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Program and Abstracts: CAPE Scientific Symposium 2010

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CAPE/ACEP 2010

Canadian Academy of Psychiatric Epidemiology
Académie canadienne d'épidémiologie psychiatrique

CAPE 2010 Annual Scientific Symposium

Charbonnel Lounge, Elmsley Hall
81 St. Mary Street
St. Michael's College
University of Toronto

September 23, 2010

CAPE 2010 Annual Scientific Symposium

CAPE was organized at the 1984 annual meeting of the Canadian Psychiatric Association (CPA) by a multidisciplinary group of researchers and teachers who recognized the need for greater communication among individuals sharing an interest in psychiatric epidemiology, but working in different parts of the country. A second goal was to bring the usefulness of epidemiological findings and methods to the attention of clinicians, policy makers, service administrators and scientific investigators throughout the mental health field. Thus, it was thought that membership would be composed of both producers and consumers of epidemiological research. A third goal was to improve the quality of training in psychiatric epidemiology offered to residents and graduate students in Canadian training centres.

In 2009, CAPE was held in St. John's, Newfoundland, extending its academic community by attracting presenters and participants from Newfoundland's psychiatric, health and public health communities. This event showcased the diversity and quality of research and knowledge application produced by the CAPE community of researchers and students. CAPE 2009 concluded with the traditional dinner, held in a warm inn in the city of St. John's, where networking continued and stories were exchanged, including a word from the CAPE/CPA 2009 Alex Leighton award recipient, Scott Patten.

A very special thanks to the local organizing committee, Drs Terry Wade and David Streiner, who assisted in reviewing abstracts and organizing the scientific program. However, the real work was done by Carol Lane (McMaster University), Geetha Manohar (CAMH), Scott Veldhuizen (CAMH) and Sandra Dewar (University of Calgary), who are responsible for organizing the venue, the food and the program. Thank you all very much!

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Information also available on CAPE website http://www.psychiatricepidemiology.ca/

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Agenda

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9:10 to 10:00	**KEYNOTE:** Do structured face-to-face interviews vs problem checklists provide equivalent classifications of child psychiatric disorder? ***Presenter: Dr. Michael Boyle***
10:00 to 11:00	**Session 1: Childhood and Mental Health** *Session Chair: Dr. Terrance Wade, Brock University*
10:00 to 10:20	**John Cairney.** Motor coordination and emotional-behavioural problems: the co-occurrence of clumsiness, inattention and distress in children
10:20 to 10:40	**Scott Patten.** Epidemiological evidence of synergistic interactions between traumatic experiences during childhood and adult stressors in major depression etiology
10:40 to 11:00	**Tracie O. Afifi**. Resilience following child maltreatment: A review of protective factors
11:00 to 11:15	**Break and Poster Viewing ***
11:15 to 12:35	**Session 2: Epidemiology** *Session Chair: Dr. David Streiner, Centre for Addiction & Mental Health, McMaster University*
11:15 to 11:35	**Karen Urbanoski.** Genetic risk for substance-related disorders: increasing the odds you'll understand what it means
11:35 to 11:55	**Annie Robitaille.** Understanding the role of social support on psychological distress among older Canadians: An investigation of the National Population Health Survey
11:55 to 12:15	**Allison Park.** Parents' education, social attainment, and major depressive episode in Canada
12:15 to 12:35	**Javad Moamai.** Kraepelinian Schizophrenia revisited: Prevalence and longitudinal characteristics
12:35 to 1:35	**Lunch and Poster Viewing ***
1:35 to 2:55	**Session 3: Health Services** *Session Chair: Dr. Paula Goering, Centre for Addiction & Mental Health*
1:35 to 1:55	**Paul Kurdyak.** Smoking cessation and psychiatric hospitalizations

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1:55 to 2:15	**JoAnne Palin.** Unmet needs and continuity of care in general practice among individuals with mental disorders: results from a data linkage study
2:15 to 2:35	**Elizabeth Lin.** Mental health and addictions performance indicators: A proposed framework
2:35 to 2:55	**Jitender Sareen.** Mental disorder diagnosis and need for treatment are not the same: Findings from a prospective longitudinal epidemiologic survey
2:55 to 3:10	**Break and Poster Viewing ***
3:10 to 4:30	**Session 4: Co-morbidity** *Session Chair: Dr. Elizabeth Lin, Centre for Addiction & Mental Health*
3:10 to 3:30	**Steve Kisely.** It's complicated. Do we understand the connection between mental illness and colorectal cancer in 2010?
3:30 to 3:50	**Angus Thompson.** Suicidal severity, mental health, addictive behaviours and recency of unemployment in the workforce
3:50 to 4:10	**Norbert Schmitz.** Psychological problems associated with transition to insulin therapy in people with type 2 diabetes: a new prospective community study
4:10 to 4:30	**Tuong-Vi Nguyen.** Differential co-morbidity of migraine with mood episodes
4:30 to 5:30	**CAPE Business Meeting**
6:30	**Dinner at La Bodega**

