

## Prevalence and Treatment of Anxiety Disorders in Children and Adolescents

A. Watts<sup>1</sup>, A. Deegan<sup>2</sup>, D. Cawthorpe<sup>3</sup>

<sup>1</sup>BHSc, University of Calgary, Calgary, Canada ; <sup>2</sup>Child & Adolescent Addiction & Mental Health, Alberta Children's Hospital, Calgary, Canada ; <sup>3</sup>Psychiatry and Community Health Sciences, Child and Maternal Health, Calgary, Canada

---

**Introduction:** Using meta-analysis and physician billing data, the prevalence and efficacy of treatments for anxiety disorders in children and adolescents was elucidated.

**Objectives:** To use billing data from the Calgary Health Region (CHR) to determine anxiety disorder prevalence rates. Meta-analysis was performed to compare treatment efficacy of two leading interventions for anxiety disorders in youth.

**Aims:** We sought to examine the prevalence of anxiety disorders in the CHR, and evaluate the efficacy of cognitive behavioural therapy (CBT) and attention bias modification (ABM) for the treatment of anxiety disorders in youth.

**Methods:** Physician billing data was used to identify 303 938 unique individuals diagnosed with an anxiety disorder. Effect sizes for CBT/ABM treatments were calculated for clinician and self-report measures and displayed in forest plots, allowing comparison of treatment efficacy.

**Results:** The 16-year cumulative anxiety disorder prevalence rate was 28.8% in the CHR, while the annual rate increased from 1.5% to 2.1% from 1994 to 2009. There was no evidence of efficacy for the ABM treatment. 80% of the CBT studies showed efficacy of the treatment as rated by clinicians, but none showed significant improvement in self-report measures. Analysis revealed the ABM placebo was more effective than ABM, and significantly more efficacious than CBT.

**Conclusions:** The prevalence of anxiety disorders in the CHR increased by 40% from 1993 to 2009. Meta-analysis revealed no evidence of efficacy for ABM. CBT only showed efficacy in terms of clinician-rated measures; possible evidence of clinician bias. Ultimately, revision of current ABM methods is necessary.