Prepared for Child and Youth Mental Health Services - British Columbia Ministry of Children and Family Development

Welcome

Summer 2007 — Children's Emotional Wellbeing

Welcome to the Summer 2007 issue of the *Children's Mental Health Research Quarterly*, produced by the Children's Health Policy Centre at Simon Fraser University. *The Quarterly* provides updates on the best currently available research evidence in children's mental health. The theme for this issue is children's emotional wellbeing. This theme was chosen in consultation with Child and Youth Mental Health (CYMH) staff at BC's Ministry of Children and Family Development (MCFD).

In addition to our regular features, in this issue we:

- Spotlight long-term outcomes of cognitive-behavioural therapy for treating anxiety disorders
- Highlight a review on including parents in treatment
- Present a review on effective treatments for obsessive-compulsive disorder
- Discuss using research evidence in clinical practice with Jane Garland, a child psychiatrist

We hope you find this issue both enjoyable and useful. Please **email us** with your questions, comments and suggestions for future topics.

Next Issue

The theme for our Fall 2007 *Quarterly* will be helping children cope at school, highlighting the assessment and treatment of attention-deficit/hyperactivity disorder (ADHD).

The Quarterly is prepared by an **interdisciplinary team** at the Children's Health Policy Centre.

EDITOR

Erika Harrison, MA

WRITER

Christine Schwartz, MA, PhD, RPsych

SCIENTIFIC EDITOR

Charlotte Waddell, MSc, MD, CCFP, FRCPC

RESEARCH ASSISTANTS

Orion Garland, BA; Larry Nightingale, LibTech; Jenn Dixon, BScHP

We welcome people to use *The Quarterly* as a reference source (for example, in preparing educational materials for parents or community groups). Please cite our work as:

Schwartz C, Waddell C, Harrison E, Garland O, Nightingale L, & Dixon J. 2007. *Children's Mental Health Research Quarterly: Summer Issue – Children's Emotional Wellbeing.* Vancouver, BC: Children's Health Policy Centre, Faculty of Health Sciences, Simon Fraser University.

Current Articles

IN COMMENTARY

Fears and worries: The typical and the concerning

We respond to questions from policy-makers, practitioners and parents about the distinction between common childhood worries and clinical anxiety disorders. We then discuss factors that influence the development of anxiety problems. We also look at the importance of preventing and treating anxiety problems early in life, and the costs to children if we do not.

IN REVIEW

Promoting emotional wellbeing, addressing childhood anxiety

We present findings from the latest high-quality research evidence on interventions for preventing and treating anxiety problems in children. To highlight the most effective programs, we examine newly published research findings and recap results from our previous **anxiety disorders review**. We then suggest recommendations for policy and practice based on this evidence.

IN FOCUS

Treating Obsessive-Compulsive Disorder

We summarize a recent high-quality systematic review on treating obsessive-compulsive disorder in children. We present well-conducted research that continues to accumulate on the effectiveness of "exposure and response prevention," a form of cognitive-behavioural therapy.

IN PRACTICE

Out of the journals and into children's lives

Jane Garland is a child psychiatrist, clinical professor at the University of British Columbia (UBC) and head of the Mood and Anxiety Disorders Clinic at BC Children's Hospital. She is also the co-author of Taming Worry Dragons, a book designed to help children combat problematic worry.We spoke to Jane about her experiences taking the research evidence into her practice and programs.

IN COMMENTARY

Fears and worries: The typical and the concerning

Here we respond to questions from policy-makers, practitioners and parents.

What is "normal" anxiety in children?

Anxiety is a normal part of childhood. Certain fears and worries are typical and may be expected at any given developmental stage. For example, it is common for toddlers to fear the dark, for school-aged children to fear animals and for teenagers to worry about relationships with peers. These typical anxiety experiences do not usually interfere with children's development and functioning. They also usually diminish with time.

When does anxiety become a problem?

Anxiety disorders are distinguished from more typical worries in that they have a significant negative impact, causing children distress and impairing children's functioning at home, at school or in the community. When fears start to interfere with daily living, for example, causing difficulties such as the inability to attend school or to enjoy friendships, there may be a clinically significant anxiety disorder.

What are the types of anxiety disorders in children?

Fears of various kinds can be typical to a child's developmental stage

There are several different types of anxiety disorders. All involve excessive fears and all cause serious impairment for affected children. Many of these disorders present early in life, between ages seven and 11 years. The table below details specific types of anxiety disorders commonly found in children.