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List of Poster Presentations

Ghislaine Badawi	Associations between Self-rated Health (SRH) Status, depression, disability and physical functioning in people with diabetes
Kristin Cleverley	Measurement invariance of the 2-factor indirect and physical aggression model: Parent and youth reports
Sivan Durbin	Distinguishing between bipolar disorder subtypes in a population-based sample
Genevieve Gariepy	Types of smokers, depression and disability in type 2 diabetes: a latent class analysis
Alain Lesage	Prevalence and incidence of schizophrenic disorders in Quebec using administrative data: methods and estimation
Farah Naaz Mawani	Validation of self-rated mental health
Javad Moamai	Correlates of involuntary hospitalization in schizophrenia
Christine Rodriguez	Mental healthcare in older adults: Perceived unmet need and barriers
Raymond Tempier	Official language minority communities in Canada: does the prevalence of mental health problems differ between minority and majority Francophones and Anglophones?

Oral Presentation Abstracts

Session 1: Childhood and Mental Health

Motor coordination and emotional-behavioural problems: the co-occurrence of clumsiness, inattention and distress in children

Speaker: John Cairney

Authors: John Cairney, Cheryl Missiuna

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Background: Deficits in motor coordination (DCD), inattention and hyperactivity (ADHD) and psychological distress (depression, anxiety) commonly co-occur in children. Our understanding of the etiological connections between these problems is limited.

Objectives: In this presentation, I discuss hypotheses regarding co-occurrence of these problems in childhood and present some recent data examining the hypothesis that motor problems, independent of inattention/hyperactivity, increase the risk of psychological distress.

Methods: Data are presented from a community-based study of psychological distress among children with motor coordination problems and ADHD called *STACK* (Screening, Tracking and Assessing Coordination in Kids) and from an ongoing longitudinal study secondary health problems in children with and without motor coordination problems (n=2500) called *PHAST* (Physical Health and Activity Study Team).

Conclusions: There is compelling evidence that psychological distress may be secondary to motor coordination problems, and that the etiological pathways leading to DCD and ADHD may be different.

Epidemiological evidence of synergistic interactions between traumatic experiences during childhood and adult stressors in major depression etiology

Speaker: Scott Patten

Authors: Scott B Patten, Jeanne VA Williams, Dina H Lavorato

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Background: Animal studies suggest that exposure of the developing nervous system to traumatic life events can lead to lasting changes in stress-responsiveness. In human populations, such changes may interact with subsequent life events to trigger major depressive episodes (MDE).

Objectives: The objective of this study was (1) to determine whether traumatic childhood experiences interact with stressful events later in life to cause MDE, and (2) to explore the specificity of such interactions by examining other combinations of risk factors.

Methods: Data from the National Population Health Survey (NPHS) were used in this study. Guided by the sufficient-component cause model, an approach proposed by VanderWeele and Robins (Epidemiology 2007;18: 329-339) for detection of synergism was used in the analysis. With restriction of the sample to respondents who were not depressed in 2004, incidence of MDE in 2006 was assessed in relation to various risk factor exposures.

Results: A synergistic interaction between traumatic childhood experiences and recent stressors was identified ($z=2.97$, $p=0.001$), indicating that these two variables act together as components of causal mechanisms. The risk difference for the combined exposure (13%) was more than twice the sum of risk differences for each exposure alone (4% for stress, 2% for childhood traumas). No evidence of similar interactions involving age or sex were found.

Conclusions: Consistent with the results of animal models, traumatic life experience and stressful life events interact to cause MDE in human populations.

Resilience following child maltreatment: A review of protective factors

Speaker: Tracie O Afifi

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Objective: Child maltreatment is linked with numerous adverse outcomes that can continue throughout the lifespan. However, variability of impairment has been noted following child maltreatment, making it seem that some individuals are more "resilient". The current review includes a brief discussion of how resilience is measured in epidemiological child maltreatment research; a summary of the evidence for protective factors associated with resilience based on those studies of highest quality; a discussion of how knowledge of protective factors can be applied to promote resilience among those exposed to child maltreatment; and finally, directions for future research.

Method: The databases MEDLINE and PsychINFO were searched for relevant citations up to July 2010 to identify key studies and evidence syntheses.

Results: Although comparability across studies is limited, family-level factors of stable family environment and supportive relationships appear to be consistently linked with resilience across studies. There was also evidence for some individual-level factors such as personality traits, although proxies of intellect were not as strongly related to resilience following child maltreatment.

Conclusions: Findings from resilience research needs to be applied to determine effective strategies and specific interventions to promote resilience and foster well-being among maltreated children.

Clinical Implications: Knowledge about protective factors associated with resilience following exposure to child maltreatment can assist clinicians in developing individual treatment plans for patients. Such information is important in developing the theoretical basis for interventions aimed at promoting resilience following child maltreatment, but such programs and strategies cannot assume to be protective – evaluation is still required.

