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GUEST EDITORIAL

Time to catch up...Qualitative research in child and adolescent psychiatry

As a research tool, qualitative research has been of little interest to researchers in psychiatry. A few recent editorials and articles in Canadian psychiatry journals have attempted to nudge researchers towards qualitative methodologies. Considered anecdotal, abstruse, and failing to meet familiar (i.e. quantitative) criteria of reliability, validity and generalizability, qualitative methodologies have been spurned rather than welcomed in psychiatry research (Brown & Lloyd, 2001; Whitley & Crawford, 2005). The lack of a template for conducting research, the flexibility, and hence uncertainties, inherent in the method and the variety of methodologies from which to choose have quite simply deterred its uptake.

Qualitative research is an especially relevant method to the subject matter of the *Journal*. In the past, research generally has been conducted *on* children and youth. More recently there has been a move towards research *with* children, engaging them as active participants, recognizing their rights, respecting their autonomy, and giving them voice (Grover, 2004). This requires recognising and reflecting on the inequalities of power and authority between researchers and child/adolescent participants. Qualitative research, with its focus on shared construction of meaning with participants, and flexibility in design, methods and process can partially disrupt these imbalances and give participants voice. Other challenges, too, remain: in recruitment, consent, access, confidentiality, interview space, and language skills, to name but a few (Bassett et al, 2007). The papers published in this qualitative issue have explicitly sought to address these challenges in often novel ways. Didkowsky, Ungar, & Liebenberg use video and photographs to breach the researcher-participant hierarchy of authority. Boydell, Volpe & Pignatiello's use of televideo interviews give children and adolescents the freedom to walk away if they so choose. Both Alaggia and Grover explore participants' subjective worlds, importantly giving voice, in Alaggia's study, to adult survivor's experience of child sexual abuse, and in Grover's research, to the world views used by litigants and interveners, including mental health professionals, to position their arguments in legal cases.

As is evident in Mordoch's and Didkowsky et al's papers, data beyond that elicited in interviews provides rich, multiple ways of looking, seeing, and understanding participants' experiences. In the papers published here, videos, photographs, interviews, and/or drawings were analysed with a variety of methods: Didkowsky et al's reflexive and visual methods, Grover's analysis of text recorded in a legal case, Mordoch's conceptually-dense understanding of children's experiences using grounded theory, and Alaggia's, Boydell et al's and Grover's phenomenological analysis of the subjective experiences of participants. Alaggia's analysis included a relatively recent addition to the researcher's toolbox: qualitative software. ATLAS.ti, NVIVO, HyperRESEARCH, and Transana, to name but a few, offer both advantages and disadvantages (Bassett, 2004). With reflexive use of software, thorough, replicable, trustworthy and credible analyses can be produced.

Systematic and rigorous qualitative research has much to offer child and adolescent psychiatry. A wide range of methodologies and the availability of new digital technologies open doors not previously explored. Indeed, the insight to be gained from a variety of data sources and importance of context in understanding children's lives is evident in all the papers here. The *Journal* welcomes your reaction to this theme issue and looks forward to future submissions of your qualitative research manuscripts.

Raewyn Bassett PhD[1,2], Guest Editor

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LETTER TO THE EDITOR

Pharmacist Prescribing: Improving Access to Care in Mental Health

Dear Editor,

Improving access to quality care is a growing concern within our current health care system. Picture the following scenario: The mother of a 17 year old contacts her son's mental health clinic to speak to the psychiatrist. The clerk informs the mother that the psychiatrist is away and cannot be contacted. She is aware that the clinic pharmacist is part of the interdisciplinary team and seeks her advice. She is concerned that her son may stop taking his clozapine due to hypersalivation, a common side effect. He has been stabilized on clozapine over the past few months after trying many other medications. During the last few days his drooling has increased, and is affecting her son's sleep and ability to function. As a result, he is unable to attend school and participate in after school activities. He is now considering stopping his medication. The pharmacist, who has been working closely with the family during their medication trials, is available to review the mother's concerns. During this discussion and after careful review of the patient chart and the pharmacists care plan, the pharmacist suggests a trial of Atropine eye drops administered sublingually to help alleviate this common side effect. Both the mom and the son are agreeable to this trial and are pleased with the outcome of the discussion. The pharmacist who has additional prescribing authority, gives the family information on the drops and how to use them, and writes a prescription for the medication. The pharmacist then documents on the patient's chart, leaves the psychiatrist a voice mail reviewing the concerns and decisions that were made and agrees to follow up with the family in one week. This scenario is a prime example of how a pharmacist working in an interdisciplinary, collaborative environment, can facilitate improved patient access to care in mental health and other areas of health care as well.

The goal of pharmacist prescribing is to improve patients' access to care and to utilize pharmacist to their full scope of practice. Many inpatient and ambulatory pharmacists work in interdisciplinary teams and focus their attention on medication management. Historically, the physician, during team discussions, has been responsible for other team members, has been responsible for prescribing medications. Pharmacists' play an integral role in medication related decisions and therefore prescribing for patients in this collaborative setting is a natural transition. This is, in no way, meant to pre-empt the role of other health care providers.

Additional authorization to prescribe schedule 1 drugs, drugs that require a prescription, excluding narcotics, benzodiazepines and other drugs regulated by the controlled drugs and substance act, has been a part of Alberta pharmacists' regulation since 2006. Pharmacist prescribing can improve access to care for patients in many different scenarios:

a. Rural or remote areas where access to prescribers can be limited.
b. Chronic disease management in a clinic or primary care network setting.
c. Management of medications (side effects, dose tapering) in hospitals and ambulatory clinics under clear clinical practice guidelines (e.g. insulin, anticoagulation, heart failure, hypertension etc.) and as part of a multidisciplinary team.

The prescribing role in Alberta includes 3 levels:

a. Adapting a prescription (e.g. altering the dose, formulation when availability of certain medications is limited).
b. Prescribing in an emergency until an authorized prescriber can be accessed.
c. Prescribing for initial access to medications. This requires additional prescribing authorization granted once a competency evaluation has been conducted. Readers are directed to the Alberta College of Pharmacists website for further detail on prescribing standards. https://pharmacists.ab.ca/nCollege/default.aspx

Along with professional judgment there are seven key elements that pharmacists must employ prior to prescribing any medication. Of these the two most important are the formation of a professional relationship with each patient and a strong collaborative working relationship with the health professional team that regularly sees the patient. The other key elements include assessment of the patient, development of a care plan, follow up with the patient, documentation and communication with the rest of the health care team.

Since Alberta moved forward with granting some pharmacists additional prescribing authorization, many more provinces and territories have begun moving in the same direction. Ontario is currently waiting for the third reading of Bill 179, which will increase the scope of practice for Ontario pharmacist. As of January 2009, British Columbia pharmacists are able to modify a prescription i.e. change a dose, formulation or regimen, substitute another drug in the same therapeutic class or renew a prescription to ensure continuity of care.

It is important to note that pharmacist prescribing does not replace the patients need to see their physician

or other health care professional; it is meant to facilitate better patient care and improve accessibility.

Rekha Jabbal BSP

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Announcement

The Editor is seeking experts in the following areas willing to take on guest editorship duties on the upcoming theme issues in 2011:

"Behavioral Genetics in Child and Adolescent Psychiatry"
"Longitudinal Studies: Implications for Change in Child and Adolescent Practise"

Guest editors should be experts in the theme issue and knowledgeable of other expert collaborators in the area.

Please send your expression of interest or suggestions to:

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THEME ARTICLES:

A Qualitative Study of Young People's Perspectives on Receiving Psychiatric Services via Televideo

Katherine M. Boydell PhD[1,3]; Tiziana Volpe MSc[1,3]; Antonio Pignatiello MD[2,3]

Abstract

Objective: It is critical to consult young people about their experiences. This study addresses the paucity of research on the perspective of young people in general, and in paediatric telepsychiatry specifically. The goal is to understand the experience of young people receiving telepsychiatry. **Method:** Interpretive interactionism (Denzin, 1989) was used to interview 30 young people; immediately following the consultation and four to six weeks later. Analysis occurred via a series of steps in keeping with the interpretive interactionist framework. **Results:** Four themes arose repeatedly: the encounter with the psychiatrist and experience of having others in the room; the helpfulness of the session; a sense of personal choice during the consultation; and, the technology. Participants highlighted the importance of their relationship with the psychiatrist. Participant's narratives were replete with examples of ways that they actively took responsibility and exerted control within the session itself. **Conclusion:** Young people have a significant role to play in their own care. It is critical that telepsychiatry recommendations be explained and opportunities for young people to express their concerns and discuss alternatives are provided. Further efforts to include young people may include ensuring offering alternate treatments and/or negotiated when recommended treatments are unacceptable and/or resisted.

Key words: telepsychiatry, qualitative, televideo, interpretive

Résumé

Objectifs: Interroger les adolescents sur leur expérience. Constater la rareté des travaux de recherche sur l'expérience des adolescents de la psychiatrie en général et de la télépsychiatrie en particulier. Présenter l'expérience des adolescents et adolescents qui reçoivent des services de télépsychiatrie. **Méthodologie:** Les données recueillies après interrogation de trente sujets ont été interprétées au moyen de l'approche interactionniste (Denzin, 1989), immédiatement après la consultation et quatre à six semaines plus tard. **Résultats:** Quatre thèmes revenaient régulièrement: la rencontre avec le psychiatre et l'expérience découlant de la présence d'autres personnes dans la salle; l'utilité de la session; l'impression de choix individuel pendant la consultation; la technologie. Les participants ont souligné l'importance de leur relation avec le psychiatre. Leurs narratifs comportaient souvent des exemples de la manière dont ils assumaient activement la responsabilité de la session et se l'appropriaient. **Discussion:** Les adolescents et adolescentes ont un rôle important à jouer dans leurs soins. Il est essentiel de leur expliquer les recommandations de la télépsychiatrie, de leur permettre d'exprimer leurs inquiétudes et de leur présenter les choix qui s'offrent à eux. Les futures études pourront porter sur les autres traitements et/ou sur les négociations lorsque les adolescents et adolescents refusent les traitements recommandés ou font preuve de résistance à leur égard.

Mots clés: télépsychiatrie, qualitatif, télévidéo, interactionnisme interprétatif

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Background

Canada's child and youth mental health system has been described as fragmented and underfunded with a significant shortage of mental health professionals (Kirby & Keon, 2006). This is problematic as prevalence rates of psychiatric disorder in community samples of children and adolescents range from 15-25 percent (Parker, Steele, Junek et al., 2003). Rural and northern communities, in particular, suffer from a severe shortage of psychiatric expertise (Parker, Steele, Junek et al., 2003: Broder, Manson, Boydell et al., 2004). Geographic and professional isolation make rural communities less attractive to mental health workers, and it is a challenge to recruit and retain specialists, who tend to concentrate in larger urban locales (Boydell, Pong, Volpe et al, 2006). Most rural communities are too small to sustain highly specialized personnel. Consequently, the delivery of mental health services using new technologies is a growing area of practice and research interest. Telehealth has been used in therapy, triage, and medicine in addition to psychiatric consultation, and by a broader range of mental health professionals, not just psychiatry. (Lingely-Pottie & McGrath, 2006; Reed, McLaughlin & Milholland, 2000). Telemedicine has been used in child and youth mental health services around the world and has been shown to fill a service gap inherent in remote and rural regions (Cruz, Krupinski, Lopez et al., 2005; Elford, White, Bowring et al, 2000; Meyers, Valentine & Melzer, 2007, 2008; Pesamaa, Ebeling, Kuusimaki et al., 2004).

Of particular note in these studies is the marked absence of the voice of young people. One exception is Grealish et al.'s (2005) study that examined adolescent perspectives regarding the quality of inpatient assessments and support via videoconferencing. Adolescents described heightened empowerment when using the equipment, and felt that they were spoken "to" rather

than "at". They reported that telemedicine promoted the transfer of power and control by making them feel more comfortable about ending the consultation or walking out. They found the process more structured and felt better informed, which resulted in enhanced understanding of their problems and increased participation in health-care decision-making.

The importance of consulting young people about their experiences is identified in the literature on paediatric mental health services, and there is a growing commitment to listening to their voices (Borland, 2001; Buston, 2002; Claveirole, 2004). Traditional perspectives conceptualize young people as developing beings who are not yet able to speak in their own voices (Balen, Holroyd, Mountain et al., 2000). This perspective has led to data being collected either by proxy, from adults close to the child, or via objective measures where the child remains passive (Balen, Holroyd, Mountain et al., 2000; Claveirole, 2004). Although this approach has its place, it is controlled by adults and neglects the competence of young people to contribute. More recently, it has been recognized that children need to be given the opportunity to share their feelings and wishes about issues affecting them (Gladstone, Boydell & McKeever, 2006; Irwin & Johnson, 2005). This study addresses the significant gap in the literature, namely the paucity of research that focuses solely on perspectives of young people in research generally, and in paediatric telepsychiatry research specifically. The goal is to understand the experience of young people receiving psychiatric services through a paediatric telepsychiatry program. The Toronto Paediatric Telepsychiatry Program (TPTP) was initiated in 2000 by the Division of Child Psychiatry at the University of Toronto. The program is funded by the Ministry of Community and Social Services (currently the Ministry of Children and Youth Services) to function through The Hospital for Sick Children (SickKids). This Program uses televideo to provide psychiatric consultations, case consultations (professional-to-professional) and education to children's mental health agencies (CMHA) and their clients in rural and remote Ontario. The mandate of the program is to provide bilingual (English and French) psychiatric consultations and education to under-serviced children's mental health community agencies and their clients, utilizing interactive videoconferencing technology (ITV). As an academic site within the Division of Child Psychiatry at the University of Toronto, SickKids is also required to fulfil clinical, teaching, and research mandates.

Clinicians at the CMHAs are responsible for referring a young person for a consultation through SickKids. Referrals are typically not accepted directly from physicians. During the consultation, the young person's case manager must be present to ensure that knowledge between the consultant and the young person is exchanged effectively, and for legal prudence. The consultant provides verbal feedback and recommendations at the end of the young person's consultation, and a written report is sent to the agency soon afterwards (Boydell, Volpe & Pignatiello, 2009; Pignatiello, Boydell, Teshima et al, 2008). The goal of this study was to explore the young person's perspective on the experience of the psychiatric encounter, positive and negative aspects of receiving psychiatric services via televideo, and technological issues.

Methods

An interpretive interactionist framework was used to guide the study (Denzin, 1989). Interpretive interactionism is both a perspective and a method, and seeks to highlight the lived experience of individuals, collected through thick description and personal experience stories. A major aim of the interpretive interactionist researcher is to identify the subjective meanings of the individual positioned within a social context. Like other qualitative research methodologies, the epistemological posture taken by interpretive interactionism questions the possibility of value free inquiry, an objective researcher, and interpretation based on causality (Guba, 1990; Lather, 1990). It assumes that knowledge is socially constructed and the concept of truth depends on the perspective one takes in interpretation (Greene, 1990; Lincoln, 1990).

Study sites included seven rural and remote community child and youth serving mental health organizations in Ontario receiving paediatric telepsychiatry services. A theoretical approach to sampling was adopted using the following criteria: (a) young people aged seven to 18 years; (b) English or French speaking; (c) no history of Pervasive Developmental Disorders; and, (d) distribution across geographical regions. Thirty participants[1] were successfully recruited, 21 of whom completed a second interview. The age and sex of the participants are shown in Table 1. Eight participants had received a previous psychiatric consultation.

The most frequent reasons for scheduling the telepsychiatry consultations were: querying the existence of a psychiatric disorder, medication suggestions or reviews, and dealing with aggressive behaviours. Participants either had a previous diagnosis confirmed or, more often, a diagnosis applied for the first time. The following diagnoses were confirmed: Oppositional Defiant Disorder (n=13), Attention Deficit/Hyperactivity Disorder

Table 1. Interviews: Participant Age and Sex
(Parentheses indicate number of second interviews completed)

AGE	MALE	FEMALE	Total
7-12 years	8 (6)	3 (1)	11 (7)
13-18 years	9 (6)	10 (8)	19 (14)
Total	17 (12)	13 (9)	30 (21)

[1]*A decision was made to halt recruitment after 30 interviews as saturation of thematic content had been achieved.*

(n=9), Mood Disorder (n=9), Learning Disability (n=5), Anxiety Disorder (n=4), Conduct Disorder (n=4), Attachment Disorder (n=3), Developmental Disability (n=2), Fetal Alcohol Syndrome/Fetal Alcohol Effects (n=1), Personality Disorder (n=1), Psychotic Disorder (n=1), and Adjustment Disorder (n=1). More than half (16 of 30 participants) had more than one identified disorder. Two participants were noted to have substance abuse and dependence concerns. Thirteen participants also had psychosocial issues regarding relationship problems (n=9) and problems of abuse and neglect (n=6), with two participants having both of these as listed concerns.

An interview guide was developed (McCracken, 1988; Gubrium & Holstein, 1997) to obtain the perceptions and experiences of participating in a paediatric telepsychiatry consultation. Two interviews were scheduled with each young person. The first interview was conducted face-to-face between the young person and the researcher and took place immediately following the consultation. It was intended to solicit immediate responses and impressions of the telepsychiatry session. Second interviews were conducted via telephone 4-6 weeks later, after some time had passed. The most common reason for incomplete second interviews (N=9) was an inability to contact the young person due to a change in telephone number, a move out of the community, or unreturned phone calls, despite several attempts. Three participants in the study declined a second interview. All interviews took an average of 30 minutes to complete.

All interviews were audiotaped and transcribed verbatim. Transcripts were analyzed via a series of steps – bracketing, construction and contextualization – in keeping with the interpretive interactionist framework (Denzin, 1989). Bracketing involves isolating the essential elements under investigation. Data were bracketed by repeatedly reading transcripts in order to develop a detailed coding system. Analysis meetings ensued to discuss the categories identified and agree upon common terms. The next stage, the process of construction, classifies orders and reassembles the phenomenon back into a coherent whole. This involved taking some of the more discrete categories or codes (such as psychiatrist understanding of problems, valued qualities in the psychiatrist) and reassembling into a larger analytic category (such as comfort with the psychiatrist). Contextualization, a process in which greater meaning is sought across individual experiences, followed. Strategies to ensure procedural rigor included prolonged engagement with the study material, sampling to saturation, an audit trail, reflexive journal, and peer review in the form of regular co-investigative meetings (Erlandson, Harris, Skipper et al., 1993).

Results

Four key areas arose repeatedly in the analysis of transcripts: the encounter with the psychiatrist and the experience of having others in the room; the perceived helpfulness of the session; a sense of personal choice and individual responsibility (or lack thereof) during the consultation; and, the technology itself as a key aspect of the psychiatric consultation.

The Encounter

An important objective of the interview was to identify perspectives regarding the televideo encounter with the psychiatrist delivering the consultation. Many references were made to the expertise of the psychiatrist, his/her valued qualities, the fact that the psychiatrist listened to them and "did their homework". Several commented that they felt that they were able to "open up" despite admitting that they don't usually talk about their personal troubles.

> *It was nice to actually get to talk to somebody, like somebody professional about what's going on and what I might be able to do to make things easier on myself. (F, 15)*

Though initial discomfort with the technology was the principal source of anxiety for young people, the experience of meeting a psychiatrist seemed to make some participants nervous as well. This was often related to their fear that they would get into trouble if they said something "bad". However, invariably, this had a temporal aspect to it as levels of discomfort were replaced by comfort fairly quickly and most certainly by end of session.

Young people seemed divided about having others in the room with them at the time of the consultation. As mandated by the Paediatric Telepsychiatry Program, every young person is required to have an agency-based case manager present during the consultation (as the official 'client' of the telepsychiatry program), but many also have their parents and/or other family members with them, as well as school personnel (e.g. teacher, principal). Some young people spoke about being uncomfortable with other people in the room at the time (despite the fact that their consent was often obtained beforehand) and indicated that they wanted to keep their discussions private.

> *I didn't like the fact that my parents were there. I don't know, there were some things that I would have preferred discussing without my parents' presence. (F, 13)*

Others found it reassuring to have people present with them, often explained to be a result of feeling supported by a positive figure during the stressful consultation.

Helpfulness

Young people discussed the degree to which they found the telepsychiatry consultations helpful. Responses ranged from those who felt that the consultation had been very helpful, to those who were more equiv-

ocal, finding it of limited value to themselves, or uncertain about its overall or long-term helpfulness. The opportunity to release pent-up emotions and thoughts, and having them understood by the psychiatrist were identified as being important. Others noted that the psychiatrist's ability to listen without being judgmental was a positive aspect of the consultation.

> *I felt that I was able to open up. I usually don't talk about that kind of thing. (F, 15)*

Many participants who found the session helpful mentioned new knowledge gained around diagnosis, medications, and advice and coping mechanisms.

> *I think he understood me really well because at the end he did a whole summary of what we were talking about and my experiences and that, and he just got it right on. (F, 18)*

In their second interview, young people often identified that they had the opportunity to use coping strategies suggested in the consultation.

> *Whenever I'm getting in an argument, I just try to walk away and play with another one of my friends…and, I haven't wrecked my room in a very, very, very very, very long time. (M, 8)*

Some participants believed that the session might be helpful for others who were in the room during the consultation, but not necessarily for them directly. They mentioned that their parents or case workers may have benefited from increased insight into the issues they were grappling with. In cases where young people believed their session to be of limited helpfulness, their reasons included the single-session consultation model, as well as the associated relatively short period of contact with the psychiatrist during the consultation, which is typically 1.5 hours in length. They acknowledged that they can feel different from day-to-day and these mood shifts would be difficult for the psychiatrist to understand in a single meeting ("*especially for teenagers, we're in different moods everyday*"). Many indicated that this brief encounter did not allow sufficient time to form a helping relationship. As noted by one 14-year old female,

> *You don't really know the person. You can't really judge by that…how can you help someone that you don't really know?*

There was often contradiction in the narratives, wherein they initially stated that the consultation was unhelpful, but would later identify components which they believed might have been helpful. One example comes from an interview with an 18-year old female, who early in the interview noted,

> *Well, I think it could be useful but it would have to be more repetitive because just an hour, it's not enough. It didn't help me.*

This participant later went on to acknowledge:

> *I don't think it was completely not useful…like for some points it was useful…because I knew I would not have other contact with her, I could ask her some direct questions.*

For some, it was difficult to ascertain what they thought of the experience and its overall or long-term helpfulness. One 16-year old male alluded to the potential helpfulness of the session when he stated that, "it could help". Uncertainty was often related to denial of a problem in the first place. This lack of knowledge (or acknowledgement) of the problem was also evident in other interviews, as was the tendency to minimize the problem, as one 14 year old female stated *"well compared to what we see everywhere, and what I know about other people, things like that. According to me, my problems are not as important as a lot of people."*

In the first interview, conducted immediately following the telepsychiatry session, the recency of the consult made it difficult for young people to state whether or not it had been helpful. As one participant reflected, "*Well it did not bring me further, but… I don't know if it helped me so far, I don't know sometimes just talking about it is helpful, but it's too recent for me to tell if it helped.*" (F, 18). At the time of the second interview, many youth remained uncertain of the helpfulness of the experience. Some, particularly younger ones, stated that they had forgotten all about the consultation and required several probes to stimulate their recall.

Personal Choice

A recurrent theme throughout the interviews was the sense of personal choice and responsibility (or lack thereof) and the importance of feeling in control during the session. Young people's narratives were replete with examples of the ways in which they were able to exert 'control' within the encounter.

> *If you don't want to talk about this subject, you don't talk about it. (F, 14)*

Many participants indicated that they were opposed to taking medication and, in fact, chose not to follow through on recommendations made in this area.

> *She recommended medication, but I don't want that. I don't want to be like strange because I never liked feeling different…always trying to blend in with my friends. (M, 13)*

Some young people described their feelings of lack of control over the situation, as a result of being coerced to attend the session, or feeling that they could not speak up during the encounter to voice their opinion, particularly when they did not agree with someone in the room.

The Technology

The majority of participants expressed excitement in

recalling the experience of speaking to a psychiatrist over televideo, and suggested that the novelty of the experience was the "*best part*" of the process. *"Cool"* was used repeatedly in the interviews to describe the overall experience with telepsychiatry. Participants were enthusiastic about the technology's ability to connect them, both aurally and visually, with someone relatively far away. As one young person expressed,

> *I got to speak to the um, I got to speak into a T.V. and um, talk to someone and that, I've never really done that before and it was so exciting to do it. (M, 8)*

Several participants alluded to the fact that the consultation caused them to feel somewhat "*removed*" from the process, likened to "*feeling like watching a show*".

> *You kind of zone out because you think he's not always there, like, you think he's just a television program. (M, 13)*

Many articulated their preference for the consultation to be held over televideo, suggesting that this format alleviated some of their anxieties regarding the meeting. They explained that meeting mental health professionals in person is intimidating, arousing more anxiety than what they had experienced during the consultation over televideo.

> *It's sure that face-to-face is harder according to me because she's right there and on the T.V. you can say like I don't mind, you don't know her and you won't see her again. I prefer it that way." (F, 17)*

Participants also identified the benefit of having the psychiatrist in a distant location, making it unlikely that they would encounter the doctor in their community, close to home. In the words of the previous participant, "*You won't see her in town!*" (F, 17). Some believed this anxiety arose from the fear of "*judgements*" being made by the psychiatrist and meeting over televideo seemed to dampen their concerns regarding this.

Participants made only very brief comments about the quality of the technology during the session. Some spoke about difficulties with picture and sound quality, but most problems were considered to be short in duration. Even when the duration was longer than several minutes, participants did not seem to believe that these difficulties adversely affected the session as a whole.

Discussion

These results offer important messages for all [child] psychiatry encounters/consultations. In talking about the telepsychiatry session itself, all participants highlighted the importance of the relationship between the psychiatrist and young person. Shattell and colleagues (2007) noted three commonalities with mental health service recipients' expressions of elements of a positive therapeutic relationship: feeling "related" to (interpersonally connected), feeling "known" as a person (as opposed to a number, diagnosis, etc.) and feeling that the problems which brought the clients into care were being addressed. Young people in our study identified these factors as being critical to a successful telepsychiatry session.

The young people who indicated that their session was helpful identified the psychiatrist's expertise and ability to make recommendations, concrete suggestions for coping with presenting symptoms or issues, and understanding the problem or issue being discussed. They explained that they appreciated the opportunity to release pent-up emotions and express them to someone who was listening. Much like the questionnaire responses presented by Grealish and his colleagues (2005), young people also noted that they felt understood and respected by the psychiatrist, and felt they had a better understanding of their problems.

Some young people expressed reservations about the degree of helpfulness of their telepsychiatry consultations. This was directly associated with the temporal aspect of the consultation, namely, that it was one-time only. Participants suggested that more than one meeting with the psychiatrist would allow the psychiatrist the opportunity to understand them better, provide a more informed perspective of what is going on in their lives and their issues before being provided with a diagnosis and/or recommendations for treatment. Shattell and colleagues (2007) also noted the essential need for service providers to take time with care recipients. Those who believed that the consultation was helpful often noted that they felt respected and understood by the psychiatrist, but many expressed that they were unsure that it was going to be of help to them because it was a one-time event. They often believed this to be the case because of a lack of regular and ongoing contact with the psychiatrist. This suggests that the relationship between the young person and his/her consulting psychiatrist needs time to develop, ideally by including multiple sessions.

It is important to also highlight youth comments regarding the room layouts, ambience, etc as these are concrete suggestions that can be readily addressed. Action has already been taken vis-a-vis making changes to the physical and aesthetic structure of the video conference rooms in keeping with suggestions of young people. For example, they requested that the set up be less formal and that the table between the televideo and themselves be removed. Young people are routinely exposed to the room and the technology before the consultation session, and consultants are encouraged to provide some information about themselves as 'a person'.

Participant's narratives were replete with examples of ways that they were able to actively take responsibility and exert control within the consultation session itself, whether it was offered to them or not. Grealish and colleagues (2005) noted that young people found that telemedicine promoted the transfer of power and control

by allowing them to feel more comfortable about ending the consultation or walking out. The sense of feeling that they could leave at any time was also expressed by a few participants in this study. Young people also demonstrated their capacity for decision-making regarding the uptake of recommendations made for them. As Prout (2000) suggested, children are actors participating in social processes, and are not simply outcomes of these processes. He states that 'whilst, like all social actors, children can be seen as shaped and constrained by the circumstances of their lives, they also shape them and are enabled by them. They are limited by the social conditions of their lives, but also find ways of creatively managing, negotiating and extending the possibilities' (p.7).

The denial of a problem by some young people may represent an attempt to feel in control of the situation or perhaps could be a response to the stigma related to mental illness. It is possible young people are in denial, but it is also possible they simply disagree with how adults have defined the problem, or responded to it. This suggests that an emphasis be placed on asking young people about the ways in which they define the problem, recognizing and accounting for the issue of stigma and discussing it with them. An inclusive view of children must address the issue of their perspectives and their needs and desires; 'the right to have [their] definition of reality prevail over other people's definition of reality' (Rowe, 1989, p.16). This encapsulates the typical power relationships between adults and young people, that is, it is the adult view of the world that is most frequently the framework for understanding (John, 2003, p.47).