Types of Anxiety Disorders in Children[1]

Anxiety Disorder	Description
Specific phobia	Excessive fear of an object or situation such as water or an animal
Social phobia	Severe and persistent fears of interacting with others such as meeting new people
Separation anxiety	Excessive worry about separation from important individuals such as parents or caregivers
Generalized anxiety	Various severe worries associated with physical symptoms and difficult to control
Posttraumatic stress disorder & Acute stress disorder	Characteristic physical and psychological anxiety responses to a traumatic event such as severe maltreatment or a serious accident
Panic disorder	Frequent disabling anxiety attacks occurring with or without obvious triggers
Obsessive-compulsive disorder	Intrusive thoughts and repetitive behaviours causing severe distress such as a compulsion to wash excessively because of a fear of germs

How common are anxiety disorders?

Anxiety disorders are the most common mental health problems in children (and adults). Approximately 6.4% of children (or six in 100) have severe problems with worries and fears warranting a clinical diagnosis.[2] Obsessive-compulsive disorder (OCD) is typically distinguished from other anxiety disorders and affects an estimated 0.2% of children (or two in 1,000).[2] This means that at any given time over 42,000 children in BC and over 338,000 children in Canada may experience some type of anxiety disorder.[3] If milder forms of anxiety are considered, many more children are likely affected. Strikingly, the majority of these children (over 75%) do not get the help they need in childhood.[2]

How do anxiety disorders develop?

Anxiety disorders are the most common mental health problems in children

Like many mental health problems, anxiety disorders likely arise through the interaction between genes and environment, particularly as children experience adversity over time.[4] Mental disorders such as anxiety emerge differently during different developmental periods.[5] Many factors increase the likelihood of such problems occurring.[6] Being female is a risk factor, as is having a parent with an anxiety disorder.[7] Parenting styles can affect the development of anxiety problems, such as when parents inadvertently encourage fears by allowing children to avoid uncomfortable situations.[8] Being temperamentally cautious during the preschool years is also a risk factor.[5] The experience of extremely negative or stressful events, beyond the typical adversities most children experience, can promote anxiety problems. Examples of extreme adversities include being physically or sexually abused, witnessing violence, being bullied, experiencing a serious accident, having numerous changes in caregivers or losing an important adult such as a parent or caregiver.[4] For OCD, research suggests biological factors are particularly important given the development of some cases after streptococcal infections[9] and noted differences in specific brain regions.[10]

The risk of developing a mental disorder after experiencing a single risk factor is quite low. Anxiety disorders, like other mental health problems, typically occur when children are exposed to multiple severe adversities.[11] It is therefore crucial to ensure children are protected from unnecessary and preventable negative experiences impeding healthy development such as maltreatment.

What factors can protect children from developing anxiety problems?

Anxiety problems typically occur when children are exposed to multiple severe adversities

When the prevention of anxiety problems has not been possible, it is vital to target interventions at adversities or risk factors that can be changed. Building on protective factors is also critical. Active coping strategies, such as focusing on solving problems rather than avoiding them, have been specifically identified as protective factors for childhood anxiety.[7] More generally, several protective factors are associated with positive mental health, including freedom from anxiety. These include: a positive relationship with at least one adult; positive relationships with peers; good learning abilities; a cohesive community and a sense of greater purpose.[12] It is a given that all children need stability, safety and supportive adults in their lives to encourage their healthy development.

Why don't more children with anxiety receive the help they need?

Anxiety problems often go undetected or mistaken for another problem resulting in children not receiving the help they need.[7] Children with anxiety are often quiet and do not come to adults' attention the same way children with behaviour problems do. Anxiety problems can also present in other ways, for example, as irritability or anger or learning difficulties when children are confronted with situations that overwhelm them. All these factors make it especially likely that serious anxiety problems may go undetected or get mislabeled, for example, when people mistake anxiety for attention or learning problems. This also means the underlying causes of the anxiety often go undetected.

What are the costs of anxiety disorders for children and for society?

Prevention and early intervention enhance the wellbeing of children, families and communities

Childhood anxiety disorders are associated with a number of negative outcomes. Children with anxiety disorders often have difficulties with academic work and periods of inability to attend school.[8] Difficulties in social relationships commonly result from low self-esteem, social isolation and challenges with social skills.[8] Physical symptoms, including headaches and stomachaches, are common.[8] Childhood anxiety disorders have also been associated with thoughts of suicide and suicide attempts.[13] Finally, children with anxiety disorders are at risk of developing additional mental disorders including other anxiety disorders, depression and substance abuse.[7] When anxiety problems are treated or prevented altogether, children can avoid such adverse outcomes and experience a healthier development.