Session 2: Epidemiology

Genetic risk for substance-related disorders: increasing the odds you'll understand what it means

Speaker: Karen Urbanoski

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A role for genetics in the development of substance-related disorders is largely acceptable to researchers and clinicians working in the field today. Recent reviews of the evidence from twin and adoption studies report that the heritability of substance-related disorders averages 0.5-0.6, indicating that approximately 50% to 60% of the population variability in the risk for these disorders is attributable to genetic factors. Other studies have considered the clustering of substance-related disorders in families, and report a 4- to 8-fold increased risk of disorder development in the first-degree relatives (i.e., siblings, parents, and offspring) of affected individuals. Despite warnings from prominent genetics researchers on the misinterpretation of heritability estimates, their meaning, in particular how they capture and relay information on genetic risk, may remain a source of some confusion to those outside of the field. This presentation seeks to consider the meaning and boundaries of heritability and other characterizations of genetic risk for substance use behaviors and related outcomes, and to provide guidance to those in the broader field in their proper use and interpretation. In genetics, as elsewhere, a clear understanding of the different types of risk (including absolute risk, attributable risk, and relative risk/odds) is essential to proper interpretation. Through a review of risk estimates and their applications in genetic epidemiology, it becomes apparent that, far from highlighting the unimportance of environmental impacts on the determinants and distribution of substance-related disorders, the research conducted to date underscores the merits of a balanced approach toward prevention and intervention.

Understanding the role of social support on psychological distress among older Canadians: An investigation of the National Population Health Survey

Speaker: Annie Robitaille

Authors: Annie Robitaille, Heather Orpana, Cameron N McIntosh

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The purpose of this study was to examine the reciprocal association between various dimensions of social support and psychological distress and whether social support acted as a buffer against chronic stressors for a population of older Canadians. First, we investigated the longitudinal bidirectional relationship between the different dimensions of social support and psychological distress using an autoregressive cross-lagged model for fives waves of data. Some support for the reciprocal relationship between affectionate support and distress was found with higher distress predicting higher affectionate support and higher support predicting higher distress. Higher distress also predicted subsequently higher levels of positive social interaction and emotional/informational support. Little support was found for a reciprocal relationship between structural support and tangible support and psychological distress. Secondly, we examined the cross-sectional and longitudinal interactions between chronic stressors and functional social support on psychological distress in a sample of older Canadians. From the cross-sectional analyses, significant interactions were found for tangible and emotional/informational support. The findings provided no evidence of buffering effects of positive social interaction and affectionate support on the association between chronic stressors and psychological distress. For the longitudinal analysis, the stress-buffering hypothesis was only supported for one wave of data with social support acting as a buffer against the relationship between chronic stressors in 2002/2003 and subsequent psychological distress two years later (2004/2005). Implications of the studies included in this thesis and future research needs are discussed.

Parents' education, social attainment, and major depressive episode in Canada

Speaker: Allison Park

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Early-life socioeconomic position (SEP) contributes to the risk for certain diseases in adulthood; however, there is mixed evidence for the role of early-life SEP in depression. Using a life course perspective, we examined whether parents' education influenced the risk for major depressive episode (MDE), independent of adult SEP, adverse childhood experiences (ACEs), and other adult risk factors. Data came from seven biennial waves (1994/95 to 2006/07) of the Canadian National Population Health Survey (NPHS), and included 1,267 participants who were between the ages of 12 and 24 at the start of the survey. Parents' education was collected by an adult household member in wave 1. ACEs were recalled in waves 1, 4, and 7; while adult measures were collected at waves 4 and 5. Individuals who met the criteria for past-year MDE in waves 6 or 7, according to the Composite International Diagnostic Interview-Short Form for Major Depression (CIDI-SFMD), were classified with MDE at follow-up. Using logistic regression analysis, we found no effect of father's education; however, those whose mothers did not complete high school were at increased risk for MDE (OR: 2.04, CI: 1.25, 3.32) relative to those whose mothers completed high school or more. Adjusting for adult SEP, ACEs, and other adult risk factors did not reduce the effect of maternal education. The results of this study suggest that early-life may be a sensitive period for the development of adult major depression, and that maternal education plays a significant role in the etiology of depression.

Kraepelinian Schizophrenia revisited: Prevalence and longitudinal characteristics

Speaker: Javad Moamai

Authors: Javad Moamai MD MSc CSPQ[1,2], Tin Ngo-Minh MD Resident V in Psychiatry[2]

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Objective: The Kraepelinian Schizophrenia (KSZ) concept, a putative categorical subtype of Schizophrenia (SZ) characterized by severe and debilitating course of illness, has been proposed to reduce the heterogeneity of the pathology. However, little research has focused on its clinical course. This study aimed to describe its nowadays prevalence and longitudinal characteristics.

Method: KSZ was defined as SZ patients who had their first admission before age 50, had at least two hospitalizations for SZ and who had been under continuous psychiatric care for ≥ 5 years. The control was defined as SZ patients with only one admission. Data were taken from the separation sheets of all 863 first admitted SZ subjects (14+ years) to a Quebec psychiatric hospital from 1980 to 2008.