This study supports earlier research on uptake of telepsychiatry recommendations which addressed the importance of buy-in from both family members and young people themselves (Boydell, Volpe, Kertes et al., 2007). Clearly, young people have a significant role to play in their own care, including adherence to suggested medication. It is thus critical that such recommendations be thoroughly explained and that there is an opportunity for young people to openly express their concerns and discuss possible alternatives. Further efforts to include young people may include ensuring alternate treatments are offered and/or negotiated when recommended treatments are not acceptable and/or resisted.

Young people in this study explained that the most positive facet of their telepsychiatry consultations was the opportunity to be exposed to a new form of technology. They referred to the novelty of the experience as the "best part" of the process for them and repeatedly used the term "cool" to describe their encounter. Consequently, it would be useful to capitalize on the novelty aspect by highlighting the cutting edge technology used in the session. Although some young people were initially uncomfortable with the technological aspect of the consultation, they noted that this feeling abated very quickly, after about ten to fifteen minutes. After this period, participants indicated that the technology was the most positive aspect of their consultation. Some also expressed an initial discomfort and sense of nervousness regarding meeting the psychiatrist, however, very basic strategies for overcoming this, such as having the psychiatrist talk to the young person directly about non-mental health related issues and some information about the psychiatrist as a person, could help alleviate this nervousness.

Since this is the first study we know of to qualitatively explore the perspectives of young people who receive help via a paediatric telepsychiatry program, further studies need to be undertaken with young people in other geographical locales and cultural contexts. For example, conducting qualitative inquiry with a sole focus on young Aboriginal people who receive help through this program, as well as recruiting a sample of individuals who live in more remote communities, would be a fruitful next step in understanding how young people view being a part of these consultations. The adult telepsychiatry literature (e.g., Shore, Savin, Novins et al., 2006) suggests that cultural formulations during telepsychiatry consultations may require the psychiatrist to attend to different types of concerns and questions.

Given that many of the research interviews were of limited duration and younger participants in particular often indicated that they were ready to terminate the interview soon after it began (are we done yet? and can I go now?), it might be fruitful to explore new methodologies that offer more opportunities for engagement. Our own recent (as yet unpublished) experience with arts-based methods indicates that many young people find working with the arts as a way of exploring phenomena under study highly satisfying. Another area of research could employ qualitative methodology to explore the similarities and differences between young people's experiences of conventional, face-to-face psychiatric consultations with those conducted over televideo. This might provide researchers and practitioners a more specific understanding of how the technology itself influences the manner in which young people are involved in these consultations.

Recent data has shown that parents endorsed high satisfaction with their children's telepsychiatric care, with increasing satisfaction upon return appointments (Myers, Valentine & Melzer, 2008). This, coupled with our findings that there is a strong desire on the part of young people to have a more extended relationship with the psychiatrist, suggests the need to further explore this option. In addition, longitudinal investigations are needed to understand the temporal nature of telepsychiatry on young people, their families and the communities served. It would provide an opportunity to address the multiplicity of factors in the lives of young people, of which telepsychiatry is just one component.

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Using Visual Methods to Capture Embedded Processes of Resilience for Youth across Cultures and Contexts

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Abstract:
Objectives: We review the value of using visual data in a dialogue with youth, to reflect, explore and find language to better understand processes of resilience. **Methods:** The argument is demonstrated with examples from the Negotiating Resilience Project (NRP): an international study of 16 youth which uses video recording a day in the life of youth participants, photographs produced by youth, and reflective interviews with the youth about their visual data. **Results:** Three examples from the NRP are used to show the ways that visual methods can capture and elucidate previously hidden aspects of youth's positive psychosocial development in stressful social ecologies. **Conclusion:** Incorporating images as research data can aid in understanding previously unarticulated constructions of youth resilience. When the researcher is reflexive about power dynamics and their role in co-constructing the research environment, visual methods have the potential to reduce power imbalances in the field, meaningfully engage youth in the research process, and help to overcome language barriers.
Key words: resilience, visual methods, culture, context, youth

Résumé
Objectifs: Vérifier si les données visuelles recueillies lors d'entretiens avec les adolescents et adolescentes sont utiles pour traduire, étudier et trouver les mots qui expliquent le mieux la résilience. **Méthodologie:** Ce point est illustré par des exemples extraits du *Negotiating Resilience Project* (*NRP)* sur le renforcement de la résilience. Le *NRP* est une étude internationale qui filme un jour de la vie de 16 sujets adolescents (garçons et filles). Les photographies prises par les adolescents sont analysées et les sujets sont appelés à réfléchir sur ces documents visuels. **Résultats:** Trois exemples extraits du *NRP* illustrent la manière dont les méthodes visuelles peuvent saisir et révéler certains aspects positifs – cachés jusqu'à lors – du développement psychosocial des sujets dans des situations sociales stressantes. **Conclusion:** Intégrer des images dans des données de recherche peut aider à comprendre les constructions tacites de la résilience des adolescents. Les méthodes visuelles aident le chercheur qui étudie la dynamique du pouvoir et le rôle de celle-ci dans la construction de l'environnement de recherche ; elles permettent de limiter les abus de pouvoir, d'engager les sujets dans le travail de recherche et de surmonter la barrière de la langue.
Mots clés: résilience, méthodes visuelles, culture, contexte, adolescents, adolescentes

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Since interest in child and youth resilience began over 50 years ago, researchers have questioned the role context and culture play in mental-health related processes and outcomes for youth living in environments that pose significant challenge to their psychosocial development (Ungar, 2008). The research, which has relied mostly on using quantitative methods to identify population-wide risk and protective factors among youth, has found aspects of resilience common across studies. However, these studies have also made a priori assumptions of the factors and processes studied, often reflecting dominant cultural groups' understandings of mental health concepts (Kağitçibaşi, 2006). We still lack knowledge regarding contextually- and culturally-embedded processes of resilience relevant to marginalized youth living in non-western countries, and aboriginal and immigrant children living in the west (Ungar, 2008).

Qualitative methodologies and mixed methods research designs have helped to explore more contextually specific processes related to youth resilience, mostly through the use of interviews (Ungar, 2004). Though interviews are a well-established method for obtaining complex and heterogeneous understandings of resilience, they may unintentionally fail to understand youth's unique accounts of coping by requiring youth to use words to explain their perceptions, even when they may not have the necessary vocabularies.

We use research from the Negotiating Resilience Project (NRP) to demonstrate the value of visual methods for studying young people's positive psychosocial development in stressful social ecologies. The NRP is a unique study in four Canadian communities, as well as India, Thailand, China and South Africa, that uses two visual method techniques - auto-driven photo-elicitation and the videotaping of a "day in the life" of youth participants. The NRP seeks to understand resilience from youth whose marginalized voices have not, for the most part, been included in resilience research. The inclusion of reciprocity and reflexivity between researchers and participants in the design allows for shared contemplation of data and collaborative meaning generation. We show, using examples from the NRP, the benefits of visual methods for observation and elucidation of unarticulated processes associated with resilience for youth across cultures and contexts. Three serious issues that surface in research with vulnerable youth populations are addressed

through the inclusion of visual methods. These include: power imbalances between the researcher and the participant; lack of youth participant engagement in the research process; and language barriers.

Researching Youth Resilience across Cultures and Contexts

The construct of resilience is built upon the recognition that an individual can achieve positive developmental outcomes despite exposure to risks deleterious enough to challenge those adaptive pathways (Luthar & Cicchetti, 2000). Researchers have moved away from understanding resilience as resulting from internal characteristics alone, such as intelligence and temperament, to examining the relationships between protective factors believed to buffer threats to positive adaptation (Luthar & Cicchetti, 2000; Rutter, 2006). However, the shortage of systematic research with marginalized youth living in highly stressful situations has resulted in theories of resilience, and in turn mental-health policies, that are heavily developed from normative ideas relating to children in North America and Europe (Boyden, 2003).

There is increasing recognition that across diverse cultures and contexts, there are varying ways that populations conceptualize and achieve resilience in perilous environments (Rutter, 2006; Ungar, 2004). In pilot research with over 1500 children worldwide, Ungar and his colleagues (2007) identified seven interdependent challenges integral to children's narratives of resilience: 1) access to material resources; 2) relationships; 3) identity; 4) power and control; 5) cultural adherence; 6) social justice; and 7) cohesion. Children who successfully maneuver their way through each challenge, within the norms and socio-political constraints imposed on them by their communities, described themselves as resilient, as did their communities. Thus, resilience can be understood as an interaction between the person and their social and physical ecology.

Qualitative methodologies have been particularly instrumental in identifying mental-health related processes of youth in adverse circumstances. These findings are embedded in local context and based on the participants' own understanding of their coping strategies. This is because qualitative research acknowledges and includes subjective (emic) experience in the research frame (Ungar, 2004) , allowing the researcher to explore the *how* and *why* of dynamic processes (Johnston & Onwuegbuzie, 2004). According to Ungar (2004), qualitative research is ideal for use in studies of youth resilience because it permits the researcher to: discover unnamed processes; attend to the contextual specificity of health phenomena; increase the 'volume' of marginalized voices; produce thick enough descriptions of lives to allow for the transfer of findings across contexts; and challenge researcher standpoint bias that orients findings toward an adult-centric perspective. In other words, we can begin to see everyday experiences from youth's eyes.

Yet designing qualitative research for use with diverse youth populations is not without its challenges. Researchers must take into account myriad issues, such as the child's age level, language barriers, and power dynamics between the researcher and participants (Epstein et al., 2006). Though interviews are a reputable qualitative method for obtaining multiple conceptualizations of mental-health related processes, they may unintentionally guide participants' descriptions of experiences by requiring youth to use words to articulate their perceptions. Their vocabularies, and the concepts available to children to describe their experience, are circumscribed by the limits of social discourse. Language barriers (the lack of words to describe experience) may inadvertently limit the depth to which certain topics can be explored, and may disregard non-verbal aspects of how meaning is communicated (Epstein et al., 2006). Interviews can accentuate adult authority, leading participants to believe there may be a "correct" or "best" answer (Blackbeard & Lindegger, 2007). Moreover, interview questions are often limited to subject areas the researcher considers important. This becomes an issue when working in unfamiliar or diverse contexts, where divergent and unexpected processes may underlie constructions of resilience. Though interviews may be developed through collaboration with local community advisors, and be culturally and contextually sensitive, what constitutes a positive solution to the challenges youth face may not hold the same meaning for youth as it does for adults.

Increasingly researchers working with youth are calling for research designs that include greater participation (Volpi, 2002; Whitmore & McKee, 2001) that help bridge potential language and power barriers between participants and researchers (Liebenberg, 2009). Visual methods that foster a process of reflection and articulation, potentially offer a solution to the methodological problems mentioned above, especially in investigations with marginalized youth. We argue that such visual methods are a viable research alternative for better capturing youths' interactions as they vie for mental-health and resilience-promoting resources within their unique social ecologies.

The Methodological Value of Using Visual Approaches to Capture Embedded Processes of Resilience

Visual methods provide an alternative or complimentary approach for use in studies of resilience because they potentially address three common problems associated with using only interviews. These include: 1) power imbalances between the researcher and the participant; 2) youth participants' lack of engagement in the research process; and 3) language barriers.

Disrupting power imbalances

When youth are invited to take their own photographs or direct their own videos, and then given the opportunity

to explain their worlds and images as they understand them (Clark-Ibanez, 2007; Karlsson, 2001), the traditional power imbalance between "the researcher" and "researched" is somewhat disrupted. Collaboration and reflexivity between the researcher and participant become imperative to fully understand the meaning behind the youth's images. The authority over the definition of resilience as it emerges from the images no longer lies with the researcher (Ball & Smith, 1992; Harper, 2002). This approach is invaluable in situations where power imbalances are amplified due to the research context, such as that of a marginalized community (Daniels, 2003; Liebenberg, 2009). Asking youth to direct the creation of their own images ensures that the research remains relevant to the youth (Blackbeard & Lindegger, 2007; Clark-Ibanez, 2007), and affords youth the power to decide which parts of their lives to include or exclude from the research record (Epstein et al., 2006; Karlsson, 2001).

Encouraging youth engagement in the research process

Visual methods have the potential to increase youth engagement in the research process. The process of making images compels youth to consider *why* they are capturing that moment on film, prompting them to think about their lives (Liebenberg, 2009; Stanzak, 2007). Contemplation of their images with the researcher may prompt reflections from the youth that would not arise during a traditional interview (Karlsson, 2001; Young & Barrett, 2001), and that may not have surfaced even while making the images. Youth may feel more ownership over their data, consequently resulting in the increased validity of research findings. By engaging youth in dialogue about the factors that protect them in times of struggle, we begin to focus on youth's strengths and valuable insights (Clark-Ibanez, 2007; Young & Barrett, 2001).

Addressing the language barriers associated with traditional interviews

Liebenberg (2009) suggests that because youth are encouraged to think about why it is they are taking a particular photograph, participants are later enabled to articulate their experiences and perceptions during the interview process, by using the image as a reminder. Even when youth cannot express themselves verbally, images themselves are research data and may help to communicate information visually. Youth are better able to set the linguistic level in discussions about their images, and may even feel less "on the spot" because there is a material go-between to reflect upon (Clark-Ibanez, 2007; Epstein et al., 2006).

Using visual methods will not inherently reduce power imbalances between researchers and participants, encourage youth engagement, or mitigate language barriers. It is only when visual methods are combined with sensitive reflection by the researcher about their pronounced role in co-constructing the research environment, along with the intent of shifting power to the participant, that previously silenced perspectives can be made audible (Packard, 2008). Each choice we make, from the technologies used to capture information to our interactions with participants and the ways we present the data, affects what we say about the social phenomenon of interest, and of the communities we work with (Daniels, 2003). Fortunately, it is the implementation of more equitable research methods that will allow researchers to learn previously unspoken and unrecognized knowledge (Packard, 2008) about resilience from youth.

Indeed, perhaps most relevant to this paper is the possibility that visual methods can elicit understandings of resilience that fail to emerge using more traditional methods, such as qualitative interviews or quantitative surveys. Photographic and video cameras can take us behind otherwise closed doors (Clark-Ibanez, 2007; Karlsson, 2001; Young & Barrett, 2001), into the personal lives of young people. We are able to see day-to-day interactions, the people youth engage with, and which resources are available or lacking, that may not otherwise be accessed in a traditional interview setting. This opens the possibility of capturing unanticipated or previously unarticulated processes that reflect "hidden" contextually and culturally specific aspects of resilience (Ungar, 2004). As Liebenberg (2009, p.445) concludes, "Because images are argued to be visual *representations* of subjective experiences, rather than objective statements, the exploration of visual meanings not only helps us 'see', but also asks us to slow down and consider, to think about what it is we *are* seeing and what it is we *don't* see, and *why*" (emphasis in original). Images allow the researcher to explore issues with research participants that we would not have contemplated otherwise (Stanzack, 2007), illuminating complex processes integral to youth's coping in dangerous environments.

We provide here a brief description of the NRP methodology followed by some examples from that study to illustrate the advantages of using visual methods to study resilience.

The NRP Methodology

The NRP uses visual methods - including photo-elicitation and the videotaping of a *day in the life* of participants – as well as interviews and reciprocity between researchers and participants, to understand the processes associated with resilience for youth in five countries. One boy and one girl, aged 13-to-16 years old, at each of four Canadian sites (Halifax, Montreal, Saskatoon, and Vancouver) and four international sites (India, China, Thailand, and South Africa), were nominated to the project by youth advocates in their communities. The youth were suggested to the project because they were seen as being resilient despite the multiple adversities they face, including displacement, poverty, racism, and other social and economic risks.

Preliminary interview

Following the consent process, youth participants took part in a private, semi-structured interview focused on understanding the adversities faced by the youth participants and their perspectives and experiences of resilience.

Photo-elicitation

At the interviews, youth were provided with a disposable camera and asked to take photographs of anything they wished to talk about, including obstacles to personal development, mental and physical health resources, social supports, and how they navigate their way through the challenges they face. Once images had been developed they were included in the study as research data, as well as used as prompts in further interviews with participants.

Day in the life video recording

In the *day in the life* procedure (adapted from Gillen et al., 2006) we filmed 8 to 12 hours of a youth participant's *day*. One researcher used a digital camcorder to film the *day,* while another researcher took observation notes. In all instances, the site researchers who recorded the field notes were familiar with the local context, allowing them to pick up on subtleties that may otherwise have been missed.

Creation of the compilation day in the life video DVD

At least two local and two distal researchers independently viewed the full *days* of video footage for each youth, making selections of the day's events that seemed to represent the range of activities and quality of interactions the youth engaged in. Researchers chose 5-6 video scenes of approximately five minutes in length they were interested in hearing more about from the youth, or those which might be interpreted as contributing to each youth's ability to cope well with adversity.

Reflection periods

Periods of reflection between our team members and between the researchers and participants ensured our analyses accounted for specific contexts and cultures, and helped to reconcile issues that arose when using visual methods across diverse contexts. These reflection periods helped us to understand youths' interpretations of their images. Through open-ended questions, youth were asked to reflect on each video clip, and were questioned whether they believed other clips should have been chosen for inclusion in the compilation. None of the participants indicated that they would have selected alternate clips for their video compilation. Next, the youth was shown the photographic images he or she had produced. Through reflective discussions with youth about the visual data, we were better able to understand the content (*the what*), the purpose (*the who, when and how*) and the youth's interpretation (*the why*) (Pink, 2001). Finally, the compilation video of a youth from another research site was shown to the youth for comment.

Data analysis

The NRP data analysis is currently underway. We are examining the data by drawing on a combination of analysis methods, including grounded theory (Charmaz, 2000) and postmodern discourse analysis (Gill, 2000), with emphasis on generating substantive theory. Links are being drawn between data sources for each youth. Data is being analyzed for processes and patterns occurring across and within sites. Youth interpretations of their data are being taken into account; however, we are also making reference to the processes participants seem to take for granted, leave unstated or seem unaware of.

The examples provided in the results section below were not developed from the data analysis procedure described above. They were selected from the youth participants' reflection interviews, based on the strength of each case to illustrate the ways in which visual methods can capture embedded processes of resilience for youth.

Results

Exemplars from the NRP

We provide below three examples from the NRP, of instances where the use of visual methods aided in the observation and understanding of previously unarticulated aspects of youth's experiences of resilience. All names are pseudonyms.

Example 1: The researcher learns about a culturally-embedded aspect of resilience through the use of photo-elicitation:

Marie is a 15-year-old youth living in Saskatoon who considers herself Mohawk First Nations. She moved to the city from a nearby First Nations reserve with her mother and three brothers when she was in grade three. Marie is dealing with a number of challenges, including systemic racism and repeated harassment by the police. Marie's self-identified strengths include "getting involved in stuff," such as competitive sports and dance, her spirituality and identity as Mohawk First Nations, and her strong connection to family. One photo that Marie took showed a young Aboriginal man with long hair. Marie told us:

> *Marie:* This is Freddie with his long hair. I took a picture of his long hair, because when you keep your long hair it is your spirit, I guess you can say. And Freddie has had his hair for a really long time so there is like memories embedded in his hair and so that is why we grow long hair. My brother Peter John he cut off his hair because he wanted to start a new life with his girlfriend, and forget about his past cause he had a really hard past-so he cut his hair. And Freddie still has his hair and Jake cut his hair. So I wanted to take a picture of that.
>
> *Interviewer:* And you have your hair. Your hair is very long.
>
> *Marie:* Yeah. I cut it a lot.

We learn here from Marie that cutting one's hair has cultural meaning tied to the ability to cope with significant life disruptions and hardships. It is a visual reminder of one's life experiences, and provides the opportunity for repeated self-renewal. By admitting that she has cut her hair a lot, Marie lets us know that she has had her own share of challenges to overcome.

Example 2: The researcher and the youth collaboratively come to an understanding about a *day in the life* episode as positively contributing to his resilience:

Neil is a 14-year-old male living in a neighborhood known for shootings and stabbings, next to an increasingly gentrified urban area of Atlantic Canada. Neil recently moved out of his mother's house to live with his father (his parents are divorced yet friendly with one another) which required Neil to adjust to new house rules and responsibilities. During the *day in the life* video recording, Neil spent much of his day with his friends walking in a well-off neighborhood. At one point, two of the boys cross the street, while the other boys remain on the other side. The friends begin playing a game they call "imaginary football" (pretending to throw an imaginary football over the cars driving between them), "imaginary skipping rope" (pretending they have a giant skipping rope spanning the road, with one youth pretending to "jump" over the rope), and so on. The youths' roadside games have the effect of causing the drivers of the cars to occasionally slow down, honk their horns, or look slightly bemused, which in turn brings the youth some fun, and at times embarrassment. As Neil viewed the video clips, he seemed surprised that we included these episodes where he and his friends engaged in small risk-taking activities. He told us, "Yeah, to be honest we actually do kind of do that a lot. Like play around with cars, it's fun. Never anything bad. Just watch them slow down, then you kind of laugh and they get mad."

Though Neil did not mention it without our prompting, we noted the invisibility of adult involvement during his day. We questioned Neil about places for youth to go for recreation in the neighbourhood. Neil told us, "The only place we can really like chill is our friends' houses. The other place would have to be the mall which we wouldn't be allowed at." He continued, "[It doesn't bother us] because we're so used to it… But I guess at first somehow it wouldn't have been [usual]. Because I know down at like the [public recreational park] or something like that there's a place where you can go play basketball at some sort of time or something like that. I heard it, but other than that I don't know." The content on Neil's video compilation, and Neil's reflections on his activities, tell us as much about Neil's community and its support structures as it does about him. Rather than viewing Neil's risk-taking as "deviant", we began to understand that his experimentation with risk afforded Neil experiences of adventure, power, rites of passage, and bonding with his friends in a context that provides very little formal space for this.

Example 3: The youth learns something new about their own perception of "growing up well" after viewing another youth's *day in the life* compilation video:

Nu Dang, a 15-year-old young woman whose family is from the Shan tribal group, was displaced from their home in Burma. Nu Dang now lives in a rented room with her mother and younger sister. Her father passed away in 2006. Nu Dang's mother works long hours as a cleaning maid, so Nu Dang and her sister usually buy food outside of the home on their own. After viewing and reflecting upon her own photographs and video compilation, Nu Dang was given the Vancouver female's video compilation to watch and comment upon. The youth depicted in the video is 14-year-old Idzel who lives with her extended family in Vancouver, Canada. Idzel's family are Mexican refugee claimants to Canada. During one scene, Idzel's mother brushes Idzel's hair as they talk. Nu Dang remarked, "I have never had this; I am envious when I see this. They take good care of their children. Not like us, we are rather neglected." Watching the video, she compares her situation to other youth, and realizes important things about her own ability to cope. She comments, "Even if their [other youth] parents don't have time, there may be grandmother, aunts, uncle, who cooks for them. But I don't have anyone and have to fend for myself." She is prompted to reflect more deeply about her own life, and as a result, speaks openly about the adult roles she has taken on to contribute to her family's welfare. She explains that these experiences have helped her to become more independent, to be able to adapt to new challenges, and access the physical resources required to survive in her high-risk neighborhood.

Discussion

These examples show that visual methods can bring to light new understandings of youth resilience. The photographs, *day in the life* videos and the youth's reflections about their images are each important data sources; however, as Packard (2008) explains, it is the ability to examine both the image content and the motivations behind making a particular image that results in a sum greater than its constituent parts. In each example provided above, it was the reciprocity between participants and researchers during the interpretation of their images that led us to understand culturally-embedded pathways to youth resilience. Designing research where the goal is power transference to youth using visual methods is an analytical strategy, a way to produce information that would not otherwise be gained, and a first step in conducting more ethical research (Packard, 2008). In the NRP, youth were given the opportunity to decide how to portray their lives and perspectives, resulting in increased engagement and a shift in power from the researcher to

the participant. For example, when Marie used a photograph to show the researcher a culturally-embedded coping response, she focused on what was important to her. By doing so, she revealed information that was beyond the researcher's experience, that was not evident by viewing the image alone, and that most likely would not be disclosed in a traditional interview setting. Likewise, when the *day in the life* video stimulated a discussion between the researcher and Neil, it allowed them to co-construct an understanding of risk-taking events as potentially positive to Neil's psychosocial development. This collaboration challenged adult-centric perspectives of what resilience means, and also defied the youth's perceptions of how an adult would interpret his risk-taking behaviours. In the context of NRP methodology, the reflection process becomes a way to explore the youth's images and perspectives, as well as the impact of the visual methods, the researcher-participant relationship, and the interactions produced by those activities (Lomax & Casey, 1998).

Conclusion

Visual methods allow us to capture culturally relevant ways in which young people perform as social actors within their environments. Using video-based methods in particular, we can record even the smallest detail of situated social interaction and aspects of the youth's social ecologies, and replay the moments for analysis (Lomax & Casey, 1998). Furthermore, the photographs and video clips become mediums from which to speak about experiences unrelated to the image's content. In other words, the focus of the analysis is on how the content is given meaning by participants (Gloor & Meier, 2000). This process allows us to balance participant reflection with the rigor of social science research (Prosser & Loxley, 2008), permitting us to reduce power imbalances in the field, meaningfully engage youth in the research process, help to overcome language barriers and generate theoretical constructs that account for culturally-embedded processes of resilience.

Acknowledgements/Conflict of Interest

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How Children Understand Parental Mental Illness: "You don't get life insurance. What's life insurance?"

Elaine Mordoch RN, PhD[1]

Abstract

Objectives: To understand how children living with parental mental illness (PMI) understand mental illness (MI) and what they want to tell other children. **Method:** The study design was a secondary analysis of a grounded theory study exploring Canadian children's perceptions of living with PMI. Interviews from 22 children, ages 6 – 16, living with a parent with depression, bipolar disorder or schizophrenia receiving treatment for the MI, were re-read, coded and analyzed along with data categories, their properties, field notes and memos from the original data. **Results:** Children revealed that they had limited understanding of MI and received few factual explanations of what was happening. Limited information on MI caused undue hardship. Younger children worried about their parent dying, while older children also were concerned about developing MI. Children offered suggestions for other children in similar circumstances. **Conclusions:** This study raises awareness of children living with PMI and identifies them as a population requiring services. It incorporates children's perceptions of what they know and need to know. Children require assistance to understand and to respond to PMI. Mental health and primary health care clinicians have opportunities to assist these children within collaborative care models developed in conjunction with school services.

Key words: children, adolescents, parents, mental illness, grounded theory

Résumé

Objectifs: Expliquer comment les enfants qui vivent avec un parent souffrant de maladie mentale perçoivent cette maladie et l'expliquent aux autres enfants. **Méthodologie:** Analyse secondaire d'une théorie factuelle qui étudie la manière dont les enfants canadiens perçoivent la maladie mentale de leur parent. Vingt-deux sujets âgés de 6 à 16 ans, dont un parent était traité pour dépression, trouble bipolaire ou schizophrénie, ont été interrogés. Les faits, les données et leur propriétés, les notes prises lors de l'entrevue et les originaux des notes de service ont été à nouveau consultés, codifiés et analysés. **Résultats:** Les enfants ont déclaré qu'ils comprenaient mal la maladie mentale et qu'on leur donnait peu d'explications concrètes sur ce qui se passait. Ce manque d'information engendre une souffrance inutile. Les enfants plus jeunes avaient peur que leur parent meure, les plus âgés craignaient de souffrir de maladie mentale plus tard. Ces enfants faisaient des suggestions aux enfants qui vivaient une expérience similaire. **Conclusions:** Les enfants dont le parent souffre de maladie mentale constituent une population qui a besoin de services de santé; cette étude indique ce que les enfants savent et ce qu'ils doivent savoir. Les cliniciens en santé mentale et les intervenants de première ligne peuvent aider ces enfants en appliquant les modèles de soins collaboratifs mis en place avec les services scolaires.

Mots clés: enfants, adolescents, parents, maladie mentale, théorisation ancrée

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Statistics indicate that one in five Canadians will suffer from a mental illness (MI) throughout their life time (Government of Canada, 2006). While statistics on parenting are not routinely collected, past estimates suggest that 50% of people with MI are parents (Gopfert, Wolpert & Seeman, 1996). National survey data from the Canadian Community Health Survey Mental Health and Well Being (CCHS 1.2) revealed 12.1% of Canadian children under 12 live with parents meeting the diagnostic criteria for mood, anxiety or substance abuse within the past year. In addition, 17% of children live in lone parent households. These statistics underestimate the prevalence rate (Bassani, Padoin, Philipp & Veldhuizen, 2009). Research has established that children of parental MI (PMI) are at increased risk for mental health and behavioural problems, suicidal ideation and interpersonal difficulties (Wickramaratne & Wesissman, 1998). However, few resources are allocated to parenting or children (Ackerson, 2003; Mordoch & Hall, 2002). Parents and their children are also victimized by the societal stigma and discrimination accompanying MI within Canadian society (Stuart, 2005).

Although Phillips (1983) identified that service providers regularly miss opportunities to intervene with children, Nicholson and Biebel (2002) noted this continues to be problematic. A culture of non-intervention in the organization of health and welfare services may inhibit prevention and early intervention efforts for this population. Thus children are left with few resources to assist them.