If not successfully prevented, or detected and treated early, childhood anxiety disorders typically have a chronic course and worsen over time.[13] These disorders then often persist (unnecessarily) into adulthood.[14] Anxiety disorders are the most common mental health problems for adults as well.[15] These difficulties have enormous individual and social costs. In Canada, the total economic costs of mental disorders exceed an estimated $14 billion dollars annually.[16] (In our **next article** we highlight successful prevention and treatment programs for childhood anxiety disorders). Intervening early not only reduces suffering for children and families, but also enhances the emotional wellbeing of the whole population.[17]

MCFD staff can access original articles cited in the *Quarterly* from the **Health and Human Services Library**.

References:

1. American Psychiatric Association. 2000. *Diagnostic and statistical manual of mental disorders: DSM-IV-TR (4th Ed.)*. Washington: American Psychiatric Association.
2. Waddell et al. 2005. A public health strategy to improve the mental health of Canadian children. *Canadian Journal of Psychiatry; 50*: 226-233.
3. Waddell et al. 2007. Developing a research-policy partnership to improve children's mental health in British Columbia. In LeClair & Foster (Eds.), *Contemporary Issues in Mental Health: Concepts, Policy, and Practice.* Canadian Western Geographical Series; 41 (pp. 183-198). Victoria: Western Geographical Press.
4. Rutter et al. 2006. Gene-environment interplay and psychopathology: Multiple varieties but real effects. *Journal of Child Psychology and Psychiatry and Allied Disciplines; 47*: 226-261.
5. Essex et al. 2006. Exploring risk factors for the emergence of children's mental health problems. *Archives of General Psychiatry; 63*: 1246-1256.
6. Kazdin et al (Eds.). 2003. *Evidence-based psychotherapies for children and adolescents.* New York: The Guildford Press.
7. Connolly et al. 2007. Practice parameter for the assessment and treatment of children and adolescents with anxiety disorders. *Journal of the American Academy of Child and Adolescent Psychiatry; 46*: 267-283.
8. Siqueland et al. 2005. Cognitive behavioral and attachment based family therapy for anxious adolescents: Phase I and II studies. *Journal of Anxiety Disorders; 19*: 361-381.
9. Leonard & Swedo. 2001. Paediatric autoimmune neuropsychiatric disorders associated with streptococcal infection (PANDAS). *International Journal of Neuropsychopharmacology; 4*: 191-198.
10. Lopez-Ibor & Lopez-Ibor. 2003. Research on obsessive-compulsive disorder. *Current Opinion in Psychiatry; 16*: 85S-91S.
11. Rutter. 2000. Resilience reconsidered: Conceptual consideration, empirical findings and policy implication. In J. P. Shonkoff & S. J. Meisels (Eds.), *Handbook of Early Childhood Intervention* (2nd ed., pp 651-682) Cambridge: Cambridge University Press.
12. Werner & Smith. 2001. *Journeys from childhood to midlife: risk, resilience, and recovery.* Ithaca: Cornell University Press.
13. Kendall et al. 2004. Child anxiety treatment: Outcomes in adolescence and impact on substance use and depression at 7.4-year follow-up. *Journal of Consulting and Clinical Psychology; 72*: 276-287.
14. Kendall et al. 1997. Therapy for youths with anxiety disorders: A second randomized clinical trial. *Journal of Consulting and Clinical Psychology; 65*: 366-380.
15. Kessler et al. 2005. Lifetime prevalence and age-of-onset distributions of *DSM-IV* disorders in the national comorbidity survey replication. *Archives of General Psychiatry; 62*: 593-602.
16. Stephens & Joubert. 2001. The economic burden of mental health problems in Canada. *Chronic Diseases in Canada; 22*: 18-23.
17. Farrell & Barrett. 2007. Prevention of childhood emotional disorders: Reducing the burden of suffering associated with anxiety and depression. *Child and Adolescent Mental Health; 12*: 58-65.

IN REVIEW

Promoting emotional wellbeing, addressing childhood anxiety

A comprehensive strategy is required to promote children's emotional wellbeing and avoid the distress and impairment associated with childhood anxiety problems. In our 2004 report, ***Preventing and Treating Anxiety Disorders in Children and Youth***, we identified three universal and two targeted ***prevention*** programs that were effective at reducing anxiety symptoms.[1] All but one program used cognitive-behavioural techniques to teach children to manage worries and anxiety. The universal *Friends* program notably reduced new cases of anxiety disorders by 8% for program participants overall and 54% for at-risk children.[2] (See the first issue of the *Quarterly* where we highlighted **outcomes** of the *Friends* program and described its **implementation** in BC schools.)

The six effective ***treatment*** programs identified in our previous report also used cognitive-behavioural therapy (CBT) or behavioural therapy (BT). Individual CBT and BT along with group CBT (with and without family involvement) were highly effective in treating a variety of anxiety disorders. A seven-year follow-up to one of these original studies was recently conducted. We summarize this study in the highlight below.