Results: Amongst all first admitted SZ patients, 30.8% ended up with KSZ. Logistic regression analysis indicated that later development of KSZ was correlated with younger age, paranoid type and less substance-related comorbidity at first admission. No correlation was found for gender. However, at the end of historical follow-up (median = 10 years), KSZ cases misused more substance than at the time of their first admission (57.3 vs. 9.6%). Similarly, the working diagnosis evolved further toward the paranoid type (41.1 vs. 66.2%).

Conclusion: The observed differences might be attributed to the persistence of severe psychotic symptoms over the duration of illness. These finding further support the existing evidence for the utility of KSZ concept, based of clinical outcome, to define a more homogeneous subgroup in schizophrenia.

Session 3: Health Services

Smoking cessation and psychiatric hospitalizations

Speaker: Paul Kurdyak

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Objective: Smoking cessation policies have been widely adopted by psychiatric hospitals to address the health burden of tobacco smoking. On September 21, 2005, the Centre for Addiction and Mental Health (CAMH) imposed such a policy. The objective of this study was to determine whether a smoking cessation policy resulted in an increased likelihood of involuntary hospitalization for patients presenting to a psychiatric ED.

Methods: ED records were abstracted for 12 weeks preceding and following the smoking cessation policy. The rate of involuntary hospitalization preceding the smoking cessation policy was compared to the rate following the policy.

Results: After the smoking cessation policy implementation, the proportion of patients with psychotic illnesses who were hospitalized involuntarily increased by 33% (34% pre-policy and 45% after; p=0.008).

Conclusions: When patients with psychotic illnesses are not permitted to smoke, they are less likely to choose voluntary psychiatric care, which, in turn, increases involuntary hospitalization.

Unmet needs and continuity of care in general practice among individuals with mental disorders: results from a data linkage study

Speaker: JoAnne Palin

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General Practitioners (GPs) are the main source of mental health care for individuals with mental disorders. However, national health surveys provide limited information about patterns of mental health service utilization within general practice settings. Data linkages between survey data and provincial administrative records can provide a more complete picture of care, including the total number of visits to GPs in the past year for any reason and for mental health reasons, and the number of GPs seen. Additionally, linking diagnostic information from survey data to administrative health utilization data can illuminate unmet needs for mental health care among individuals who have mental disorders according to the survey but who have no record of care for a mental diagnosis in the administrative data. The Canadian Community Health Survey on Mental Health and Well-being was linked to administrative records in British Columbia (n=2,378). Of the 271 respondents with a mental disorder, 55% had no evidence of care from a GP for a mental health issue; and 10% had no care from a GP for any reason; 72% saw more than one GP and they tended to be high users of care, according to the administrative data. The number of mental health visits in the administrative data were compared to survey estimates, and the results were suggestive of survey respondent over-reporting. This study highlights issues pertaining to unmet needs and continuity of care among individuals with mental disorders that cannot be assessed when using either data source separately.

Mental health and addictions performance indicators: A proposed framework

Speaker: Elizabeth Lin

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Choosing and measuring performance indicators for mental health and addictions has become of increasing concern to stakeholders at levels spanning individual provider organizations to regional and provincial planners to international consortia. In mid-July 2009 the Ontario Ministry of Health and Long-Term Care began an initiative to develop and evaluate a 10-year strategy for mental health and addictions. To expedite implementation, it took the unusual step of simultaneously establishing groups to develop specific objectives and strategies and a collaborative working group to recommend and develop performance indicators to measure them. The key concern with the Ministry's approach was how to coordinate these two different activities.

We present a framework, developed by a subgroup of the collaborative working group, designed to answer this concern. Key features of the proposed framework are that it takes a population-based (rather than attributes-based) approach; is broadly defined to accommodate different populations, kinds, and levels of services; reflects inputs, processes, and outputs of organized (vs. informal) services and supports; and is intended to facilitate indicator selection by serving as a classification system for both measures and strategies. Another important feature is that it facilitates examination of how (and whether) processes are linked to specific outcomes. Hypothetical and real examples of how the framework can be used to link strategies to indicators, and vice-versa, are provided.

Mental disorder diagnosis and need for treatment are not the same: Findings from a prospective longitudinal epidemiologic survey

Speaker: Jitender Sareen

Authors: Jitender Sareen MD, Christine Henriksen MA, Murray B Stein MD, Murray W Enns MD

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Background: Epidemiologic studies from around the world have repeatedly found that the vast majority of those with a mental disorder do not receive treatment. Controversy has surrounded whether people in the community who meet criterion for a mental disorder diagnosis are in true need of treatment. Some have argued that these people require treatment and policymakers need to develop public education and outreach for these individuals. On the other, many have argued that the current epidemiologic studies may be capturing levels of distress that are transient and do not require treatment. To date, there is no empirical evaluation of the longitudinal course of individuals with a mental disorder who do not receive treatment. To address this issue, we utilized data from a large longitudinal survey.

