Articles Summarised

» Anxiety and depressive symptoms and medical illness among adults with anxiety disorders
» The association between major depressive disorder in childhood and risk factors for cardiovascular disease in adolescence
» Longitudinal association between pain, and depression and anxiety over four years
» Association between mental disorders and subsequent adult onset asthma
» Associations between diabetes, major depressive disorder and generalized anxiety disorder comorbidity, and disability: Findings from the 2012 Canadian Community Health Survey – Mental Health (CCHS – MH)
» Poststroke suicide attempts and completed suicides: A socioeconomic and nationwide perspective

Introduction

This newsletter provides a brief summary of some of the latest research and publications that may be of interest to practitioners in the field of addiction and mental health. Each newsletter will cover one of the themes of the Alberta Addiction and Mental Health Research Partnership Program and provides structured accounts of research on a given topic, based on a limited search of the literature for recent publications. We do not thoroughly assess the quality of the research identified so this publication acts as a signpost for further reading and assessment, rather than as a definitive account of what should be included in clinical practice.

This month’s edition focuses on Chronic Disease and Mental Health.

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Anxiety and depressive symptoms and medical illness among adults with anxiety disorders

Study Design: Cross-sectional study

Focus of the Study: Anxiety and depression often co-exist and are associated with a variety of medical conditions; however, the relationship between symptom severity and specific medical conditions is unclear. This study examined the association between comorbid anxiety and depression, and different anxiety and depression symptom severity with physical health in patients diagnosed with anxiety disorders. The study
also aimed to determine the extent to which anxiety and depression each contribute to overall disease rates and rates of specific diseases. The study participants were 989 adult patients diagnosed with one or more of the following anxiety disorders: generalized anxiety disorder, social anxiety disorder, post-traumatic stress disorder, panic disorder.

**Key Findings:**

- Anxiety and depression comorbidity was strongly associated with increased medical conditions.
- Compared to individuals with only one anxiety disorder, individuals with multiple anxiety disorders and depression had 1.3 times the number of medical conditions.
- Individuals with multiple anxiety disorders and depression were 2.6 times more likely to have difficulties with eyesight than individuals with multiple anxiety disorders and no depression. There were no other associations between comorbid psychological diagnoses and specific medical conditions.
- Individuals with more severe symptoms of anxiety and depression had more medical conditions.
- Increased anxiety and depressive symptom severity was associated with higher rates of asthma, heart disease, back problems, stomach ulcers, migraines, and eyesight difficulties.
- Anxiety symptoms were independently linked with stomach ulcers, whereas depressive symptoms were independently linked with heart disease, migraines, and eyesight difficulties.

**Implications for Practice:** This study suggests that in patients with anxiety disorders, greater severity of anxiety and depressive symptoms is associated with greater medical comorbidity. The association between anxiety and depressive symptoms with medical conditions was as strong as the association between BMI and medical conditions. Screening and treatment for anxiety and depression in the medically ill may improve patient outcomes.


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**The association between major depressive disorder in childhood and risk factors for cardiovascular disease in adolescence**


**Study Design:** Cross-sectional study

**Focus of the Study:** Adults with depression have an increased risk of developing cardiovascular disease (CVD). Risk factors for CVD, such as smoking, a higher body mass index, and sedentary behavior are often more severe in depressed adults. Research examining the relationship between depression and CVD risk factors has typically focused on adult age groups; however, there is uncertainty about when clinical depression first becomes associated with risk factors for CVD. This study examined the relationship between depression and CVD risk factors, including smoking, obesity, physical activity level, and parental history of CVD across three samples of adolescents: those with childhood-onset depression (COD), never-depressed siblings of children with depression, and a control group without any major psychiatric disorder.

**Key Findings:**

- Among those with COD, 59% reported one major depressive disorder episode during lifetime, 32% reported two episodes, and 9% reported three or more episodes. During assessment, 15% of those with COD were in a major depressive disorder episode.
- Compared to siblings and the control group, those with COD reported lower levels of physical activity, more time spent doing sedentary activities, higher rates of obesity, and higher prevalence of regular smoking.
- In general, prevalence of risk factors for CVD among siblings fell midway between those with COD and the control group.
- Parents of those with COD reported higher rates of CVD than control parents, including myocardial infarction, CVD-related hospitalization, CVD medication, and stroke.
- Parental CVD was not associated with increased CVD risk factors among youth with COD.