Since our 2004 report, new research on childhood anxiety disorders has accumulated. We reviewed this recently published high-quality evidence on preventing and treating anxiety.

How we reviewed the research

Our research team conducted a systematic review of randomized-controlled trials (RCTs) on interventions for preventing and treating anxiety disorders. We searched the databases Medline, PsycINFO, CINAHL, CENTRAL and EMBASE for RCTs published between 2004-2007 (the time period since our previous review on anxiety). We accepted RCTs that included a comparison group — consisting of children being placed on a waitlist or receiving treatment as usual or another form of treatment. (See the first issue of the *Quarterly* for a description of our **standard methodology**.)

What we learned

Of the 73 articles we identified and assessed, seven articles describing five RCTs met our inclusion criteria. One addressed prevention. The four treatment RCTs all addressed psychosocial interventions for a variety of anxiety disorders. All interventions were CBT-based and typically had components including education, managing physical signs of anxiety (e.g., relaxation and breathing exercises), challenging inaccurate thinking styles (e.g., disputing negative self-talk) and exposure exercises. Most programs took place in settings natural to children such as their homes or schools, rather than in clinics or hospitals.

Highlight

Treating childhood anxiety disorders: Long-term outcomes

In our 2004 report, ***Preventing and Treating Anxiety Disorders in Children and Youth***, we presented findings from a number of CBT treatment programs.[1] In one of the featured studies, Kendall and his colleagues found 57% of children no longer had their primary anxiety disorder at the end of their CBT treatment.[2] At one-year follow-up, children maintained these gains.

Seven years later, the same research team collected outcome data on 91% of the original child participants*. Kendall found that children treated with individual CBT continued to maintain and build on their successes with 81% of the children being free from their primary diagnosis at long-term follow-up.[3]

Children's treatment gains related to their anxiety disorders also appeared to be associated with future substance use. Children meeting diagnostic criteria for their primary anxiety disorder at the end of treatment were significantly more likely to use marijuana, use drugs in larger amounts, drink more days of the month, experience more unwanted consequences from drug use and have more unsuccessful attempts to control drug use. However, post-treatment diagnostic status was not predictive of actual rates of substance use disorders or depression.

The outcomes of this follow-up study should be considered preliminary given the study design. Because there were no comparison groups used in the long-term follow-up, we cannot know if the natural effects of time and maturation contributed to the positive outcomes. As well, 50% of children received additional treatment after leaving the study suggesting other possible reasons for noted gains. Accordingly, further long-term research using appropriate control groups is needed before we can say with greater certainty that successful treatment can lead to long-term gains in both anxiety symptoms and other areas of functioning.

* This follow-up study was not included in our own review because it lacked a comparison group.

MCFD staff can access original articles cited in the *Quarterly* from the **Health and Human Services Library**.

References:

1. Waddell et al. 2004. *Preventing and treating anxiety disorders in children and youth.* Vancouver, BC: UBC.
2. Kendall et al. 1997. Therapy for youths with anxiety disorders: A second randomized clinical trial. *Journal of Consulting and Clinical Psychology; 65*: 366-380.
3. Kendall et al. 2004. Child anxiety treatment: Outcomes in adolescence and impact on substance use and depression at 7.4-year follow-up. *Journal of Consulting and Clinical Psychology; 72*: 276-287.

CBT can effectively prevent and treat a wide variety of anxiety disorders

The table below shows program and participant characteristics along with outcomes. We reported symptom measure outcomes only for those studies not including diagnostic measures. For all studies, reported findings include the final data collection point ranging from three months to one year after the end of treatment (post-test). We also reported outcomes at post-test for the two studies not retaining their waitlist control group at follow-up.[3-5]