A volume of research on children of PMI exists but the majority of this research is based on behavioural competence measures and adults' perceptions of children's experiences. Few research studies incorporate children's perspectives. Previous literature focused on risks associated with genetic transmission (Rosenthal, 1970) exposure to parents' pathology (Rutter, 1966) and the effects of multiple risk and protective factors (Werner & Smith, 1992). During the decade of the eighties, the research approach shifted from a disease model to a health promotion model resulting in extensive literature on children's resiliency (Anthony & Cohler, 1987; Garmezy, 1987; Rutter, 1985). However, this literature mainly relied on imposed views of resiliency filtered through adult eyes and focused on behavioural competence which minimized children's subjective experiences (Mordoch & Hall, 2002).

Currently, there is renewed interest in children living

with PMI. Australia has provided a decade of strong leadership in identifying children's needs (Cowling, 1999) and the World Health Organization supported the 2009 European conference on children of PMI: The Forgotten Children (World Psychiatric Association News, 2009). While a body of current research is developing most children continue to manage their circumstances with little information or formal intervention (Mordoch & Hall, 2008).

Children in the research process

In this paper, the term *children* is used to describe all participants under the age of majority. Qualitative studies encourage children to express their perceptions and provide an understanding of the context of their lives (Davies & Wright, 2008). Adults' views of children's experiences may differ greatly from children's accounts (Lightfoot, Wright, & Sloper 1999). This paper assumes that the inclusion of children's perspectives in research generates knowledge that if used, will facilitate the bridging of services for children and their parents. While quantitative research has made significant contributions, it has insufficiently addressed children's perspectives and the multiple social and cultural contexts of their experiences (Graue & Walsh, 1998). Children are not regarded as the primary source of knowledge on their experience. Rather the child's experience is filtered through their parents, distancing the researcher from the child's unique world and denying children the opportunity to speak about situations concerning them (Oakley, 2000).

Method

This paper is a secondary analysis of a qualitative grounded theory study on how children perceived and managed living with PMI. In qualitative research the data provide rich detailed description of the participant's social world and its constraints. This supports a secondary analysis wherein data are reanalyzed for purposes of answering new questions, more fully examining the original question, and expanding concepts (Thorne, 1994). In grounded theory, analysis yields categories (concepts) that capture the underlying patterns in the data. These emerge from systematic data coding and constant comparative analysis of incidents (Glaser, 1998). Within this process, some categories or their properties may not be fully developed in order to focus on the original research questions.

This secondary analysis focused on further investigation of a property (component) of the category *Monitoring,* developed in the primary analysis. Monitoring was a process whereby children monitored cues in their parents' physical appearance, interactions, activities and mood (See Mordoch & Hall, 2008 for detail). A property of monitoring, *Having part of the story,* prompted the secondary research questions. The purpose of this secondary analysis was to answer the following questions: How do children understand and learn about MI? What do they want to tell other children living with PMI?

Sample

The sample consisted of 22 English speaking children aged 6 – 12 years who lived full or part time with a parent with a MI. The parent had a primary diagnosis of depression, bipolar disorder or schizophrenia and was receiving treatment. Fourteen boys and 8 girls were interviewed, with 11 children aged 6-12 years and 11 children aged 13-16. The study was conducted in a mid-size Canadian city. Some children were interviewed twice. For full description of the sample, see Mordoch & Hall, 2008.

Data Analysis

Interviews and data categories from the original study that were linked to the focus of the secondary analysis were re-read along with the original memos and field notes. This process ensured there was sufficient data to answer the research questions. All transcribed and audiotaped interviews, corresponding participant observation and field notes were readily accessible. Audio tapes of selected interviews were replayed to clarify coding categories and levels of conceptual abstraction. Art collected in the original study was reviewed in the context of the secondary analysis questions. The analysis followed the principles of open (all is coded), selective (focused on the emergent categories) and theoretical codes (conceptualization of the relationship of codes) (Glaser, 1998).

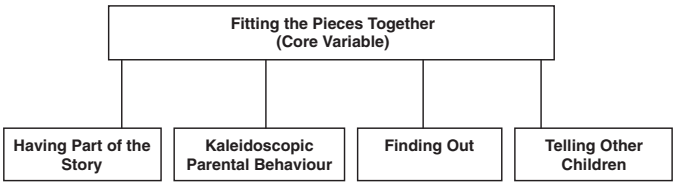
Rigour of the analysis

An audit trail documented decisions related to coding. Grounded theory criteria of fit (the relationship of the core variable to the problem being studied) and work (the ability of the core variable to relate the other concepts to the core variable) were upheld in the analysis by intensive attention to levels of coding and integration of memos (Glaser, 1998). Reflexivity, the influence of the researcher/participant relationship on the construction of the data, was addressed in memos, field notes and intercollegial dialogue. Credibility and authenticity of the findings was supplemented by a rich and dense data set and conscious attention to researcher influence.

Findings: Fitting the Pieces Together

The secondary analysis generated the core variable, *Fitting the Pieces Together* with properties of: *having part of the story, kaleidoscopic parental behaviour, finding out about MI, and telling other children. Fitting the Pieces Together* (Figure 1) refers to the children's struggle to

Figure 1. Core Variable with properties



make sense of the limited information available to them while living with PMI. To clarify their understanding of PMI, children had to make sense of information they received or that inadvertently came across their paths.

> *They (adults) don't get them (children) help..... They don't speak to the kids about it....They (children) should know that, if he (Father) had that illness he wouldn't be himself, like right away you'd see it like this.* (Boy Age 11).

In trying to fit the puzzle together other concerns were raised:

> *The kid is eventually gonna figure out that you're lying to them. I think that could be the start of a kid saying, well, if the doctors can lie and Mommy and Daddy can lie, then I can lie.* (Girl Age 16).

Children needed enough information about MI to help them live with their circumstances, avoid unnecessary emotional duress and give them hope for the future; *"once I understood, things were better."* (Girl Age 16).

Having Part of the Story: "You don't get life insurance. What's life insurance?"

There was consensus across the interviews that most children were not well informed and that MI was not openly discussed. This suggested that MI was not important; "I'm not thinking that it is (MI) not important. It just seems like it's not important if people don't talk about it, learn about it, or know about it" (Girl Age 14). This idea was reinforced in insidious ways. For example, reflecting on a school Career Day, this child noted: "Different people speak about their careers. There wasn't anything to do with mental health. ....There was no representation of that... There was every other thing under the sun, ...even bartending." (Girl Age 16).

Silence around mental illness misinformed children's perceptions. While not privy to information, children were still expected to manage their circumstances. For example, this child reflected on her experience with acute PMI: "She didn't really tell me. She was talking about it, sort of, and I was sitting beside her giving her a glass of milk and ...lots of huggies." (Girl Age 7). The child did not receive any explanation for her mother's acute illness and was left feeling uncertain as to what was happening.

Vague explanations and efforts to shield children escalated their concerns. An older child observed: "The kid eventually starts thinking ...there's something definitely not right here, either my dad's dying or there's something you're not telling me." (Girl Age 16). This sense of vagueness created unnecessary worry and ambiguity around what was happening and the nature of MI. The child continued:

> *It's better for kids to know .... you'll ask what's happening and your parents don't tell you,.....They don't want to cause you any stress. I don't think parents realize, it causes more stress not to know what's going on...You're lost as to what's happening.* (Girl Age 16).

Hospitalization of a parent triggered images of physical illness causing children concern the parent would die: "That mommy will get really sick and die. That the same thing will happen to their (other children's) mommies and they don't probably feel safe" (Girl Age 6).

Children had difficulty understanding hospitalization for a mental illness. Consequently, hospitalization was associated with physical illness and unwarranted fears that their parent was dying. This caused undue hardship for children.

The essence of *having part of the story* and its impact on children is best captured in the following response from a 9 year old boy: "It's (parent being ill) not that fun, you don't get life insurance. That's kinda (sic) bad thing, I think. {Pause.....} What's life insurance?" This child had overheard a family discussion related to life insurance and his father's illness. The child inferred that life insurance was desirable but unattainable. Having partial understanding of the situation, he was left unsure and worried about the implications. Children had pieces of information that they did not completely understand but sensed something was wrong. This was further reinforced with changes in parental behaviours.

Kaleidoscopic parental behaviour

A kaleidoscope is a tube containing loose bits of colored material and two mirrors at one end that shows many different patterns as it turns (Merriam-Webster, 1995). Children understood MI as diverse patterns of parental behavioural changes. Much like the turn of a kaleidoscope, these changes were often predictable patterns but held elements of unpredictability (Mordoch & Hall, 2008). MI was understood as changing patterns in physical health and social behaviours: "There's when they're always sitting alone. Like they're by their selves...and one more sign is when you talk to someone it takes them a while to register what you ask them." (Boy Age, 9).

Children understood MI as decreased functioning of their parent: An 11 year old boy stated: "It's kinda hard to like get a hold of good jobs and stuff like that". Behavioural changes in activities with children were noted "they (parents) lose interest in things they used to like and they get sadder and sadder." (Girl Age 10). The first line of this child's drawing (Figure 2) illustrates the parent becoming sad for no apparent reason. The second line illustrates the mother losing interest in examining a ladybug, previously a favourite pastime of the child and parent.

Drinking could be an indication that something was wrong: "I could tell when she's getting upset, because ... she'd drink and start saying really depressing things." (Girl Age 16). Some changes shattered the children's sense of safety. These parental behavioural changes could lead to chaos. This boy was chronically unable to

Figure 2.

sleep because he did not know what was happening and who was in his home.

> *My sister started bringing her friends over. They'd drink and do drugs. My mom couldn't really do anything because she'd be depressed, she didn't know what to do. So she'd...sit back and pretty much watch it...I couldn't sleep. (Boy Age 14).*

Children understood that MI signified unpredictable behaviour in their parents:

> *"she'll get just really mad for no reason…stuff she usually wouldn't get mad about. Cause she's a pretty nice mom." (Boy Age 13).*

Some unpredictable changes from the parent's routine behaviour frightened children:

> *She is getting better with night terrors and screaming...when she did, it freaked me out...She said 'Don't be afraid to wake me up'...And I poked her and she went whipping around. I got so scared. (Girl Age 11).*

Children recognized patterns and unpredictability in parental behaviour. They incorporated these observations into their understanding of MI. Children's understanding was fragmented and constructed over time within a context of ambiguity. How then did children gather information about MI?

Finding out - How do children obtain information?

Children learned about MI through parents and family, school counsellors, overhearing adults' conversations, printed materials, by chance, and via the media. Some parents explained MI and their behaviours to their children. Extended family or the well parent would sometimes interpret parental behaviour to the child or give advice on what to do when the parent was ill.

Conversations inadvertently overheard provided information. In times of crisis, children could not help but overhear household conversations discussing the parent's situation.

> *I could hear the phone. I could also hear their talking even when they hang up.*
> *I just sit here...I don't really want to hear but it is part of my home. See eavesdropping is picking up the phone and listening. It's not that. (Boy Age 10).*

Children interpreted these conversations on their own: "I heard she was talking on the phone to one of her doctors. I could not hear what she was saying and I never asked her…She has a kind of a fainting disability or something like that." (Boy Age 13). Although living with a chronically ill parent, this was the child's only source of information on mental illness.

Children occasionally came across information at school informing them about drugs and MI: "I read it in one of these. It was called Marijuana…the teachers gave it to us. There was another one that said that people with MI should not use cannabis (Boy Age 16). The boy wanted to share this pamphlet with his parent and his siblings. It had considerable impact on him due to his fear of becoming mentally ill: "I can avoid it (marijuana). Something like that might trigger me (to have MI). I told D. (brother) about it. I don't think my younger brothers know…that drugs can trigger it. They are too young."

Children also learned about MI by chance. One child learned about brain functioning and anti-depressants in a reading comprehension paper. This provided valuable information about her mother's MI. Media reports of celebrities experiencing addictions and suicide informed older children, although the credibility of these reports was unclear.

Accessing information about MI was elusive. When thinking of accessing health information, this child identified that there were places for finding out about cancer but was unsure about where you would find out about MI: "Where do people find out about cancer? Isn't there a place like that for MI?" (Girl Age14). Children did not know where to turn for information.

> *My father has the illness....I gotta understand it more. I wanna (sic) know symptoms of it. I'd like to …try to prevent it...If I go to a hospital to talk to a MI doctor there, he'd probably just tell me to get out of here; we're too busy. (Boy Age 16).*

Telling other children: What other kids need to know

Children described what they wanted to tell other children. They felt children should know about MI but should

be told in ways that are not "scary". Children suggested that adults could help children understand. They suggested strategies:

> *Something like Magic School Bus, or a video game….That's a way to inform little kids. I knew about molecules before I knew about, half the stuff I know right now…make a computer game out of facts about different illnesses... make it fun. (Girl Age 16).*

Complex concepts could be explained in fun and creative ways that would help children.

> *I'd describe a healthy brain as a freshly baked blueberry pie. You know everything is in its right place; it is all organized and ready to eat. A brain with a MI is a blueberry pie that somebody stuck a fork in, mushed it all up and everything is mixed up. (Girl Age 16).*

Children felt that they were the only ones living with PMI; "How would you know, you don't talk about it" (Boy Age 10). They wanted children to know there are other children in similar circumstances. Children stressed it is important to tell children what to do when the parent is ill. Often children do not know how to handle situations.

> *They should know not be scared. Kids are scared a lot of the time….they're young and they don't know what's happening. Just take care, don't worry. Suck it in. Try to stay strong, focused. (Boy Age 14).*

Despite the difficulties his family had faced, this child felt that they had managed to stay together and he had learned to depend on himself. Other children noted that sometimes being physically close to the parent was not wise and advised "to get out of the same room" in crisis situations and to look after younger siblings. The drawing in Figure 2 illustrates one child's advice to leave the room and to take younger children with you when the parent becomes irritable.

Children were sensitive to problems at school:

> *Kids bothering you if they find out that your parents have a MI and they make fun of you, just laugh it off…so they know they're not getting to you…just let it go in one ear, out the other. (Boy Age 14).*

Some children were frequently changing schools due to their families' relocation. This was likely a contributing factor towards being bullied.

Children believed that all children knew little about MI. They might think it is "like being mentally challenged" but it is different. They felt it was important to: "Help people understand what people do not know about MI" (Boy Age 14). Children understood that parents need help and it is not the parent's or the child's fault. Children identified ways to help the parent and wanted to inform other children: "Parents need help and children can talk to them, try and understand what is wrong: Sometimes you have to take care of your parent. If they drink coffee, get them a coffee." (Boy Age 14).

Children need to know that while medication may help their parent, medication should not be used by everyone: "Medication isn't always the way to take care of your problems…The kid needs to realize that the medication, the food, makes parents feel better because something is wrong with them." (Girl Age 16). Children wanted other children to know what had helped them and hoped this would help other children.

Children recognized that their parent was more than the MI. Most children valued the significant contribution parents made to their lives: 'It's not like we don't love her cause she's got a mental illness...her heart's still there and she cares about me and K (sister)" more than anything.' (Boy Age 13). From their lived experiences children understood that MI was "not 24/7", and was "not all bad, you know." One child (Girl Age 11) drew a heart around her mother "cause I love her." (Figure 3). She recognized mental illness made her mother different from other mothers.

Discussion

Fitting the Pieces Together described the process whereby children tried to understand PMI. Children recognized patterns of change and unpredictability in their parents' behaviours. They understood PMI based on observations, sporadic information from families and occasionally teachers or counsellors, in addition to pamphlets, media, and happenstance. This struggle to understand PMI is identified in other studies (Cowling, 1999; Fudge & Mason, 2004).

Based on their experiences, children wanted to

Figure 3.

inform other children of helpful ideas to manage their circumstances. Doing so helped them feel less isolated. Foster, O'Brien and McAllister (2005) found that children living with PMI were unaware of other children in similar circumstances and that knowing of them was helpful. Children were sensitive to the stigma around MI which impeded their understanding. Protecting children from factual information about MI is identified as a barrier preventing parents from discussing their illness (Stallard, Norman, Huline-Dickens, Salter & Cribb, 2004). Children, however, state they know something is wrong and shielding them causes more concern. Literature that advises caregivers how to talk to children during acute illness, states that children should be informed that with treatment and support, their parent's condition will improve (Chovil, 2004). Health care providers need to understand that children have questions which require answers from a trusted and empathic adult. Research on when and what to tell children is needed to ensure that all children receive timely and developmentally appropriate information. This study demonstrated children experienced undue hardship when imagining parental health outcomes based on incomplete information.

The role of schools in providing support for children of PMI and education on MI is crucial in service provision (Foster et al., 2005; Fudge & Mason, 2004). Fox, Buchanan-Barrow and Barret (2008) identified that children generally adopt societal attitudes towards MI and therefore it is not surprising that children of PMI might be subject to ridicule. Schools need to assist children who may be teased and ensure that additional burden is not placed on these children.

Roose and John (2003) found children to be articulate, aware and capable of providing important perspectives on mental health. Efforts to include children's views, particularly children who are socially excluded, require support and consideration in service development (Day, 2008). Europe and the United Kingdom are addressing children's exclusion from meaningful participation in research, theories and policies that affect them. In the United Kingdom, children of PMI are increasingly recognized as 'carers' of their parents with MI. Young 'carers' projects assist with respite and leisure while recognizing the significant amount of work that children contribute, often within positive parent/child relationships. Additional services include one to one befriending, homework clubs and support to families (Aldridge, 2005). While efforts to include children have prevailed, there is little evidence of the impact of their perspectives on policy (Hill, Davis, Prout & Tisdall, 2004). In Canada, strategies that include children's voices and utilize their opinions are needed to transform services. Waddell et al. (2005) question why Canadian mental health policy does not reflect research evidence on children and posit that researchers and policy makers can work collaboratively towards positive change.

This study is clinically significant as it increases this population's visibility within the mental health system. Given the 20th anniversary of the United Nations Convention on the Rights of Child (UNCRC) the findings are timely. All children have the right to get and share information that is not damaging to them or others; to voice and have their opinions heard on what should happen when adults are making decisions affecting them (www.rightsofchildren.ca). Children have a right to voice their perceptions on living with PMI and health care providers have the responsibility to listen, to assist and protect children. While all parents of the children in the study had recent contact with the mental health system, few children recalled any interaction with a health care professional. Given that 12.5% of Canadian children are estimated to live with PMI (Bassani et al., 2009) and are considered to be at increased risk of pathology, a systematic approach to assessing and addressing these children's issues is urgently needed within the primary care and mental health systems.

Conclusion

This secondary analysis of a grounded theory study on children's perceptions of living with PMI provides information on how children understand and learn about MI and what they want other children to know. Little formal intervention assists children in their understanding of MI. Children require services that minimize the ill effects of PMI, maximize family strengths and maintain the safety of children. Primary health and mental health care providers have an opportunity to respond to children's concerns and work collaboratively to meet their needs.

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The authors have no financial relationships or conflicts to disclose.

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Implicit Informal Qualitative Research Processes Embedded in Legal Proceedings: A Case Example

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Abstract
Objective: To make manifest, through a qualitative research process, the competing meanings constructed by the various parties in a legal case based on their own phenomenological perspective and/or experience of the events that gave rise to the legal complaint. **Methods:** Representative quotes from the documentary court filings of various parties in a U.S. Supreme Court case, Safford Unified School District v. Redding, involving a highly emotional issue-strip search of a child at school by school officials –provide the data source. These texts are analyzed conceptually to discover themes which help summarize the parties' diverse phenomenological perspectives on the 'facts'. **Results:** The sample texts from the court filings in the case were readily organized by themes and the competing parties' conflicting perspectives located on opposite ends of various continuums described in terms of those themes. **Conclusions:** Making sense of conflicting legal positions can be considered, in part, as an informal qualitative research process. The use of textual analysis, a qualitative research process, can greatly assist in making more explicit the conflicting phenomenological perspectives of the various parties latent in the hundreds of documents typically filed with the courts in any major case. This may be helpful in mediation.
Key words: phenomenology, hermeneutics, qualitative research, law

Résumé
Objectifs: Faire ressortir, par un travail de recherche qualitative, l'argumentation des différentes parties lors d'un procès, en s'appuyant sur la perspective phénoménologique et/ou sur les faits qui sont à l'origine de la poursuite. **Méthodologie:** Des extraits représentatifs des documents déposés à la Cour par les différentes parties lors de l'affaire *Safford Unified School District v. Redding,* sur la fouille à nu pratiquée sur un élève par la direction de l'école fournissent les données de base. L'analyse conceptuelle des textes fait ressortir les thèmes qui servent à résumer les diverses perspectives phénoménologiques des faits. **Résultats:** Les textes extraits des dossiers de la Cour étaient organisés par thème; les points de vue des parties formaient un continuum, mais ils divergeaient fortement aux deux extrémités. **Conclusions:** Il est en partie possible de considérer que l'étude des positions opposées constitue un travail informel de recherche qualitative. L'analyse des données textuelles et la recherche qualitative peuvent être très utiles pour faire ressortir la divergence de point de vue des diverses parties, dans une optique phénoménologique. Ces informations se trouvent dans les centaines de documents qui forment le dossier dans une affaire importante. Ces conclusions peuvent servir lors de la médiation.
Mots clés: phénoménologie, herméneutique, recherche qualitative, droit

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Introduction

Mental health professionals participating in legal cases as expert witnesses can assist the courts in understanding the world view that each of the parties brings to a case and how that view impacts upon the parties' interpretations of the facts. Doing so involves the mental health professional in what is essentially an implicit qualitative research process. The case example used here is the 2009 decision by the Supreme Court of the United States in *Safford Unified School District #1 v. Redding* concerning the strip search at school of a 13- year-old girl by school personnel looking for contraband drugs.

It is suggested that judicial decision-making is a great deal messier than simply applying the law to the alleged 'raw facts'. The case 'facts' in *Safford Unified School District #1 v. Redding* are here considered from the various contextualized perspectives (phenomenological worlds) of the petitioner, the respondent, and certain of the interveners. The judicial decision making process is thus, in part, a search for meaning. The ultimate ruling in the case might be viewed as involving, in part, the judicial panel navigating through the conflicting interpretations/meanings proffered by the competing litigants and other participants and negotiating a consensus majority socially constructed meaning. Of course, dissenting views held by one or more justices reflect a different meaning construction, and frequently a differing weight assigned to various 'facts', as well as often also an alternate contextualization of the 'facts'.

The qualitative analytic research strategy utilized in this paper in the context of the Safford Unified School District case is one well grounded on the phenomenological/hermeneutic research philosophical perspective. Textual (or discourse) analysis of the written or spoken word i.e. deriving from interviews or recorded spontaneous speech to discover themes embedded in that material is common in phenomenological/hermeneutic research. In this regard, it is important to emphasize that the themes described in this paper and detected through textual analysis of the parties' written or spoken transcribed word contained in their respective court filings summarize the conflicting phenomenological or 'lived experience' of the various parties relating to their personal construction of the 'strip search' of a child by school officials in the Safford case.

The aforementioned qualitative research strategy or

approach appears to provide a particularly suitable lens and efficient methodology for examining the widely diverse texts containing competing arguments and testimonials of the litigants and interveners filed with the court. This textual analysis brings to the fore the tacit personal meanings (i.e. phenomenological perspectives) underlying the competing legal positions of the parties. In the analysis of the Safford legal case, how both the school staff who ordered or conducted the strip search, and the female young student who was the subject of the search, experienced the events is critical to the analysis of the 'facts of the case'. In addition, the method of textual analysis generating themes provides a highly efficient way to summarize voluminous legal material in court filings relating to the various parties' point of view on the key issues. The essence of this phenomenological /hermeneutic approach using textual analysis will become clearer in the context of its application in the analysis of the conflicting meanings bandied about in the Safford legal case.

Phenomenology posits that "one gains understanding of an experience through empathy" (Bentz and Shapiro, 1998, p. 99). The raw datum of phenomenological research is the inferred internal state of the person(s) being studied. The goal then is to understand the other's reality; something which can be difficult if there are cultural, social class, educational, power and/or other divides between the persons involved. For instance, there may be a cultural divide between the qualitative researcher and the persons who are the subjects of inquiry or in this case, the judicial panel and the litigants and even between the litigants themselves. More specifically, in the Safford school case, there is a power divide at play influencing the litigant's phenomenological perspectives on the strip search. The themes that emerge from the textual analysis are very reflective of that power divide and its implications for the parties' subjective experience of the events as will be discussed.

The goal in doing textual analysis is to attempt to stay as true as possible to what the subject actually said, hence the use of direct quotes. Inevitably, the qualitative research process, however, involves a creative component i.e. deducing from the direct written or oral texts produced by the participants studied what themes are latent in those 'utterances'. Ideally, the researcher would have access to the persons who generated those utterances/texts to obtain their feedback as to the degree to which, in their view, the themes accurately represent what they intended by their utterances. Often, as in the case here, the quotes from the court submissions of the various parties themselves provide rather direct clues as to each party's phenomenological perspective.

Hermeneutic qualitative approaches, of which there are many, are also relevant to the analysis of the legal case. Hermeneutics refers to the "art and science of interpretation" (Bentz and Shapiro, 1998, p. 105). It has been suggested that "the chief concern that leads one to hermeneutics is the need to have an enriched understanding of the context of a piece of data, the setting that gives its meaning and out of which it arises" (Bentz and Shapiro, 1998, p. 109). Like phenomenology, hermeneutics postulates that the more you can contemplate the subjective state of who you are studying, the higher your level of understanding of whatever they produce (i.e. in this instance then better understanding of the reasons for the parties' respective positions reflected in their submissions to the court). Thus, from the foregoing perspective, in order to more fully understand the legal texts produced by the various participants in the Safford legal case, it is necessary to understand what the texts meant to those who created them, the psychological intent behind the arguments as well as something of the socio-cultural, ethical, historical, emotional and power contexts from whence such arguments originate. The latter is then a phenomenological/hermeneutic approach which can be contrasted with a strategy that involves simply trying to decipher some abstract meaning in the text disconnected from who is making the argument and under what circumstances. Note also that the hermeneutic approach is "intended to give meaning to a fabric of data, rather than to predict or control some particular event" (Bentz and Shapiro, 1998, p.109).

In terms of the qualitative analysis presented in this paper, the intent is thus to provide deeper insight into the contextualized meanings of the legal arguments advanced by various participants in the proceedings. The paper is organized around a few of the central themes that were, in this qualitative researcher's view, embedded in the actual text of the competing parties' and intervener submissions to the Court. The quotes (texts) from the court submissions in *Safford* that are cited then are the un-interpreted data and the themes are held to be embedded in that data. By providing the raw data (the quotes), the reader is free to generate his or her own themes from the data which the reader may feel better captures the subjective perspective of the persons that generated the range of texts/utterances (i.e. here the particular parties to the legal case). It must be stressed that phenomenological/ hermeneutic research approaches recognize that it is not possible to have a neutral researcher who is entirely successful at avoiding the imposition of his or her own interpretative framework. Hence, in the qualitative methodology of textual analysis, for instance, the themes held by the qualitative researcher to be embedded in the texts/utterances generated by the persons being studied are willingly offered up for scrutiny and challenge. Most important, of course, are the challenges, if any, mounted by the persons studied, to the validity of the themes that are held to summarize the texts/utterances. These challenges by the persons studied of the themes generated from their actual verbal or written utterances can serve as a basis for further exploration of: a) the nuances of their

phenomenological world, and b) their willingness or lack of willingness, on at least some points, to acknowledge where they are allegedly 'coming from' on a deeply personal subjective level. This type of analysis of competing phenomenological perspectives amongst the parties to a legal case then might be especially useful in mediation.

The themes generated from textual analysis in the context of qualitative research concerning a legal case reflect the contexts in which the litigants and interveners positioned the so-called 'raw facts' to give the latter the 'spin' they desired. However, it is suggested that the 'legal spin' reflected in the arguments is not just a matter of legal strategy. Rather, the 'spin' also reflects, to a large extent, the differing phenomenological worlds of the parties. Given the space limitations of this paper, the objective here is very modest. It is to give the flavour of textual/discourse analysis as a qualitative research method, and illustrate its possibilities for providing insights into the conflicting meanings assigned to the 'same facts' i.e. here by various parties in a legal case. The themes discussed below emerging from the texts in the Safford case are closely interrelated and perhaps, in some respects, inseparable, but they are discussed as distinct themes here for expository purposes.

The Case

Safford Unified School District #1 v. Redding involves the strip search at school by school personnel of then 13-year- old Savana Redding; an honours student with no history of having previously been disciplined by the school. The principal had been told by another student that Savana had secreted ibuprofen tablets on her person in violation of the school's zero tolerance policy which required that students have advance permission to bring any drug to school. Savana was escorted to the Assistant Principal's office where she was shown a day planner that belonged to Savana along with knives and other contraband including a cigarette and lighter visible inside the planner as well as four prescription-strength ibuprofen tablets, and one over-the-counter anti-inflammatory pill lying atop the principal's desk beside the planner. Savana informed the Assistant Principal that, with the exception of the day planner itself, which she contended she had lent to another student, none of the other items, including the pills, were hers. Savana agreed to have the Assistant Principal and his assistant search her backpack for contraband. After the backpack search yielded nothing, Savana agreed to go to the nurse's office with the principal's assistant for a further search at the nurse's office. The principal's assistant and the nurse had Savana undress to her underwear, and at their instruction, pull her bra out and move it side to side, and pull out the elastic on her underpants at the crotch and move the pants side to side. This in order that any pills hidden would presumably fall out of the underwear, thus exposing her breasts and pelvic area to some degree. Throughout the process, Savana was not permitted to call her mother. No pills were found.