**Implications for Practice:** Childhood-onset major depressive disorder is associated with a higher likelihood of elevated levels of cardiovascular disease risk factors in adolescence, which may contribute to adult CVD. Effective prevention and treatment of pediatric depression may play a part in decreasing the rate of adult CVD. Also, mental health care providers may want to consider screening depressed children and adolescents for CVD risk factors and behaviors.
Longitudinal association between pain, and depression and anxiety over four years

Study Design: Retrospective cohort study

Focus of the Study: Pain is a common and complicated global health problem. Chronic and persistent pain has a detrimental effect on the affected individual's psychosocial functioning. Pain is a risk factor for developing depression and/or anxiety (D/A). However, little is known about the influence of D/A on the course of pain. The objective of this study was to examine the association between different courses of D/A symptoms, namely the incident, remitted, and chronic courses of D/A with pain over time, and to compare this with healthy controls. The healthy controls had no lifetime history of D/A, and no D/A diagnosis during the course of the study. There were 2676 participants in this study and they were followed up for four years.

Key Findings:
» There was a positive association between change in both depressive and anxiety symptoms and change in pain symptoms (severity and number of locations) over time. When D/A symptoms increased, so did the pain severity and number of pain locations and vice versa.
» Compared to healthy controls, individuals with incident D/A, remitted D/A and chronic D/A all had significantly greater pain severity and number of pain locations at all three time points of the study (baseline, two year follow up and at four year follow up). Individuals with chronic D/A had the highest pain ratings.
» The remitted D/A participants; i.e., those with a D/A diagnosis at baseline but remission of D/A during follow up, experienced the greatest decline in pain (both severity and number of locations) compared to the other groups. Individuals who developed D/A over time, but had no D/A diagnosis at baseline; i.e., the incident D/A group already had significantly higher pain ratings compared to the healthy controls at baseline.
» There was a positive association between incident depression, remitted depression and chronic depression and both pain severity and number of pain locations. Individuals who remitted from depression had decreased pain ratings (both for severity and number of locations).
» There was also a positive association between incident anxiety, remitted anxiety and chronic anxiety and both pain severity and number of pain locations. Similar to the findings for depression, individuals who remitted from anxiety had decreased pain ratings (both for severity and number of locations).
» Despite the significant decline in pain ratings in those who experienced a remission of D/A during follow up, their pain levels were still significantly higher than healthy controls.

Implications for Practice: The diagnosis of anxiety and/or depression should be considered and treated appropriately when treating pain and vice-versa. In some cases, a reduction in anxiety and/or depression could lead to reports of reduced pain severity.

Association between mental disorders and subsequent adult onset asthma

Study Design: Retrospective cross-sectional study

Focus of the Study: Previous research has shown an association between asthma and mental disorders; however, little is known about the order in which the conditions occur. The authors wanted to investigate the possible association of mental health disorders and subsequent adult-onset asthma. The present study examined the relationships between 16 mental health disorders (e.g., mood and anxiety disorders, impulse control, and substance use disorders) and people who were diagnosed with asthma after the age of 21. Data were taken from the World Mental Health Surveys, which were conducted in 19 countries.

Key Findings:
Among those with adult-onset asthma, 21% experienced a major depressive episode (MDE), 10% had generalize anxiety disorder (GAD), 11% suffered from a specific phobia, 8% had PTSD, 2% had intermittent explosive disorder, and 8% abused alcohol.

Out of the 16 mental health disorders included in the survey, 12 disorders predicted adult-onset asthma. The strongest associations were found for bipolar disorder, binge eating disorder, anxiety disorders, and alcohol dependence.

As the number of mental health disorders a person had increased, the likelihood of developing adult-onset asthma also increased.

Early onset of a mental disorder (i.e., measured as prior to age 21) was more strongly associated with subsequent adult-onset asthma.