CBT-Based Anxiety Disorder Prevention and Treatment Programs

Intervention Description	Participant Characteristics	Findings
Prevention Programs		
Cool Kids Program: School Version:[6] 8 weekly group child sessions & 2 group parent information sessions Delivered by school counsellors & mental health workers in Australian middle schools **Comparison Group:** Waitlist	**Ages:** 9-10 **Gender:** 59% female **Target population:** Economically disadvantaged children with high anxiety levels	At 4-mo follow-up, CBT produced significant improvements over controls on: 2/3 symptom measures
Treatment Programs		
Parent-led Bibliotherapy:[5] 3 month self-paced program Delivered without practitioner assistance in rural Australian homes **Comparison Groups:** Waitlist (at post-test only) & Group CBT	**Ages:** 6-12 **Gender:** 40% female **Diagnoses**[i]**:** GAD, Social Phobia, SAD, Specific Phobia, OCD &/or PD	At post-test, Bibliotherapy & Group CBT produced significant improvements over controls on: 2/2 diagnostic measures[ii] At 3-mo follow-up, Bibliotherapy & Group CBT maintained improvements on both diagnostic measures
Group CBT:[1,4,iii] 18 weekly group child sessions & several parent education sessions Delivered by graduate students in American outpatient clinics **Comparison Groups:** Waitlist (at post-test only) & Individual CBT	**Ages:** 8-14 **Gender:** 49% female **Diagnoses**[i]**:** GAD, SAD &/or Social Phobia	At post-test, Individual & Group CBT produced significant improvements over controls on: 2/2 diagnostic measures At 12-mo follow-up, Individual & Group CBT maintained improvements on both diagnostic measures
Trauma-focused CBT (TF-CBT):[7,8] 12 weekly individual child & parent sessions (3 sessions include joint component) Delivered by therapists in American outpatient clinics **Comparison Group:** Child-centred therapy	**Ages:** 8-14 **Gender:** 79% female **Diagnosis:** PSTD related to contact sexual abuse	At 12-mo follow-up, TF-CBT produced significant improvements over child-centred therapy on: 2/10 symptom measures
Skills for Social and Academic Success (SASS):[7,8] 12 weekly group sessions (+ 2 booster sessions); 4 social events; 2 individual meetings; 2 parent & teacher educational meetings Delivered by psychologist & graduate student in American high schools **Comparison Group:** Attention control	**Ages:** 14-16 **Gender:** 83% female **Diagnosis**[i]**:** SAD	At 6-mo follow-up, SASS produced significant improvements over controls on: 2/2 diagnostic measures

GAD = Generalized Anxiety Disorder SAD = Social Anxiety Disorder PTSD = Posttraumatic Stress Disorder

OCD = Obsessive-Compulsive Disorder PD = Panic Disorder

[i] Diagnoses listed in descending frequency with many children having at least one comorbid diagnosis

[ii] Group CBT produced significantly greater improvements than Bibliotherapy

[iii] a follow-up study to an RCT featured in our original 2004 report

Highlight

Involving parents in treating childhood anxiety disorders

Involving parents in CBT for treating childhood anxiety disorders was recently addressed in a well-conducted research review. Barmish and Kendall examined data from nine RCTs that included parents as active participants in treatment.[1] Most studies had 10 to 12 sessions with parents, although one had as few as four. Parental involvement typically consisted of teaching parents to model appropriate behaviour by managing their own anxiety, reducing family conflict and helping parents learn not to reinforce anxious behaviour in their children.

The authors compared effect sizes of CBT programs with and without parental involvement. Post-treatment effect sizes for CBT without parent involvement ranged from small to medium for child-reported measures to large for parent-reported measures. For programs with parents actively involved, effect sizes ranged from small to large for child-reported measures to large for parent and practitioner reports. The authors concluded that although treatments with parental involvement seemed to have larger effect sizes, there was not enough evidence to conclude that involving parents in treatment is "uniformly superior." This tentative finding is consistent with our own review noting that including a family component did not uniformly improve outcomes and that initial improvements were not always maintained long-term.[2]

The value of parents participating in CBT for childhood anxiety disorders may vary based on factors such as the child's age and the parents' mental health issues. Specifically, including parents in treatment may be particularly beneficial for younger children.[1] There may also be added benefits to including parents in treatment when they too experience significant anxiety.[1] Further research is needed to better understand when it is most important to include parents in treatment to improve outcomes.

MCFD staff can access original articles cited in the *Quarterly* from the **Health and Human Services Library**.

References:

1. Barmish et al. 2005. Should parents be co-clients in cognitive-behavioural therapy for anxious youth? *Journal of Clinical Child and Adolescent Psychology, 34*: 569-581.
2. Waddell et al. 2004. *Preventing and treating anxiety disorders in children and youth.* Vancouver, BC: UBC.

All interventions produced significant improvements including decreases in at least two anxiety symptom measures, or decreases in the number of children meeting diagnostic criteria for an anxiety disorder. These gains were made in comparison to another form of treatment (child-centred therapy) or in comparison to control groups. However, because two studies did not include control groups at follow-up (Group CBT and Parent-led Bibliotherapy), we cannot be certain the long-term gains for these two interventions were due to the treatment received rather than other factors such as time or maturation.

The reported improvements were both statistically and clinically significant with up to 81% of children being diagnosis-free at one-year follow-up.[4] For example, 59% of children in the school-based SASS group no longer met criteria for SAD compared to *no* students in the attention control group. Although parent-led home-based bibliotherapy was more successful than a waitlist control (e.g., 18% versus 6% diagnosis free at post-test), standard group CBT resulted in greater change by both practitioner and parent reports (e.g., 49% diagnosis free at post-test). Additionally, treatments were effective in natural settings such as homes and schools.