We had two research questions:

1. Among those with a mental disorder who do not receive treatment at baseline, what proportion had a remission of symptoms over the follow-up?
2. What are the correlates of persistence?

Methods: Data came from the two waves of the National Epidemiologic Survey of Alcohol and Related conditions (N=34,653 adults (age 20 years and older). Axis I mental disorders and mental health service use were assessed at baseline and 3 years follow-up.

Results: Preliminary findings demonstrate that the majority of people with an Axis I mental disorder who have not received treatment at baseline do not meet criteria for a mental disorder at follow-up.

Conclusions: Meeting diagnostic criterion for a mental disorder does not equate with a need for treatment.

Session 4: Co-morbidity

It's complicated. Do we understand the connection between mental illness and colorectal cancer in 2010?

Speaker: Steve Kisely

Authors: Steve Kisely, Leslie Anne Campbell, Martha Cox

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Introduction: Some studies suggest a higher case fatality from colorectal cancer in psychiatric patients even though incidence is no greater than the general population's. If the increased mortality rate were solely due to lifestyle, cancer incidence would more consistently mirror the mortality rate. However, this finding is not universal and may be confounded by possible protective effects of psychotropics, study design (e.g. inception vs. historical cohort), mean cohort age, or delays in presentation with more advanced staging at diagnosis.

Aims: To assess how study design and cancer stage at presentation affect survival from colorectal cancer in psychiatric patients

Methods: 1) A population-based record-linkage analysis comparing cancer stage at presentation in psychiatric patients (n=821) with that for the general population in Western Australia (n=7194), using an inception cohort to calculate rate ratios. 2) A retrospective historical cohort of colorectal cancer presentations to Cancer Care Nova Scotia comparing 558 psychiatric patients with 2943 controls

Findings: In the cohort of new psychiatric cases, cancer incidence was lower than for the general population in females (OR 0.87; 95% CI=0.77-1.05) and no higher in males (OR 0.95; 95% CI=0.85-1.05). Mortality in both groups was 30% higher. More psychiatric patients developed secondaries within 90 days of presentation (23%) than the general population (17%) ($p<0.05$). In the retrospective historical cohort of prevalent psychiatric cases, there was no association between psychiatric status and stage at presentation or mortality.

Conclusions: Cancer stage at presentation, setting and study design should be considered when interpreting any association between mental illness and cancer.

Suicidal severity, mental health, addictive behaviours and recency of unemployment in the workforce

Speaker: Angus H Thompson

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Substance abuse, problem gambling, recent employment status, and mental illness have been shown to be strongly related to various levels of what has been termed the "suicidal process" (a set of behaviours ranging from a death wish, through the thought of suicide, a plan, an attempt, and finally, completed suicide). However, changes in problem behaviour prevalence across levels of the suicide process have not been examined. To examine correlations between levels of the suicide process and substance use (tobacco, alcohol, and drug use), gambling, mental disorder (anxiety, phobia, depression, and antisocial personality disorder), and employment status. Data were taken from the Alberta Survey of Addictive Behaviours and Mental Health in the Workforce. Each problem behaviour was graded according to level of risk or seriousness, and mental disorders were classified as either present or absent. The associations between these levels and position on the suicide process were examined. 2817 persons completed the survey. The results showed that for most addictive behaviours, increasing levels of seriousness were accompanied by (1) a dramatic increase in suicidality (with higher effects for those with employment difficulties), and (2) a reduction in prevalence. Mental health is meaningfully related to addictive behaviours in the workforce, whether the respondents were currently employed or not. Although employment status showed important differences, the developmental nature of suicidal behaviour and its important correlates suggests that a large proportion of preventive interventions are best established prior to engagement in the workforce.

Psychological problems associated with transition to insulin therapy in people with type 2 diabetes: a new prospective community study

Speaker: Norbert Schmitz

Author: Norbert Schmitz

Affiliation: McGill University

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I will present and discuss the design of a new prospective community study. The study is funded by CIHR and will start in 2011.

Epidemiological studies have shown that treatment with insulin is associated higher levels of depression, poorer functioning and reduced quality of life. The initiation of insulin therapy is considered as a critical life event: it may be associated with biological complications and psychological problems. The transition to insulin process might play an important role in the deterioration of health status.

Using a community sample of people with type 2 diabetes, we plan to identify psychological and psychosocial factors associated with change of health status due to the transition from oral hypoglycemic agents to treatment with insulin injections. The two main objectives are a) to identify if depression and anxiety symptoms, social support, diabetes related distress and negative attitudes toward insulin are predictors for change in health status, in addition to diabetes severity after transition to insulin therapy; and b) to identify the role of coping strategies (task-oriented, emotion-oriented, and avoidance-oriented coping styles), social support, lifestyle-related behaviors and low neighborhood deprivation as protective factors on physical and mental health status after transition to insulin.

