joanna Bhaskaran, BSc. (Hons.)¹; Huntai Kim, MD²; Minoo Mahmoudi, MD²; James Bolton, MD^{1,2}

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Title: Is Non-Suicidal Self-Injury a Useful Distinction in Self-Harm Behavior?

Objective: Non-suicide self-injury (NSSI) has been included in DSM-5 as a condition requiring further study. It includes cutting, yet other methods of self-harm are not considered NSSI even if the person did not intend to die. The objective of this study was to compare correlates of different methods of self-harm to determine whether people who harm themselves by cutting are a distinct subgroup.

Methods: 6919 adults presented to psychiatric services in the emergency departments of two tertiary care hospitals in Manitoba between January 2009 and December 2011. Chart reviews of the NSSI presentations were conducted to obtain demographic and clinical information. People presenting with cutting as the method of self-harm were compared to those presenting with drug overdose.

Results: There were no differences between the groups on most demographic measures, including sex, age, and employment status. Mental disorders were common in both groups. 30% of the cutting group had an alcohol use disorder, as did 23% of the overdose group. Borderline personality disorder was diagnosed more frequently in the former group (26%) than the latter (17%), but this difference was non-significant (OR=1.70, 95% CI 0.69-4.22). Previous NSSI behavior was more common among people cutting (OR=4.53, 95% CI 1.30-15.77).

Conclusions: People who engage in NSSI have high rates of mental disorders. The method that people use to harm themselves does not appear to distinguish these groups; they appear to be similar on most correlates. Further study is required to determine whether NSSI should be broadened to include other methods of self-harm.

Name: Matthew Clyde, PhD Candidate, University of Ottawa Faculty of Social Sciences; Douglas Mental Health University Institute / McGill University (M.Sc Psychiatry; former); MClyd102@gmail.com

Title: The association between smoking and major depression in a Canadian community based sample with Type-2 Diabetes.

Objective: To describe the characteristics of successful smoking quitters, unsuccessful quitters and non-attempters in adults with type-2 diabetes and to assess the association between smoking cessation success and attempts with depression syndrome in this population. .

Method: 1871 adults with type-2 diabetes were recruited via random digit dialing for the Montreal Health and Well Being Study (DHS). Ever smokers were classified as Successful Quitters, Unsuccessful Quitters and Non-Attempters. Depression was assessed using the Patient Health Questionnaire-9 and categorized as no vs. depression syndrome. Generalized Estimating Equations were used to test the association between depression syndrome and smoking cessation status, while controlling for other demographic and health related variables.

Results: At baseline, we categorized 794 ever smokers as successful quitters, 189 as unsuccessful quitters and 188 as quitting non-attempters. Across subsequent waves, we recorded 68 cases of quitting, and 50 cases of relapse to smoking. In the fully adjusted model, depression syndrome was significantly associated with being an unsuccessful quitters (AOR = 1.53 (95% CI 1.12 – 2.08), but not non-attempters, compared to successful quitters (reference group).

Conclusions: Those making unsuccessful quitting attempts were more likely to have depression syndrome compared to successful quitters. Depression may therefore have impacted their ability to successfully quit. Addressing depression may be an important clinical goal for those attempting to successfully quit smoking.

Name: Carl D'Arcy, Royal University Hospital, Saskatoon, kcd156@mail.usask.ca

Co-Authors: XiangFei Meng PhD

Title: Preventing mental illnesses: using epidemiological tools to provide an evidence-based based approach for population intervention to reduce the prevalence of depression

Background: National epidemiological survey data (2002) showed that more than 1 in 10 Canadians reported a mental illness in the last year. Administrative (Saskatchewan) show that in 2007 some 12.9% of the provincial population were dispensed a psychotropic medication.

Given the high volumes of mental illnesses reported in most developed and developing countries it is unlikely there will be enough trained clinical manpower available to treat all mental disorders that should be treated - a prevention strategy is more practical, desirable and cost-effective.

A prevention strategy should focus on reducing the prevalence modifiable risk factors. Using population-based datasets we estimate the impact of various modifiable risk factors on the incidence of depression among Canadians.

Methods: Data were from a nationally representative longitudinal health survey of Canadians, the National Population Health Survey (NPHS) 1994/95 to 2010/11. We used multivariate logistic regression to explore the relationships between modifiable risk factors and incident depression. Population attributable fractions (PAFs) are calculated for each risk factor for incident depression.

Results: Risk factors for first episode depression were younger age (15-24) being female, being Caucasian, regular smoker, occasional/former drinker, and having a chronic disease. Protective factors were being older, male, non-Caucasian, non-smoker, regular drinker, and being chronic disease free.

Limitations of the data and analyses are discussed.

Discussion: The implications of these results for prevention is in terms of early intervention, modifying gender roles, reducing poverty and inequality, smoking reduction in vulnerable populations, and better treatment and management of chronic diseases.

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Co-Author: Louise Fournier, Ph.D.^{1,2}, Jennifer O'Loughlin, Ph.D.^{1,2}

Title: Physical activity and mental health among college students in Quebec

Relevance: Anxiety and depressive disorders are more prevalent among young adults (15-24 years old) than any other population age group. Physical activity is an effective intervention to prevent these disorders. However, no research has examined the potential of physical activity to promote positive mental health. Furthermore, the influence of different physical activity modalities and the social mechanisms linking physical activity with mental health remain unclear.

Objective: This poster presents a doctoral research protocol developed to study the associations between three physical activity modalities (frequency, intensity and social context), social support and integration, and two indicators of mental health (positive mental health, anxiety/depression symptomatology). Relevance, research questions, design and methodology, and main expected results will be discussed.

Methodology: Approximately 2500 college students from Cegep de l'Outaouais will be followed in a prospective cohort study. 100 physical education group-classes will be randomly selected; participation from all students in those group-classes will be sought. All participants will complete a first paper questionnaire during class-time in September 2013; a follow-up web questionnaire will be sent six months later.

Expected results: We hypothesize that high intensity, high frequency and group physical activities will show larger effects on mental health outcomes than activities that are less intense, frequent and practice alone. Social support and integration are also expected to mediate the relationship between group physical activity and outcomes.

Conclusion: Results from this study will help inform physical activity guidelines for Quebec's colleges around the implementation of interventions aiming to promote positive mental health through physical activity.

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Co-Author: Jack Tsai, PhD, Ilan Harpaz-Rotem, PhD, Rani Hoff, PhD, Jitender Sareen, MD, & Robert H. Pietrzak, PhD

Title: Predominant Typologies of Psychopathology in the United States: A Latent Class Analysis

Background: Latent class analysis (LCA) offers a parsimonious way of classifying common typologies of psychiatric comorbidity. We aimed to use LCA to identify the nature and correlates of predominant typologies of Axis I and II disorders in a large and comprehensive population-based sample.

Methods: This study utilized Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions (2004-2005; n = 34,653), a population based sample of U.S. adults. We derived latent classes based on all assessed Axis I and II disorders and examined the relationship between the identified Axis I classes and lifetime psychiatric disorders and suicide attempts, and physical- and mental health-related quality of life.