What we recommend

Any comprehensive public health strategy to address children's emotional wellbeing needs to include attention to prevention, to treatment and to addressing underlying causes. High-quality research evidence shows that many cases of childhood anxiety can be prevented through CBT-oriented programs such as the *Cool Kids Program* and *Friends*. Importantly, these short-term programs have been effectively implemented in schools — natural settings where large populations of children can be easily reached. In addition to preventing anxiety problems, school-based programs promote emotional resilience in large numbers of children.[10] These programs, together with evaluations of their impact on BC children, are therefore highly recommended.

To best meet children's needs, the focus should be on preventing problems before they arise, as well as on providing treatment for those with disorders. Where prevention is not possible, it is vital to use the most effective treatments. Consistent with findings from a well-established practice parameter noting the substantial empirical support for CBT in treating anxiety disorders, the evidence regarding the long-term utility of CBT continues to accumulate.[11]

Successful interventions for anxiety problems can be used in homes and schools

In the highlight above, we summarize new research suggesting that CBT can effectively treat a wide variety of anxiety disorders both within traditional clinic settings and in the community including in schools and homes. Although home-based bibliotherapy produced less robust results than group CBT, emerging evidence suggests better results for bibliotherapy when parents are supported by practitioner phone contact.[12] Overall, community settings for mental health interventions have a strong advantage because they reach children who may not, or cannot, access treatment otherwise. Such settings may also help reduce stigma and encourage children to use effective strategies in their natural environments. CBT, in its various formats, remains the standard of care for treating most types of anxiety problems. Medications, including the SSRI fluoxetine, should only be used for the most severe situations and be carefully monitored when they are used. Overall, investments in effective prevention and treatment programs for anxiety disorders in children are highly recommended.

MCFD staff can access original articles cited in the *Quarterly* from the **Health and Human Services Library**.

References:

1. Waddell et al. 2004. *Preventing and treating anxiety disorders in children and youth.* Vancouver, BC: UBC.
2. Waddell et al. 2007. Preventing mental disorders in children: A systematic review to inform policy-making. *Canadian Journal of Public Health; 98: 166-173*
3. Flannery-Schroeder & Kendall. 2000. Group and individual cognitive-behavioural treatments for youth with anxiety disorders: A randomized clinical trial. *Cognitive Therapy and Research; 24*: 251-278.
4. Flannery-Schroeder et al. 2005. Group and individual cognitive-behavioral treatments for youth with anxiety disorders: 1-year follow-up. *Cognitive Therapy and Research; 29*: 253-259.
5. Rapee et al. 2006. Bibliotherapy for children with anxiety disorders using written materials for parents: A randomized controlled trial. *Journal of Consulting and Clinical Psychology; 74*: 436-444.
6. Mifsud & Rapee. 2005. Early intervention for childhood anxiety in a school setting: Outcomes for an economically disadvantaged population. *Journal of the American Academy of Child and Adolescent Psychiatry; 44*: 996-1004.
7. Cohen et al. 2004. A multisite, randomized controlled trial for children with sexual abuse-related PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry; 43*: 393-402.
8. Deblinger et al. 2006. A follow-up study of a multisite, randomized, controlled trial for children with sexual abuse-related PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry; 45*: 1474-1484.
9. Masia Warner et al. In Press. Treating adolescents with social anxiety disorder in school: An attention control. *Journal of Child Psychology and Psychiatry and Allied Disciplines.*
10. Farrell & Barrett. 2007. Prevention of childhood emotional disorders: Reducing the burden of suffering associated with anxiety and depression. *Child and Adolescent Mental Health; 12*: 58-65.
11. Connolly et al. 2007. Practice parameter for the assessment and treatment of children and adolescents with anxiety disorders. *Journal of the American Academy of Child and Adolescent Psychiatry; 46*: 267-283.
12. Lyneham & Rapee. 2006. Evaluation of therapist-supported parent-implemented CBT for anxiety disorders in rural children. *Behaviour Research and Therapy; 22*: 1287-1300.

IN FOCUS

Treating Obsessive-Compulsive Disorder (OCD)

What is OCD?

To be diagnosed with OCD, a child must experience clinically significant obsessions and/or compulsions. Obsessions are unwanted recurring thoughts or images causing significant anxiety. The most common obsessions are fears of contamination.[1] Worries about personal safety and the safety of family members are also frequent.[1] Compulsions are repetitive behaviours or mental acts a child feels compelled to do either to prevent or reduce anxiety. The most common compulsions include excessive washing, cleaning and confirming actions (e.g., checking that doors are locked).[2] These repetitive behaviours are quite time consuming and are often kept hidden from others due to embarrassment.