In the cases of mood disorders, GAD, social phobia and PTSD, the association with subsequent adult onset asthma was stronger when the onset of asthma occurred in early adulthood.

In general, the associations between mental health and adult-onset asthma varied little by gender.

**Implications for Practice:** Although the findings from this study are preliminary, the results suggest that people who suffer from mental disorders in their pre-adult life may be susceptible to adult-onset asthma. Being aware of client’s history of mental health disorders may help guide health care professionals in screening for physical health concerns.


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**Associations between diabetes, major depressive disorder and generalized anxiety disorder comorbidity, and disability: Findings from the 2012 Canadian Community Health Survey – Mental Health (CCHS – MH)**


**Study Design:** Cross-sectional study

**Focus of the Study:** Prior research has shown that major depression disorder (MDD) and diabetes often co-occur. Generalized anxiety disorder (GAD) is another common disorder which frequently occurs in individuals who also suffer from MDD. Although a link between MDD and diabetes has been identified, it is less clear if GAD is also associated with increased rates of diabetes. GAD and MDD have also been shown to negatively impact the functioning of those who suffer from either condition; however, it is not known if those who suffer from comorbid GAD/MDD and diabetes experience greater levels of disability.

This study aimed to examine associations between diabetes and MDD/GAD comorbidity, and levels of disability in diabetes patients who also suffer from MDD and GAD. Data was used from the 2012 Canadian Community Health Survey – Mental Health, a large, national survey that collects health-related data. The researchers looked at those who had received a diagnosis of MDD/GAD in the past 12 months and during their lifetime.

**Key Findings:**

- Those who had been diagnosed with diabetes were almost twice as likely to suffer from comorbid MDD and GAD in the previous 12 months than those who did not have diabetes.
- Among those with diabetes, the presence of MDD only, GAD only, or comorbid MDD and GAD in the previous 12 months had an increased likelihood of disability when compared with those who did not have either disorder.
- Those with diabetes were more likely to experience comorbid MDD and GAD at some time during their lifetime than those without diabetes.
- Among those with diabetes, only the presence of comorbid MDD and GAD during the respondents’ lifetime was associated with an increased likelihood of disability.

**Implications for Practice:** Health care providers working with clients with diabetes should be aware of the increased likelihood of comorbid MDD and GAD. Integrated treatment approaches that focus on healthy living as well as dealing with depression or anxiety issues may be beneficial to the client.

Poststroke suicide attempts and completed suicides: A socioeconomic and nationwide perspective


Study Design: Cohort study

Focus of the Study: Stroke patients are at an increased risk of having suicidal thoughts and of risk of suicide. In the general population, marital status, education and income are among socioeconomic factors that are known to be associated with suicidal thoughts and suicides. The objective of this study was to examine how such socioeconomic factors affect suicide attempts and completed suicides in 220,336 Swedish stroke survivors. Additionally, the researchers examined the methods for attempting suicide and the time at which patients were at the highest risk of suicide after their stroke.

Key Findings:
- The rate of completed suicide in patients 1 year post-stroke was almost twice as high as the rate of suicide in the general Swedish population aged 20 – 74 years.
- Stroke patients in the 20-54 age range were about five times more likely to have completed suicide compared to the general Swedish population.
- Patients who were younger, male, living alone at the time of the stroke (vs. married or common law), had only primary or secondary school education (vs. university educated), were in low to middle income brackets (vs. high income), were born in Europe (vs. born outside Europe) and suffered higher stroke severity (being unconscious or being drowsy on admission) were at an increased risk of attempting suicide.
- Three-quarters of all suicide attempts were by means of self-poisoning.
- The incidence rate of suicide attempts was the highest in the first year post-stroke. The rate of suicide attempts then dropped in the second and third years after a stroke, and subsequently leveled off after the third year.
- Three months post-stroke, patients who attempted suicide were those who perceived their health to be poor or very poor and reported depression.

Implications for Practice: Certain clinical and socioeconomic factors appear to increase the risk of suicide attempts in stroke survivors. This sub-group of patients would benefit from psychosocial support and suicide preventative interventions.


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