Results: A four-class solution was optimal in characterizing both Axis I and II disorders. For Axis I, this included low psychopathology (n=28,935, 84.0%), internalizing (n=3,693, 9.9%), externalizing (n=1,426, 4.5%), and high psychopathology (n=599, 1.6%) classes. For Axis II, this included no/low personality disorders (n=31,265, 90.9%), obsessive/paranoid (n=1635, 4.6%), borderline/dysregulated (n=1319, 3.4%), and highly comorbid (n=434, 1.1%) classes. Compared to the low psychopathology class, all other Axis I classes had significantly increased odds of mental disorders, Axis II classes, suicide attempts and poorer quality of life with the high psychopathology class having the overall highest rates. Compared to the low psychopathology class, the internalizing and externalizing classes had increased rates of mood and anxiety disorders, and substance use disorders, respectively.

Conclusion: Characterizing co-occurring patterns of psychopathology using person-based typologies represents a higher-order classification system that may be useful in clinical and research settings.

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Title: Anxiety Disorders and Major Depression are Correlates of Suicide Ideation and Attempts in Younger and Older Canadian and American Adults

Background: Suicide ideation and attempts (SI/SA) are significant concerns for service providers in mental health, particularly geriatric mental health. However, little research has examined the associations between individual anxiety disorders and Major Depressive Disorder (MDD) and SI/SA using population-based samples of older Canadian and American adults.

Methods: Data were from the public use Canadian Community Health Survey Cycle 1.2 collected in 2002 ($N = 36,984$) and the Collaborative Psychiatric Epidemiology Surveys collected in 2001-2003 ($N = 20,013$). Because age moderated the effect of most of the individual anxiety disorders on SI/SA, we stratified our analyses by older (aged 55+) and younger (aged <55) adults. Cross-tabulations compared prevalence rates of past-year SI/SA between individuals with, and without, past-year anxiety disorders and MDD. Unadjusted logistic regression models and models adjusting for sociodemographics and comorbid Axis I disorders determined associations between individual anxiety disorders and MDD, and SI/SA.

Results: Among both older and younger adults, each anxiety disorder (except PTSD and generalized anxiety disorder for older American adults) and MDD was associated with greater odds of SI/SA (AOR 2.96-7.72 for older Canadians, 5.45-17.40 for older Americans; 1.56-9.30 for younger Canadians, 2.51-4.91 for younger Americans).

Conclusions: Anxiety disorders and MDD were positively and strongly associated with SI/SA among Canadian and American younger and older adults alike, independent of comorbid Axis I disorders. This research contributes to the growing literature that suicide is a highly prevalent and complex mental health problem across the lifespan.

Session B

Name: Mark A. Ferro, Department of Psychiatry & Behavioural Neurosciences [1], Offord Centre for Child Studies [2], McMaster University, ferroma@mcmaster.ca

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Titre: Epilepsy-related ambiguity in the Attention Problems subscale of the Youth Self-Report

Although the Youth Self-Report (YSR) was not designed for assessing psychopathology in children with chronic illness, it is used extensively in paediatric populations, including adolescents with epilepsy (AwE). It has been criticized for entangling physical and behavioural symptomatology; thus, there is risk of obtaining distorted estimates of problem behavior due to the inclusion of epilepsy-related items. The aim was to test for measurement invariance of the Attention Problems subscale of the YSR (YSR-AP) and compare problem scores in a population-based sample of AwE and healthy controls. Data were obtained from the Mater University Study of Pregnancy and included 33 AwE and 1068 controls aged 14 years (52% male). Multiple-group confirmatory factor analysis was used to examine measurement invariance of the YSR-AP. Structural equation modeling was used to examine the association between epilepsy and YSR-AP scores. The baseline model demonstrated adequate fit: $\chi^2(26)=44.16$, $p=0.015$; CFI=0.990; TLI=0.984; RMSEA=0.036. However, the model was not invariant between groups: $\Delta\chi^2(6)=13.89$, $p=0.031$. Removal of epilepsy-related ambiguous items (#13-confused; #17-daydreams) and respecification of the model resulted in a well-fitting [$\chi^2(23)=31.22$, $p=0.118$; CFI=0.994; TLI=0.995; RMSEA=0.025], invariant scale [$\Delta\chi^2(5)=1.99$, $p=0.851$]. Modeling the association between epilepsy and the original YSR-AP suggested that AwE had higher problem behaviour ($\beta=0.27$, $p<0.001$); however, when the invariant YSR-AP was modeled, no significant differences were observed ($\beta=0.11$, $p=0.417$). Results suggest that AwE may not be able to distinguish between seizure semiology from certain epilepsy-related behaviours. Thus, estimates for this subscale may be biased, resulting in misclassification based on risk stratification for mental health services.

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Co-Author: Dominic Comtois, Alexandra Blair, Benoit Thierry, Yan Kestens, Norbert Schmitz

Title: Neighbourhood factors increase the risk of depression in adults with diabetes

Background: Depression is frequent in people with diabetes and can have detrimental effects on disease outcomes. The place where people live is thought to affect mental health above and beyond characteristics of individuals. Neighbourhood environments are particularly relevant to people with diabetes who rely on their local area for resources and support.

Aim: To investigate the effects of a range of neighbourhood characteristics on depression in people with diabetes.

Methods: We used longitudinal data from 1,601 participants in the Diabetes Health Study (2008-2012). We assessed depression using the Patient Health Questionnaire. We measured neighbourhood deprivation using census data; density of businesses and services and land-use patterns using geospatial data; and level of greenness using satellite data. We estimated the effect of neighbourhood factors on incidence of depression using survival analysis, adjusting for confounders.

Results: The 5-year cumulative incidence of depression was 26%. Neighbourhood material deprivation, availability of physical activity services and level of greenness had significant effects on the risk of depression, after adjusting for age and sex. Only availability of physical activity services remained significant after adjusting for socioeconomic and health factors. Other neighbourhood features were not significant.

Conclusion: Neighbourhoods which have greater availability of physical activity services are associated with lower risk of depression in people with diabetes. Further research is needed to investigate pathways relating this neighbourhood factor to depression.

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Co-Auteurs: Dr. David Blackburn, David Tran, Dr. Alfred Remillard, (University of Saskatchewan), Dr. Lauren Bresee (Alberta Health Services)

Titre: Trends in adherence to antipsychotic medications between 1994 and 2005 in Saskatchewan: an ecological analysis

Background: Second generation antipsychotics (SGAs) have better tolerability compared to first generation antipsychotics (FGAs). As a result, we sought to examine whether the shift to SGAs from FGAs was associated with increases in overall antipsychotic adherence.

Objective: To describe trends in antipsychotic adherence among a cohort of individuals discharged from a first-time schizophrenia hospitalization between 1994 and 2005.

Methods: We used Saskatchewan health administrative databases to identify subjects discharged following a first-time hospitalization for schizophrenia and were dispensed an antipsychotic within the following 365 days. During the 365 days following discharge, we calculated the number of days where at least one antipsychotic dose was available, the number of hospitalizations, and number of days hospitalized. All measures were age- and sex-adjusted and reported per person year.

Results: Between 1994 and 2005 overall dispensations for antipsychotics increased dramatically and the proportion of SGAs increased from 11% in 1994 to 83% in 2005. The number of days per person year with at least one antipsychotic on-hand increased from 178 in 1994 to 230 in 2005 (p for trend < 0.05). During the same period, all-cause days in hospital and distinct hospital visits declined from 25 to 16 days and 1.4 to 0.7 per person year, respectively.

Conclusions: Between 1994 and 2005, SGAs replaced FGAs as the most commonly used antipsychotics in Saskatchewan. During this time, increased adherence and reduced hospitalizations was also observed. The extent to which SGAs are directly responsible for these trends requires further study.