Helping children overcome fearful situations

Exposure and Response Prevention (E/RP) is a specific form of CBT developed to treat OCD. E/RP involves gradually exposing a child to a feared situation while the child practices not engaging in anxiety reducing behaviours or rituals. For example, a child who washes compulsively would be gradually exposed to challenging situations such as touching a "dirty" object, without engaging in ritualized washing or other cleaning behaviours.

Children are encouraged to take an active role in choosing and sequencing their exposures to feared situations. E/RP is typically used with other CBT techniques including education, cognitive exercises and relaxation training.

Exposure and Response Prevention, a form of CBT, is a highly effective treatment for OCD

Reviewing the research evidence

O'Kearney, Anstey and von Sanden recently published a systematic review of treatments for OCD.[3] Applying rigorous (Cochrane) methodological standards, the authors accepted four RCTs in their review.* All studies examined the effectiveness of E/RP with all but one (Neziroglu) including additional educational and cognitive components in their treatment protocol. Gender distribution was equal for all studies. The table below shows additional participant and study characteristics.

Characteristics of Study Participants and Interventions

Study	Nationality	Number of Participants	Age range (in yrs)	E/RP duration (in hrs)	Medication Comparison	Placebo Control
De Haan 1998	Dutch	23	7 to 18	12	Clomipramine	n/a
POTS 2004	American	112	7 to 18	14	Sertraline	Pill placebo
Barrett 2004	Australian	77	10 to 13	21	n/a	Waitlist
Neziroglu 2000	American	10	10 to 17	30	Fluvoxamine	n/a

* Three of the studies used were included in our previous review, *Treating Obsessive-Compulsive Disorder in Children*[4]

E/RP produced positive outcomes

The findings demonstrate E/RP is an effective treatment of childhood OCD. E/RP produced better post-treatment functioning than control groups (pill placebo or waitlist). Pooled data from two studies showed no significant difference in outcomes between E/RP and medication treatments. There was evidence that combining E/RP and medication was beneficial compared to medication alone, but not relative to E/RP alone. The authors concluded that E/RP is a promising treatment for childhood OCD.

Putting research into policy and practice

These review findings supporting the effectiveness of E/RP are consistent with our previously published report ***Preventing and Treating Obsessive Compulsive Disorder in Children and Youth*** and a well-regarded practice parameter.[4,5] In our report we recommended medication only be used for the most severe OCD cases due to safety concerns. Despite the strong evidence in favour of using E/RP, there are ongoing issues regarding the availability of treatment for children in need. A barrier to successful use of E/RP is the lack of adequately trained practitioners.[6] Training practitioners to use this effective treatment is necessary to best help children meet their full potential. In BC, the ***Child and Youth Mental Health Plan*** gives a framework to provide practitioners with CBT training.

MCFD staff can access original articles cited in the *Quarterly* from the **Health and Human Services Library**.

References:

1. Dell'Osso et al. 2007. Diagnosis and treatment of obsessive-compulsive disorder and related disorders. *International Journal of Clinical Practice; 61*: 98-104.
2. Rapoport et al. 2000. Practitioner review: Treatment of obsessive-compulsive disorder in children and adolescents. *Journal of Child Psychology and Psychiatry; 41*: 419-431.
3. O'Kearney et al. 2006. *Behavioural and cognitive behavioural therapy for obseesive compulsive disorder in children and adolescents.* Cochrane Database of Systematic Reviews.
4. Waddell et al. 2005. *Treating obsessive compulsive disorder in children.* Vancouver, BC: UBC.
5. King et al. 1998. Practice parameters for the assessment and treatment of children and adolescents with obsessive-compulsive disorder. *Journal of the American Academy of Child and Adolescent Psychiatry; 37*: 27S-45S.
6. Abramowitz et al. 2005. The effectiveness of treatment for pediatric obsessive-compulsive disorder: A meta-analysis. *Behavior Therapy; 36*: 55-63.

IN PRACTICE

Out of the journals and into children's lives

Jane Garland
Child Psychiatrist

We recently spoke with child psychiatrist, Jane Garland, about her experiences using "evidence-informed practices" with children experiencing anxiety problems. Jane is a clinical professor at the University of British Columbia and the clinic head of the Mood and Anxiety Disorders Clinic at British Columbia's Children's Hospital. She is the co-author of the book *Taming Worry Dragons* designed to help children combat problematic worry.

Here we describe Jane's strategies and successes in managing some typical obstacles faced in using CBT for treating childhood anxiety disorders. Many children with anxiety problems have learned to avoid those situations that trigger their fears. Some children also resist using CBT strategies such as exposure to fear provoking stimuli. Jane described techniques she has successfully used to help overcome resistance.