After the incident, Savana transferred to another school. Savana's mother filed suit against the school district (Safford), and against the principal, his assistant and the nurse. The mother alleged that the strip search violated Savana's Fourth Amendment constitutional right to be free from unreasonable searches. The individual respondents claimed qualified immunity against the suit. The District Court granted the motion, finding that there was no Fourth Amendment violation, but the full Ninth Circuit judicial panel reversed. The school board appealed to the U.S. Supreme Court which ruled that Savana's Fourth Amendment rights were violated as: a) the strip search was not justified at its inception since it was based on uncorroborated vague allegations, and b) it was too intrusive a search under the circumstances since there was no evidence to suggest that Savana had pills hidden in her underwear. However, the Court also held that the principal, his assistant and the nurse all had 'qualified immunity' from liability.

Emergent Themes in the Court Submissions

In what follows, quotes from the court submissions are presented followed by textual analysis for each theme that emerged.

'In Loco Parentis' vs. 'Parens Patriae' Jurisdiction

'In loco parentis' concerns the school acting as the official delegate of the parent; authorized by the parent and looking out for the 'best interests' of each child. In contrast, 'parens patriae' jurisdiction concerns the State intervening to protect vulnerable individuals such as children and lawfully infringing on the authority and privacy rights of certain parents and particular children to provide that protection.

1.1 The National School Board Association (NSBA) and the American Association of School Administrators' (AASA), as Interveners on Behalf of the School Board: Their Reliance on the 'Parens Patriae' Jurisdiction of School Officials as Agents of the State and their Focus on the General Context of Prescription and Over-the Counter Drug Abuse by Youth.

"Amici [court-approved interveners] have a strong interest in ensuring that school leaders have the ability to respond to student drug abuse in an effective manner through educational efforts and other appropriate interventions that may include student searches. Amici believe that *school officials should be afforded legal clarity and appropriate deference when making on- the-spot decisions that require the balancing of student privacy with the need to ensure a safe and orderly learning environment for all students*.

The Ninth Circuit's ruling [holding the search unconstitutional] sharply limits the ability of school leaders to meet this responsibility without risk of personal liability" (NSBA and AASA Amicus Brief p.1-2, emphasis added).

"Here *the Ninth Circuit trivialized the dangers posed by the non-medical use of prescription and over-the-counter ('OTC") drugs by students*…" (NSBA and AASA Amicus Brief in support of the school board petition for certiorari of the Ninth Circuit en banc decision, p. 3-4, emphasis added).

"[Referencing a 2002 near fatality at Safford Middle School due to prescription drugs ingested at school] Unfortunately, Safford's experience is no random or isolated phenomenon. *National studies show a troubling rise in the abuse of prescription and OTC drugs among teens.* In fact, prescription drugs are the drug of choice among 12- to 13-year-olds…*These same statistics also correlate with a sharp increase in poisonings and even deaths related to the abuse of prescription and OTC drugs* "(Petition for certiorari by the Safford School Board of the Ninth Circuit en banc decision p. 5-6, emphasis added).

The above quotes reveal that the respondent school board, and the interveners on its behalf, rely on *a parens patriae* rationale for searches of a student's person for contraband. They refer to the need for even further deference to the school officials in their decision to infringe the student's privacy in recognition of the school officials' functions relating to maintaining a safe school environment. That is, the 'best interests' of each individual student, including any student who might be accused of having drug contraband in his or her possession, and the school official as a delegate of the parent during school hours, is not a focus. Instead, the focus is on school officials'' responsibilities as agents of the State for the school population as a whole.

The NSBA and AASA intervener amici briefs, furthermore, strategically de-emphasize the specifics of the strip search, i.e. asking the child to pull out her underwear and move it from side to side revealing her private body areas, and its possible adverse longer term psychological impacts. The issue of parental rights and the child's right to access the guardian is avoided in the materials filed to the Court by interveners siding with the school board. The effect is to contribute to removing the strip search issue from the phenomenological perspective/context of a person acting in loco parentis since the parental delegate (the school principal) is not portrayed in the NSBA and AASA briefs as needing to be concerned with contacting the parent prior to contemplating or implementing a strip search of the student.

Further, the interveners on behalf of the school board heighten the perceived risk to students that the school officials were dealing with in the case at bar by referencing over-the counter ('OTC') and prescription drug abuse and hence implicitly contextualizing the incident involving Savana in that prescription/"OTC' drug abuse framework. This was the case even though ibuprofen and anti-inflammatory drugs are not normally the drugs of choice for teen prescription or over-the counter drug abuse.

1.2 Savana, and Interveners on her Behalf: Their Emphasis on: a) the *'In Loco Parentis'* Doctrine and Responsibilities to a Particular Child, and the Argument that b) the Standard of Reasonableness for a Search of the School Child Should be Grounded Also on the 'Best Interests' of the Individual Child Along with the Particularized Facts and Circumstances.

"*The fact that Petitioners could have ratcheted up the invasion of Savana's privacy to such shocking dimensions* [i.e. had they done a strip search which required school personnel touching Savana or a cavity search] *does not diminish the trauma, degradation, and thorough humiliation that occurs when a thirteen-year-old girl is ordered to undress, stand naked, and expose her genital area and breasts to her school officials*" (Savana Redding's merit brief before the U.S.S.C. p. 14, emphasis added).

"Prior to viewing the teacher-student relationship through the constitutional prism…*U.S. courts assessed teacher treatment of pupils under principles of tort law, using the in* ***loco parentis doctrine****. Today, searches of students in schools are measured against modern Fourth Amendment principles. But those principles have long been informed by the common law* [i.e. the principle of in loco parentis]" (Brief of the Urban Justice Centre, Asian American Legal Defence and Education Fund, Advocates for Children of New York and the National Youth Rights Association, p.3-4, emphasis added).

"…The [psychological] injuries sustained through the strip search of a thirteen year old girl would have been cognizable at *common law*. As this Court has said, '*youth is more than a chronological fact. It is a time and condition of life when a person may be most susceptible to influence and to psychological damage.'…the act [i.e. strip search at school] which caused those injuries would have violated the reasonableness standard under the* ***in loco parentis doctrine****…*" (Brief of the Urban Justice Centre, Asian American Legal Defence and Education Fund, Advocates for Children of New York and the National Youth Rights Association, p. 22, emphasis added).

The brief on behalf of Savana, the girl child at the centre of the case, takes the phenomenological perspective of the girl 'victim' in describing the humiliation and

degradation the child experienced as a result of the strip search and the possible adverse longer term psychological consequences. In addition, interveners on behalf of Savana focused on the in loco parentis standard of 'reasonableness' which informs interpretation of the Fourth Amendment when determining whether a search at school of a particular child is justified and appropriate in its level of intrusiveness. That standard considers whether a caring parent would treat their child this way. The emphasis on the particular child automatically encourages a more empathetic phenomenological perspective than does consideration of non-individualized school populations.

The 'Probable Cause' v 'Reasonable Suspicion' Continuum for a Lawful Search of Students by School Officials at School

The standard for lawful warrantless searches at school which violate school children's privacy has been held by U.S. courts to be that of 'reasonable suspicion' of wrongdoing rather than probable cause; the latter being a much higher standard. Those searches, however, must be as non-intrusive as reasonable under the circumstances and justified on the particular facts.

2.1 NSBA and AASA, as Interveners for the School Board, Argued for Reliance on a Low Standard for 'Reasonableness' of a Search of the School Child's Person; a Standard Based on the Discretionary Judgment of the Particular School Principal Involved.

"…the need for *efficient school administration* undertaken to preserve a *safe school environment* and to protect students from serious health risks required a more *flexible "**reasonable suspicion standard**"* to evaluate the constitutionality of school searches [as opposed to a higher 'probable cause' standard]" (NSBA and AASA Amicus Brief p. 2, emphasis added).

In considering whether a 'student search' at school is lawful, the NSBA and AASA amicus briefs emphasize: a) the purported need for deference to school officials in determining whether the 'reasonable suspicion standard' was met; and b) the safety of the school as a whole as the presumptive rationale for any strip search independent of any feasible alternative resolutions of the situation. On the NSBA/AASA view, there is no need for the school principal to consider the 'best interests' also of the individual student (i.e. here Savana) where the prospect of a strip search is contemplated (as would be the case for a school official perceiving him or herself as acting as a parental delegate in loco parentis). Rather, the phenomenological perspective is one of those in power and their perceptions of their need to ensure that they will be perceived as responsible and concerned with accountability to the State (the government department that manages education in the State jurisdiction involved).

2.2 Savana, and Interveners on Her Behalf, Argued for Reliance on a Higher Standard of Justification for a Strip Search of a Student (Towards the 'Probable Cause' End of the Continuum).

"A child's 'private parts' are not subject to observation by school officials without significant justification. *One unreliable accusation* that Savana possessed *ibuprofen **at some unspecified time in the past and in an unknown location** did not provide sufficient reason to observe Savana's genital area and breasts*" (Savana Redding's merit brief before the U.S.S.C. p. 8-9 filed by the American Bar Association, emphasis added).

"[*Where] the intrusiveness of the search intensifies, the standard of Fourth Amendment 'reasonableness' approaches probable cause even in the school context*. ***Thus, when a teacher conducts a highly intrusive invasion such as the strip search in this case, it is reasonable to require that probable cause be present."*** (Brief of the Urban Justice Centre, Asian American Legal Defence and Education Fund, Advocates for Children of New York and the National Youth Rights Association, p.33, emphasis added).

Savana's position is based on her phenomenological experience of great humiliation and degradation as a result of the strip search. Savana, through her representatives, thus maintained that: a) only a high standard close to 'probable cause' could justify such an intrusive and adversely psychologically impactful search of the person of the child as she experienced and only when all other avenues have been exhausted, and b) the test for a strip search must also require independent evidence as to the likely precise location on the child's person of the alleged hidden contraband.

Justification Required at Each Stage of a Search if it Becomes Progressively More Intrusive Versus Reliance on the School Officials' Discretionary Judgment

The requirement in U.S. law to continually re-assess the propriety of a search the more intrusive it becomes places a burden on the school official ordering or conducting the search not to exceed his or her authority in violating the student's privacy to a greater extent than reasonably required in the circumstance. This requires a subjective and objective assessment of the situation, but is not a discretionary judgment.

3.1 NSBA and AASA, on Behalf of the School Board, Argued that Principals Need Not Continually Re-assess the Propriety of a Search as it Becomes More Intrusive When Searching for Pills or Other Small Contraband Items.

"Under the Ninth Circuit's decision…educators…must continuously re-assess the propriety

of the search…whenever the level of intrusion escalates during the search…*Imagine how complicated it would be for an educator to follow the Ninth Circuit's progressive search analysis for each level of intrusion*….When the objective of the search is to determine whether the student has concealed small items with potential for significant harm, on his or her person, then the search may need to be more intrusive to detect the items" (NSBA and AASA Amicus Brief p. 6-7, emphasis added).

The NSBA /AASA argued that any requirement for a continual re-assessment of the propriety of a search the more intrusive the search becomes would place an onerous and unworkable burden on the principal. The focus then is on what, from the phenomenological perspective of the school officials, would be the least onerous process for them and ensure that they would be perceived by their superiors as concerned with their own accountability to the State for school safety.

3.2 Savana Argued that there Must be Further Objective Justification at Each Escalation of the Escalating Intrusiveness of a Search Infringing the Privacy Rights of a School Child.

"The path from Marissa's accusation to Savana's being strip searched was quick and direct. [Marissa was a classmate and one time friend of Savana's who claimed that she had received pills from Savana at some unspecified time and location in the past]. Even though Wilson [the principal] already had isolated Savana in his office and thereby contained any possible danger to other students, he proceeded to strip search Savana [via his female delegates with Savana in the presence of females only and not being touched] without asking Marissa [the tipster] for any details about Savana's alleged misconduct and without seeking any information from Savana's *mother* or from other students or teachers. The record is silent as to whether the school ever determined the real source of Marissa's pills, but *what is clear is that the school strip searched Savana first, based on Marissa's vague, uncorroborated, and unreliable accusation, and only later began asking questions*" (Savanna Redding's merit brief through her legal guardian p. 5).

Savana argued that ongoing re-assessment of the legitimacy of a search as its intrusiveness escalates is a vital pre-condition for conducting a lawful search of a school child's belongings or person. In Savana's phenomenological world view, given her negative strip search experience, there must be an imperative that requires respect for the child's privacy to the greatest extent that is reasonable under the circumstances.

A Few Concluding Comments

This paper has presented an admittedly somewhat limited example of how qualitative research methods, and specifically text analysis, can be used to explore variable meanings assigned to so-called raw 'facts'. These variable meanings can be organized as emergent themes that are present in the mass of data at hand. In the example discussed that data is the voluminous legal texts created as submissions to the U.S. Supreme Court in a contentious case concerning the contours of a school child's privacy rights and freedom from school authorized searches of the school child's person by school personnel. What is clear is that the 'facts' are being interpreted in terms of the widely differing meaning contexts in which they are located by the various parties in the case. Hopefully, the mental health professional testifying in legal cases can help the judicial panel to understand these varying perspectives and the personal, social class, power, political, cultural and other contexts out of which they arise. In doing so, the mental health professional is contributing to what is essentially an informal qualitative research process in a legal setting.

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The authors have no financial relationships or conflicts to disclose.

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An Ecological Analysis of Child Sexual Abuse Disclosure: Considerations for Child and Adolescent Mental Health

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Abstract

Objectives: Research continues to indicate a concerning number of children and youth, between 60-80%, withhold disclosure until adulthood suggesting that many children endure prolonged victimization or never receive necessary intervention. The study aim was to qualitatively identify factors that impede or promote child sexual abuse (CSA) disclosure. **Methods:** Using a phenomenological design, forty adult survivors of CSA were interviewed about their disclosure experiences to provide retrospective accounts of their childhood and adolescent abuse experiences, disclosure attempts, and meaning-making of these experiences. **Results:** Findings show that disclosure is multiply determined by a complex interplay of factors related to child characteristics, family environment, community influences, and cultural and societal attitudes. An ecological analysis is offered to understand these complexities. Unless barriers to disclosure are eradicated, negative effects of CSA can persist manifesting in serious mental health issues. **Conclusions:** Practitioners can expect to work with children, adolescents and adults who have withheld disclosure or attempted to tell over time having experienced a wide range of responses. Multi-level intervention is recommended at the individual, community and macro-levels. Future investigations should focus on how to identify and measure the impact of community and macro level factors on disclosure, aspects that have received much less attention.

Key words: child sexual abuse, disclosure, qualitative phenomenological design, ecological analysis, child and adolescent mental health

Résumé

Objectifs: Un nombre inquiétant (entre 60 et 80 pour cent) d'enfants et d'adolescents attendent d'être adultes pour avouer qu'ils ont été victimes d'abus sexuels, ce qui laisse croire que ces abus se prolongent pendant des années ou que les victimes ne reçoivent jamais les services d'intervention nécessaires. Identifier les facteurs qui empêchent ou favorisent la divulgation des abus sexuels sur les enfants. **Méthodologie:** Quarante adultes victimes d'abus sexuels dans leur enfance ont été interrogés sur leur vécu. Les données recueillies ont été analysées depuis la perspective phénoménologique; les sujets ont fait un récit rétrospectif de leur expérience d'enfant et d'adolescent, de leur tentative d'aveu, et du sens qu'ils ont donné à leur expérience. **Résultats:** La divulgation est déterminée par divers facteurs complexes interconnectés, comme les caractéristiques de l'enfant, son environnement familial, les influences communautaires ainsi que les attitudes culturelles et sociales. L'analyse écologique se propose d'expliquer ces aspects complexes. Tant que des barrières empêcheront les victimes de parler, les abus sexuels continueront de se traduire par de graves problèmes de santé mentale. **Conclusion:** Les intervenants doivent savoir que les enfants, les adolescents ou les adultes avec lesquels ils travaillent peuvent avoir été victimes d'abus sexuels; les victimes ne l'ont peut-être jamais avoué ou, si elles ont tenté de le faire, elles se sont certainement trouvées confrontées à un grand nombre de réactions. Il convient d'intervenir aux niveaux individuel, communautaire et macroscopique. Les recherches à venir devront définir et quantifier le rôle – peu étudié jusqu'à présent – que jouent la communauté et les facteurs macroscopiques sur la divulgation de ces abus.

Mots clés: abus sexuel des enfants, divulgation, phénoménologie qualitative, analyse écologique, santé mentale de l'enfant et de l'adolescent

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While there have been recent significant advances in public awareness efforts along with prevention and intervention programs for child sexual abuse (CSA), disclosure of sexual victimization remains a difficult undertaking. By some estimates between 60-80% of CSA victims withhold disclosure suggesting that many children and adolescents endure prolonged victimization and do not receive necessary therapeutic intervention (Hébert, Tourigny, Cyr, et al., 2009; Jones, 2000; Paine & Hansen, 2002). Studies that examine latency to disclosure report a mean delay from 3 -18 years (Hébert, Tourigny, Cyr, et al., 2009; Smith, Letourneau, Saunders, et al., 2000). In the most recent Canadian study on prevalence and disclosure of CSA (Hébert, Tourigny, Cyr, et al., 2009), researchers concluded that almost 58% of victims delayed disclosing for five years or more, and 20% of their sample never disclosed to anyone. Of primary concern are the immediate and long-term effects of CSA which have serious and persistent mental health implications if left untreated. Most common negative effects of sexual abuse in childhood manifest in emotional and behavioural problems, post-traumatic stress symptoms, depression, suicidal ideation and self-harm behaviours, anxiety, substance abuse, aggression, self-esteem issues, academic problems, and sexualized behaviors (Beitchman, Zucker, Hood, daCosta, & Akman, 1991; Kendall-Tackett, Williams, & Finkelhor, 1993; Martin, Bergen, Richardson, et al., 2004; Putnam 2003; Walrath, Ybarra, Sheenan, et al., 2006). Long-term effects indicate increased risk for individuals with a sexual abuse history (vs. non-abused individuals) for major depression, suicide, addictions, post-traumatic stress disorder, anxiety disorders, antisocial personality disorder, dissociation, and sexual dysfunction (Dubé, Anda, Whitfield, et al., 2005; Gold, Lucenko, Elhai, et al.,

1999; Hébert, Tourigny, Cyr, et al., 2009; Putnam, 2003; Spataro, Mullen, Burgess, et al., 2004; Walrath, Ybarra, Sheenan, et al., 2006). Clearly, if victims are able to disclose when the sexual victimization is occurring, there is a greater likelihood that the abuse will be stopped and appropriate help will be received leading to better mental health outcomes.

However, barriers and facilitators of disclosure are still not that well understood. The aim of this study was to qualitatively identify dynamics that impede or promote disclosure by examining a range of factors including child and family features, environmental influences, cultural considerations, and societal attitudes. Identification and removal of barriers to disclosure means that victimization can be stopped and treatment can be offered to ameliorate short and long-term negative effects.

Method

Design

The research questions were formulated on a comprehensive review of the research literature as follows: 1) What individual and environmental influences impact disclosure of CSA and; 2) What contextual factors promote or impede disclosure in childhood? These questions suited an inductive, discovery-oriented inquiry using qualitative methodology. The study employed a phenomenological design -the Long-Interview method developed by McCracken (1988) compatible for collecting and analysing data involving process issues and for uncovering complex processes. This method lends voice to the 'lived experience' of CSA survivors and closely parallels the method developed by phenomenologist van Manen (1997). The study received approval from the investigator's institutional ethics review board, Health Sciences I at the University of Toronto.

Sampling

Purposive sampling, a method of qualitative sampling that targets participants on specific characteristics and experiences, was employed for this study (Creswell, 2007). The intent was to capture the experiences of both women and men, as well as those who disclosed during the abuse and those who withheld. Recruitment occurred through networking with social service agencies and advertising on a university campus. Challenges with sampling were encountered when trying to recruit male survivors. Since male participants were more difficult to locate snowball sampling was also employed, e.g. word of mouth where male participants were asked to refer other men they knew into the study. Over one-third (36%) of the final sample were men which is consistent with rates cited in incidence and prevalence studies (Cawson, Wattam, Brooker, & Kelly, 2000; Fergusson, Lynsky & Horwood, 1996; Putnam, 2003). Exclusion criteria included people under the age of 18 and anyone experiencing major mental health issues (e.g., actively psychotic or suicidal). Study participants reflected a mixed clinical and community sample although the majority had received treatment for their victimization at some point in their lives. Sampling was stopped at the point of saturation on the research questions posed. This is consistent with Creswell's (2007) assertion that categorical saturation can be achieved on a sample of 20-30 cases.

Data Collection Instruments

An in-depth interview guide was developed by the author in collaboration with a research advisory committee comprised of child and family practitioners, and mental health specialists. The interview guide probed: individual and family history; family background and dynamics; sexual abuse onset, duration, type; strategies used by the perpetrator in maintaining secrecy; disclosure attempts and outcomes; (mis)perceptions and beliefs developed by the victim; nature and quality of primary/significant relationships in childhood and adolescence; and environmental contributors, and cultural influences. Questions were open-ended and allowed room for participants to add comments that may not have been asked of them. The majority of the interviews were conducted by the author.

Data Analysis

Interviews were transcribed and then imported into N*Vivo, computer software used for the analysis of qualitative data. Phenomenological reduction was the primary method of data analysis in which transcendental (descriptive) and hermeneutical (interpretive) analyses were conducted (Ray, 1994; van Manen, 1997). Initially the interviews were read for descriptive data and thematic development. Line-by-line review of the transcripts was conducted to inform a first level coding framework that was later used to assist in the interpretive analysis. In the second stage, the interviews were imported into N*Vivo, coded, and higher-level codes were also determined. The use of N*Vivo software aided in managing these data, grouping of categories, creating memos for theme evolution, and analysis within and across interviews.

Trustworthiness

Reliability issues were addressed through credibility, dependability, and transferability typically used to establish trustworthiness in qualitative investigation (Drisko, 1997; Lincoln & Guba, 1985; Padgett, 1998). In qualitative research transferability takes precedence over generalizability. Uncovering processes and understanding context are the main concerns in examining the phenomenon. Trustworthiness of the data was ensured through prolonged engagement with the topic (the author's 20 years of experience in CSA counseling and program development), persistent observation through intensive interviewing and follow-up with individual participants, and peer debriefing of emerging themes with experts in

the field. Dependability of the data occurred through verbatim transcription of the interviews to prevent secondary revision or distortion of the narratives. An independent coder analysed a sub-sample of transcripts to notice if similar or different themes were emerging and if all themes were exhausted. This process was undertaken until consensus was achieved. In addition, theoretical triangulation was conducted in interpreting the findings, achieved in this study through using an ecological theoretical framework for deeper analyses of these data.

Results

Sample Characteristics

Data were generated through in-depth interviews with fourteen male (14) and twenty six (26) female survivors of CSA for a total of 40 interviews. The participants ranged in age between 18 and 65 with a mean age of 40.1 years. About two-thirds of participants were female and a little over one third were male. The average age of onset of abuse was 5.3 years old and the vast majority of the perpetrators were biological fathers, step-fathers, mother's partners and grandfathers. Participants were of diverse socio-economic background – middle-class, working poor, and homeless and 36% of the sample were non-white. Forty percent (42%) of the participants had disclosed the abuse during childhood; 32% had attempted some form of disclosure in indirect ways during childhood and; 26% had not disclosed because they had repressed the memory, or the abuse had occurred in pre-school years and they had difficulty with recall. Purposeful disclosure is slightly higher than reported in other studies because of the sampling attempts to purposefully locate disclosers.

In the initial analysis a thematic analysis was undertaken. Themes that emerged as having an impact on childhood disclosure included: individual and developmental factors; family dynamics; community context and societal attitudes. These themes closely paralleled the interview guide and supporting quotes for confirmability are presented below. Although these are presented as discrete thematic areas, they overlap in significant ways.

Individual Characteristics

Study participants were asked to describe themselves throughout their childhood and adolescence and in relation to disclosing the sexual abuse. Some quotes suggest that developmental factors entered into whether they comprehended what was happening, while temperament or personality traits also had some bearing on their ability to tell.

> *But I never had that thought as a child to tell. I just (pause) I don't know how or why the fear was there but I, I didn't know I could tell because we weren't allowed to talk about anything. (P9: f: 41).*[1]

> *I am still a very introverted person. I always will be. I am able to still be very withdrawn. I wouldn't have told you anything if I hadn't trusted you. (P7: f: 54).*

In other cases, descriptions indicated that the words just were not there for them. Another participant stated *'we tried to tell my mother'* yet concludes his statement by acknowledging that *'I couldn't come out and say it.' (P2: m: 36).*

Family Dynamics

Family themes that emerged indicated that CSA disclosure can be negatively affected by certain characteristics such as: rigidly fixed gender roles with dominating fathers; chaos and aggression; the presence of other forms of child abuse; domestic violence; dysfunctional communication and; social isolation. Notice that in this first quote, although the participant is talking about the past, the words come out as if the danger still exists in the present, even though his disclosure was highly publicized as part of uncovering a pedophile ring.

> *I do have the reality that I have death threats from my family for talking about the abuse, and I do have the reality that I could be killed. (P18: m: 43).*

Other study participants recounted closed communication patterns in their families:

> *But there was no communication, there was no talking, there was none and then my mother left us. (P4: f: 61).*

Many study participants also described high levels of aggression in the family unit which shut down possibilities of disclosure:

> *If he did some of the things he said he was going to do then he would have killed us. (P14: f: 29).*
> *He was abusive with me mostly, but with my mother yeah. Looking back now yeah he was very abusive with her. (P15: f: 32).*

Neighbourhood and Community

It was not surprising to find that participants spoke of the larger environmental impact they experienced as child victims, however the voluminous nature of detailed description was of particular interest. The vast majority of study participants noted how distressing it felt to experience a lack of empathy from neighbours. For example, one participant recounts how she was ostracized from neighbours and friends after the police came to their home responding to a domestic dispute call involving her father's assault on her mother. Following this incident her best friend pulled away from her:

> *And she said, 'I'm not allowed to talk to you any more. My mother said your family's not nice.' So I remember walking home and then after that I didn't make any attempts to make friends. (P4: f: 61)*

She further explained a 'snowball effect' taking place whereby she already felt isolated because of this incident

[1]*Participant ID#; gender; age*

and then the thought of telling anyone about her father sexually abusing her was far too overwhelming.

Study participants also noted a marked lack of involvement from school personnel when they had the expectation that someone should take notice and reach out:

> *I used to hate recess because I had no friends and I used to walk back and forth along the fence all by myself, hands in my pockets, head down, and I never spoke to anybody. I was always, always by myself. If one teacher would have asked me is there something wrong, I mean it would have helped. (P15: f: 32).*
>
> *I know, in high school the teachers just used to think of me as a loner and quiet and shy and just leave me alone. (P32: f: 45).*

When teachers did notice they did not seem to know how to pursue troubling behaviour:

> *I remember grade ten through twelve I would be terrified to go home. I would stay until the doors closed at school and the teachers always wondered why are you staying here so late, why don't you go home? I don't want to go home. (P9: f: 41).*

Finally, there were many statements around simply anticipating not being believed:

> *I just don't trust people or trust that people will respect it. They look down upon me or think there is something wrong or they won't believe it. There are all kinds of reasons. People just don't want to hear about it. (P14: f: 29).*

Cultural and Societal Attitudes

An enduring theme that surfaced through probing of larger structural and cultural influences was the richness of examples participants provided of messages they were exposed to through the media and in social circles. One woman whose abuse started at the age of 11 remembered commercials she viewed with young girls acting in seductive ways:

> *I don't know if I was maybe 11 or but um, seeing Brooke Shields in a jeans commercial on TV and her lying down and the jeans being unzipped and finding out how old she was ...Calvin Klein using 12-year-old girls. (P24: f: 31).*

This was confusing for her as she was being abused by a teacher and wondered if this was how girls her age were expected to behave. She was also conflicted because she enjoyed the attention of an adult as she was living in an emotionally deprived family environment.

Male survivors of CSA described a host of conflicts about disclosing on two levels –men shouldn't be victims and because they were abused by men this called into question their sexual orientation.

> *So in a way by saying to somebody you were sexually abused, is the fear of just having that 'feminine' thing attached to you. (P31: m: 34).*
>
> *I think it's because growing up, guys are always bombarded with the whole jock mentality, jock image that this is how a man is. (P26: m: 29).*

For some men this spun into hyper-masculinity and highly sexualized behaviour.

