HEARTSMAP CME – THOUGHTS AND ANXIETY

HEARTSMAP Domain	Thoughts and anxiety
Number of articles	3

General Theme	Clinician Bottom Line
Anxiety and co-morbid depression • Youth with comorbid anxiety and depression self-reported higher family dysfunction than youth with anxiety alone. (Level of Evidence: II.2)	• Addressing the family dynamic can be a potential point of intervention in improving the treatment outcome for youth with co-morbid anxiety and depression. • See article #1
Anxiety • Anxiety is one of the most common and earliest forms of mental health concerns that can precipitate into other disorders later in life. (Level of Evidence: I)	• There are age-specific manifestations of anxiety disorders that should be taken into account when identifying and assessing children. • Cognitive-behavioural therapy (CBT) is currently the most efficacious psychotherapy for children and adolescents with anxiety disorders. • See article #2
Truancy • Truancy is robustly associated with self-reported depression and anxiety, as well as externalizing behaviors, delinquency, low school engagement, and lower parental involvement. (Level of Evidence: II.1)	• An educational intervention aimed at reducing truancy may reduce depression and anxiety in truant youth. • See article #3

1. O'Neil, K. A., Podell, J. L., Benjamin, C. L., & Kendall, P. C. (2010). Comorbid Depressive Disorders in Anxiety-disordered Youth: Demographic, Clinical, and Family Characteristics. *Child Psychiatry & Human Development*, *41*(3), 330–341. http://doi.org/10.1007/s10578-009-0170-9
    a. **Objective**: to observe the family characteristics of youth with co-morbid anxiety and depressive disorders.
    b. Method:
        i. **Population:** 200 children and adolescents aged 7-17 presenting to anxiety disorder clinic at Temple University.
        ii. **Design**: a cross-sectional design involving multiple interviews and self-reported questionnaires to measure anxiety, co-morbid depressive disorders, and family functioning.
        iii. **Primary Outcome:** statistically significant mean difference in family functionality between youths with co-morbid anxiety and depression and youth with anxiety alone.
    c. **Results:** 12% of youth with anxiety had co-morbid depressive disorders, which was lower than the literature value of 28 to 54% based on other research. Compared to anxious youth without co-morbid depression (M= 22.79, SD = 5.57), youth with comorbid depression and anxiety reported significantly higher dysfunctionality on the general family functioning scale (M = 25.69, SD = 3.18). Youth with comorbid depression and anxiety also self-reported more anxiety and depressive symptoms than youth with anxiety alone.
    d. **Conclusion:** Given the small to moderate sample size, the cross-sectional study lends fair evidence that that family dysfunction could be a risk factor for developing comorbid depression among youth with anxiety. Potentially, an intervention aimed at reducing family dysfunction could alleviate the development of comorbid depression among youth with anxiety.
    e. **Level of evidence:** II.2 (cross-sectional study with a limited sample size)

2. Mohr, C., & Schneider, S. (2012). Anxiety disorders. *European Child & Adolescent Psychiatry*, *22*(1), 17–22. http://doi.org/10.1007/s00787-012-0356-8
    a. **Objective:** to review various anxiety disorders in child and adolescents with a transition to new DSM-V
    b. Method
        i. **Population:** children and youth with anxiety
        ii. **Design:** a systematic review of various studies on child & adolescent anxiety
        iii. **Primary outcome measure**: prevalence and characterization of different types of anxiety disorders in children and adolescents; therapeutic efficacy of cognitive-behavioural therapy (CBT) compared to wait-list control without treatment.
    c. **Result:** Anxiety is identified as one of the most common and earliest forms of mental health concerns that can precipitate into other disorders later in life. It is important to note that there are age-specific manifestations of an anxiety disorder. In terms of treatment, CBT is the only evidence-based psychotherapy with a remission/treatment rate of 56~69%.
    d. Conclusion: The robust collection of cross-sectional, cohort, and randomized clinical trials make this systematic review a concrete overview on anxiety disorders. It also lends strong evidence to CBT as currently the most efficacious psychotherapy for children and adolescents with anxiety disorders.
    e. **Class of evidence**: I (systematic review with demographical, cross-sectional, cohort, and randomized clinical trial)

3. Vaughn, M. G., Maynard, B. R., Salas-Wright, C. P., Perron, B. E., & Abdon, A. (2013). Prevalence and correlates of truancy in the US: Results from a national sample. *Journal of Adolescence*, *36*(4), 767–776. http://doi.org/10.1016/j.adolescence.2013.03.015
    a. **Objective**: to identify the prevalence, sociodemographic characteristics, and mental health problems associated with truancy
    b. **Method**:
        i. **Population:** 68,736 youth aged 12-17 as part of 2009 National Survey on Drug Use and Health (NSDUH).
        ii. **Design:** Cross-sectional study involving multiple self-reported questionnaires that measure the rate of truancy, sociodemographic and mental health conditions, school engagement, parental involvement, and externalizing behaviours.
        iii. **Primary outcome measure**: odds ratios of externalizing behaviours and mental health concerns in truant youth vs. non-truant youth
    c. **Result**: Youth who exhibited severe truancy (4 or more skips per month) were three times more likely to self-report depression and 2.5 times more likely to report anxiety than moderate skippers (1-3 times per month).
    d. **Conclusion:** Despite the limitation inherent to cross-sectional study, the size of the sample and the magnitude of odds ratios lend solid strength to the study's conclusion that truancy is robustly associated with mental health concerns such as anxiety and depression.
    e. **Level of evidence**: II.1 (well-designed cross-sectional study)

Appendix: Guide for Level of Evidence

Canadian Task Force on the Periodic Health Examination's Levels of Evidence*

Level	Type of evidence
I	At least 1 RCT with proper randomization
II.1	Well designed cohort or case-control study
II.2	Time series comparisons or dramatic results from uncontrolled studies
III	Expert opinions