Beginning with assessment and understanding

Jane noted the importance of starting with a therapeutic assessment. She uses CBT-informed language during the process to reframe children's experiences and perspectives on anxiety. Excessive fears can be transformed into "a talent for creative worrying" and "an amazing imagination". This shift helps to increase children's willingness to discuss their concerns and their interest in treatment. A successful interview also provides an opportunity for practitioners to teach children important information about the nature of anxiety. Jane uses the analogy of an overly sensitive car alarm that goes off when the wind blows. This metaphor helps children understand the importance of their own alarm system which can be miss-set to ring even when the child is just a bit nervous. Jane discussed how a successful therapeutic assessment can set the stage for useful interventions.

Making therapy fun

Using children's own creativity is a technique Jane stressed as useful in overcoming resistance to treatment. Jane uses metaphors to make therapy fun and appealing. For example, to highlight the concept of "thought stopping," Jane often uses the analogy of "pulling the plug on a computer." She also described having children view themselves as heroes in a battle against worry dragons. To help children stop listening to their fears, they are encouraged to write down or draw their worries and place them in a "dragon trapping jar." Jane uses the same metaphor to encourage positive lifestyle habits. Children are reminded of the importance of good sleep and eating habits in order to stay in shape to fight dragons.

Excessive fears can be transformed into "a talent for creative worrying" and "an amazing imagination".

Support from family and community

Jane spoke about the importance of including significant adults to help children overcome their fears and worries. Parents are encouraged to support and instruct their children as they face their anxieties rather than trying to "rescue" children from fear provoking situations. Siblings can be supportive by helping children take time away from worrying by engaging in positive activities. Finally, school staff can be part of the problem solving process by assisting children's efforts in their CBT program. By focusing on the strengths of children, families and communities, adaptive functioning can be achieved and sustained.

Fighting their fears

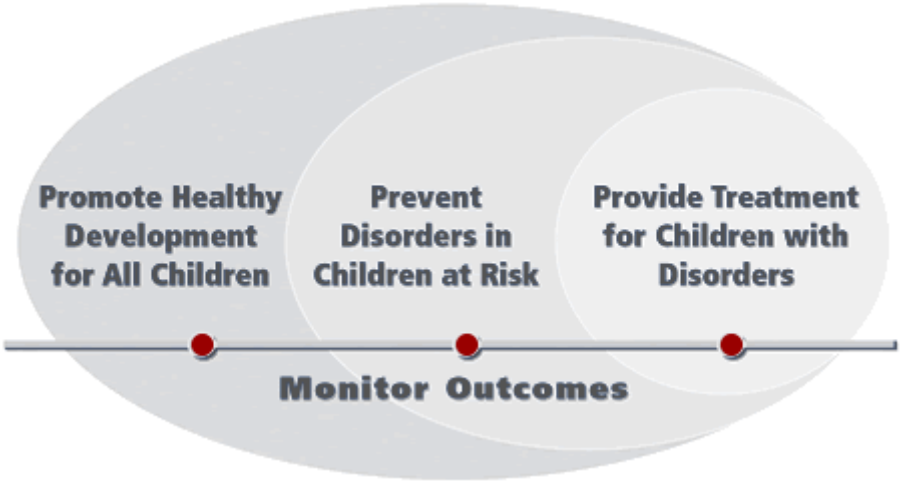
To see an example of the personal impact of anxiety disorders in children, see the Knowledge Network documentary, ***Fighting Their Fears: Child and Youth Anxiety***. *Marley's Story* demonstrates how CBT techniques helped her overcome what began as separation anxiety and progressed into social anxiety. *Alana's Story* provides another example of positive outcomes using coping strategies and *Jason's Story* shows his struggles and successes with OCD.

Making Research Work for Children

About the Children's Health Policy Centre

We are an interdisciplinary research group in the Faculty of Health Sciences at Simon Fraser University. Our work focuses on integrating research and policy to improve children's social and emotional wellbeing, or children's mental health. We promote a public health strategy for children's health. Our work complements the mission of the Faculty of Health Sciences at Simon Fraser University to integrate research and policy for population and public health locally, nationally and globally.

Public Health Strategy for Children's Mental Health



About *The Quarterly*

The Quarterly is an electronic publication prepared for Child and Youth Mental Health Services with British Columbia's Ministry of Children and Family Development. It provides updates on the best currently available research evidence in children's mental health for policy-makers, practitioners, families and the public.

Please visit **www.childhealthpolicy.sfu.ca** to learn more about our ongoing work integrating research and policy to improve children's social and emotional wellbeing.