> *I didn't understand lovey-dovey feelings. I was strictly out for what I could get. Fulfill my own needs. I guess I was so sexualized that would make me feel more like a man and less confusion about homosexuality. (P1: m: 58).*

A pervasive theme was one of how they felt unheard as children. Participants at the age of 23 or 64 made references to cultural attitudes of children as being without voice:

> *However in sort of daily life there was a sort of um, a how do you call it? Sort of like, I think it was an element of sort of children being seen and not heard and not as full human beings. (P8: m: 64).*

This type of message (of not being heard) lead some participants to assume that if they told they would be dismissed:

> *Now when I get older it is the fear of telling because I am being blamed, well you should have done it then, maybe you don't remember, how can you remember that many years ago? (P14: f: 29).*

Higher level analysis revealed important sub-themes that became apparent as these categories were collapsed and refined, and relationships among categories were explored. This stage of the analytic procedure identified important sub-themes related to the interactive dynamics of disclosure indicating how both victims and recipients of disclosure are impacted by greater structural and cultural forces. Just as the individual child or youth is affected by environmental, cultural and structural influences, significant people in their lives may also be impacted by these same factors in their response to disclosure. For those individuals who attempted disclosure at the time of abuse or shortly after onset (40%), responses were consistently insensitive. One participant explained:

> *I told my mom when I was in grade one about our neighbor's daughters, that they were doing things with each other and to me, but it caused a whole lot of ruckus. (P8: m: 52).*

An unpleasant situation unfolded for him when his mother did take action and spoke to the parents of the girls, who immediately denied the events, with the parents accusing the boy of fabricating the story. His account was made more difficult to endorse because the girls corroborated each other's stories. He further explained that he was ostracized and isolated at school and in his community after that.

The following participant was entering adolescence when an older cousin started to sexually molest him. Upon

telling his mother she believed that her son should put a stop to it, emphasizing that he would if he really didn't like it, as if he had enough personal agency to stop it.

> *I just described to her what he did to me one day (long pause) and she just told me to stay away from him. She said that if I really didn't like it that I should stop him. (P10: m: 28).*

This participant believed that his mother did not want to disrupt and upset the family by confrontations around sexual abuse. He described her attempts to reduce his contact with his cousin but that he ultimately did not feel fully supported by her. He further explained that she was a single mother and did not want to alienate her family for the support they offered her.

In the following situation a young girl disclosed to her aunt after she had initially told her mother, who did not take steps to protect her from her step-father's sexual abuse. However, because the family was in a socially prominent position, and her step-father held a high rank in the military, she believed she was silenced to preserve the family's elevated status and his job.

> *So I finally decided to tell my aunt one day what was going on and she acted just like my mother and started to get abusive too. (P7: f: 54).*

In another case when child welfare authorities found out about the abuse and removed the teen from her family, the participant's mother later asked why she hadn't told her after which her mother blatantly admitted she wouldn't have believed her disclosure anyway. At the time the sexual abuse had been discovered, the participant was a rebellious teenager who was drinking heavily and engaging in other substance abuse. She had also started running away from home so that the mother-daughter relationship was very strained. Any of these behaviours could have been attributed to the abuse which had not yet been disclosed.

> *At that point I had disclosed after to my mother and she said, 'why didn't you tell me before' and I said 'because I didn't think you would have believed me' and she said 'you know you are right. I may not have at the time'. I mean I love her for her honesty (laughs) but you know? (P22: f: 38)*

Professionals were also noted to have responded ineffectively by involving the family and increasing the risk to the abused child who in the following case had disclosed to a teacher at the age of seven:

> *Then the teacher found out and I was told to go to the principal's office. At the principal's office, we didn't have a telephone, my mom and dad and I ended up with my grandmother finding out and she locked me up for two weeks, saying I was lying and I was terrible and I was telling all of these lies. (P36: m: 47).*

Others responded in biased and discriminatory ways, in this case racist, when a young adolescent disclosed to her physician:

> *He actually, he said to me – and he's still a doctor there- um, he said to me 'well that's not sexual assault, you were old enough [13 or 14]. You probably enjoyed it, you know. You girls in those countries enjoy those things anyway, that's not sexual assault'. (P24: f: 31).*

Discussion

Interview data from this study show that disclosure of child sexual abuse is multiply determined by factors related to child characteristics and history, family dynamics, community context, and larger cultural and societal attitudes. It is a complex process, not easily defined and is shaped by what each individual brings to it and their unique set of circumstances. As well, these data confirm that disclosure is an on-going process not a single event (Bradley & Wood, 1996; Sorensen & Snow, 1991; Summit, 1983). While the study objectives set out to identify both barriers and facilitators of disclosure, unfortunately barriers far outweighed facilitators.

When trying to make meaning of these data an ecological theoretical framework was used for organizing and analyzing the vast amount of information brought forward through the participants' narratives. In-depth analyses of the study data demonstrate a close fit with ecological theory. Drawing from Bronfenbrenner (1979), and Belsky's (1980) ecological theoretical framework initially used for understanding the interplay of factors contributing to child abuse, it became clear that this framework can also be extended to disclosure of CSA for a fuller understanding of child victims. The ecological framework rests on the premise that individual behavior can only be understood by taking into account factors at each of: ontogenic, micro-system, exo-system and macro-system levels (Bronfenbrenner, 1979). Ontogenic development deals with the personal history and characteristics of the individual; micro-systems involve the immediate context of the individual (e.g., family and other intimate relationships); exo-systems refer to formal and informal structures such as neighbourhood, community, social networks and their availability and; macro-systems include cultural values and belief systems that impact on the individual.

Ontogenic Level Factors – Individual Characteristics: The age of onset of abuse had a significant impact on CSA disclosure in this sample. The younger the child was when the abuse started, the more difficult the disclosure. Obvious developmental constraints related to cognitive and verbal functions, and recall ability, hindered intentional disclosure. Behavioural indicators were most often cited as 'signals' of victimization. Study participants described behaviors ranging from clinging and temper tantrums as younger children, to angry outbursts as adolescents, serious substance abuse, withdrawal, eating problems, avoiding being at home or running away to alert adults to problems (see Alaggia, 2004 for expanded typologies of disclosure).

An intervening variable was the temperament or personality of the child. Adults in this sample retrospectively recounted personality characteristics and described themselves as either withdrawn or introverted children or as acting out and disconnected from feelings. It is difficult to tell whether these were internalizing or externalizing effects as a result of CSA, manifesting after the onset of abuse, or whether these were traits of the child before the onset of abuse that both affected their ability to disclose and were vulnerabilities for being abused.

Micro-System Level Factors – Family Environment: Family characteristics were probed to understand the impact of family environment in the context of disclosure but not for causal CSA factors. However, the families of survivors were largely described as chaotic, ruled by aggression, plagued by substance abuse, closed systems that were uncommunicative and socially isolated –all factors that silenced the child victims. The predominance of these characteristics in this study sample can be explained by turning to the work of Alexander and Schaeffer (1994) who studied typologies of incestuous families. They found "Cluster 3 families" to be the most pathological and dysfunctional of these families marked by high levels of conflict and control, violence in the parental unit, less emotional bonding, and the presence of other forms of child abuse such as physical abuse. In the current study two thirds of the sample described family environments very similar to "cluster 3" descriptions. The families in the study sample were characterized by high levels of violence, such as threats of murder, and poor parental response to disclosure indicating less emotional bonding. This may account for the preponderance of non-disclosures and indirect disclosures (see Alaggia & Kirshenbaum, 2005 for detailed description).

Finally, another contributor to non-disclosure was the presence of intimate partner violence in this sample with the adult victim most often being the mother. The co-occurrence of woman abuse and child sexual abuse has been documented elsewhere and is remarkably high. This family dynamic also has serious implications for both disclosure and response (Alaggia & Turton, 2005; Kellogg & Menard, 2003). Clearly, disclosure became more complicated for child victims in the face of their mothers' victimization. When both the child and a parent are being victimized by one perpetrator the prospect of telling becomes more frightening.

Exo-System Level Factors – Neigbourhood and Community Influences: Contextual aspects have been much more difficult to identify and measure in terms of their impact on disclosure of CSA. A qualitative approach is a starting point for unearthing these factors and the themes brought forward through this study give guideposts for areas of further investigation. Overall, participants described their communities as uncaring or unknowledgeable in how to handle their behaviours or their disclosures. It should be taken into account that the sample mean age reflected a generally older cohort which indicates that they may not have been exposed to newer sexual abuse awareness and prevention programs. Future research could utilize stratified sampling to include adults who have been recipients of in-school prevention programs and more recent child welfare legislation.

Macro-System Level Factors – Cultural and Societal Attitudes: As with exo-system factors, little is known about the impact of cultural and societal attitudes. One area that becomes clearer through these data is how socialized gender roles and subsequent expectations pervaded through cultural messaging. Men reported being profoundly affected by prevailing attitudes about masculinity and images of men as supposed to be immune to victimization or as being perceived as inadequate when victimized. They feared being identified as homosexual and being the target of unfair treatment if they disclosed abuse by a male perpetrator. A few described adopting hyper-masculine stances to counter these fears. Male victimization is beginning to be more closely examined but needs to be further explored in terms of disclosure and on larger samples (Alaggia & Millington, 2008; Gartner, 1999). Women were equally as affected by a culture of sexist and patriarchal attitudes inhibiting their ability to disclose. They were more likely to fear being blamed and described feeling more responsibility for their victimization and for repercussions of telling. They anticipated being disbelieved, and blamed for the abuse (or for not stopping the abuse). As well, both women and men described being raised with attitudes that children do not count. The phrase "children should be seen but not heard" was frequently recited by participants as commonly heard throughout their childhoods.

Study Limitations

Using a retrospective sample is one constraint of the study that should be noted. Recounting events that occurred in childhood is subject to memory failure, distortion and revision of events. Although the range of age of participants was broad the sample mean age was 40.1 and therefore the experiences of a younger cohort are not as well represented. The sample is also skewed to those who did not disclose, or attempted to disclose on childhood/adolescence but were met with disbelief or minimization. Therefore they recounted more negative factors in their narratives. Future studies should focus on securing a sample of disclosers who experienced positive responses in childhood to better identify and understand the facilitators of disclosure.

Implications for Practitioners

Although CSA disclosure is hoped for at the onset of victimization, our best research to date is still showing a consistent trend of disclosures being commonly delayed or withheld. The present study has documented that individual level factors partly account for non-disclosure, but

that a host of environmental factors are also implicated in withholding disclosure. Based on the narratives of the study participants, practitioners should be prepared for disclosures of historic sexual abuse given that so many victims only disclose childhood victimization in adulthood. Patients will often present in therapy with other complaints or problems such as depression, addictions, eating disorders, relationship issues, sexual dysfunction, aggression and so forth, before revealing sexual trauma in childhood.

Practitioners can expect to work with children, adolescents and adults who have attempted to tell over time in different ways, having experienced a wide range of responses. Thus, it is important for professionals to inquire about reasons for withholding, all attempts to tell, responses following disclosure, and consequences of telling. Information should be gathered about family and other intimate relationships since certain family characteristics increase risk for lack of disclosure.

At the practice level, promoting primary prevention, such as awareness programs and parenting programs, and secondary prevention aimed at larger structures such as the media and justice system should be developed and sustained, as these influences can have profound effects on how children and youth perceive abuse, and anticipate responses to disclosure based on cultural messaging. The promotion of such programs also has the potential to reach parents and professionals to sensitize them to possible disclosures and preferable responses. More comprehensive work should also be focused at the community level and macro-systems with further research to assist in identifying and measuring these factors and their impact on disclosure, as well as responses to disclosure. It is important to keep in mind that the forces which influence children and youth in their disclosures are the same forces that permeate society and influence the responses of people to whom youth might disclose.

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Keli Anderson & Jana Davidson (Guest Editors)

PSYCHOPHARMACOLOGY:

How Does This Happen? Part I: Mechanisms of Adverse Drug Reactions Associated with Psychotropic Medications

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Abstract
Objective: To review the background and mechanisms behind how certain psychotropic medications cause adverse drug reactions.
Methods: A literature review pertaining to several interesting and unusual adverse drug reactions attributed to selected psychotropic medications was conducted. These include: 1) QTc interval prolongation secondary to ziprasidone, pimozide, and other antipsychotic agents. 2) Nephrogenic diabetes insipidus and hypernatremia secondary to lithium. 3) Hypothyroidism secondary to lithium. 4) Erectile dysfunction secondary to selective serotonin and serotonin/norepinephrine reuptake inhibitors (SSRIs/SNRIs).
Results: Biochemical mechanisms of how certain psychotropic medications cause adverse drug reactions were reviewed. Specific interventions and monitoring recommendations to prevent or reduce the impact of these adverse reactions are discussed briefly.
Conclusion: Knowledge of risk factors and mechanisms of adverse drug reactions with psychotropic medications can help to guide medication prescribing, monitoring and interventions to prevent or mitigate these reactions.

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Introduction

Like almost all available drugs, psychiatric medications are associated with a wide variety of possible adverse effects. As clinicians we need to be aware of the common, rare and serious adverse effects of the medications our patients are taking. However, due to busy demands of training and clinical practice, there isn't always an opportunity to step back and consider ***how*** these adverse reactions occur, and what the underlying mechanisms are. The authors present several cases illustrating some interesting, common and potentially serious adverse reactions of psychotropic medications, followed by a discussion of the current knowledge of the underlying mechanism of these reactions, and recommendations for monitoring and interventions that may help prevent or reduce the impact of these reactions.

Please note: All cases presented in this article are based on real clinical situations, but are non-exhaustive in their level of detail. Some details have been modified for illustrative purposes only in order to highlight a possible presentation of the adverse reaction being discussed.

Case #1

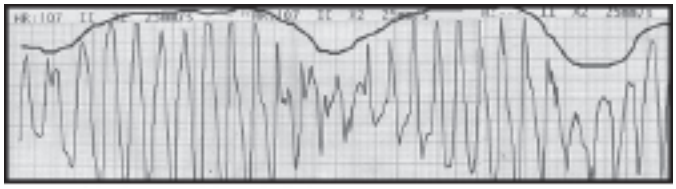
WR is an 18-year old female who has a psychiatric history significant for mood disorder NOS with psychotic features, PTSD and Axis II cluster B features. She was first admitted to the intensive care unit with lithium toxicity (lithium level 5.57 nmol/L (normal: 0.6-1.2 nmol/L)) requiring dialysis. Other findings included QTc interval of 580 msec (normal: <450 msec in females) and a decreased serum potassium level of 2.7 mmol/L (normal: 3.5-5 mmol/L). She was taking lithium (dose not specified) and ziprasidone 80 mg twice daily at the time of admission. Lithium and ziprasidone were discontinued and she was started on olanzapine. On repeat ECG, her QTc interval was 440 msec and she was discharged.

Two weeks later she was re-admitted to hospital with a chief complaint of chest pain. On ECG, her QTc interval was 600 msec with serum potassium level of 3.3 mmol/L. She experienced a non-sustained run of Torsades de Pointes. She had been retitrated to ziprasidone 80mg twice daily because olanzapine was ineffective. Ziprasidone was discontinued at this point, and she was started on aripiprazole. On repeat ECG, the QTc interval had normalized at 445 msec.

Antipsychotic-induced QTc prolongation - how does this happen?

Prolongation of the heart-rate corrected QT interval (QTc) on the electrocardiogram (ECG) is a concern with many antipsychotic drugs in addition to ziprasidone. The antipsychotics thioridazine, mesoridazine, droperidol, pimozide and haloperidol have all been identified as potentially causing significant QTc prolongation (Haddad & Anderson, 2002). Other 1st-generation and 2nd-generation antipsychotics have also been shown to prolong QTc to a lesser extent at standard doses (Haddad & Anderson, 2002, Harrigan et al. 2004). QTc prolongation is not harmful in itself, but is a surrogate marker of an increase in the risk of developing the potentially life-threatening ventricular arrhythmia Torsades de Pointes (TdP, as shown in Figure 1). Translated from French, this is literally "twisting of the points" about the isoelectric line on the ECG. The risk of developing TdP increases with increasing length of the QTc interval, but the relationship is not linear (Haddad & Anderson, 2002). Normal values for QTc interval are less than 440 msec in males, and less than 450 msec in females. Prolongation of QTc interval is clinically concern-

Figure 1. ECG tracing showing Torsades de Pointes



ing when the value increases by more than 60 msec compared to a drug-free baseline measurement, or when increased above an absolute value of 500 msec (Haddad & Anderson, 2002).

There is considerable diurnal variation of QTc interval (Morganroth et al., 1993), and it may also fluctuate in response to exercise and meal intake. Additional patient factors for QTc prolongation include female gender, being over age 65 and medical conditions such as diabetes, smoking, liver disease, hypokalemia, hypomagnesemia and history of heart disease including bradycardia, heart failure, ischemia and congenital long-QT syndrome. QTc prolongation varies by drug (Haddad & Adnerson, 2002, Harrigan et al., 2004) and other drug related factors include pharmacokinetic drug interactions (those resulting in increased blood levels of known QTc prolonging agents, e.g. erythromycin and ziprasidone, fluvoxamine and pimozide), pharmacodynamic drug interactions (additive effects of concurrent intake of known QTc prolonging agents, e.g. pimozide and clomipramine, moxifloxacin and ziprasidone), and drug dosage exceeding the manufacturer's recommended upper limit (Kao & Furbee 2005, Zemrak & Kenna, 2008).

Virtually all drugs that cause QTc prolongation, including antipsychotic agents affect QTc interval via *I*Kr blockade (Haddad & Anderson, 2002). Human cardiac potassium channels are coded for by the human *ether-à-go-go*-related gene (hERG), and these potassium channels are often referred to as hERG channels (Kongsamut et al., 2002). hERG forms the major portion of one of the ion channel proteins (the 'rapidly activating' delayed rectifier current (*I*Kr)) that conducts potassium ions out of the cardiac myocytes, and this current is critical in correctly timing the repolarization of the cell membrane during the cardiac action potential (Haddad & Anderson, 2002).

Interestingly, the hERG gene is the human homolog of the *Ether-à-go-go* related gene found in the common fruit fly Drosophila. This gene was named in the 1960s by William Kaplan, who found in experiments that when flies with mutations in this gene were anesthetized with ether, their legs started to shake, resembling the dancing then popular at the *Whisky à Go-Go* nightclub in Los Angeles, California (Swain, 2007).

Recommended management of the risks for antipsychotic-induced QTc prolongation include assessment of personal and family cardiac history, including inquiry about sudden cardiac death. For drugs with a warning regarding QTc prolongation, determination of serum potassium and magnesium levels and correction of electrolyte abnormalities should be performed prior to starting treatment. Routine baseline ECG testing is often not explicitly mandated in manufacturer prescribing information. Many of these drugs are commonly prescribed for children despite limited study in the pediatric population. Some clinicians will choose to obtain an ECG at baseline and again on treatment once the target dosage is achieved. If an ECG is obtained, a baseline QTc interval above 440 msec in males or 450 msec in females is considered a contraindication to treatment with any drug known to significantly prolong QTc interval. Additionally, the drug should be discontinued if the QTc interval increases by 60 msec or more from baseline, or an absolute increase above 500 msec occurs with treatment. Use of antipsychotics known to cause significant QTc prolongation should be avoided in a patient with history of cardiac arrhythmias, long-QT syndrome, recent acute myocardial infarction or uncompensated heart failure, or with other drugs known to significantly inhibit their metabolism, or have the potential to cause additive QTc prolongation (Pfizer Canada Inc. 2007).

As of 2005, guidelines for the nonclinical evaluation of human pharmaceuticals for the potential of QT interval prolongation and delayed ventricular repolarization have been developed (European Medicines Agency, 2005). Assessment via this process may limit the number of drugs with significant QTc prolongation that undergo clinical testing and reach the market. It was recently noted that QT prolongation associated with arrhythmia or TdP was the number one reason for withdrawals or restrictions of drugs from the US market over the previous 10 years (Kao & Furbee 2005).

Verdict: Mechanism established

Case #2

A 15-year-old male was admitted to the inpatient psychiatric emergency ward secondary to wide mood swings, which were mostly depressive in nature, and were accompanied by homicidal and suicidal ideation. The patient had previously been diagnosed with bipolar disorder and attention deficit/hyperactivity disorder (ADHD). He was taking lithium 1200 mg twice daily and olanzapine 15 mg once daily. His lithium level on admission was 1.0 mmol/L (normal therapeutic range: 0.8-1.2 mmol/L) and sodium was 144 mmol/L (normal range: 135-145 mmol/L). He presented with significant polydipsia, drinking at least 10 liters of water a day prior to admission, accompanied by frequent urination. Urine osmolality was 136 mmol/L (normal range: 50-1200 mmol/L) and urine specific gravity of 1.003 g/mL (normal range: 1.002–1.028 g/mL) indicative of dilute urine. In hospital, his water intake was initially restricted by staff and his sodium level increased to 154. Following a water deprivation test, a diagnosis of

nephrogenic diabetes insipidus was made. Lithium was discontinued, which was followed by a reduction in the patient's thirst and water intake. The sodium level returned to within the normal range 9 days following lithium discontinuation.

Lithium and Nephrogenic Diabetes Insipidus - how does this happen?

Nephrogenic diabetes insipidus (NDI) takes its name from the Greek term *diabaínein* meaning "a siphon" or "to pass through" and the Latin *insipidus*, meaning "not savory" or "lacking flavor", accurately describing the prominent symptom of this condition which is production of a large volume of dilute urine. NDI is also characterized by severe thirst and excessive water intake. The term *nephrogenic* denotes the underlying impairment in the kidney with an impaired response to vasopressin (antidiuretic hormone (ADH)). This distinguishes this condition from related conditions such as central diabetes insipidus, and primary polydipsia (Cheetham & Baylis, 2002). NDI can be distinguished from these related conditions through performance of a water deprivation test; when a patient with NDI is deprived of water intake, sodium levels become elevated (Khanna, 2006).

Lithium causes NDI by entering the renal collecting tubule cells through epithelial sodium channels (ENaC). Unlike sodium, lithium is not exported from the cell by the sodium potassium-adenosine triphosphate pump (Na^+,K^+-ATPase); therefore, it accumulates intracellularly to cytotoxic concentrations and leads to ADH resistance by inhibition of signaling pathways. These pathways involve glycogen synthase kinase type 3 (GSK-3), an enzyme that is involved in glycogen metabolism and controlling water transport via aquaporin-2 (AQP2) channels and sodium transport via ENaC (Grünfeld & Rossier, 2009). In rat studies, lithium decreases the density of ADH receptors which decreases adenylate cyclase stimulation, leading to down regulation of AQP2 channels (Christensen et al., 1985, Marples et al., 1995). Reduction in AQP2 channel insertion into the apical membrane leads to delivery of hypo-osmotic fluid to the medullary collecting duct, and a limited capacity to reabsorb water. These functional changes are associated with structural changes in collecting duct cell composition and morphology. While evidence indicates ENaC expression along the collecting duct have a major role in production of lithium-induced NDI, questions remain concerning effects of lithium on other signaling pathways (Grünfeld & Rossier, 2009).

Though it appears counter-intuitive, diuretics such as hydrochlorothiazide and amiloride are used to treat NDI (Cheetham & Bayliss, 2002). Hydrochlorothiazide inhibits sodium reabsorption in the distal renal tubules and increase excretion of water, sodium, potassium and hydrogen ions. However, volume contraction induced by hydrochlorothiazide can lead to increased lithium serum levels and potential for lithium toxicity. Hypokalemia induced by hydrochlorothiazide may also contribute to a defect in urine concentrating ability.

Amiloride is a potassium-sparing diuretic and ENaC inhibitor and partially restores urine concentrating ability by blocking uptake of lithium through ENaC channels. Experimental and clinical evidence demonstrates the efficacy of amiloride for the treatment of lithium-induced NDI (Bedford, et al., 2008). Amiloride has a weaker natriuretic effect, induces less volume contraction compared to hydrochlorothiazide, and will not induce hypokalemia.

Non-steroidal anti-inflammatory drugs (NSAIDs) such as indomethacin increase cyclic adenosine monophosphate (cAMP) in the renal collecting tubules. This promotes water resorption, and inhibits prostaglandin production, decreasing urine flow to the distal tubules, leading to reduction in urine output (Cheetham & Bayliss, 2002).

Verdict: Mechanism not yet established

Case #3

A 9-year-old Caucasian male with a diagnosis of bipolar disorder was well managed with lithium treatment (dosage/lithium level not specified) for manic symptoms and explosive behavior. However, he exhibited a significant reduction in total T4 (thyroxine) levels from 95.2 to 75.9 pmol/L (normal: 58-161 pmol/L) with a concomitant compensatory elevation in TSH from 3.7 to 5.9 mIU/L (normal range: 0.3-5 mIU/L) during the drug trial. The addition of levothyroxine 50 mcg per day to his drug regimen successfully returned his TSH levels to within the normal range (4.3 mIU/L).

Lithium and Hypothyroidism - how does this happen?

It is well known that lithium can cause hypothyroidism, but just how does it affect the physiology of the thyroid gland and the chemistry of thyroid hormones? Lithium concentrates in the thyroid gland and can cause the following: inhibition of the uptake of iodine into follicular cells, alteration of the structure of thyroglobulin by interfering with the coupling of iodotyrosine residues to form iodothyronines, and inhibition of thyroid hormone secretion (Davies & Franklyn, 1991, Livingstone & Rampes, 2006). It also has been observed that conversion of T4 to active triiodothyronine (T3) is decreased in both animal and human models (Terao et al., 1995). Lithium is a known goitrogen, and lithium-induced goiter is thought to be caused by increased TSH secretion (Grandjean & Aubry 2009).

There is a relationship between lithium and autoimmunity. Lithium does not induce antithyroid peroxidase (TPO) antibodies, but rather exacerbates pre-existing thyroid autoimmunity by stimulating the secretion of immunoglobulins by lymphocytes (Livingstone & Rampes, 2006). If TPO antibodies are present, continuation of thyroxine will be required even if lithium is discontinued (Livingstone & Rampes, 2006).

Risk factors for developing lithium-induced hypothyroidism include: female gender, first degree relative with hypothyroidism, elevated thyroid stimulating hormone (TSH) at baseline, weight gain, pre-existing antithyroid antibodies, iodine deficient diet, higher lithium levels and rapid cycling bipolar disorder (Livingstone & Rampes, 2006). Monitoring is important since clinical signs and symptoms of hypothyroidism are non-specific and insidious in onset. Patient assessment prior to starting lithium treatment should include: physical examination, checking for presence of goiters and assessment of risk factors for developing lithium induced hypothyroidism. In addition, measurement of TSH levels and antithyroid antibodies are recommended at baseline. TSH should be repeated in 3 months, then every 6 to 12 months thereafter unless the patient develops symptoms of hypothyroidism. Overt hypothyroidism should be treated with a thyroid supplement and TSH should be re-checked regularly (Livingstone & Rampes, 2006).

Verdict: Mechanism established

Case #4

LD is a 19-year-old Caucasian male with a past psychiatric history significant for recurrent Major Depressive Disorder. He has responded to treatment with fluoxetine 10mg daily for 4 years and experienced worsening of depression within 10 to 14 days each of the four times he attempted to discontinue fluoxetine. LD is not receiving any other medications, and denies illicit substance use. Upon questioning him about why he repeatedly stops his fluoxetine treatment, including specific questioning about sexual side effects, he reveals he is usually unable to reach orgasm and he experiences mild erectile dysfunction while taking fluoxetine. These sexual side effects diminish each time he stops the medication and return shortly after fluoxetine is restarted.

SSRIs/SNRIs and Erectile Dysfunction - how does this happen?

Sexual effects such as erectile dysfunction, delay or inability to reach orgasm and decreased libido are commonly reported by patients taking selective serotonin reuptake inhibitors (SSRIs) and serotonin/norepinephrine reuptake inhibitors (SNRIs) (Rosen, Lane & Menza, 1999). However, sexual dysfunctions are also highly prevalent in both genders in the general population, and occur at a higher rate in patients with mood disturbances (Angst, 1998, Corona et al., 2009, Kennedy & Rizvi, 2009) making it difficult to estimate the prevalence of SSRI/SNRI-induced sexual dysfunction. Manufacturer and literature estimates of rates of SSRI/SNRI-induced sexual dysfunction in adults may underestimate the problem, and very little information about SSRI/SNRI-induced sexual dysfunction exists for the adolescent population. With the exception of behavioural disinhibition, reported rates of non-sexual adverse effects of SSRIs are generally similar between adolescents and adults (Scharko, 2004), and while data is lacking, it is biologically plausible that sexual effects also occur at similar rates in adolescents. Recent research on SSRI/SNRI-induced sexual dysfunction estimates range from 22% up to 60% in adult patients (Corona et al., 2009, Kennedy & Rizvi, 2009). Underreporting of sexual side effects may be due to reliance on patient self-report coupled with patient and/or clinician discomfort discussing these effects. This effect may be more pronounced during monitoring of adolescents taking these medications. For instance, during the period 1991-2002, the adverse event reporting system of the US Food and Drug Administration (Medwatch) received a total of 8 reports of SSRI-induced sexual dysfunction in adolescents (Scharko, 2004). Direct questioning about sexual side effects is recommended for patients being treated with SSRIs. Consideration regarding patient age, cultural, personal and psychodynamic factors must be taken into account. Structured questionnaires exist for the assessment of sexual function in adults, but not for adolescents (Rosen, Lane & Menza, 1999, Scharko, 2004, Kennedy & Rizvi, 2009). The clinician may need to initiate the conversation, ask about, name and describe in age-appropriate terms specific aspects of sexual dysfunction in order to elicit the presence of these effects.