Disclaimer: Dr. David Blackburn is the Chair in Patient Adherence to Drug Therapy within the College of Pharmacy and Nutrition, University of Saskatchewan. This position was created through unrestricted financial support from AstraZeneca Canada, Merck Canada, Pfizer Canada, and the Province of Saskatchewan's Ministry of Health. None of the sponsors were involved in developing this study or writing the manuscript.

"This study is based in part on de-identified data provided by the Saskatchewan Ministry of Health. The interpretation and conclusions contained herein do not necessarily represent those of the government of Saskatchewan or the Saskatchewan Ministry of Health."

Name: Christine A. Henriksen, Student, University of Manitoba, umhenri5@cc.umanitoba.ca

Co-Authors: Tracie O. Afifi, Jitender Sareen, Harriet MacMillan, Michael Boyle

Title : Childhood Maltreatment and Mental Health Across the Lifespan: Findings from a Nationally Representative Sample

Background: Childhood maltreatment remains a significant public health concern: victims are at an increased risk for mental disorders and poor quality of life in adulthood. To date, no studies have examined mental health (good, moderate, poor) following childhood maltreatment across the lifespan in a large nationally representative population-based sample. Objective: To estimate the prevalence of childhood maltreatment and its association with mental health across the lifespan. Methods: Data came from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), a representative sample of American adults (N=34,653, ages 20+). Semi-structured face-to-face interviews assessed respondents for well-being, childhood maltreatment, and past year DSM-IV mood disorders, anxiety disorders, and substance use disorders. Multinomial regression was used to determine the association between childhood maltreatment and mental health across three age groups (20-34, 35-59, 60+ years). Results: The distribution of mental health status varied across the age groups, with a higher proportion of older adults having good mental health (i.e., no mental disorder and good mental well-being), compared to young adults and middle-aged adults. Childhood maltreatment significantly predicted poor mental health (i.e., mental disorder and poor well-being), compared to good mental health, across all age groups (odds ratios ranging from 2.36 to 3.28), with the highest odds ratios being observed among younger groups. Conclusions: Childhood maltreatment is significantly linked to poorer mental health outcomes across the lifespan, and the association appears strongest among young adults. Public policy efforts should be targeted at reducing childhood maltreatment to reduce mental disorders and improve quality of life.

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Co-Author: M. Sloan, Dr. N.C. Low

Title: Anxiety and Impulsivity in Bipolar Disorder: A Case Report and Literature Review

Background: Bipolar disorder is associated with more suicide attempts and increased impulsivity. In addition, bipolar subjects have significantly higher rates of anxiety disorders than the general population. However, despite these findings, the specific relationship between impulsivity and anxiety in bipolar disorder has received little attention.

Objectives: (1) To present a case of bipolar disorder with anxiety and impulsivity; (2) To review the literature on impulsivity and anxiety in bipolar disorder.

Methods: Case presentation of a bipolar subject with comorbid anxiety and literature review of PubMed and PsycINFO.

Results: (1) The core features of this case study include large frivolous purchases, risky sexual behaviour, and high suicide risk. His impulsivity score was significantly higher than previous literature on impulsivity scores in bipolar subjects with comorbid anxiety. (2) Current conceptualizations suggest that core features of anxiety disorders, such as behavioral inhibition and anxious apprehension, are inconsistent with characteristics of impulsivity, such as increased risk-seeking and acting without forethought. Several authors have found that anxiety may serve as a protective factor against disinhibited, potentially dangerous impulsive behaviors. In contrast, a handful of studies suggest that bipolar subjects with a) comorbid anxiety disorder or b) lifetime suicide attempts reported elevated levels of impulsivity compared to bipolar subjects without a current anxiety disorder.

Conclusions: This case exemplifies the importance of assessing anxiety disorders and impulsivity in bipolar subjects with high suicide risk. Future research should focus on clarifying the association of impulsivity and anxiety in bipolar disorder in relation to suicide risk.

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Co-Author: Dr. N.C. Low

Title: Prevalence and Familial Aggregation of Migraine and Mood Disorders : A Literature Review

Background: Previous research suggests that migraine comorbidity with mood disorder constitutes a subtype of mood disorders. However, few studies discuss this comorbidity and their implications in clinical settings. Furthermore, familial co-aggregation of these disorders – indicated by increased migraine prevalence in relatives of mood disorder subjects and increased mood disorder prevalence in relatives of migraine subjects – has been understudied.

Objective: This study reviews 1) the comorbidity of mood disorders and migraine and 2) the familial clustering of migraine in mood disorder subjects.

Method: Literature searches were conducted and articles using clinically-valid classifications of mood disorders and migraine in clinical settings were selected.

Results: Migraine prevalence for the general population was found to be 5-8% in men and 11-16% in women. In depressed subjects, migraine ranged from 24-57%, and in bipolar subjects, the range was 26-54%. In bipolar I subjects, migraine ranged from 11-19%, whereas in bipolar II subjects, the range was 43-77%. With regards to familial clustering of migraine, 21-59% of depressed subjects with migraine had a family history of migraine compared to 10-21% of depressed subjects without migraine. In bipolar disorder subjects with migraine, 65% had a family history of migraine compared to 26% of bipolar subjects without migraine.

Conclusion: The increased prevalence of migraine in families of mood disorder subjects without migraine suggests a potential shared etiology between the disorders. Furthermore, the higher prevalence of migraine in bipolar II compared to bipolar I disorder supports their distinction as separate mood disorders and warrants further analysis of their distinct symptomatology.

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Co-Author: J. Cohen (First author), Dr. N.C. Low
Title: Cognitive Styles in Mood Disorders
<p>Background: Bipolar disorder and unipolar depression are disorders defined mainly by an abnormal disturbance in the individual's mood state. Research has shown that these individuals exhibit specific cognitive styles that may trigger a mood episode, or a worsening of existing mood symptoms, in the presence of stressful events.</p> <p>Objective: To test differences in cognitive style between adults with bipolar disorder and unipolar depression using a clinical sample from a tertiary healthcare centre.</p> <p>Methods: Two self-report questionnaires were used to measure cognitive style, the Short-Form Cognitive Style Questionnaire (CSQ-SF), and the Behavioral Inhibition System/Behavioral Approach System (BIS/BAS) Scales. Diagnostic interviews were administered to yield mood diagnoses, comorbid psychiatric diagnoses and sociodemographic characteristics. Multiple linear regression models were created to measure the association between mood diagnosis and specific cognitive styles.</p> <p>Results: Three significant differences were found between bipolar and unipolar subjects on measures of cognitive style. Compared to bipolar subjects, unipolar subjects (1) tended to respond and react with more negative affect and 'inhibited' behavior in anticipation of potentially threatening events, in addition to (2) exhibiting lower levels of self-worth. In contrast, bipolar subjects (3) showed more 'fun-seeking' behaviors compared to unipolar subjects, implying that they have a stronger tendency to pursue pleasurable things.</p> <p>Conclusion: Mood disorder subjects exhibit specific differences on cognitive styles, specifically in the way they interpret and approach negative and/or threatening events. Cognitive style abnormalities indicate specific targets of therapy and their assessment may be helpful in individualizing treatment.</p>