We propose to conduct a community based cohort study in Quebec with 2,500 insulin naïve type 2 diabetes patients at baseline. Participants will be recruited through the Régie de l'Assurance Maladie du Québec (RAMQ), the provincial public health insurer. This cohort will be re-assessed after one, two and three years. We expect that 20% of the participants will switch to insulin treatment within 2 years after baseline assessment.

Differential co-morbidity of migraine with mood episodes

Speaker: Tuong-Vi Nguyen

Authors: Tuong-Vi Nguyen, Sok S Lee, Genevieve Gariepy, Norbert Schmitz, Nancy CP Low

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Background: Migraine has been found to be co-morbid with bipolar disorder and major depressive disorder in clinical and population-based samples. However, discrepancies and variability in findings across studies suggest that examining mood episodes separately - that is, as (1) manic episodes alone, (2) depressive episodes alone, and (3) manic-depressed episodes - may be fruitful in terms of determining which of these are specifically associated with migraine.

Methods: Using a population-based sample (n=36,984), the Canadian Community Health Survey Cycle 1.2, this study examined lifetime prevalence of migraine in subjects with lifetime history of manic episodes alone, depressive episodes alone, and both manic and depressive episodes. Logistic regression analyses were conducted, controlling for age, sex, socio-economic status, smoking and medication status.

Results: In subjects with manic episodes alone, the adjusted odds ratio (adjOR) of having migraine was 1.5 (95% CI 1.2-2). In subjects with depressive episodes alone, the adjOR of having migraine was 1.6 (95% CI 1.4-1.7). In subjects with both manic and depressive episodes, the adjOR of having migraine was 2.1 (95% CI 1.7-2.5). The odds of having migraine were significantly increased when subjects had both manic and depressive episodes, when compared to subjects with only one type of mood episode - either manic or depressive episode alone.

Conclusions: Differential co-morbidity of migraine with the manic-depressive subtype of bipolar disorder, when compared to the manic alone subtype or to major depressive disorder, supports the examination of mood disorders by specific mood episode types. These findings strengthen the argument that different phenomenology underlie migraine co-morbidity with mood disorders.

Poster Presentation Abstracts

Associations between Self-rated Health (SRH) Status, depression, disability and physical functioning in people with diabetes.

Presenter: Ghislaine Badawi

Author: Ghislaine Badawi

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Background: Self-rated health (SRH) has been shown to be a strong predictor for morbidity and mortality, but few studies have evaluated the role of SRH in the development of poor physical and mental functioning in diabetic populations.

Objective: This study investigated the association between SRH and both depression and global disability, accounting for the role of demographic, lifestyle and health-related characteristics in adults with diabetes in Quebec.

Methods: From 2003 adults with self-reported diabetes that participated in the Montreal Diabetes Health study, we used data from 1536 with complete information on our variables of interest. SRH was obtained using the question “In general, how would you rate your health?” Global disability and depression were assessed using the World Health Organization Disability Assessment Schedule II (WHO-DAS-II) and the Patient health Questionnaire (PHQ-9), respectively. Linear regressions were used to assess the association between SRH and both depression and disability.

Results: The prevalence of excellent/very good/good and fair/poor SRH was 78.5% and 21.5%, respectively. SRH was strongly associated with both disability (β=0.83, p=0.001), and depression (β=0.42, p=.001), after accounting for demographic, lifestyle and health-related behaviours. Employment status was associated with depression in men. Age and physical activity were associated with depression in women.

Conclusion: Depression and disability were associated with poorer lifestyle behaviours and health-related characteristics in people with diabetes; positive ratings of SRH were associated with better physical and mental functioning, indicating the importance of addressing the individual’s health perception during treatment.

Measurement invariance of the 2-factor indirect and physical aggression model: parent and youth reports

Presenter: Kristin Cleverley

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Researchers and clinicians are increasingly interested in identifying subtypes of aggression and how they relate to each other over development. Recent factor analytic work on aggression has suggested that a two-structure measurement model – physical aggression (PA) and indirect aggression (IA) - may be informative, particularly for understanding predictors, developmental course and outcomes of aggression. To date, however, the two-factor structure has not been confirmed in youth. As informants change over developmental periods, it is essential to first determine whether the structure of aggression is invariant across informants (specifically parents and youth). This study examined the measurement invariance of the two-factor structure of aggression (physical and indirect) in youth and their parents drawn from a nationally representative sample of 1587 youth and 1826 parents. Confirmatory factor analysis was used to test a two-factor model of aggression in youth, and multiple group confirmatory factor analysis was used to test whether the two-factor model was invariant by sex (youth) and by informant type (parent and youth). The results supported configural invariance of the two-factor model of PA and IA based on youth and parent reported data. However, results did not support invariance of the intercepts across informants, which was expected given that the mean levels of PA and IA were different between parent to youth. These results support findings that indicate indirect and physical aggression are two separate, yet related constructs, and maybe useful for future longitudinal analysis using these two constructs.