These medications are often thought of as affecting only serotonin (and norepinephrine) 'selectively', and that the observed sexual dysfunctions must be directly related to an action of these one or two neurotransmitters. However, the exact mechanism has not yet been identified, and several possible mechanisms for SSRI/SNRI-induced sexual dysfunction exist. The first half of a clinical axiom is that an increase in serotonergic neurotransmission tends to diminish sexual function. While this is apparent, various neurotransmitters and neuropeptides beyond serotonin are involved in the sexual response. Sexual dysfunction has been linked to post-synaptic actions of serotonin, decreased dopaminergic transmission, cholinergic and $alpha_1$ adrenergic blockade, inhibition of nitric oxide synthase, and prolactin elevation (Kennedy & Rivzi, 2009).

Serotonin (5-HT) is a prominent neurotransmitter in the central nervous system, involved in regulating mood, sleep, appetite, muscle contraction, memory, learning and sexual function. There are as many as 15 different known serotonin receptor subtypes identified across 7 families (Glennon, Dukat & Westkaemper, 2000). When a medication that inhibits serotonin reuptake is taken, overall serotonergic transmission is increased "across the board". Agonism at $5\text{-}HT2_{A/C}$ post-synaptic receptors is associated with inhibition of the mechanistic aspects of sexual function (Keltner, McAfee & Taylor, 2002).

Drugs that have properties of post-synaptic $5\text{-}HT2_{A/C}$ blockade such as mirtazapine, trazodone and nefazodone (nefazodone was removed from the Canadian market in

2004) have been shown to have minimal rates of sexual dysfunction, and are utilized as augmentation agents for the treatment of SSRI/SNRI-induced sexual dysfunction (Serretti & Chiesa, 2009, Stryjer et al., 2009).

The second half of the aforementioned clinical axiom is that a decrease in dopaminergic neurotransmission is also associated with sexual dysfunction. Sexual dysfunctions are seen with dopamine antagonists such as antipsychotic drugs (Meyer, 2008). Dopamine reuptake inhibitors such as bupropion and dopamine agonists such as amantadine, amphetamine derivatives and methylphenidate are associated with low rates of sexual dysfunction and utility as augmentation agents for the treatment of SSRI/SNRI-induced sexual dysfunction (Woodrum & Brown, 1998, Serretti, 2009). Serotonergic neurons arise from the raphe nuclei in the midbrain and some project to and innervate mesolimbic dopaminergic neurons, indirectly inhibiting this pathway (Stahl, 1998). Additionally, while SSRIs are thought of only as affecting the serotonin transporter, as implied by their nomenclature, some SSRIs possess affinity for the dopamine reuptake transporter more than others within this class. Among the SSRIs, receptor affinity for the dopamine transporter, expressed by the 50% inhibitory concentration (IC_{50}) (with lower values indicating greater affinity) for sertraline was 48 nM. The next most potent agents are fluoxetine and paroxetine, with IC_{50} values of 5000 nM and 5100 nM respectively (Rosen, Lane & Menza, 1999). However, in a large meta-analysis of antidepressant treatment-emergent sexual dysfunction, rates of sexual dysfunction with sertraline were similar to both fluoxetine and paroxetine (Serretti & Chiesa, 2009).

As clinicians we are aware that blockade of dopaminergic neurons by antipsychotics drugs often leads to a significant increase in prolactin. While dopaminergic inhibition is the main physiological control of prolactin secretion, prolactin elevation is also observed following treatment with some of the SSRIs, particularly sertraline, but this effect has also been noted with fluoxetine and paroxetine (La Torre & Falorni, 2007). Serotonergic neurons project from the raphe nuclei to the medial basal hypothalamus, and stimulate prolactin release via $5\text{-}HT_{1A}$ and $5\text{-}HT_2$ receptors (La Torre & Falorni, 2007). The action of serotonergic innervation is indirect, exerting its effects via prolactin-releasing factors such as vasoactive intestinal peptide (VIP). Elevated prolactin levels are also associated with sexual dysfunction (Holt, 2008).

Stimulation of the parasympathetic nerves produces vasodilation and relaxation of cavernous tissue, leading to penile erection. This effect is blocked by administration of the classical anticholinergic, atropine. Certain SSRIs may also cause anticholinergic effects. Among the SSRIs, paroxetine has the greatest affinity for the muscarinic M_3 receptor, and has approximately one-fifth of the anticholinergic potential as nortriptyline. Cholinergic neurotransmission may have a modulating influence on other neurotransmitter systems (Rosen, Lane & Menza, 1999).

Nitric oxide is a key mediator of erection. Nitric oxide binds to guanylate cyclase receptors and results in an increase in levels of cyclic guanylate monophosphate (cGMP) which promotes smooth muscle relaxation and penile arterial vasodilation (Webb et al., 1999). Paroxetine, but not citalopram has been shown to inhibit the enzyme nitric oxide synthase (NOS) in rats (Angulo et al., 2001). Inhibitors of NOS inhibit penile erection elicited by the stimulation of pelvic nerves. The NOS enzyme is structurally similar to the cytochrome p450 enzymes. Inhibition of NOS by paroxetine may be related to its ability to potently inhibit certain p450 enzymes. In contrast, citalopram has minimal p450 inhibitory activity. Currently available drugs for erectile dysfunction such as sildenafil, vardenafil and tadalafil work by promoting cGMP induced vasodilation via inhibition of phosphodiesterase-5.

Sexual dysfunction induced by SSRIs/SNRIs appears to be dose-related and among the available SSRIs may occur more commonly with paroxetine. A multi-factorial etiology appears likely. Many interventions to treat/reduce sexual dysfunction have been employed with variable degrees of success. Common approaches include: “wait and see”, antidepressant dosage reduction, temporary drug holidays, changing antidepressant treatment to a drug with lower reported rates of sexual dysfunction, or augmentation with various agents (Keltner, McAfee & Taylor, 2002).

Verdict: Mechanism not yet established

Conclusion

The mechanisms of how psychotropic medications cause adverse effects are not always known. When the mechanism is known, it is often complicated. Knowledge of the risk factors and mechanisms for adverse drug reactions can help to guide medication choice and monitoring parameters and if necessary, implementation of interventions to prevent or reduce the impact of these reactions.

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INFORMATION MANAGEMENT FOR BUSY PRACTITIONERS

Adverse Drug Reactions: Investigating to Reporting

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A patient has just arrived in your office and is describing a new symptom that you suspect is from their drug therapy. As a clinician, how do you investigate this symptom and how it relates to the drug, collect the evidence and if it is a suspected drug reaction, how do you go about reporting it?

Investigating the ADR

Investigating a suspected adverse drug reaction (ADR) is like putting on your sleuthing hat and taking a closer look through your magnifying glass. The first place to start is by reviewing the product monograph in the Compendium of Pharmaceuticals and Specialties (CPS). Many adverse reactions both common and less common are often reported in the drug monograph. If it's a drug that has been on the market for less than 5 years or a rare reaction, a literature search may be required. On-line references such as Micromedex, eCPS or Lexi-Drugs are updated frequently and may have the relevant information. Other options are doing a PubMed search for case reports, calling the drug company or calling a pharmacist. Some hospital pharmacies have a drug information service which may be accessible to the community.

Unfortunately, there isn't a complete ADR database available for reviewing new or unpublished ADRs. The Canada Vigilance Online Database is a compilation of ADR reports from health care professionals, consumers and manufacturers that have been reported to Health Canada. The database is useful to see if a similar reaction has been reported before.

Reviewing the Evidence

Once the literature has been reviewed (you may not have found any literature to support your suspicion) review the suspected drug reaction with your patient. Important things to consider are: onset of symptoms in relation to the suspected drug's start date, concomitant medications and treatment if any. Keep in mind you just have to suspect an adverse drug reaction, not prove it 100%.

If a patient is on multiple drug therapy, consider consulting a pharmacist to review the patient's drugs. Pharmacokinetics and potential drug interactions need to be considered when suspecting an ADR.

When do I Report?

Not every ADR requires reporting to Health Canada. However, it's better to have reported, than not to have reported at all. Health Canada's recommendations for reporting suspected drug reactions are as follows:

1. Any severe drug reaction
2. Any reaction (regardless of severity) in drugs that have been on the market less than five years.
3. Any unexpected reaction (regardless of severity) not consistent with the manufacturer's literature.

Remember, you only have to be suspicious of the drug in question; you may not have all of the details or any proof.

How do I Report?

There are several ways to report an ADR to Health Canada. The easiest is to refer to Health Canada's website and click on Drugs and Health Products. On the left hand column, MedEffect (adverse drug reaction reporting) should be listed. From there, you will be directed to several options including:

1. Report online: www.healthcanada.gc.ca/medeffect
2. Fax or Mail: Download a form and fax or mail it to Canada Vigilance Program
3. Report by phone: 1-866-234-2345

The ADR report should contain the following information: the patient's characteristics such as age or birth date, gender and weight/height if available, drug name (dates, dose and frequency if known), description of reaction and treatment if any. The reporter must also provide contact information should Health Canada require further information.

Remember anyone can report an ADR including physicians, nurses, pharmacists and other health care professionals as well as the consumer.

Why Report?

Drug products undergo years of surveillance and clinical trials before they ever reach the consumer. All drug products continue to be monitored post-market for adverse effects not discovered in clinical trials. Once drugs come to market and are utilized by the general population, less common or unexpected reactions may occur. As the science of pharmacogenomics evolves, we now know that an individual's response to a drug is variable due to their genetics so the old rule of thumb "one drug for all" doesn't hold true.

Reporting an adverse drug reaction helps identify a need for further investigation of a drug product. If there are several reports of a rare drug reaction post-marketing this may warrant an investigation by the product regula-

tors depending upon the severity of the reaction. This in turn may lead to additional warnings, further drug research such as benefit/risk studies and possibly product withdrawal. For example Prepulsid® (cisapride) was removed from the Canadian market due to the drug's association with cardiac arrhythmias and sudden cardiac deaths (Peterson, 2000). By reporting adverse drug reactions, you are contributing towards effective and safe drug products.

Summary

Health Canada estimates that health care professionals report less than 10% of ADRs (Environics Research Group, 2007). ADR reporting shouldn't be a tedious task and can be done very quickly in a busy practice. Pharmacists and the Canada Vigilance Regional Offices are great resources when investigating and reporting ADRs. Other resources include subscribing to Health Canada's MedEffect which provides an e-notice which is a free alert to advisories, warnings and recalls. MedEffect also provides the Canadian Adverse Reaction Newsletter (CARN), a quarterly publication detailing specific products and side effects.

For additional information on ADR reporting in Canada refer to Health Canada's website MedEffect Canada: www.healthcanada.gc.ca/medeffect or contact the Canada Vigilance Program at 1-866-234-2345.

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CLINICAL PERSPECTIVES:

Clinical Case Rounds in Child and Adolescent Psychiatry

Improved Functioning in Children Diagnosed with Reactive Attachment Disorder after SSRI Therapy

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The process of secure attachment between child and parent during early childhood is requisite for laying the foundation for later normative psychosocial and emotional development. Failure to establish a nurturing and reciprocal attachment between the young child and caretaker can have profound and sometimes irreversible effects on the child's later social emotional development, and may result in the development of Reactive Attachment Disorder (RAD). Moreover, there is literature that describes the potential neurobiological deficits that can occur to the developing brain if a child is exposed to early maltreatment (Schore, 2001). The absence of responsive and consistent caretaking can subject the developing brain to an inordinate amount of physiological stress, leading to increased cortisol production and consequential inefficiencies in the serotonin and the growth-hormone releasing systems. Although neurotransmitter deficiencies are a possible result of early childhood maltreatment, treatment of these children is usually limited to psychosocial interventions that focus on remediating the core attachment deficits and other comorbid conditions. Pharmacological interventions may have efficacy in treating comorbid conditions (e.g., depression, ADHD, PTSD), but there is no literature supporting the use of pharmacological treatment to address the core attachment deficit. This deficit reflects the child's inability to form a secure and enduring relationship with their primary caregiver, which consequently impairs their future social adaptation in the areas of affect regulation, stress modulation and behavioural organization.

The following two case studies will illustrate the use of SSRI therapy in children with RAD who have other comorbid conditions, and discuss these outcomes in the context of early neurobiological and social development.

Case One

M.L. is a 12 y.o. female whose clinical presentation and psychosocial history met the DSM-IV-TR criteria for RAD- disinhibited type, Oppositional Defiant Disorder and Learning Disorder NOS. From birth to age 4 years, she was raised by her single mother whose lack of caretaking led to extreme and prolonged emotional and physical neglect. The mother actively abused drugs; moved with the child long distances several times; demonstrated inconsistent, permissive and punitive parenting; and exposed the child to domestic violence, explicit adult sexual activity and frequent marginal caretakers. At age 4, she began placement in 7 different foster homes, all of which had difficulty managing her aggressive and disorganized behavior. At age 5, she was placed with her current adoptive family where she continued to demonstrate significant behavior problems, including recurrent rage episodes, controlling behavior and frequent emotional dysregulation. Over time, she showed no spontaneous affection towards her adoptive parents, and seemed indifferent and uncomfortable about their displays of affection towards her. She indiscriminately sought attention and affection from adult strangers, sometimes touching them inappropriately. She was socially immature, disinterested in interactive play and often engaged in isolative sexualized behavior. Over the next 6 years, she was provided a stable and nurturing home environment, but she remained emotionally distant and lacked interest in forming close relationships with family members and others. Her oppositional behavior remained problematic, and she showed no guilt about her transgressions. Basic deficits in social reasoning and judgment were also evident. During this time, she also received a broad range of mental health services, including pharmacological trials on methylphenidate, clonidine, guanfacine and risperidone. Neither pharmacologic nor psychosocial interventions provided appreciable benefit. At age 11, her medications were discontinued, and there was no remarkable regression in her functioning. She remained extremely oppositional and aggressive. Her emotional attachment to family was negligible, while her affective range was highly constricted and predominately angry.

At age 12, she underwent psychoeducational testing and was found to have average intelligence, but also was diagnosed with a nonverbal learning disability. Although she was not outwardly depressed, a therapeutic trial of sertraline 50mg/day was initiated in an effort to mitigate her moodiness and irritability. There was slight benefit

after two months, and then the dose was advanced to 100mg/day which lead to a dramatic improvement in her mood, affective range and general behavior. Her mood became more outwardly euthymic and normative, and her pervasive anger diminished. Her oppositional and aggressive behavior was greatly reduced, but episodic difficulties in the area of social reasoning and judgment remained evident. More significantly, she demonstrated genuine interest in social activities with her parents and siblings, along with increased respect for their feelings and personal boundaries, all of which had not been observed previously. Although she was not seeking increased affection from her parents, she was more genuinely responsive and appreciative when affection was shown to her. She no longer displayed indiscriminate sociability. There were no signs of relapse after 8 months of treatment.

Case Two

R.W. is a 6 y.o. boy whose clinical presentation and psychosocial history met the DSM-IV-TR criteria for RAD-disinhibited type, Oppositional Defiant Disorder and Mood Disorder NOS. From birth to age 3 years, he was raised by various caretakers, including his biological parents and other relatives. All of these households were characteristically chaotic and disorganized, and his level care was quite marginal. He was exposed to frequent emotional and physical neglect, graphic domestic violence and parental alcohol and substance abuse. At age 3.5, he was placed in foster care where he was highly oppositional, and also displayed frequent rage episodes, destructive behavior and aggression. He seemed indifferent and remorseless about his misbehavior. He was extremely clingy and his need for attention from his foster parents appeared insatiable. Although his foster parents consistently showed him genuine warmth and affection, he seemed indifferent about their overtures, unless he could manipulate them for privileges or rewards. He was superficially charming and precocious with strangers, often becoming quite dramatic and would impulsively seek their attention inappropriately. Although he sought opportunities to play with other children, he was typically controlling, manipulative and intrusive. On other occasions, he appeared anxious about possible separation from his foster parents. His outward mood was not classically depressed, but he frequently appeared dysphoric, irritable and angry. There were frequent crying episodes. Over the next few years, the foster parents continued to provide him with a stable and nurturing household, but genuine emotional attachment remained absent.

At age 6, he was started on sertraline 25mg daily to treat his mood issues. Over the next several months his dose of sertraline was gradually increased to 150mg daily. He was also given a provisional diagnosis of ADHD and underwent a trial of mixed amphetamine and dextroamphetamine XR 10mg daily. During this medication trial, he showed no obvious improvement and there was increased irritability and disruptive behavior, which led to the discontinuation of the medication after 2 months. He remained on sertaline which led to remarkable improvement in his mood and behavior. He showed significantly less oppositional behaviors at home and at school; his affect was brighter and his mood more normative; and his anger diminished, along with his irritability and crying episodes. His impulsive attention seeking towards strangers was noticeably decreased. He seemed more genuinely interested in social activities with his parents and other family members, and would spontaneously seek their affection, in contrast to past affection seeking which typically occurred to avoid discipline or gain privileges. His socialization with peers greatly improved, and he was generally respectful, cooperative and appropriate during play activities. Improvement remained evident after 9 months.

Discussion

The above cases of pharmacological treatment of RAD reflect an unexpected and relatively prolonged improvement in not only mood and behavior, but in certain aspects of attachment behavior. A closer examination of the neurobiological and neuropsychological effects of early childhood maltreatment offers possible explanations.

It has been established that children who have been subjected to severe and prolonged emotional and physical neglect during the first 2 years of life, while there is rapid and critical brain development, may sustain significant deficits in later brain functioning. Schore (2001) describes the cascade of neurobiological events that can impede normal brain development in the maltreated young child which can result in impaired right brain and corticolimbic functioning, along with inefficiencies in the serotonin and growth hormone-releasing systems. These events can create “relational trauma” which later affects the child’s social emotional functioning in the areas of affect regulation, stress modulation and interpersonal adaptation.

Animal analogue research (primate and rodent studies) has demonstrated how significant bonding deficits can lead to increased cortisol production and consequential deficits in corticolimbic functioning in the developing brain (Sanchez, 2001). Another rodent study showed how early maternal separation resulted in reduced growth hormone production and deficient serotonergic functioning, but this was remedied by providing fluoxetine to the maternally-deprived rodents (Katz et al., 1996). More recent research has shown that that macaque monkeys who have been exposed to deficient early rearing will develop inefficiencies in varied neurotransmitter systems, including serotonergic functioning (Stevens et al., 2009). Other human studies have found hyposecretion of growth hormone in maltreated infants (Frasier and Rallison, 1972).

Some studies have highlighted how severely maltreated children have different and aberrant neurophysiological responses to normal social emotional events. Oxytocin and vasopressin are neuropeptides that are highly associated with complex social affiliative behavior, including attachment, regulation of stress and emotional reactivity. Normal social sensory experiences, such as a parent touching and holding the child during caregiving, will increase levels of these neuropeptides and activate the reward circuitry found in the nucleus accumbens. Children with an early history of severe maltreatment have shown reduced levels of vasopressin during an experimental social physical interaction study with their adoptive mothers, when these levels are expected to rise (Wismer et al., 2005).

Other literature has established how maltreated children can interpret and process anger differently than normal children. When maltreated children are presented experimental facial emotion tasks, they demonstrate increased neurophysiological arousal, cognitive attention and sensitivity to angry faces in comparison to normal controls. Maltreated children also have increased difficulty differentiating normal emotions (e.g., sad, happy, fearful), but show increased arousal and vigilance towards perceived threat (Wismer and Pollack, 2004). In the cases reviewed, both children demonstrated severe oppositionality, angry mood and aggression, in addition to core attachment issues.

The above discussion highlights how early childhood maltreatment can significantly impair developing corticolimbic circuits and serotonenergic functioning. The referenced cases demonstrated significant mood improvement from SSRI therapy, even for the child without depression. This child was also diagnosed with a nonverbal learning disability which implies right hemisphere dysfunction (Rourke, 1995) and corresponds with the prevailing theory that early childhood maltreatment can impair right hemisphere development and serotonergic functioning. More significantly, an unexpected benefit in the areas of attachment and behavior was also evident in both children. Although serotonergic enhancement may have contributed to this improvement, it is unlikely that unitary SSRI therapy would fully remediate the complex developmental problems found in RAD children. In fact, the use of antidepressants in prepubertal children is a controversial issue and current research findings have not supported consistent efficacy (Garland et al., 2009). Therefore, any conclusions about the relationship between SSRI use and the improvements found in the above children must be made with caution until further empirical evidence is established. Moreover, if some degree of efficacy is found, one would speculate that a subset of RAD children, especially those with features of mood dysregulation, would benefit most from SSRI therapy.

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The authors have no financial relationships or conflicts to disclose.

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CLINICAL PERSPECTIVES:

Interview with Dr. Susan Bradley

Editor's Note: We are once more privileged to have an insider's view into one of the bright lights of child psychiatry in Canada and on the world stage. Dr Bradley's peripatetic career is an excellent example of the interplay of life influences, career challenges and intellectual rigor in the midst of controversy and changing times. It is often difficult to integrate teaching, research, and meaningful clinical contact while at the same time reforming institutions and creating new ones; Dr Bradley accomplished all of this with passion and gusto. This snap-shot of her life also illustrates how she is a great role model for young psychiatrists, in particular female psychiatrists juggling the demands of career and family life.

Normand Carrey MD

Introduction:

I consider myself extremely fortunate to have been able to practice Child Psychiatry and still find it as interesting and exciting as when I first began. Being asked to write about my career causes me to reflect on many aspects of my life and work.

The Early Years:

My good fortune began with "good enough" parents who encouraged me academically but also, through their own example, promoted an interest in other people and their lives, and in community involvement.

My father left school after grade eight because he was the eldest in his immigrant Irish family and they could not afford to keep him in school. He worked from age 14, ultimately finding an apprenticeship and was able to complete high school during the Great Depression. He felt supremely lucky to find that with his apprenticeship in tool and die making he was able to become a high school technical teacher.

My mother taught piano and played the church organ. She was a most supportive person throughout my growing up period, always welcoming my friends and those of my brother and sister. She befriended many who saw our home as a happy haven. My father was truly humble and could never quite figure why people had been so nice to him as he was growing up. He never entirely understood that it was because he was such a nice person.

The University Years:

Although I began university with the intent to do research in physiology or biochemistry, I realized that spending time in a lab sacrificing animals was not only aversive but not as interesting as I had imagined. While browsing in a second hand bookstore I came upon a book about psychology. This was in the 60's and so had a lot of emphasis on Freud. I began reading voraciously believing that Freud could help us understand how people think and why they do things. Although the answers were somewhat disappointing it whetted my appetite for the search. My next challenge was to convince my parents that I needed to go to medical school. We agreed that I should finish my BSc. Medical school was interesting but at times made me wonder if I might choose to do something else. However, after my stint of working a year in India with CUSO, I was more than ever convinced that Psychiatry was the most interesting thing I could do.

Although something of a detour, my time with CUSO working jointly in a Tibetan refugee camp and a Canadian mission hospital was a good life experience. Dealing with individuals who have a very different standard of living but who have a positive view of life helped me get a perspective on "needs" and "wants", something I continue to reflect upon. I also learned to be patient, previously not a strong part of my character. The bus that I took from one site to another was erratic and required standing by the road and waving. Sometimes a bus would stop, but, as often as not, it was full, so I would sit on my knapsack and wait for many hours until there was a space. I was very aware of not getting flustered by time delays but of using this time to think and look at things around me, perhaps a precursor to my later interest in mindfulness meditation approaches.

Early Career and Parenting:

It was not until I had my mandatory 6 months in Child Psychiatry that I really felt I had discovered where I should be, that is, a career as an academic child psychiatrist. Since that point I have had a great deal of support first with a reduced work load when my children were young and then with an opportunity to get back into an academic stream when I returned to the University of Toronto and Hospital for Sick Kids.

While working part-time at the then Clarke Institute, now CAMH, I was the psychiatric lead on a general child psychiatry team. A request was circulated from the Adult Gender Identity Clinic for a child team member to join them in seeing children with GID (Gender Identity Disorder). Although interesting to me (I had had the good fortune to have had a long term therapy patient with GID who had transitioned by this time) it was the interest of the other team members that led to our becoming the Child and Adolescent GID team. We all found these children and their families quite fascinating and I was con-

vinced there was something physical that we could research. When we were joined by Ken Zucker our capacity to examine the functioning of these children and their families really allowed us to develop a complicated formulation integrating temperamental and dynamic factors into our understanding of GID. This journey has been eventful and filled with lots of competing ideas and controversies.

Under Ken's leadership we made a significant contribution to the field. Our book *Gender Identity Disorder and Psychosexual Problems in Children and Adolescents*, published in 1995, continues to be the main reference in this area. In an era where much of psychiatric formulation is reduced to the five axes of the DSM, the patients we have the privilege to see through the Child and Adolescent GID clinic, continue to intrigue me with the constant challenge to make sense of complicated family/child dynamics and biological factors.

As part of my interest in developmental psychopathology I became convinced from the beginning of my career that a focus on prevention was worth pursuing even though the specifics of how to do this were not clear. One of my first jobs was as consultant to a therapeutic nursery program (Thistletown Preschool). In this setting I learned how to do behavior management, something not taught in our residency program at that time. I also began to understand how stressful it was to parent young children and how easily things could go off track. It was at this time that my own children were born and so I was much more sensitive to these issues. I also had the good fortune to work with Nancy Cohen, a research psychologist, presently at the Hincks-Dellcrest Centre in Toronto, who taught me a lot about program evaluation. This study was one of the first studies to evaluate a "preventive program".

Prior to joining the Hospital for Sick Children (HSC) as a full time psychiatrist I had done consulting work with the Children's Aid Society and with the Syl Apps Youth Centre, an Ontario Regional facility for adolescents adjudged delinquent and placed in residential care. These consultation experiences piqued my interest in the developmental trajectory of children who had been abused and neglected. At the time Sue Goldberg and Klaus Minde had begun to work at HSC with infants exploring the role of attachment in various disorders. Coming to HSC allowed me to learn about attachment in a way that would never have been possible in another psychiatric setting. I had become convinced that none of the prevailing theories of the development of psychopathology either understood biological factors that contributed to vulnerability well nor did they account for why psychosocial interventions as well as biological interventions could both work. Jerome Kagan was beginning to publish his seminal work on "inhibition" now probably better described as stress reactivity. Steve Suomi was following similar ideas in rhesus monkeys.

These were the foundations that led to me attempt to formulate a theory of the development of psychopathology based on difficulties in the regulation of affect, within the context of attachment. My first paper describing this theoretical model published in 1989 in the *Canadian Journal of Psychiatry*, was really an attempt to see if anyone would discredit these ideas as they seemed overly obvious and therefore perhaps wrong. Over the next ten years the field of stress research confirmed the vulnerability of certain individuals to anxiety and depression and attachment research confirmed the connection between styles of attachment and patterns of affect regulation.

Infant Psychiatry at HSC seemed to offer even more promise for prevention and so it was not hard to convince me, now as Chief of Psychiatry, to work towards developing an initiative that would promote training for community workers involved with parents of infants and young children. With a small grant from a now defunct organization, Peter Sutton, then Head of Infant Psychiatry, and I, surveyed frontline workers in the community involved with parents of young children regarding their needs. This led to the development of the Infant Mental Health Promotion Project, now referred to as IMP, an academic-community coalition devoted to providing education and training about evidence based programs for parents and infants. This coalition, initially led by Rhona Wolpert, has been very successful in advocating for the needs of parents of young children, in creating information materials such as videos and a newsletter, and in running conferences and workshops to meet this need. My role as academic co-chair of IMP was probably the main reason I was asked to become the Community Champion for Early Years Centres in Toronto. This gave me an opportunity to work more broadly in the community and to help diminish the notion of HSC as an isolated academic institution.

My interest in parenting may be seen to emerge from the above account. However, in teaching residents I realized that despite dynamic theories of psychopathology, there were few clear statements about parenting and how to support that. My interests in affect regulation, attachment and prevention led quite naturally, it seemed to me, to attempting to introduce a more specific focus on parenting in residents' training and to work in supporting the introduction of evidence based parenting programs in the community. This led to the development of The Parenting Alliance, a community-academic coalition devoted to training in evidence-based parenting interventions. Having had the opportunity to see the impact of such programs over time I am impressed at how staff knowledge and facility in supporting parenting has improved as these programs have become widespread.

It was not until I left the position of Psychiatrist-in-Chief and Head of the Division of Child Psychiatry and had a 6 months sabbatical that I had the time to do the research to support my original theory. This led to the publication of my book *Affect Regulation and the Development of Psychopathology* in 2000. I have been delighted to see how the basic science emerging over the last ten years has lent strong support to this theory.

The Future:

As I look to the future of our specialty I am particularly concerned that we do not lose our understanding of the importance of a psychodynamic approach to development and to the understanding of psychopathology integrating biopsychosocial factors. There are dangers in the assumption that making a diagnosis tells us how to understand our patients and how best to help them.

Although I began a career wanting to become a researcher (and research has been important in my career) I realize that I was temperamentally more suited to being a teacher and administrator. However, residents don't always know what to do with me. I have been called too "psychodynamic" by some and too "biological" by others. I feel proud of that as I believe that integration of the psychological and biological is psychiatry's role. I often joke with patients about my own ADHD but do recognize that having a lot of energy has been a helpful ingredient in my work. My interactions with students, staff and patients have made my career very rewarding and continue to do so.

Susan Bradley MD

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BOOK REVIEWS

A Word from the Book Review Editor

"Writing, when properly managed…is but a different name for conversation."