Session B

Name : Paul Kurdyak, MD PhD FRCP(C), Centre for Addiction and Mental Health, paul.kurdyak@camh.ca
Co-authors: Paul Benassi, Karline Naylor, Yang Chen, Marcos Sanchez, Michael Collins, Juveria Zaheer
Title: Impact of a Promotional Campaign on Psychiatric Emergency Department and Ambulatory Clinic Volumes
<p>Objective: The majority of individuals with mental illness and addictions do not receive treatment. In March 2010, the Centre for Addiction and Mental Health (CAMH), a tertiary care psychiatric hospital in Toronto implemented a campaign to increase awareness of available services. We evaluated whether this campaign increased the number of monthly visits to the CAMH psychiatric Emergency Department (PED) and General Psychiatry Assessment Clinic (GPAC).</p> <p>Methods: Administrative records from consecutive CAMH PED patient visits to (n = 29069) and referrals to general assessment clinic (GAC) (n = 8326) were grouped by month from April 1, 2006 to December 31, 2011. All patients who presented to the PED and GAC were included. The impact of the CAMH "Transforming Lives" campaign on PED and GPAC visit volume was measured using time series analysis.</p> <p>Results: The campaign was associated with immediate and sustained increases in PED and GPAC monthly visits. PED visits increased each month by 8.2 post-intervention (95% CI 4.4-12.1; P value <0.0001). GAC visit volume experienced a shift in the series of about 44 more visits per month post-intervention (95% CI 22-66, P value <0.0001), and then held stable until the end of 2011. The per capita volume of PED patients increased within Toronto and the distance patients travelled from outside Toronto increased as well.</p> <p>Conclusion: Public awareness campaigns, such as the CAMH "Transforming Lives" campaign, can increase the likelihood individuals with mental illness and addictions to seek help through self and/or physician referral to mental health services.</p>

Session A-1 (#4)

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Co-Auteurs: Helen-Maria Vasiliadis, MSc, Ph.D., Michel Prévile, Ph.D.

Titre: Health-Related Quality of Life and Quality of life associated with common mental health disorders

OBJECTIVE: The aim of this study was to determine the association between health-related quality of life (HRQOL) and quality of life (QOL) with a number of common mental disorders in a representative community sample of older adults.

METHOD: The data was obtained from the ESA (Étude sur la Santé mentale des Aînés) Services study that included a large sample of 1809 older adults aged 65 years and over who consulted and were recruited in a primary care practice. HRQOL was measured using the EQ-5D-3L and the Visual Analog Scale (VAS). The CASP was used to measure QOL. Common mental disorders studied included posttraumatic stress disorder (PTSD), depression and anxiety which were based on DSM-IV criteria. Multivariate linear regression was used to study the HRQOL and QOL as a function of PTSD, depression, anxiety, physical health and sociodemographic characteristics.

RESULT: HRQOL measured by the EQ-5D-3L was significantly ($p < 0,05$) associated with age, number of chronic illnesses, the presence of major depression, obsessive-compulsive disorder and cognitive impairment. By using the VAS, the HRQOL was associated with age, education, number of chronic illnesses, cognitive impairment and number of daily hassles. The CASP (QOL) was associated with age, marital status, number of chronic illnesses, the presence of major depression, generalized anxiety disorder, number of daily hassles, income and PTSD. The model better explained the variability observed in the VAS ($R^2 = 0,231$) and the CASP ($R^2 = 0,213$) then in the EQ-5D-3L ($R^2 = 0,109$).

CONCLUSION: The study showed that the determinants associated with HRQOL and QOL from the patient perspective and general population perspective differs.

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Co-Auteurs: Helen-Maria Vasiliadis, MSc, Ph.D., Michel Prévile, Ph.D.

Title: Effect of antidepressant use on two dimensions of Health-Related Quality of Life in older adults: The EQ-5D-3L and the Visual Analog Scale.

OBJECTIVE: The purpose of this study was to assess the effect of antidepressant use on Health-Related Quality of Life (HRQOL) in community-dwelling older adults.

METHOD: The data was obtained from the ESA (Étude sur la Santé mentale des Aînés) Services study that included a large sample of 1809 older adults aged 65 years and over who were recruited in primary care practices. The EQ-5D-3L and the Visual Analog Scale (VAS) were utilized to assess HRQOL. The EQ-5D-3L measures utility, with values from the general population perspective, and the VAS which assesses HRQOL from the patient perspective. Antidepressant use was self-reported. The association between the two instruments of HRQOL and antidepressant use was tested using multivariate linear regression analysis.

RESULT: The VAS was moderately associated with the EQ-5D-3L ($R=0,18$). The VAS was significantly ($p<0,05$) associated with antidepressant use after adjustment for sociodemographic and physical health factors. Participants who were taking antidepressants had a higher score on the VAS ($b=2,372$, $p <0.05$). The EQ-5D-3L showed no significant association with antidepressant use. Among respondents with a mental disorder, the analyses did not show an association between antidepressant use and the scores on the VAS and the EQ-5D-3L. The VAS was better explained than the EQ-5D-3L by the model with a coefficient of determination (R^2) of 0,232 and 0,109 respectively.

CONCLUSION: The result suggested that the two instruments did not measure the same concept. Further studies are required to better document the association between the VAS and the EQ-5D-3L and health status in respondents with mental health problems.

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Title: The Effects of Stressful Life Events and Coping Styles on Suicidal Ideation in Young Adults

Background: According to Statistics Canada, suicide is the second leading cause of death for young adults. Stressful life events (SLE) have been proposed as a contributor to suicidal ideation.

Objective: (1) To test if SLEs in the past year are associated with suicidal ideation. (2) To test if coping styles (i.e. emotion-, avoidance-, and task-oriented) modify the association between SLEs and suicidal ideation.

Methods: Data were from the Nicotine Dependence in Teens Study, a prospective school-based cohort in Montreal. The sample consisted of 853 young adults (mean age = 24.04) who completed self-report questionnaires regarding (1) SLEs in the past year using a modified List of Threatening Events, (2) frequency of suicidal ideation, and (3) coping styles using the Coping Inventory for Stressful Situations-21. The associations between SLEs (exposure), suicidal ideation (outcome), and coping styles (modifiers) were examined in multiple linear regressions and interaction testing.

Results: The number of SLEs was associated with suicidal ideation (unstandardized B=0.034, p=0.000). In the presence of SLEs, task-oriented coping was associated with a decrease in both feeling suicidal (unstandardized B=-0.051, p=0.002) and seriously considering suicide (unstandardized B=-0.028, p=0.025). Emotion-oriented coping was associated with an increase in feeling suicidal (unstandardized B=0.130, p=0.000) and seriously considering suicide (unstandardized B=0.061, p=0.000). There was an interaction between SLEs and both task-oriented (unstandardized B=-0.024, p=0.002) and emotion-oriented coping (unstandardized B=0.15, p=0.027) on the frequency of feeling suicidal, but not serious suicidality.

Discussion: Strengthening task-oriented coping and diminishing emotion-oriented coping would be beneficial in this population to reduce suicidal ideation.

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Title : Types, Count and per capita costs of psychiatric residential facilities

Context/Objectives. In a balanced publicly managed mental health care system, supervised residential facilities including long-term hospital settings may represent 60 % of the budget for less than 10% of severely mentally ill (Amaddeo et al., 2007). In Quebec, the sources of financing include the ministries of health and social services, the federal/provincial/municipal housing agencies, the ministry of Justice (prisons and halfway-houses), transfer payment to individuals, public and private disability insurances, private donations and individual contribution.

Methods. Using Province of Quebec and Montreal Mental Health Institute administrative data and expertise, the presentation counts the existing and needed array of supervised residential places, establishes their costs and report on a population-based.