Distinguishing between bipolar disorder subtypes in a population-based sample

Presenter: Sivan Durbin

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Objective: Bipolar Disorder type I (BDI) is distinguished from Bipolar Disorder type II (BDII) based on the presence of one or more episodes of mania rather than hypomania. Other differences between these two unique disorders have yet to be comprehensively examined. The purpose of this study was to examine the characteristics and differences between subjects with BDI and BDII, as well as the differences between BD subtypes and Major Depressive Disorder (MDD) in a non-clinical, US population-based sample.

Method: Data were obtained from the National Epidemiological Survey on Alcohol and Related Conditions (NESARC). There were 7,124 subjects included in our analysis: 935 with BDI, 494 with BDII, and 5,695 with MDD. The study was retrospective in design and cross-sectional. Variables examined included demographics, clinical features, depressive symptomatology, and co-morbid conditions. The primary analysis examined differences between BDI and BDII groups using t-tests, Chi-squares, and logistic regressions. Secondary analyses examined the differences between BDI and MDD, BDII and MDD, and BD of any type and MDD.

Results: Key differences between BDI and BDII were identified in all categories, including demographics, clinical features, depressive symptomatology, and co-morbid conditions. Furthermore, differences between BD subtypes and MDD were identified, thus providing a list of variables that help distinguish these distinct clinical entities.

Conclusions: Aside from the presence of manic and hypomanic episodes, differences between BDI and BDII exist and can be used to assist in establishing accurate diagnoses in a population-based sample.

Types of smokers, depression and disability in type 2 diabetes: a latent class analysis

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Background: Despite the detrimental effects of smoking on health, a high number of adults with type 2 diabetes continue to smoke. Identifying distinct profiles of smokers could help tailor smoking intervention programs in this population and may help uncover high risk subgroups with unfavourable health outcomes.

Objective: This study examined whether smokers with type 2 diabetes could be classified into different profiles based on socioeconomic characteristics, smoking habits and lifestyle factors. Depression and disability status were compared across smoking profiles.

Methods: A community sample of adults with self-reported diabetes was selected from random digit dialing. Analyses included 383 participants with type 2 diabetes who were current smokers. Participants were interviewed at baseline (2008) and re-interviewed one year later (2009). We identified types of smokers using latent class analysis.

Results: We uncovered three meaningful classes of smokers: (1) long-time smokers with long-standing diabetes (n=105); (2) heavy smokers with deprived socioeconomic status, poor health and unhealthy lifestyle characteristics (n=105); (3) working and active smokers, recently diagnosed with diabetes (n=173). Members of class 2 were significantly more likely to be disabled and depressed at baseline and follow-up compared with others. They were also less likely to have quit smoking at follow-up, despite attempting to quit as often as others.

Conclusion: Different profiles of smokers exist among adults with type 2 diabetes. One class of smokers is particularly linked with depression, disability and a deprived socioeconomic situation. Distinguishing between types of smokers may enable clinicians to tailor their approach to smoking cessation.

Prevalence and incidence of schizophrenic disorders in Québec using administrative data: methods and estimation

Presenter: Alain Lesage

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Context: Accurate estimates of incidence and prevalence of a disease rely on a valid identification of individuals who suffer from the disease.
Objective: The present study aimed to characterize a criteria-based algorithm that would identify prevalent and incident cases of schizophrenic disorders when using medical administrative databases.
Design: A retrospective population-based cohort study was conducted using 1996 to 2006 (inclusive) data from the Québec's hospital discharge register and the physician claims database.
Population at study: The study population included all adult individuals with suspected schizophrenic disorders living in the province of Québec in 2006.
Data analysis: To identify cases of schizophrenic disorders, four algorithms were defined and tested. The lifetime prevalence and incidence rates of schizophrenic disorders for the year 2006 were estimated. To measure the number of incident cases in 2006, we removed from the prevalent pool all patients who had a record of schizophrenic disorders between January 1, 1996 and December 31, 2006 (a clearance period of 10 years). Using this 10-year clearance period as the reference, Kappa coefficients and positive predictive values (PPV) were calculated to determine the "optimal" length for this clearance period (a retrospective period clear of schizophrenic disorders records) to identify incident cases.
Results: The lifetime prevalence rates of schizophrenic disorders varied from 0.59% to 1.46% and the incidence rates from 42 to 92 per 100,000 depending on the algorithm used. When compared to the 10-year clearance period, the Kappa agreement is excellent given a clearance period of 6 or 7 years; while, to achieve a PPV of at least 90%, a clearance period of 7 or 8 years would be necessary.
Conclusion: With an appropriate algorithm, the prevalence and incidence of schizophrenic disorders can be conveniently estimated using administrative data. Those estimates are a vital step toward appropriate interventions for mental disorders like schizophrenia.

Validation of self-rated mental health

Presenter: Farah Naaz Mawani

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Background: This article assesses the association between self-rated mental health and selected World Mental Health-Composite International Diagnostic Interview (WMH-CIDI)-measured disorders, self-reported diagnoses of mental disorders, and psychological distress in the Canadian population.