Laurence Sterne, *The Life and Opinions of Tristam Shandy, Gentleman.*

Within the pages of a journal, the Book Reviews section has a distinctive role and nature. The books that form the raw material for reviews are works of integration – of primary research, expert opinion, and specific points of view and experience. To this chorus, the reviewer adds his or her own perspective, judgment, and expertise in completing a thoughtful and informative assessment. The combination of many such reviews in any single issue, and over the course of many issues, makes the Book Reviews section distinctively like a conversation that includes the many published voices heard in our field, and the words of the reviewers who place published works in the context of the established knowledge and wisdom of our profession.

As I take on the role of your new Book Reviews Editor, I am acutely aware of the voices – past, present, and future – appearing on these pages. I am thankful to our current Editors, Normand Carrey and Carlo Carandang, for providing me the opportunity to serve in this role. I am grateful in particular to the Book Reviews Editors who came before me, Pratibha Reebye and Wade Junek, into whose wise shoes I now step.

In the coming years and months on these pages, I aim to build a rich set of conversations and discussions that build on the dedication and vision established by my predecessors. To do this, I call on you, readers and reviewers, to help broaden the scope of voices we hear from. While the mental health textbook will continue to be the heart of our reviewed materials, I will extend the range of reviewed works to include publications from other academic fields, children's fiction, parent guides, literary fiction, biography, and popular culture. In this broadening of the variety of books reviewed lies an attempt to enrich our field with some outside perspectives, while also providing glimpses of the cultural milieu in which children and families are growing and learning.

I also call on you to help expand the stable of reviewers whose work appears on these pages, so that voices not yet heard can come forward. I encourage all of you readers to contact me with proposed books for review in our Journal, and especially ones you would like to review yourself. In particular, I welcome reviews from trainees in psychiatry in our *Journal*. One hardly has to emphasize to child and adolescent mental health experts how important it is to provide venues for development to ensure healthy growth and vitality. This principle applies to the development of the newest talent in our field, and the pages of our Journal are an exceptional venue to provide just that opportunity. Reviews from our most recent colleagues will also provide some fresh perspectives on the books we review and on our evolving profession. In this vein, one particular format I will encourage is the development of review pairs that form as a collaboration between trainee and seasoned professional. This approach can serve as a good vehicle for mentorship in our field, further develop ties in our professional community, and enrich our reviews with multiple perspectives.

J'invite également nos lecteurs francophones à nous envoyer des revues de livres publiés en français. Ainsi nous pourrons approfondir chez nos lecteurs la connaissance des idées qui nous proviennent de l'étude de la psychiatrie et de la psychologie dans des milieux francophones. Cela servira aussi à assurer la vitalité et la continuité du bilinguisme de notre publication.

The work you will see on these pages will continue to maintain the standards of our *Journal* and our field, providing well-composed writings befitting the professional audience for which they are intended. In the years to come, expect to find on these pages reviews that are concise, considered, and relevant — characteristics you would expect from any good conversation.

Daniel Lafleur MD, CM, FRCPC
Book Review Editor

Treating Trauma and Traumatic Grief in Children and Adolescents
Judith A. Cohen, Anthony P. Mannerino, and Esther Deblinger. Guilford Press: New York, NY, 2006. 256 pp. US $32.00.

Having recently participated in a review of our local children's bereavement program, I was eager to read Dr. Cohen's book on the subject and was pleased to find it even more informative and readable than I had expected. The authors begin with a description of the effects of trauma on grief — psychiatric, physical and social. Their premise is that trauma blocks normal grieving, impacting affect, behaviour and cognition. The spectrum of effects mirrors the

extent of the trauma. Parental reactions and support, the child's age, and of course their resiliency, contribute, and both parent and child must be assessed to guide treatment.

Following this assessment, the therapist's next task is to outline the therapy. Normal grieving is accomplished by a growing ability to recall positive aspects of the deceased and their relationship; with trauma, these recollections trigger traumatic memories, preventing grieving. The creation of a trauma narrative allows exposure and extinction, but may be blocked by the avoidance that is the product of the child's and their parents' reaction to trauma. The reluctance of both the child and the parent to do this work must be overcome for healing to occur.

The authors describe the evolution of the model, the role of the therapist, and the commonalities with other therapies. In particular, an emphasis is placed on the importance of a flexible approach to tailor the process to the family's situation. Conjoint therapy of the entire family is particularly important. The authors' mnemonic "PRACTICE" outlines the therapeutic plan: psycho-education and parenting skills, relaxation, affective modulation, cognitive coping, trauma narrative, *in vivo* mastery of triggers, conjoint parent-child sessions, and enhancing safety and development describe the course content. Specific chapters address these elements with attention to dealing with distressing symptoms early on in the therapy, normalizing them, and providing educational materials. An early goal is strengthening parenting skills which may have been deficient initially or may have lapsed due to misguided attempts to "spare" the child additional stress. The importance of providing positive interactions with the child is emphasized. Relaxation and meditation for the child and the adult are taught next, followed by exercises to identify and modulate feelings, using cognitive techniques such as thought stopping, positive self-talk, reviewing safety plans, enhancing social skills and problem solving for dealing with triggers. The description of the cognitive triangle and use of it, as well as many aspects of the treatment, will be familiar to practitioners of cognitive behavioural therapy, making the model extremely user friendly.

Thus equipped, the child is ready to begin the task of constructing the trauma narrative. This activity is likened to cleansing a wound — potentially painful, but necessary for healing. A list of books is provided for children to use in this work. Beginning with neutral and happy information, the child writes or dictates a "book" that describes the family history, including the trauma. Both words and pictures may be employed. Re-reading this narrative, the child then must add the associated feelings, culminating in the event description and processing all aspects of it, even the worst moment. The relaxation and distraction techniques that have been learned previously may be employed. Meanwhile, in parallel, the parent constructs his or her own narrative. Finally, the parent is "exposed" to the child's narrative, desensitizing them to their fear of hearing the child's experience, and allowing communication that tends to be blocked prior to this step. As therapy progresses, these narratives are used to expose dysfunctional thoughts and cognitive restructuring can proceed for the child and the adult. Homework is used to uncover more dysfunctional cognitions and generate substitute thoughts. Concrete situations that are avoided can then be approached by gradual exposure. After preparation, conjoint sessions allow the child to read their narrative to the adult. Formerly forbidden questions from both the child and the adult, prepared before the session, can be explored. Finally, rules for personal safety are taught and creation and rehearsal of a safety plan are completed.

Once this trauma work is completed, grieving is addressed. Beginning with abstract ideas about death, the understanding of both the child and the adult must be approached and explored. Techniques to expose what has been lost are used, but in addition, the troubling aspects of the relationship that no longer have to be dealt with should be processed. Ambivalence is resolved and rifts that may have been present at the time of death are unearthed and healed. Methods of memorializing the deceased to promote and encourage happy, positive memories are described.

As the therapy moves to a close, the child and their parent will be encouraged to move away from what they have lost, and towards new experiences and relationships. The therapy is terminated with a celebration, as well as planning for any triggers that could be anticipated in the near and distant future.

This practical book outlines the therapy in a way that makes it come alive. To provide the best care, therapists naturally need experiential training as well, as pointed out by the authors, and reading this book inspires the reader to get that training. Many good practical examples, as well as a trouble-shooting section, complete each chapter. Handouts for patients and an excellent reference section complete the book. The authors' impressive breadth of knowledge and experience makes this book valuable for any professional who might find families with traumatic experiences in their practice. I strongly recommend it to my colleagues.

Tamison Doey MD, Windsor, Ontario

Depression and Bipolar Disorder: Stahl's Essential Psychopharmacology, 3rd Edition
Stephen M. Stahl. Cambridge University Press: New York, NY, 2008. 312 pp. US $52.00.

This text provides a specific and fully revised review of the pharmacological treatment of Depression and Bipolar Disorder, based on Stahl's comprehensive Essential Psychopharmacology text. It is very readable and includes Stahl's trademark informative and colourful diagrams. This book serves as a quick reference to the currently proposed mechanisms of drug action and interaction as well as serving as a helpful primary source of information regard-

ing the state of knowledge about postulated drug targets. It is appropriate for medical students and residents, as well as for experienced physicians, given the number and complexity of existing pharmacological agents.

Throughout, Stahl adopts an approach of optimizing treatment based on a "treat the symptom" model, as opposed to assuming that symptom complexes represent a common underlying disease entity – the "treat the underlying illness model". The former model (used in Stahl's text) may favour polypharmacy (adding agent 1 for symptom y and then adding agent 2 for symptom z), while the latter model favours a selective monotherapy approach (for this patient with this illness subtype, agent 1 should in the majority of cases resolve all related symptoms (y and z)). Which approach is actually the most effective (symptom-targeting polypharmacy vs. syndrome-based monotherapy) in the stabilization of bipolar disorder has not been directly tested, however accumulating evidence suggests that carefully selected monotherapy based on the patient's clinical profile yields success in about 70-75% of cases, as compared to a success rate of 30% using treatment guidelines including combinations. Together with the STAR D study showing that only 50% of depressed patients benefit from current treatment approaches (switching and combining), we still have a long way to go in understanding and selecting effective treatments for patients with mood disorders. Despite these limitations, this textbook by Stahl is a useful summary of our current understanding of the field in an easy to digest format. It is arguably the best book in its class for illustrating conceptual mechanisms of action and is comprehensive, covering all existing agents.

Anne Duffy MD, FRCPC, Halifax, Nova Scotia

The Child's Voice in Family Therapy : a systemic perspective

Carole Gammer. W. W. Norton & Company: New York, NY, 2009. 304 pp. US $35.00.

The author, a clinical psychologist who worked at Harvard before moving to France, begins this book by noting that in family therapy the voice of children has been underdeveloped. Too often family therapists don't know how to work with children in a way that their voice can be heard and appreciated, even though the therapy work is about them. A family has several generations, each with its own issues. For families to work well, the various ages need to be able to talk to each other in a rich, meaningful way.

This is not a book about how to treat children, but rather a practical guide for getting all to talk and listen to what the other has to say. It is not a book steeped in theory but a practical, descriptive way that the members of the family can be led to listen and appreciate each other and talk of various issues.

The book is set in three parts. In the opening chapter, the author mentions the work of Beebe on bidirectional influence and the importance of considering systemic processes. She describes her model as assuming multi-causality, and describes her approach to working with children in family therapy: "we need only to watch, listen, talk to and intervene with them taking seriously what the children have to say." (page 7)

The section of eight chapters that follows provides clear and practical descriptions of several interactive techniques (including the use of dramatization, metaphor, systemic art techniques, externalization, setting limits, restoration of play, links to the past and video-supported intervention) supplemented with excellent vignettes. The techniques she describes are related to a systematic, interactive model. She assumes multi-causality and that children have a rich representational life even though they may not have words to describe what they are feeling and thinking. The techniques and their application are aptly described, with a focus on giving a voice to the child's viewpoint. She supplies an excellent bibliography of child-focused art techniques, many of which I have not seen before. I appreciated her goal of teaching family members how to play with one another to facilitate communication.

The final section focuses on the particular themes of hyperactivity and sibling relationships. In her focus on the siblings, the author speaks not just of how siblings relate, but of how parents play a role in that relationship, and the deeper understandings and feelings involved.

From the beginning, the goal of the approach described here is to include the child in therapy and build a relationship between the therapist and the child. Limit-setting is left to the parents while direction of the flow of the session (who speaks, who listens) should be in the control of the therapist. The following stage is goal determination, with some tips on sharing observations and helping the family with prioritizing. The next stage described is that of is goal exploration using techniques that are of interest to the child in therapy (*e.g.* dramatization, systemic art techniques and externalization). The final stage described is that of change elaboration, in which the therapist guides families to think about how they might do things differently. All subsequent sessions follow these steps.

The language in this text is straightforward, graphic, colourful and practical, with a focus on technique and not on the theory behind it. Dr. Gammer's examples can be adapted to a variety of family issues to give a more rounded, deeper meaning, teaching family members how to talk with each other through play, listening, and understanding.

I recommend this book highly because of the clarity of the vignettes, which are broadly applicable. The central and crucial message is that children's voices are important and need to be heard to understand the strengths and problems in a family and to set a salutary direction for change. This is a great book.

Elsa Broder MD, Toronto, Ontario

Handbook of Attachment: Theory, Research, and Clinical Applications, Second Edition
Jude Cassidy and Phillip R. Shaver, Eds. The Guilford Press: New York, NY, 2008. 1020 pp. US $125.00.

This second edition, which acknowledges the pioneering work of John Bowlby and Mary Ainsworth, is more exciting and supported with evidence-based information. The authors, Jude Cassidy and Philip Shaver, are well known figures in the attachment field. They have accomplished an unbelievable intellectual feat on these pages by balancing the most recent neurobiological advances in attachment research and preserving the foundational elements of attachment theory derived from psychoanalysis, ethology and developmental psychology.

The book is made up of six parts, with each part composed of several chapters. The first part provides an overview of psychological attachment theory, and the second describes the biological perspectives on attachment. From here on, there is a smooth progression through the developmental aspects of attachment, psychopathology, clinical applications of attachment theory, and a final section titled "System, Culture, and Context."

Readers will be interested in the new and emerging information in the field of attachment contained in some entirely new chapters that did not exist in the first edition. "Psychobiological Origins of Infant Attachment" is one such pearl. The chapter authors (Polan and Hoffer) provide an elegant discussion of new discoveries regarding the development of the attachment bond, sensitive periods for attachment, and hidden regulators of early development. The authors pave the way for us through complex studies on filial attachment, including a discussion of experiments with rat pups and their mothers that provide new perspectives on "sensitive periods." For example, the sensitive period for olfactory learning in rat pups is now precisely defined to extend until postnatal day 9, during which period rat pups inhibit avoidance learning and prefer proximity seeking to their mothers. During sensitive periods there exists a facilitatory platform for attachment relationships and emotional tuning that extend into the pup's adult life. This chapter also reviews Michael Meaney's research on epigenetics, with a key finding that low levels of maternal care lead to more fearful adult offspring with heightened startle responses and intense adrenocortical responses to stress (page 166). Similarly, a body of research that shows that a high level of mother-infant interaction leads to slower sexual development and lower levels of adrecortical responses is thought provoking.

A chapter on attachment in rhesus monkeys is of particular interest as it provides a window on human nonverbal attachment processes. Another favourite chapter is by James Conan with elegant explanations of neural processes involved in attachment. In my opinion, this chapter is the most important addition to the new edition, and it provides reliable, well-supported facts, asks provocative questions, and provides some guidelines to future research. In this chapter Conan also introduces the "Social Baseline Model of Affect Regulation in Social Interaction."(page 255). I particularly liked this chapter's discussion of incentive motivation and its role in the initiation of early attachment bonds. Incentive motivation is defined as involving the acquisition of rewarding stimuli and is linked to dopamine and functions of the nucleus accumbens, the amygdala, and the prefrontal cortex (PFC). HPA axis functioning is discussed in the context of maternal behaviour and pair bonding, mostly as the coordinator of behavioural and physiological systems. The PFC is implicated in attachment processes as an encoder of conditioned or "automatic" responses to attachment figures and as a modulator of cognitive processes associated with attachment systems, such as working memory (pages 246-247). The common thread throughout is that early neonatal experiences with the caregiver are assimilated in the developing brain and provide neural and neuroendocrine templates for behaviours in the social world.

Other impressive and new developmental information is presented in the chapter "Attachment in Middle Childhood"; thus far a neglected area of research in the attachment field. This chapter focuses on children from ages 7 to 12 years. Although conclusions regarding middle childhood attachment experiences seem common sense (*e.g.* secure infants are less likely to experience clinical problems in middle childhood), there are some new and surprising facts. For example, evidence is presented supporting an association between father–child secure attachment and peer popularity but no such link has been found regarding mother–child secure attachment.

This volume also contains refreshing updates regarding attachment relationships of young children in foster care. Mary Dozier and Michael Rutter give an excellent and measured review of this topic and include information on children adopted nationally or internationally. The authors specify interventions to enhance attachment in this population including biobehavioural "catch-up" intervention and a behavioural home-based intervention. There is a cautionary discussion of harmful attachment therapies such as holding therapies.

A theoretical attachment perspective on divorce is provided by authors Feeney and Monin. The view is put forward that divorce is a *process* of disrupted attachment that has far–reaching roots in previous attachment relationships and profound implications for future relationships (page 949). Clinicians want to know how early attachment can affect later development. In his chapter, Ross Thompson urges us to develop theoretical formulations that include the representational dimensions of attachment security and to integrate developmental science in understanding early close relationships.

Carol Magai provides a stimulating discussion of attachment in middle and later life, including the attach-

ment of older parents to adult children and adult children's attachment to their parents. The final section, "Systems, Culture, and Context" extends beyond cultural aspects of attachment, binding together a discussion of caregiving behaviour, cultural patterns of attachment, religious representations, and theoretical perspectives on divorce and child care policies.

Of course, it is impossible in this review to produce an in-depth analysis of each of the chapters in this book, though I have tried to give a glimpse of the new information provided in this latest edition. With the large number of references and its well-coordinated themes, this stands as a book that is easy to read and to follow. It is certainly not a bedside book, and its value lies in the way one wants to use it.

For clinicians who are new to attachment literature, the first section provides a solid review of attachment. For researchers, there is a wealth of updated information in every chapter. For seasoned clinicians, this book sets a solid understanding of how attachment influences clinical presentations, however, it does not provide help with attachment-based interventions. This book belongs in departmental libraries and retains its position as an authoritative volume on attachment theory including research and clinical applications.

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DALHOUSIE UNIVERSITY
Inspiring Minds

IWK Health Centre

CHIEF, DEPARTMENT OF PSYCHIATRY
IWK HEALTH CENTRE

HEAD, DIVISION OF CHILD AND ADOLESCENT PSYCHIATRY
DALHOUSIE UNIVERSITY FACULTY OF MEDICINE

HALIFAX, NOVA SCOTIA

The IWK Health Centre and the Department of Psychiatry in Dalhousie University are jointly recruiting a leader for the Health Centre Department of Psychiatry and the Dalhousie University Division of Child and Adolescent Psychiatry. This is an outstanding opportunity for an experienced and accomplished individual with demonstrated leadership, clinical and academic credibility and strategic vision to direct and manage clinical and academic affairs in the Department of Psychiatry/ Division of Child and Adolescent Psychiatry within an integrated health system.

The combined role of Chief and Division Head requires dynamic leadership and vision in clinical and academic domains, together with management skill to effect excellence in care, education and research within available resources, and to align strategically and operationally within an integrated health system. The incumbent must negotiate, nurture and leverage opportunities to maximize productivity through collaboration, partnership and integration of academic and clinical practice. The successful candidate will have an MD, hold or be eligible for medical licensure in Nova Scotia, hold or be eligible to sit for Royal College of Physicians and Surgeons of Canada certification in psychiatry and should have qualifications that fulfill criteria for full membership in the Canadian Academy for Child and Adolescent Psychiatry

As Chief, IWK Department Psychiatry, you will be responsible to the CEO through the Vice-President Medicine for all medical administration and functioning of the Department, and will work in partnership with the Directors of the Health Centre's Mental Health and Addictions Program to ensure the effective provision of mental health services for our child and adolescent population. As Head, Dalhousie University Division of Child and Adolescent Psychiatry, you will be responsible to the Head of the Dalhousie University Department of Psychiatry for all academic activities of the Department and its members.

Dalhousie University's Medical School serves Maritime Canada: the provinces of Nova Scotia, New Brunswick and Prince Edward Island. The IWK Health Centre provides quality care to women, children, youth and families in the Maritimes and beyond. It is engaged in leading-edge research; works to promote healthy lifestyles for families; and supports education opportunities for health professionals and other learners. Services provided by the Health Centre are delivered through three programs: Children's Health; Mental Health and Addictions; and Women's and Newborn Health. The Department of Psychiatry/ Division of Child and Adolescent Psychiatry encompasses a full range of child and adolescent psychiatry and has active teaching and research programs.

The Department works closely with colleagues at the Capital District Health Authority (CDHA), which includes the academic health sciences centre for the adult population. CDHA's main campus, the Queen Elizabeth Health Sciences Centre, and the Dalhousie University Faculty of Medicine are both located adjacent to the IWK, greatly facilitating clinical and research collaboration.

Halifax is the largest city in Atlantic Canada and serves as its cultural, entertainment and recreational centre. Located on the Atlantic Ocean, the city combines great natural beauty, an enviable lifestyle and a climate that is unusually mild for Canada! The IWK is located close to the downtown core and within a few minutes walk of many city amenities as well as parks and the ocean. Many desirable living areas are within walking distance of the hospital, or within a few minutes driving time.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. Dalhousie University and the IWK Health Centre are Employment Equity/Affirmative Action employers. The Health Centre and University encourage applications from qualified Aboriginal people, persons with a disability, racially visible persons and women.

To apply for this exceptional opportunity, applications should include a curriculum vitae and a summary statement of clinical, teaching and research interests. Applicants are asked also to name three referees, who will be contacted later for letters of reference should the applicant be named to the short list for this position. Applications are due no later than February 28th, 2010 and should be sent to the attention of:

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IWK Health Centre web site is www.iwk.nshealth.ca

Canadian Academy of Child and Adolescent Psychiatry
Académie canadienne de psychiatrie de l'enfant et de l'adolescent

30th Annual Conference, September 26-28, 2010
Westin Harbour Castle Hotel, Toronto, Ontario

"Child and Adolescent Psychiatry Grows Up:
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Pediatric Update: Childhood Epilepsy and Mental Health
Dr. Elizabeth Donner
Neuroimaging and Clinical Practice
Dr. Brad Peterson
Resilience in Personal and Professional Life
Dr. Richard Gunderman
Adult Update: Intensive Short-Term Dynamic Psychotherapy
Dr. Allan Abbass

Town Hall

Everything You Always Wanted to Know about Becoming a Subspecialist
Dr. John Leverette

Resident Clinical and Research Training *'Cinq à Sept'*
Social event for residents in training to meet Child Psychiatry Division Heads,
Program Directors and Research Mentors
An opportunity to network and exchange information and ideas

Canadian Expert Panel

Should We Define Who We Treat By Age Alone?
Dr. Klaus Minde, Dr. Derryk Smith, Dr. Stan Kutcher

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www.cacap-acpea.org

INSTRUCTIONS TO AUTHORS

Manuscripts are welcome on any topic relevant to child and adolescent mental health, including psychiatry, psychology, pediatrics, pharmacology, social work and social policy (advocacy). The *Journal* is an open access, interdisciplinary, international publication that seeks to advance knowledge in child mental health and foster critical debate and discussion around controversial topics. The *Journal* publishes two theme issues and two regular issues per year. A theme issue is built around cutting edge issues and consists of a set of companion articles built around a theme selected by a guest editor(s) who is solicited by the Editor.

Length

Manuscripts exceeding word limits will not be accepted without permission from the Editor. Manuscripts of excessive length may be returned. Word limits for each submission category are as follows and include abstract, references, tables and figures. Authors may submit to any of the following categories except psychopharmacology column.
Original Research/Review Articles – 4,000 words; Brief Communication – 2,500 words
Clinical Perspectives – 1,200 words (case studies, grand rounds); 2,500 words (clinical interviews, debate forum)
Psychopharmacology column – 4,000 words
Book Reviews – 700 words
Letters to Editor – 700 words

Original Research / Review Articles / Brief Communications

Original research consists of original work with data not published elsewhere. Review articles are accepted either as submissions by authors or as solicited by the editor. Authors in their reviews should seek to 1) not duplicate existing reviews available elsewhere, and 2) critically appraise the literature for gaps in knowledge and controversial areas. The editor may accept on occasion scholarly theoretical papers (essays) with potential implications for theory building, especially in interdisciplinary areas. Original research can be qualitative or quantitative.

Clinical Perspectives (case studies, grand rounds, debate forums, clinical interviews)

This section of the *Journal* presents clinically based discussions of relevant mental health areas. Criteria for acceptability will be whether the submissions suggest novel clinical hypotheses or contradict current clinical practice not supported by the evidence or literature. Authors must rigorously appraise and review existing literature as part of their submission. The clinical interviews recognize the expertise of senior researchers or clinicians who have clinical or research wisdom and can offer trend analysis or historical overviews of the field. For all of these submissions, the Editor may identify an independent discussant to provide expert commentary. Author(s) will have full access to the discussant's commentary and may choose to add a brief response.

Book Reviews

Send directly to Dr. Pratihba Reebye, Book Review Editor, at preebye@cw.bc.ca. Book Review submissions should include:

Title, Author(s), and Editor(s)
City, province/state and country
Publisher and year of publication
Number of pages
Price and type of currency (CDN, US, etc.)
'Paperback' if applicable, all others are assumed to be hard cover
Reviewer's full name, academic credentials, city, province/state and country

Letters to the Editor

The *Journal* encourages opinion, controversy, and preliminary ideas. We invite reader comments on the articles we publish, as well as issues of concern to child and adolescent mental health. The Editor reserves the right to solicit and publish responses or commentaries from the authors of articles and others. The author of the original letter waives the right to review or respond to those responses or commentaries. All letters are subject to editing and shortening. Not all letters will be published.

Ethics

Research involving human beings must be conducted ethically with due regard for informed consent. Submissions must include a statement of approval and description of consent procedures. Patient anonymity must be protected and any identifying information must be omitted from all submissions such as the location of the clinical facility, age, diagnosis, etc. The parent/guardian and the patient (if able) must give permission for publication.

Conflict of Interest

Authors are responsible for recognizing and disclosing financial and other ties that might appear to be a conflict of interest. Authors must provide a listing of all current financial ties with for-profit enterprises which may include industry research funding, stockholdings/ownership interest, consulting relationships and speaker's bureaus. Financial benefit from instruments, technology or treatments must also be disclosed. If all of the authors have nothing to disclose, include the statement: "The authors have no financial relationships to disclose."

Authorship

Manuscripts are considered with the understanding that they represent original material and have not been submitted or accepted elsewhere, either in whole or in part. Give authorship credit only if substantial contributions have been made to *all* of the following: conception and design of study or analysis and interpretation of data; critically drafting or revising the manuscript for intellectual content; and, approval of the final version for publication.

Copyright

Authors must submit written permission from the copyright owner to use direct quotations, tables or illustrations that have appeared in copyrighted form elsewhere, along with complete details about the source. Permission fees are the responsibility of the submitting author. At the time of submission, the corresponding or lead author is required to indicate agreement to the following statement:

> **The author(s) hereby transfer(s), assign(s), or otherwise convey(s) all copyright ownership to the Canadian Academy of Child and Adolescent Psychiatry in the event that such work is published in the *Journal*. I (we) warrant that the material contained in the manuscript represents original work and has not been published or under consideration for publication elsewhere.**

Clinical Trials

A clinical trial is any study that prospectively assigns human subjects to intervention or comparison groups to evaluate the cause-and-effect relationship between an intervention and an outcome. Trial registry name, registration identification number, and the URL for the registry should be included at the end of the abstract. Trials should be registered in one of the recognized trial registries and require the minimum registration data set as described by the ICMJE (www.icmje.org/faq.pdf).

Manuscript Processing and Peer Review

Manuscripts should be submitted by email to the Editorial Assistant. Authors can usually expect a decision within 6 to 10 weeks. All manuscripts are submitted to an anonymous peer review process. A consulting reviewer may be added at any stage of the review process to address technical questions. Reviewers' comments will be sent with the editor's decision. However papers that clearly do not fit the *Journal's* format, mission, or publication priorities will be returned without review. Accepted papers are subject to editorial revisions and copyediting. Corrected proofs must be returned within 48 hours. Authors will receive a complimentary copy of the issue in which their submission appears.

> **Important Note: Changes that have been made to conform to *Journal* style will stand if they do not alter the authors' meaning. Only the most critical changes to the accuracy of the content will be made. Changes that are stylistic or are a reworking of previously accepted material will be disallowed. The Editor reserves the right to deny any changes that do not affect the accuracy of the content.**

Preparation of Manuscripts

All submissions must be formatted for 8½ by-11-inch paper with 1-inch margins, in 10-point or larger font, double spaced. Each manuscript must contain the following elements, ordered as below.