Results. About 30 % of the budget goes for supervised residential services, whilst another 25% is for short and long-term hospitalisation. The array of publicly funded supervised residential settings from the health, social, justice and housing sectors offer about 176 places for severely mentally ill per 100k inhabitants, but more would be required if supplement to rent is offered, circa additional 100 to 200 places per 100k inhabitants, at a per capita costs of 5-10\$/100k inhabitants.

Conclusion/Discussion. Further downsizing of psychiatric hospital, or downright closure, and addressing the rising needs of homeless and imprisoned severely mentally ill, have been hampered by the availability of suitable supervised residential settings and failure or slowness of social housing to develop enough places, leaving the health and social services sector develop and run housing facilities in addition to provide clinical and social support.

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Title: Clustering of Neuropsychiatric Symptoms of Dementia in the Long-Term Care Setting across the 24-hour Circadian Cycle: Preliminary Findings

BACKGROUND: Behavioral and psychological symptoms of dementia (BPSD) are highly prevalent in the long-term care (LTC) setting. To date, few studies have assessed the clustering of BPSD symptoms, and none have done so as a function of the time of day

OBJECTIVES: To assess the clustering of BPSD in LTC residents with dementia as evaluated by front-line staff across the 24-hour circadian cycle.

METHODS: As part of a larger study examining BPSD prevalence and incidence, we assessed neuropsychiatric symptoms over a 3 month period for 72 LTC residents. Frequency and severity of symptoms over a 2-week period were assessed using the Neuropsychiatric Inventory Nursing Home Version (NPI-NH). Fifty-six residents were evaluated during the day shift (07:00-15:00), 44 during the evening (15:00-23:00) and 46 at night (23:00-07:00). Factor analysis was employed to assess symptom clustering.

RESULTS: The mean BPSD prevalence across the three shifts was 60.2%, with significantly many more residents exhibiting four or more symptoms during the evening (sundowning) than during the day or night. The predominant psychotic symptoms (delusions, hallucinations) remained clustered independently in all time periods. Agitation/aggression and irritability were associated with anxiety and disinhibition during the day, with depression during the evening and with sleep dysregulation at night. Residents with clinically significant depressive symptoms were more likely to manifest other BPSDs.

CONCLUSIONS: Our results suggest that the clinical tableau of BPSD vary over the 24-hour circadian cycle, thus highlighting the importance of considering both BPSD clustering and time of day when assessing and managing neuropsychiatric symptoms in LTC.

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Title: Pemphigus and Psychiatric Morbidity

Purpose: This study was designed to evaluate mental health status, quality of life, and prevalence of psychiatric comorbidity in newly diagnosed pemphigus patients.

Methods: Over an 18 month period, all newly-diagnosed pemphigus patients (n=283) were given the General Health Questionnaire 28 (GHQ-28) and Dermatology Life Quality Index (DLQI) to assess the impact of this dermatological disorder on their mental health. Those indicating psychiatric morbidity were referred for psychiatric assessment.

Results: 212 complete forms were returned (response rate= 75%). The bimodal score of GHQ ranged from 0 to 26 (mean=9.4) and the likert score of GHQ ranged from 6 to 68 (mean=31.9). A total of 157 patients (73.7%) indicated possible cases of mental disorder according to the GHQ-28 scores. The DLQI score ranged from 0 to 30 (mean of 13.8) and revealed a 32% prevalence of quality of life impairment. The psychiatric assessment revealed the diagnoses of obsessive compulsive disorder (32%), depressive episode (20%), general anxiety (12%), and acute and transient psychosis (6%).

Conclusions: Our study demonstrated a high prevalence of psychiatric co-morbidity in pemphigus patients, among which obsessive compulsive disorder (OCD) was the most common. Potential explanations include a common autoimmune origin of these two disorders or the psychological development of OCD secondary to the behavioural and psychological issues relating to pemphigus patients. This high prevalence of psychiatric co-morbidity in pemphigus patients underlines the clinical importance of mental health screening in these dermatological patients and the opportunity to explore the possible causal relationships or common etiologies of these conditions.

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Title : The role of stress and community belonging in the association between food insecurity and mental illness

While food insecurity has been linked to a range of adverse physical and mental health outcomes, the mechanisms through which it impacts health remain unclear. A small number of qualitative studies have suggested stress and withdrawing from community activities as two possible explanations for the increased risk of mental illness among individuals with food insecurity. The current study tested the joint association of stress and community belonging on the risk of having a mood or anxiety disorder, using data from the 2009-10 Canadian Community Health Survey. There was no evidence of an additive interaction between high stress and weak community belonging regardless of whether individuals were food secure or food insecure. Across the four combinations of stress and community belonging, individuals who were food insecure were approximately 3 times more likely to report a diagnosis of a mood or anxiety disorder. Results suggest that increased risk of mental illness among individuals with food insecurity is not explained by stress or community belonging. Higher rates of other social risk factors for mental illness did not account for the increased prevalence of mental illness among individuals experiencing food insecurity. Biological explanations related to nutrient levels, and personality differences that were not tested in the current study warrant further exploration to understand this disparity in mental health outcomes.

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Title : Positive Mental Health in Canada

Objective: The aim of this analysis is to describe the mental health status of Canadians and compare this to other population-level estimates.

Methods: The Mental Health Continuum - Short Form developed by Dr. Corey Keyes, included in the 2011/2012 Canadian Community Health Survey, consists of 14 items representing dimensions of positive mental health and is used to classify individuals as having either flourishing, moderate, or languishing mental health.

Results: Approximately 78% of Canadians ages 12 years and over experience flourishing mental health. Prince Edward Island had the highest rate of flourishers (84%) and Quebec had the lowest rate (75%). Higher rates were observed among ages 12 to 25 years (78%), those currently married (80%) and those with household income over \$100,000 (82% to 85%). Rates also varied by education and ethnicity. Rates among men and women were similar.

Conclusion: Compared to published estimates, rates of flourishing mental health among Canadians are higher than expected. Population based studies in US (25-74 years of age) and South Africa (30 years of age and over) suggest rates of flourishing of 18% and 20% respectively (Keyes CLM, 2002; Keyes CLM et al 2008). A study focused on American youth (12- 18 years of age) reported overall rates of flourishing of 38% (Keyes CLM, 2006). The discrepancy between other published results and our findings may be due to differences in population characteristics or variations in the administration of the module (i.e., telephone vs self-administered). Additional work is required to explore potential reasons for this variation.

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Title: Comorbidity between lifetime eating disorders and mood and anxiety disorders: a population-based cross-sectional study
<p>Objective: To examine profiles of eating disorders (EDs), mood and anxiety disorders, and their comorbidities, explore risk patterns for these disorders, and document differences in health service utilization in a national population.</p> <p>Method: Data analyzed was from the Canadian Community Health Survey of Mental Health and Well-being (CCHS 1.2). Sampling weights and bootstrap variance estimation were employed. Multiple logistic regression was used to estimate odds ratio and confidence intervals.</p> <p>Results: The lifetime prevalence of EDs was 1.70% among Canadians, compared to 13.25% for any mood disorder, 11.27% for any anxiety disorder, and 20.16% for any mood <i>or</i> anxiety disorder. Almost half of those with EDs (49.07%) also suffered with mood or anxiety disorders, and 30.99% had major depression (MD). A similar pattern in depressive symptoms was found among individuals with MD and EDs, but those with EDs reported fewer symptoms. Those who were males, married, living in rural areas, having no chronic condition, perceived less stress and better mental health were more likely to be free of EDs and mood and anxiety disorders. Individuals with EDs had similar rates of health care utilization compared to those with mood and anxiety disorders, but reported more unmet needs.</p> <p>Discussion: A significant proportion of individuals with EDs had comorbid mood or anxiety disorders. Patients with lifetime EDs should be concomitantly investigated for mood and anxiety disorders. Individuals with EDs reported more unmet mental health needs, this warrants more scrutiny. Similar interventions may be effective for both eating and mood and anxiety disorders.</p>

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Title : First Criminal Behavior among Older Adults with Serious Mental Illness: The Role of Comorbid Alcohol Use Disorder

OBJECTIVE: Substance use disorders are well known risk factors for Criminal Behavior (**CB**) among patients with serious mental illness. However, the mediating effect of age of first CB on this association has not been specifically explored. The aim of this study was to examine the effect of age on the clinical characteristics of subjects who exhibited first CB.