Data and methods: Data are from the 2002 Canadian Community Health Survey: Mental Health and Well-being. Weighted frequencies and cross-tabulations were used to estimate the prevalence of each mental morbidity measure and self-rated mental health by selected characteristics. Mean self-rated mental health scores were calculated for each mental morbidity measure. The association between self-rated mental health and each mental morbidity measure was analysed with logistic regression models.

Results: In 2002, an estimated 1.7 million Canadians aged 15 or older (7%) rated their mental health as fair or poor. Respondents classified with mental morbidity consistently reported lower mean self-rated mental health (SRMH) and had significantly higher odds of reporting fair/poor mental health than did those not classified with mental morbidity. Gradients in mean SRMH scores and odds of reporting fair/poor mental health by recency of WMH-CIDI-measured mental disorders were apparent. A sizeable percentage of respondents classified as having a mental morbidity did not perceive their mental health as fair/poor.

Interpretation: Although self-rated mental health is not a substitute for specific mental health measures it is potentially useful for monitoring general mental health.

Correlates of involuntary hospitalization in schizophrenia

Presenter: Javad Moamai

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Objective: Although many studies have shown an increased rate of Involuntary Hospitalization (IH) in schizophrenic patients, the literature provides little information about the clinical correlates of IH in First Admitted Schizophrenic Patients (FASP). The aim of this study was to describe the clinical characteristics of schizophrenic patients having a first lifetime hospitalization with regard to IH.

Method: Data were taken from the separation sheets (ICD-9 format) of all 414 FASP (18+ years) admitted to a Quebec regional psychiatric hospital from 1991 to 2008. Bivariate and logistic regression analyses were conducted. The study covariates were length of the hospitalization, age, gender, co-morbid personality disorder, and co-morbid alcohol and substance use disorders.

Results: The observed rate of IH among FASP was 41.5%. A logistic regression analysis indicates that only younger age was correlated significantly with IH in FASP. IH status could not be distinguished from voluntary hospitalization on the basis of other study covariates.

Conclusions: These results support the view that clinical characteristics do not clearly discriminate between involuntary and voluntary status. Furthermore, the finding that IH is the main mode of contact with psychiatric hospital in schizophrenic patients makes IH a major public health issue. This study then warrants further and regular research in this area.

Mental healthcare in older adults: Perceived unmet need and barriers

Presenter: Christine Rodriguez

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Purpose: To examine the (1) prevalence of perceived unmet need and reasons for not seeking care in a representative sample of Canadian adults ≥55 years who meet objective criteria for need and (2) demographic, social and clinical (need) correlates of perceived unmet need in this population.

Methods: A subsample of respondents who met objective criteria for need and were ≥55 years (n=2045) was selected from the 2002 Canadian Community Health Survey 1.2 (n=36,984). The prevalence of perceived unmet need and reasons for not seeking care are described. Demographic, social and need factors were compared among those who reported a perceived unmet need (n=152) to those who did not (n=1872) using multivariable logistic regression.

Results: We found that 16% of respondents ages 55 and older met our objective criteria for need; of these, 7.4% reported having their need unmet in the previous 12 months (perceived unmet need). Lower perceived social support, higher levels of distress, poor self-rated mental health, any self-reported ADL limitation were all related to perceived unmet need in older adults. No sociodemographic variables were related to perceived unmet need in these individuals. In a multivariate, logistic model with all predictors, only self-rated mental health and having a mental disorder where associated with perceived unmet need.

Conclusions: More than 90% of older adults meeting objective criteria for psychiatric need do not perceive a need for care. Our findings suggest greater attention should be paid to psychological factors as determinants of self-perceived unmet need in this population.

Official language minority communities in Canada: does the prevalence of mental health problems differ between minority and majority Francophones and Anglophones?

Presenter: Raymond Tempier

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Introduction: Language is a key health determinant that may affect an individual's well-being.[1] Within Canada, official language use and minority-majority status differs provincially (French-majority/English-minority in Quebec and French-minority/English-majority outside of Quebec). Very few studies have examined differences in mental health problems and mental health service use between Francophones and Anglophones in minority/majority situations.

Purpose: This poster presents partial results from the author's masters thesis. The goal of the poster will be to determine whether differences exist in mental health problems between minority and majority Francophones and Anglophones within and outside of Quebec.

Methodology: The current study used data from the Canadian Community Health Survey: Mental Health and Well-being, Cycle 1.2.[2] Two main comparisons were made: 1) Quebec Francophones to Quebec Anglophones, and 2) outside Quebec Francophones to outside Quebec Anglophones. Twelve-month and lifetime prevalences of mental disorders were examined through bivariate analyses.

Results: Very few significant differences were found between minority and majority official language groups, though some notable regional differences were found: Anglophones and Francophones outside Quebec had a higher prevalence of poor self-rated mental health and low life satisfaction compared to their respective language counterparts in Quebec.

Conclusion: These findings can help aid stakeholders in redirecting resources and developing policies and programs towards areas in need of most help.

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