METHOD: CB is defined as the hospitalization of an accused under a criminal custody order for any conviction. Data was taken from discharge summaries (ICD format) of all 3610 adult admissions to a Quebec regional psychiatric hospital between 1991 and 2012. First, a descriptive analysis of the clinical characteristics of 309 subjects with CB was performed. Then, a nested case-control study comparing clinical characteristics of 108 first admitted older cases (41 to 64 years) and 58 younger controls (18 to 25 years) was conducted.

RESULTS: 9% of first admitted patients had at least one conviction for CB. The CB rates significantly correlated with younger age (Median: 36 years) and male gender (83%). Compared with younger controls, the older cases were more likely to be suffering from bipolar disorders than schizophrenia-related disorders. Moreover, they had significantly more comorbid alcohol use disorders (30 vs. 10 %) and less comorbid non-alcoholic substance use disorders (22 vs. 55%).

CONCLUSION: In spite of its limitation, this study suggests that older adults who exhibited first CB represent a selected subgroup of forensic patients with distinct clinical characteristics and distinct treatment needs.

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Title: **Psychological distress and gender-norm adherence in a sample of mental health institute workers**

In 2004, Statistics Canada reported 356,000 incidents of violent victimization in workplaces across Canada, a third of which occurred in organizations providing social assistance or health care. Beyond physical injuries, these incidents place workers in a state of emotional distress, often leaving them angry, confused, frustrated, fearful, and at a heightened risk of depression or post-traumatic stress disorder (Rose, Brewin, Andrews & Kirk, 1999). Despite the fact that women are twice as likely to develop mental health issues in response to violent victimization incidents (Tolin & Foa, 2006), not many studies have looked at the impact of sex and gender on persons' psychological well being as a result of violent incidents in the workplace (Hatch-Maillette et al, 2007). Relying on a sample of 88 at-risk adult workers at differing levels of seniority in Montréal's largest mental health institute, this study examines the differential importance of sex and gender in determining feelings of security, perceived personal efficacy, and psychological distress. Based on the widely used Bem Sex Role Inventory (Bem, 1974), which measures a person's masculinity and femininity, we further developed a measure of adherence to gendered norms and examined its relationship with feelings of security at work, perceived personal efficacy, and psychological distress. Our results indicate that the observed relationship between participants' sex and mental health, feelings of perceived efficacy, feelings of security, and fear of being exposed to violent incidents in the workplace dissipate when we take into account their degree of adherence to the socially prescribed gender roles of their sex.

Session D-4 (#20)

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Title: Survey on Living with Chronic Diseases in Canada: Mood & Anxiety Disorders

The Survey on Living with Chronic Disease in Canada (SLCDC) is sponsored by the Public Health Agency of Canada and conducted by Statistics Canada. The SLCDC is a 20 minute cross-sectional survey in follow-up to the Canadian Community Health Survey (CCHS) that collects information related to the experiences of Canadians with chronic health conditions. In 2014, the SLCDC will focus on mood and anxiety disorders. The survey was designed to provide new information on: the impacts (including restrictions in daily and work-related activities) of mood and anxiety disorders on Canadians across the life course; and how people with mood and anxiety disorders manage their condition. Data will be linkable to the 2013 CCHS which includes health determinants and co-morbidities. Respondents will be age 18+ with a mood and/or an anxiety disorder living in privately occupied dwellings in the ten provinces. The sample (~5,500) will provide reliable estimates at the national level by age and sex. Data collection is scheduled to commence in September of 2013 and data will be officially released in January of 2015. The SLCDC data can be used by governments to better plan and provide health services for persons with mood and anxiety disorders and to develop public education campaigns primarily aimed at health promotion and disease prevention and management. Researchers will be able to access the data through Statistic Canada's Regional Data Centres (RDC) Programs for independent analyses.

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Title : Exploring the Concept of Clinical Efficiency for Evaluating Quality of Mental Health Services

Quality measurement is a complex component of mental health services. Understanding the organization, delivery, and effectiveness of services is vital for improving quality and safety. A set of 27 Mental Healthcare Quality Indicators (MHQIs) can be derived from the RAI-MH, a comprehensive assessment system, used in Ontario in all designated inpatient mental health beds across 71 hospitals. This instrument is completed longitudinally, each time capturing over 400 items that include observations of mental status, cognitive, social, role, and physical functioning, behaviours, substance use, safety, and resource utilization. The MHQIs measure patterns of change in the following domains: depressive symptoms, psychosis, physical pain, cognitive performance, daily functioning, interpersonal conflict, harmful and disruptive behaviours, and control procedures. For each MHQI domain, risk adjustment variables have been identified to compare MHQI rates among hospitals and regions in Ontario. While the initial MHQIs measure basic rates of improvement or incidence, there may be ways to examine magnitudes of change as expressions of clinical efficiency. This could have important implications for demonstrating the unique effects of different types of inpatient services (e.g., acute, geriatric) on aspects of clinical presentation as well as benchmarking activities. The purpose of this presentation is to explore the use of these data for measuring clinical efficiency and discuss implication for clinical efficiency indicators as concepts of healthcare quality.

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Title: Child Adversity Typologies and the Mediating Role of Axis I and II Disorders and Substance Use in Predicting Adult Incarceration

Objective:

A substantial challenge in childhood adversity research is to characterize predominant typologies of child adversities given that co-occurrence of adversities is the norm. In this study, we used latent class analysis (LCA) to characterize *typologies* of 10 different childhood adversity variables in a national sample of U.S. adults. We then evaluated how these typologies differentially predicted incarceration, and the role of gender, substance use and mental disorders in moderating/mediating these outcomes.

Method:

LCA was conducted on childhood adversity variables from the National Epidemiological Study of Alcohol and Related Conditions (n=34,653). Path modeling was used to evaluate associations between typologies of adversity, gender and mental disorders, and incarceration.

Results:

Standard fit indices identified a best LCA solution of 5 risk typologies. This model included a low risk typology (#1) and 4 risk typologies: #2 physical abuse and neglect; #3 Adult in Household Risk (AIH), poverty, and neglect; #4 high adversity; and #5 AIH high risk. Compared to the low risk typology, each group, except for #5, experienced elevated risk for incarceration (Odds Ratios (OR) 1.65-5.90). Risk typologies had different patterns of partial to full mediation (OR: 1.54-4.29), with significant moderation by gender. Risk typology (#4) continued to experience substantially elevated risk for incarceration in the mediated model (OR = 4.25).

Conclusions & Clinical Implications:

Findings from this nationally representative sample suggest that there may not be universal risk for incarceration, but rather specific adversity typologies with elevated risk. Policies addressing incarcerated persons should thus consider early life factors.

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Title : The Effect of Stressful Life Events and Coping on Alcohol Use in Young Adults

Background: The latest national survey on drug use in the U.S. estimated that 14.4% of young adults met criteria for alcohol abuse or dependence. Over a thousand young adults die yearly from alcohol-related unintentional injuries.

Objectives: (1) To test if stressful life events (SLEs) in the past year are associated with greater frequency of alcohol use and binge drinking. (2) To test if coping styles (i.e., emotion-, task-, and avoidance- oriented) modify this association.

Methods: Data were from the Nicotine Dependence in Teens Study, a prospective school-based cohort in Montreal. The sample consisted of 853 young adults (mean age = 24.0 years, SD = 0.7) who completed self-report questionnaires regarding (1) SLEs in the past year using a modified List of Threatening Events, (2) alcohol use and binge frequency in the past year and (3) coping styles using the Coping Inventory for Stressful Situations-21. The associations between SLEs (exposure), alcohol use and binge (outcome) and coping styles (modifiers) were examined in multiple linear regressions and interaction testing.

Results: The number of SLEs was significantly associated with frequency of alcohol use (unstandardized B=0.033, p=0.044) but not bingeing. Avoidance-oriented coping was associated with increased frequency of alcohol use (unstandardized B = 0.102, p = 0.023) and bingeing (unstandardized B = 0.129, p=0.004), whereas task-oriented coping was protective for bingeing only (B=-0.107, p=0.010). There were no significant interactions between SLEs and emotion-oriented coping.

Conclusion: Focusing on task-oriented coping and preventing avoidance-oriented coping may help reduce the prevalence of alcohol use in this population.

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Title : The Effect of Stressful Life Events and Coping on Cannabis Use in Young Adults

Background: The latest national survey on drug use in the U.S. estimated that one third of young adults used cannabis in 2011. The high prevalence of cannabis use is of public health concern given the recent findings linking cannabis use to the development of psychosis.

Objectives: (1) To test if stressful life events (SLEs) in the past year are associated with greater frequency of cannabis use. (2) To test if coping styles (i.e., emotion-, task-, and avoidance- oriented) modify this association.

Methods: Data were from the Nicotine Dependence in Teens Study, a prospective school-based cohort in Montreal. The sample consisted of 853 young adults (mean age = 24.0 years, SD = 0.7) who completed self-report questionnaires regarding (1) SLEs in the past year using a modified List of Threatening Events, (2) cannabis use in the past year and (3) coping styles using the Coping Inventory for Stressful Situations-21. The associations between SLEs (exposure), cannabis use (outcome) and coping styles (modifiers) were examined in multiple linear regressions and interaction testing.

Results: The number of SLEs was significantly associated with frequency of cannabis use (unstandardized $B=0.101$, $p=0.000$). In the presence of SLEs, task-oriented coping was associated with decreased frequency of cannabis use (unstandardized $B = -0.113$, $p = 0.044$) whereas emotion-oriented coping was associated with increased frequency of cannabis use ($B=0.125$, $p=0.029$). There were no significant interactions between SLEs and avoidance-oriented coping.

Conclusion: Focusing on task-oriented coping and preventing emotion-oriented coping may help reduce the prevalence of cannabis use in this population.

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Co-Author: Norbert Schmitz
Title : Diabetes distress as a risk factor for transition from oral medication to insulin medication in people with type 2 diabetes
<p>Background: Diabetes distress is a psychological measure of the distress specific to the experience of living with diabetes. It includes subscales that measure regimen-distress, diabetes-related emotional burden, interpersonal distress and physician-related distress. Diabetes distress is associated with decreased adherence to the self-care regimen and increased physical complications. However, there is a paucity of population-level research that examines the longitudinal impact of diabetes distress.</p> <p>Study objective: Ascertain if diabetes distress could act as a predictor for the transition to insulin.</p> <p>Methods: A total of 1,200 people who took part in the baseline and first follow-up of the Evaluation of Diabetes Treatment study (2011-2012) were assessed for this analysis. All participants were insulin-naïve at baseline and completed telephone interviews where questions about sociodemographic factors, diabetes complications, self-care behaviours and the diabetes distress scale were administered.</p> <p>Results: A total of 62 people transitioned from oral hypoglycemic medication to insulin treatment between baseline and follow-up. Logistic regression analyses adjusted for age, sex, diabetes complications and duration of diabetes revealed that those people who transitioned to insulin were more likely to have moderate to severe diabetes distress OR 1.90 (1.06-3.43) though this association was no longer significant after adjusting for baseline self-care. The subscale of diabetes distress that most strongly predicted the transition to insulin was the emotional burden subscale, even after adjusting for baseline self-care behaviours OR 2.18 (1.05-4.51).</p> <p>Conclusions: Results from this analysis provide the first evidence that diabetes distress may be a predictor for transitioning from oral hypoglycemic medication to insulin medication.</p>

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Co-Authors: Maria Ospina, Liz Dennett, Arianna Waye & Philip Jacobs
Title : Measuring workplace productivity: Test quality and mental health confounds
<p>Background. Self-report instruments are commonly used to provide estimates of lost productivity and its economic consequences. Presenteeism (low productivity while at work) reportedly produces greater economic loss than does absenteeism. However, tests of presenteeism may be compromised by (1) poor psychometric properties, (2) tendency to inflate one's own accomplishments, and (3) the influence of mental health on test-taking behaviour. Methods. Point 1 was addressed by a systematic review of the quality of the psychometric properties of existing tests and on the quality of studies that assessed these properties. Light was shed on points 2 and 3 by secondary analyses of data from a study of workforce mental health and addictive behaviour. Findings. Psychometric properties of 21 tests were examined in the 40 studies that met our inclusion criteria (from an initial screening of 1,767 articles). Several tests showed specific strengths, but none showed evidence of acceptability in all psychometric areas. In fact, only one test produced criterion validity data (weakly) and the test that fared the best among the 21 instruments proved to not actually measure presenteeism. The quality of the studies assessing test properties was inconsistent. Further analyses confirmed (a) a tendency to over-rate oneself (point 2) and (b) an influence of mental disorder on test-taking behaviour (point 3). Discussion. Our findings plus the illogic of using self-report tests to evaluate ego-involved measures, such as work performance, set the background for our upcoming study that will gather and compare criterion validity data for six of the leading presenteeism instruments.</p>

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Co-Authors: Phillip Jacobs, Jessica Moffatt, Arianna Waye

Title : Creative sentencing and the delivery and evaluation of a workplace mental health promotion intervention: A pilot project

Background. When an Alberta firm was fined for an environmental offence involving mental health issues, the presiding judge invoked a “creative sentencing” approach. Three-quarters of the fine was awarded to the Institute of Health Economics to undertake and evaluate a mental health promotion project relevant to the improvement of conditions in the Alberta workplace. **Methods.** *Mental Health Works* (of the Canadian Mental Health Association) was commissioned to present a 2-day workshop (sessions were separated by 30 days) for senior workplace staff (“influencers”). Sessions dealt with the recognition of mental health problems, connecting with troubled employees, management influences, and suggested worksite policy and procedural changes. Workshop quality, mental health impact, mental health knowledge, and resultant worksite program activities were measured before and after the workshop sessions and 3 – 5 months later. **Findings.** Workshop session I was successfully delivered to 35 persons, while 28 attended day 2. The findings across our three evaluation components can be summarized quite simply. There was strong evidence for workshop quality, there was good evidence that participant learning took place, and there were indicators that some positive developments were initiated in the workplaces of the attendees. **Discussion.** The project made use of a manualized, and therefore replicable, workshop presentation that dealt with important mental health matters and showed meaningful effectiveness and promise. Therefore, a more widespread use of these, or similar, workshops is recommended.

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Co-Auteurs : Scott Patten, Sandra Berzins and Kirsten Fiest

Titre: Prevalence and Risk Factors of Suicidal Ideation in the MS Population

The objective of this study was to examine the prevalence and short-term incidence of suicidal ideation in the MS population, as well as patterns of association with suicide risk. A sample of 189 subjects randomly selected from a community-based MS clinic registry participated in as many as 13 interviews over the course of 6 months. At baseline, the 2-week period prevalence of suicidal ideation was 8.9%. Over the course of 6 months, 20% of participants reported suicidal ideation at least once. Being over the age of 65 (PR = 2.4 [95% CI 1.3 to 4.2]), low self-efficacy (PR = 3.2 [95% CI 1.9 to 5.4]), low social support (PR = 1.9 [95% CI 1.1 to 3.2]), high reliance on emotion-focused coping (PR = 3.5 [95% CI 1.9 to 6.1]) and low levels of task-oriented coping (PR = 2.4 [95% CI 1.4 to 4.2]) were all associated with an increased risk of suicidal ideation independent of depression. Survival analysis also showed that the presence of these variables at baseline was predictive of suicidal ideation over the course of the 6 month period even among those subjects with no suicidal ideation at baseline. Some of these risk factors are modifiable and may present opportunities for primary prevention.

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Co-Authors: Joanna Bhaskaran, Jitender Sareen, James Bolton
Title : Clinician Prediction of Future Suicide Attempts: A Longitudinal Study
<p>Objective: The objectives of the study were to determine: 1) the clinical correlates that lead a clinician to rate a person's likelihood of future suicide attempt (SA); and 2) the accuracy of clinicians' predictions in predicting future SA.</p> <p>Methods: Participants consisted of consecutive adult presentations (N=1899) over a 2-year period (February 26 to December 31, 2011) to psychiatric services in the ED. Individuals were assessed at baseline presentation on 21 clinical correlates that included social and demographic factors, mental disorders, and suicidal behavior. Clinicians also completed a 'Clinician Prediction Scale' on their perceived risk of a future SA within the next 6 months [ranging from 0 (no likelihood) to 10 (very high likelihood)].</p> <p>Results: Of the 20 correlates, only 6 independently accounted for the variance in leading a clinician to rate a person's likelihood of future SA to be at medium risk, and 8 predictors for high risk. Aggression, depression or hopelessness, lack of social support, and no suicidality or self-injurious behavior emerged as common predictors. Thirty-nine individuals presented again to the ED with future SA. The longitudinal analysis suggests that patients who received a high rating on the SA scale at baseline presentation have increased odds of 6.33 (95% confidence interval 2.71 to 14.78; $P < .001$) in making a future SA within 6 months.</p> <p>Conclusion: Accurate assessment of future SA is important in referring patients to appropriate treatments. Although clinicians' prediction of future SA is better than chance, it remains shy of desired accuracy.</p>

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Title : Predictors of Future Suicide Attempts among Individuals Presenting to Psychiatric Services in the Emergency Department: A Longitudinal Study

Background: The objective of the study was to determine which clinical and demographic factors predict future suicide attempts among people presenting to psychiatric services in the emergency department (ED).

Methods: Participants consisted of consecutive adult presentations (N = 6919) over a 3-year period (January 1, 2009 to December 31, 2011) to psychiatric services in the ED of the two main tertiary care hospitals in Manitoba, Canada. Trained medical professionals assessed each individual on the 10-item SAD PERSONS risk assessment scale as well as 9 other candidate risk factors. Stepwise logistic regression and receiver operating characteristic (ROC) curves examined the association between these baseline variables and future suicide attempts within the next 6 months.

Results: One hundred and thirty three individuals from the original sample presented again to the ED with future suicide attempts. Of the 19 variables examined at baseline, only 5 independently accounted for the variance in future attempts: suicidal ideation, female sex, age<45, previous suicide attempt or psychiatric care, and substance abuse. ROC-determined high-risk scores using this model had an almost 3.5 times higher risk of future suicide attempt (odds ratio = 3.41; 95% confidence interval 2.05 to 5.67; $P < .001$) but low positive predictive value (5%). Low-risk scores had very high negative predictive value (98%).

Conclusion: This 5-item list may be useful for screening purposes. Rather than focus on precision rates of risk assessment tools, strategies to screen out low-risk individuals could enhance efficiency in the ED. Further testing of suicide risk assessment tools is required.

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Title: Childhood cognitive ability and its relationship with anxiety and depression in adolescence
<p>Background: Childhood cognitive ability may have protective effects against anxiety and depression in adolescence. However, this protective effect may depend on the time of symptom assessment and child gender. Also, the effects of childhood stressors on adolescent anxious and depressive symptoms may be moderated by childhood cognitive ability.</p> <p>Methods: The sample included 4,405 individuals from the Canadian National Longitudinal Study of Children and Youth (NLSCY). Between ages 4-5 and 10-11, children completed a test of verbal ability and scholastic aptitude and a series of mathematics computation tests. At ages 12-13 and 14-15, symptoms of anxiety and depression were assessed via self-report items derived from DSM diagnostic criteria. Multinomial logistic regression was used to examine the effect of childhood cognitive ability on the severity of anxious and depressive symptoms in adolescence, while controlling for several covariates including SES and gender.</p> <p>Results: Greater cognitive ability was generally associated with decreased odds of internalizing symptoms at age 12-13. However, greater cognitive ability generally increased, or had no effect on, the odds of internalizing symptoms at age 14-15. Some of the effects of childhood cognitive ability varied by child gender. Also, childhood cognitive ability attenuated the effects of family dysfunction and chronic illness throughout childhood on subsequent internalizing symptoms.</p> <p>Conclusion: Results suggest that programs attempting to increase early cognitive skills may be particularly beneficial for girls. Also, an increased focus on cognitive skills may attenuate the negative effects of some stressors on subsequent anxious and depressive symptoms, regardless of child gender.</p>

Session E

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Title : Trends in Male Suicide in Canada

Purpose: To examine trends in suicide amongst males in Canada. Methods: Vital Statistics (CANSIM) data on mortality due to suicide in Canada were examined during the period 2001-2009. Age effects were examined for males who completed suicide. Results: Across all ages, suicide was on average 3 to 4 times more frequent amongst males. The suicide rate amongst young males appears to have decreased slightly over the period of study whereas the rate of suicide amongst middle-aged males has not decreased. Amongst the oldest age groups, the sex difference and preponderance of male suicide was found to be particularly high. Discussion: Explanations for the higher suicide rate amongst males have included: a greater propensity amongst males toward risk-taking behaviours, which may be accepted and encouraged by traditional gender roles associated with men and masculine identity; a greater likelihood of engaging in hazardous patterns of drug and alcohol use that have a strong positive correlation with suicide; a lower rate of help-seeking behaviour and a tendency to ignore or deny serious symptoms, and conceal mental health issues. The high rate of suicide amongst very old males requires attention. Policies and practices that may reduce suicide in males will be discussed.

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