General

- **Title (max 15 words)**
- **Name, address, telephone, fax and e-mail address of the corresponding author**
- **Full name, academic degrees, affiliation, city, state/province and country for each author**
- **Acknowledgment paragraph (max 120 words), with any necessary credit lines and description of any funding or support**
- **Structured abstract (max 200 words):**

Objective: the primary purpose of the study
Method: design of the study, main outcome measures and age range of subjects
Results: key findings
Conclusions: including clinical significance
Key words: 3 to 5 key words to be used for indexing

- **Trial Registry name, URL and registration identification number (if applicable)**
- **Spell out all abbreviations (other than units of measure) the first time they are used**
- **Do not use footnotes in the text**
- **Always use the generic term for a drug. When it is necessary to refer to the proprietary name, list it in parentheses after the generic term, followed by the register mark ®**

References

- **Consult a recent print or electronic issue for sample references prepared following American Psychological Association 5th Edition.**
- **If there are more than two authors in a citation use "et al."' after the first author's name within the text**

Reference list:

- **Arrange in alphabetical order by author name and chronologically by author (do not number).**
- **List all authors' names for each publication using initials and surnames**
- **Unpublished or submitted manuscripts or personal communications should only be noted in the text, not the reference list**
- **Include "in press" manuscripts in the reference list**

Tables and Figures

- **Tables and figures should comprise no more than a total of 5 double-spaced manuscript pages. The *Journal* does not publish tables or figures that have appeared in other publications. Cite previously published materials only for reference.**
- **Do not submit tables as picture files (JPG, BMP, etc)**
- **Number tables consecutively in order of appearance in the text**
- **Cite each table in the text and note approximately where it should be placed**
  If abbreviations are necessary, define them in a key within the caption

INSTRUCTIONS DESTINÉES AUX AUTEURS

Le *Journal de l'Académie canadienne de psychiatrie de l'enfant et de l'adolescent* accepte tout manuscrit traitant de la santé mentale de l'enfant et de l'adolescent, et tout particulièrement de psychiatrie, psychologie, pédiatrie, pharmacologie, travail social et politique sociale (défense des droits des enfants et des adolescents). Le *Journal* est une publication internationale, interdisciplinaire et accessible à tous, qui a pour objet l'avancement des connaissances en santé mentale de l'enfant et de l'adolescent. Il encourage le débat critique et la discussion sur des sujets controversés. L'Académie publie deux numéros spéciaux sur un thème donné et deux numéros ordinaires par an. Les numéros spéciaux traitent de questions d'actualité. Ils regroupent divers articles qui s'articulent autour d'un thème choisi par un ou plusieurs rédacteurs invités, à la demande du rédacteur en chef du *Journal*.

Longueur

Les manuscrits qui dépassent le nombre de mots permis ne seront acceptés qu'avec la permission du rédacteur en chef. Les manuscrits trop longs seront retournés à leurs auteurs. Le nombre de mots maximal dans chaque catégorie est indiqué ci-après. Sont inclus dans ce total le résumé, les références, les tableaux et les figures. Les auteurs peuvent soumettre un article dans l'une des catégories ci-dessous, exception faite de la chronique sur la psychopharmacologie.
Recherche originale/Exposés de synthèse – 4 000 mots; Brève communication – 2,500 mots
Perspectives cliniques – 1 200 mots (études de cas, conférences scientifiques); 2,500 mots (entrevues cliniques, groupes de discussion)
Chronique sur la psychopharmacologie – 4 000 mots
Critiques de livres – 700 mots
Lettres au rédacteur en chef – 700 mots

Recherche originale / Exposés de synthèse / Communications brèves

La recherche originale porte sur des travaux qui n'ont jamais été publiés ailleurs. Les exposés de synthèse sont acceptés. Ils peuvent être présentés par les auteurs ou demandés par le rédacteur en chef du *Journal*. Les auteurs doivent 1) ne pas reproduire des exposés disponibles ailleurs, et 2) évaluer, dans une optique critique, les manques dans les connaissances et les sujets controversés. Le rédacteur en chef peut accepter occasionnellement les articles théoriques (essais) si les implications de ces derniers sont susceptibles de mener à l'élaboration d'une théorie, notamment dans les secteurs interdisciplinaires. La recherche originale peut etre de nature qualitative ou quantitative.

Perspectives cliniques (études de cas, conférences scientifiques, groupes de discussion, entrevues cliniques)

Cette section du *Journal* présente des discussions cliniques sur des secteurs de la santé mentale. Pour être acceptés, les articles doivent proposer de nouvelles hypothèses cliniques ou contredire la pratique actuelle si elle n'est pas appuyée par les faits ou la littérature. Dans leur article, les auteurs doivent évaluer et analyser rigoureusement la littérature existante. Les entrevues cliniques reconnaissent l'expertise des chercheurs ou cliniciens chevronnés qui ont une grande expérience - clinique ou théorique -, qui peuvent analyser les tendances ou présenter une analyse historique du thème considéré. Dans tous les cas, le rédacteur en chef du *Journal* peut demander à un participant indépendant à la discussion de servir d'expert. Les auteurs ont accès à la totalité des commentaires du participant et peuvent décider d'y répondre brièvement.

Critiques de livres

Les envoyer directement au Dr. Pratihba Reebye, rédacteur en chef, Critiques de livres, à preebye@cw.bc.ca. Les critiques de livres devront donner les informations suivantes:

Titre, auteurs et rédacteurs
Ville, province/État et pays
Éditeur et année de publication
Nombre de pages
Prix et devise (dollar canadien, dollar américain ou autre)
Livre broché (le cas échéant). Ne rien indiquer si le livre est relié
Nom complet du réviseur, titres universitaires, ville, province/état et pays

Lettres au rédacteur en chef

Le *Journal* encourage l'opinion, la controverse et les idées novatrices. Nous invitons les lecteurs à nous faire part de leurs commentaires sur les articles que nous publions, ainsi que sur les questions se rapportant à la santé mentale de l'enfant et de l'adolescent. Le rédacteur en chef se réserve le droit de demander des réponses ou des commentaires aux auteurs ou à d'autres personnes, et de les publier. Les auteurs d'une lettre originale renoncent à étudier ces réponses ou commentaires ou à y répondre. Toutes les lettres peuvent être modifiées et abrégées, mais toutes ne seront pas publiées.

Éthique

La recherche qui porte sur des êtres humains doit respecter les principes d'éthique. Les sujets doivent avoir été informés et avoir donné leur consentement à l'étude. Les soumissions doivent inclure le formulaire de consentement et une description du déroulement de la procédure. L'anonymat du sujet doit être respecté. Les soumissions ne doivent contenir aucune information (emplacement de la clinique, âge du sujet, diagnostic, etc.) permettant d'identifier le patient. Les résultats ne peuvent être publiés sans l'autorisation du parent, tuteur ou patient (s'il est en mesure de donner son autorisation).

Conflit d'intérêt

Les auteurs doivent indiquer les liens financiers ou autres susceptibles de donner lieu à un conflit d'intérêt. Ils doivent fournir la liste de tous les liens financiers qu'ils ont avec des organismes à but lucratif (entreprises qui financent des recherches, actions ou parts de société, activités de conseil et bureaux des conférenciers). Ils doivent également indiquer les avantages financiers qu'ils tirent d'instruments, de techniques ou de traitements. Les auteurs qui n'ont rien à divulguer feront la déclaration suivante: Les auteurs n'ont aucun intérêt financier à divulguer.

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Les manuscrits considérés pour publication doivent présenter des travaux originaux qui n'ont été ni soumis ni acceptés ailleurs, en totalité ou en partie. Indiquer les crédits d'auteur seulement s'il y a eu une contribution substantielle à *tous* les aspects suivants: conception de l'étude; analyse et interprétation des données; analyse critique ou révision du contenu intellectuel du manuscrit; approbation de la version finale pour publication.

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Essais cliniques

On entend par essai clinique toute étude qui répartit les sujets dans un groupe d'intervention ou dans un groupe témoin afin d'évaluer la relation de cause à effet entre une intervention et un résultat. Les auteurs indiqueront à la fin du résumé le nom, le numéro d'identification et l'adresse URL du registre dans lequel l'essai clinique a été inscrit. Les essais doivent être inscrits dans l'un des registres ci-dessous, et donner les informations requises par l'*International Committee of Medical Journal Editors* (www.icmje.org/faq.pdf)

Traitement et révision des manuscrits

Les manuscrits doivent être envoyés par courriel à l'assistante du rédacteur en chef du *Journal* qui répondra aux auteurs dans les six à dix semaines qui suivent. Tous les manuscrits sont assujettis à une révision anonyme par un comité formé de pairs. Les réviseurs ou le rédacteur peuvent demander à un consultant des conseils sur les questions techniques. Les commentaires des réviseurs seront joints à la lettre informant les auteurs de la décision du rédacteur. Les articles acceptés pourront être révisés et mis en forme par la rédaction. Les épreuves corrigées devront être retournées dans les 48 heures. *Les auteurs recevront un exemplaire gratuit du numéro du *Journal* dans lequel leur article sera publié. Les articles qui ne correspondent pas au format, à la mission ou aux exigences de publication du *Journal* seront renvoyés à leurs auteurs sans être révisés.

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Préparation des manuscrits

Présenter les articles sur papier de format 8½ po par 11 po avec marges d'un pouce; utiliser une police de 10 points ou plus, à double interligne. Inclure les éléments suivants, dans l'ordre indiqué ci-après:

Généralités

- **Titre (max. 15 mots)**
- **Nom, adresse, numéro de téléphone, numéro de télécopieur et courriel de l'auteur correspondant**
- **Nom complet, titres universitaires, affiliation, ville, État, province et pays de chaque auteur**
- **Remerciements (max. 120 mots), avec indication des crédits et de l'appui reçu - financier ou autre**
- **Résumé structuré (max. 200 mots):**

Objectif: principal objectif de l'étude
Méthodologie: organisation de l'étude, principaux résultats et âge des sujets
Résultats: principales constatations
Conclusions: indiquer la pertinence clinique
Mots clés: trois à cinq mots pour indexer l'article

- **Nom, adresse URL et numéro d'identification (s'il y a lieu) du registre des essais cliniques**
- **Écriture, en toutes lettres, des abréviations (autres que les unités de mesure) lors de leur première utilisation dans le texte**
- **Ne pas inclure de note de bas de page dans le texte**
- **Toujours utiliser le nom générique des médicaments. S'il est nécessaire de donner la dénomination spéciale d'un médicament, l'indiquer entre parenthèses après le nom générique, suivi de la mention ® ou ℠.**

Références

- **Consulter un numéro récent (version papier ou électronique) pour présenter les références selon la 5e édition du *Publication Manual de l'American Psychological Association.***
- **Si une citation compte plus de deux auteurs, faire suivre le nom du premier auteur de la mention *et al*.**

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- **Indiquer dans le texte, et non dans la liste des références, les communications personnelles ou manuscrits non publiés ou soumis pour publication.**
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Tableaux et figures

- **Les tableaux et figures ne doivent pas représenter plus de cinq pages à double espace de la totalité du manuscrit. Le *Journal* ne publiera ni tableaux ni figures publiés ailleurs. Indiquer, pour référence seulement, les documents qui ont déjà été publiés.**
- **Ne pas envoyer de tableaux sous forme d'images (JPG, BMP, etc.);**
- **Numéroter les tableaux selon leur ordre d'apparition dans le texte;**
- **Citer chaque tableau dans le texte et indiquer approximativement où le tableau doit être inséré;**
- **Les abréviations devront être écrites en toutes lettres, dans une légende à l'intérieur du titre.**

Vyvanse®
(lisdexamfetamine dimesylate capsules)

PRESCRIBING SUMMARY

Patient Selection Criteria

THERAPEUTIC CLASSIFICATION:

Central Nervous System Stimulant for Attention Deficit Hyperactivity Disorder

INDICATIONS AND CLINICAL USE

Pediatrics

VYVANSE®*(lisdexamfetamine dimesylate capsules) is indicated for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in children aged 6-12 years.

Adolescents, Adults and Geriatrics

VYVANSE is not currently indicated for use in adolescents (13-17 years of age) or in adults (>18 years of age). VYVANSE has not been systematically studied in, and is therefore not indicated for use in, the geriatric population (>65 years of age).

A diagnosis of ADHD (DSM-IV-TR®) implies the presence of hyperactive-impulsive or inattentive symptoms that cause impairment and were present before the age of 7 years. The symptoms must be persistent, must be more severe than is typically observed in individuals at a comparable level of development, must cause clinically significant impairment, and be present in two or more settings. The symptoms must not be better accounted for by another mental disorder. For the Inattentive Type, at least six of the following symptoms must have persisted for at least 6 months: lack of attention to details/careless mistakes, lack of sustained attention, poor listener, failure to follow through on tasks, poor organization, avoids tasks requiring sustained mental effort, loses things, easily distracted, forgetful. For the Hyperactive-Impulsive Type, at least six of the following symptoms must have persisted for at least 6 months: fidgeting/squirming, leaving seat, inappropriate running/climbing, difficulty with quiet activities, "on the go", excessive talking, blurting answers, can't wait turn, intrusive. For a Combined Type diagnosis, both inattentive and hyperactive-impulsive criteria must be met.

Special Diagnostic Considerations

The specific etiology of ADHD is unknown, and there is no single diagnostic test. Adequate diagnosis requires the use not only of medical but also of special psychological, educational, and social resources. Learning may or may not be impaired. The diagnosis must be based upon a complete history and evaluation of the patient and not solely on the presence of the required number of DSM-IV characteristics.

Need for Comprehensive Treatment Program

VYVANSE is indicated as an integral part of a total treatment program for ADHD that may include other measures (psychological, educational/vocational, social) for patients with this syndrome. Drug treatment may not be indicated for all patients with this syndrome. Drug treatment is not intended for use in a patient who exhibits symptoms secondary to environmental factors and/or other primary psychiatric disorders, including psychosis. Appropriate educational/vocational placement is essential for patients with this diagnosis and psychosocial intervention is often helpful. When remedial measures alone are insufficient, the decision to prescribe drug treatment will depend upon the physician's assessment of the chronicity and severity of the child's symptoms and on the level of functional impairment.

Long-Term Use

The effectiveness of VYVANSE for long-term use, i.e. >4 weeks, has not been systematically evaluated in controlled trials. Therefore, the physician who elects to use VYVANSE for extended periods should periodically re-evaluate the long-term usefulness of the drug for the individual patient (*also see* **DOSAGE AND ADMINISTRATION**).

Pediatrics (<6 years of age): Amphetamines are not recommended for use in children <6 years of age.

CONTRAINDICATIONS

- Advanced arteriosclerosis, symptomatic cardiovascular disease, moderate to severe hypertension, hyperthyroidism, known hypersensitivity or idiosyncrasy to the sympathomimetic amines, glaucoma, allergy to amphetamines or to components of VYVANSE (lisdexamfetamine dimesylate capsules) or its container.
- Agitated states.
- Patients with a history of drug abuse.
- Administration of VYVANSE during or within 14 days following the administration of monoamine oxidase inhibitors may result in hypertensive crises (also see Supplemental Product Information – Drug Interactions).

Safety Information

WARNINGS AND PRECAUTIONS

General

The least amount of amphetamine feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. VYVANSE should be used with caution in patients who use other sympathomimetic drugs.

Cardiovascular (*also see* CONTRAINDICATIONS, DOSAGE AND ADMINISTRATION – Dosing Considerations and Supplemental Product Information)

Misuse and Serious Cardiovascular Adverse Events

The misuse of amphetamines may cause serious cardiovascular adverse events (AEs) and sudden death.

Pre-existing Structural Cardiac Abnormalities or Other Serious Heart Problems and Sudden Death

Sudden death has been reported with sympathomimetic drugs used for ADHD treatment at therapeutic doses in children/adolescents with structural cardiac abnormalities or other serious heart problems. Although some serious heart problems alone carry an increased risk of sudden death, sympathomimetic drugs generally should not be used in children/adolescents with known serious structural cardiac abnormalities or other serious cardiac problems that may place them at increased vulnerability to the sympathomimetic effects of ADHD drugs.

Hypertension and other Cardiovascular Conditions

Sympathomimetic medications can cause a modest increase in average blood pressure (BP) and average heart rate (HR) and individuals may have larger increases. While the mean changes alone would not be expected to have short-term consequences, all patients should be monitored for larger changes in HR and BP. Caution is indicated in treating patients whose underlying medical conditions might be compromised by increases in BP or HR. BP and pulse should be monitored at appropriate intervals in patients taking VYVANSE, especially patients with hypertension.

Assessing Cardiovascular Status in Patients Being Treated with Sympathomimetic Medications

Theoretically there exists a pharmacological potential for all ADHD drugs to increase the risk of sudden/cardiac death. Although confirmation of an incremental risk for adverse cardiac events arising from treatment with ADHD medications is lacking, prescribers should consider this potential risk.

All drugs with sympathomimetic effects prescribed in the management of ADHD should be used with caution in patients who: a) are involved in strenuous exercise or activities, b) use other sympathomimetic drugs, or c) have a family history of sudden/cardiac death. Patients who are being considered for treatment with sympathomimetic medications should have a careful history (including assessment for a family history of sudden death or ventricular arrhythmia) and physical exam to assess for the presence of cardiac disease, and should receive further cardiac evaluation if findings suggest such disease. Patients who develop symptoms such as exertional chest pain, unexplained syncope, or other symptoms suggestive of cardiac disease during stimulant treatment should undergo a prompt cardiac evaluation.

Effects on Weight and Long-Term Suppression of Growth (*also see* Supplemental Product Information)

Children in VYVANSE Clinical Trials

Growth should be monitored during treatment with stimulants, and patients who are not growing or gaining weight as expected may need to have their treatment interrupted.

Stimulant Use in Adolescents and Children
Published data for other stimulants report that in children aged 7-10 years there is a temporary slowing in growth rate without evidence of growth rebound during this period of development. Published data are inadequate to determine whether the chronic use of amphetamines in children may be causally associated with suppression of growth.

Dependence Liability (*also see* Supplemental Product Information)
VYVANSE is a Schedule III drug under the Controlled Drugs and Substances Act (CDSA).

Amphetamines have been extensively abused. Tolerance, extreme psychological dependence, and severe social disability have occurred. There are reports of patients who have increased the dosage to levels many times higher than recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Careful supervision is therefore recommended during drug withdrawal. Manifestations of chronic intoxication with amphetamines may include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxication is psychosis, often clinically indistinguishable from schizophrenia.

Psychiatric (*also see* Supplemental Product Information)

Pre-existing Psychosis
Clinical experience suggests that in psychotic patients, administration of stimulants may exacerbate symptoms of behaviour disturbance and thought disorder.

Bipolar Illness
Particular care should be taken in using stimulants to treat ADHD in patients with comorbid bipolar disorder because of concern for possible induction of a mixed/manic episode in such patients. Prior to initiating treatment with a stimulant, patients with comorbid depressive symptoms should be adequately screened to determine if they are at risk for bipolar disorder; such screening should include a detailed psychiatric history, including a family history of suicide, bipolar disorder, and depression.

Emergence of New Psychotic or Manic Symptoms (also see CONTRAINDICATIONS)
Treatment-emergent psychotic or manic symptoms can be caused by stimulants at therapeutic doses. If such symptoms occur, consideration should be given to a possible causal role of the stimulant, and discontinuation of treatment may be appropriate.

Aggression
Aggressive behaviour or hostility is often observed in children/adolescents with ADHD, and has been reported in clinical trials and the post-marketing experience of some medications indicated for the treatment of ADHD. Although there is no systematic evidence that stimulants cause aggressive behaviour or hostility, patients beginning treatment of ADHD should be monitored for the appearance of, or worsening of, aggressive behaviour or hostility.

Neurologic

Seizures
There is some clinical evidence that stimulants may lower the convulsive threshold in patients with prior history of seizures, in patients with prior EEG abnormalities in absence of seizures, and, very rarely, in patients without a history of seizures and no prior EEG evidence of seizures. In the presence of seizures, the drug should be discontinued.

Tics
Amphetamines have been reported to exacerbate motor and phonic tics in Tourette's syndrome. Therefore, careful clinical evaluation for tics in Tourette's syndrome in patients and their families should precede use of stimulant medications.

Ophthalmologic (*also see* CONTRAINDICATIONS)
Difficulties with accommodation and blurring of vision have been reported with stimulant treatment.

SPECIAL POPULATIONS (*also see* Supplemental Product Information)

Pregnant Women
The effects of VYVANSE on labour and delivery in humans is unknown. There are no adequate and well-controlled studies in pregnant women.

Non-teratogenic Effects: Infants born to mothers dependent on amphetamines have an increased risk of premature delivery and low birth weight. Also, these infants may experience symptoms of withdrawal as demonstrated by dysphoria, including agitation, and significant lassitude.

Amphetamines should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Women
Amphetamines are excreted in human milk. Mothers taking amphetamines should be advised to refrain from nursing.

Pediatrics (<6 years of age)
Amphetamines are not recommended for use in children <6 years of age. Long-term effects of amphetamines in children have not been well established.

ADVERSE REACTIONS (*also see* Supplemental Product Information)

Adverse Events Associated with Discontinuation of Treatment
The pre-marketing pediatric development program for VYVANSE included exposures in a total of 401 participants in clinical trials (345 pediatric and 56 healthy adult subjects). Of these, 345 pediatric patients (ages 6-12) were evaluated in two controlled clinical studies (one parallel-group and one crossover), one open-label extension study, and one single-dose clinical pharmacology study.

Adverse drug reactions observed with VYVANSE treatment mainly reflect side effects commonly associated with amphetamine use. In clinical trials, approximately a third of pediatric subjects treated with VYVANSE reported decreased appetite and insomnia. Other very common adverse drug reactions include dry mouth, headache and upper abdominal pain. Stimulant side effects generally occur early in treatment and tend to decrease over time.

In a 4-week, parallel-group controlled clinical trial in pediatric patients with ADHD, 9% (20/218) of VYVANSE-treated patients discontinued due to AEs compared to 1% (1/72) who received placebo. The most frequent AEs leading to discontinuation and considered to be drug-related (i.e. leading to discontinuation in at least 1% of VYVANSE-treated patients and at a rate at least twice that of placebo) were ECG voltage criteria for ventricular hypertrophy, tic, vomiting, psychomotor hyperactivity, insomnia, and rash (2/218 each; 1%).

Clinical Trial Adverse Drug Reactions
AEs reported in a 4-week clinical trial in pediatric patients treated with VYVANSE (incidence of ≥1%) and greater than that observed in placebo-treated patients are presented in Table 1.

Table 1. Adverse Drug Reactions Reported by ≥1% of Pediatric Patients Taking VYVANSE in a 4-Week Clinical Trial

Body System	Preferred Term	VYVANSE (n=218)	placebo (n=72)
Metabolism and Nutrition Disorders	Decreased Appetite	39.0%	4.2%
	Anorexia	1.8%	0%
Psychiatric Disorders	Affect lability	3.2%	0%
	Agitation	1.4%	0%
	Aggression	1.4%	0%
	Initial Insomnia	4.1%	0%
	Insomnia	18.8%	2.8%
	Irritability	9.6%	0%
	Tic	2.3%	0%
Nervous System Disorders	Dizziness	5.0%	0%
	Headache	11.9%	9.7%
Gastrointestinal Disorders	Abdominal Pain Upper	11.9%	5.6%
	Vomiting	8.7%	4.2%
	Nausea	6.0%	2.8%
	Dry Mouth	4.6%	0%
Skin and Subcutaneous Tissue Disorders	Rash	2.8%	0%

General Disorder and Administration Site Conditions	Pyrexia	2.3%	1.4%
Investigations	Weight Decreased	9.2%	1.4%

Note: This table includes those events for which the incidence in patients taking VYVANSE was greater than the incidence in patients taking placebo.

The pediatric clinical trial was a phase 3, randomized, multicentre, double-blind, parallel-group, placebo-controlled study in 290 children aged 6-12 years with ADHD. Adverse drug reactions with the highest subject incidence rates in VYVANSE treatment group combined were decreased appetite, insomnia, upper abdominal pain, headache, irritability, vomiting, weight decreased, and nausea. All of these adverse drug reactions are typical side effects of amphetamine products. Fifty percent of these adverse drug reactions occurred within the first week of treatment with VYVANSE, when all of the active-treated subjects received VYVANSE 30 mg. Small increases in heart rate were observed with VYVANSE use. These changes were small in magnitude and are known effects of amphetamine use.

Effect on body weight: In the pediatric study, VYVANSE demonstrated a dose-response effect on subjects' body weight over 4 weeks. No significant differences were observed among the treatment groups in systolic BP and diastolic BP (*also see* **WARNINGS AND PRECAUTIONS, Effects on Weight and Long-Term Suppression of Growth**).

To report an adverse event, contact your Regional Adverse Reaction Monitoring Office at 1-866-234-2345 or call Shire Canada Inc. at 1-800-268-2772.

Administration

DOSAGE AND ADMINISTRATION

Dosing Considerations

Dosage should be individualized according to the therapeutic needs and response of the patient. VYVANSE should be administered orally starting at the lowest possible effective dosage.

VYVANSE should not be used in patients with symptomatic cardiovascular disease including coronary artery disease and should generally not be used in patients with known serious structural cardiac abnormalities or other serious heart problems that may place them at increased vulnerability to the sympathomimetic effects of ADHD drugs (*also see* **CONTRAINDICATIONS** *and* **WARNINGS AND PRECAUTIONS**).

Cardiovascular: Assessing cardiovascular status in patients being treated with sympathomimetic medications).

Patients who are considered to need extended treatment with VYVANSE should undergo periodic evaluation of their cardiovascular status.

Recommended Dose and Dosage Adjustment

In children with ADHD who are 6-12 years of age and are either starting treatment for the first time or switching from another medication, 30 mg once daily in the morning is the recommended dose. In clinical studies, doses of 30-70 mg/day were shown to be effective, although no additional benefit was demonstrated at doses >30 mg/day, and AEs and discontinuations were more frequent at higher doses. Doses >70 mg/day of VYVANSE have not been studied. If the physician, based on clinical judgment, decides a dose increase >30 mg/day is warranted for an individual patient, the maximum recommended dose is 50 mg/day; dosage adjustment should occur after approximately one week. VYVANSE has not been studied, and is not recommended for use, in patients <6 years or >12 years of age.

VYVANSE should be taken in the morning. Afternoon doses should be avoided because of the potential for insomnia.

VYVANSE may be taken with or without food.

VYVANSE capsules may be taken whole, or the capsule may be opened and the entire contents dissolved in a glass of water. If the patient is using the solution administration method, the solution should be consumed immediately; it should not be stored. The dose of a single capsule should not be divided. The contents of the entire capsule should be taken, and patients should not take anything less than one capsule/day.

Where possible, drug administration should be interrupted occasionally to determine if there is a recurrence of behavioural symptoms sufficient to require continued therapy.

SUPPLEMENTAL PRODUCT INFORMATION

WARNINGS AND PRECAUTIONS

Cardiovascular

Adults: Sudden deaths, stroke, and myocardial infarction have been reported in adults taking stimulant drugs at usual doses for ADHD. Although the role of stimulants in these adult cases is also unknown, adults have a greater likelihood than children of having serious structural cardiac abnormalities, cardiomyopathy, serious heart rhythm abnormalities, coronary artery disease, or other serious cardiac problems. Adults with such abnormalities should also generally not be treated with stimulant drugs.

Effects on Weight and Long-Term Suppression of Growth

Children in VYVANSE Clinical Trials: In a controlled trial of lisdexamfetamine in children ages 6 to 12 years, mean weight loss from baseline after 4 weeks of therapy was -0.9, -1.9, and -2.5 lbs, respectively, for patients receiving 30 mg, 50 mg, and 70 mg of lisdexamfetamine, compared to a 1 lbs weight gain for patients receiving placebo. Higher doses were associated with greater weight loss with 4 weeks of treatment. Careful follow-up for weight in children ages 6 to 12 years who received lisdexamfetamine over 12 months suggests that consistently medicated children (i.e. treatment for 7 days per week throughout the year) have a slowing in growth rate measured by body weight as demonstrated by an age- and sex-normalized mean change from baseline in percentile of -13.4 over 1 year (average percentile at baseline and 12 months was 60.6 and 47.2, respectively).

Stimulant Use in Adolescents and Children: In a controlled trial of amphetamine (d to l enantiomer ratio of 3:1) in adolescents, mean weight change from baseline within the initial 4 weeks of therapy was -1.1 lbs and -2.8 lbs, respectively, for patients receiving 10 mg and 20 mg of amphetamine (d to l enantiomer ratio of 3:1). Higher doses were associated with greater weight loss within the initial 4 weeks of treatment.

Dependence Liability

Human Studies: In a human abuse liability study, when equivalent oral doses of 100 mg VYVANSE and 40 mg immediate-release d-amphetamine sulfate were administered to individuals with a history of drug abuse, VYVANSE 100 mg produced subjective responses on a scale of "Drug Liking Effects", "Amphetamine Effects", and "Stimulant Effects" that were significantly less than d-amphetamine immediate-release 40 mg. However, oral administration of 150 mg VYVANSE produced increases in positive subjective responses on these scales that were statistically indistinguishable from the positive subjective responses produced by 40 mg of oral immediate-release d-amphetamine and 200 mg of diethylpropion.

Intravenous administration of 50 mg lisdexamfetamine to individuals with a history of drug abuse produced positive subjective responses on scales measuring "Drug Liking", "Euphoria", "Amphetamine Effects", and "Benzedrine Effects" that were greater than placebo but less than those produced by an equivalent dose (20 mg) of intravenous d-amphetamine.

Animal Studies: In animal studies, lisdexamfetamine produced behavioural effects qualitatively similar to those of the CNS stimulant d-amphetamine. In monkeys trained to self-administer cocaine, intravenous lisdexamfetamine maintained self-administration at a rate that was statistically less than that for cocaine, but greater than that of placebo.

Psychiatric

Emergence of New Psychotic or Manic Symptoms: In a pooled analysis of multiple short-term, placebo-controlled studies, such symptoms occurred in about 0.1% (4 patients with events out of 3482 exposed to methylphenidate or amphetamine for several weeks at usual doses) of stimulant-treated patients compared to 0 in placebo-treated patients.

Special Populations

Pregnant Women: VYVANSE had no apparent effects on embryo-fetal development or survival when administered orally to pregnant rats and rabbits throughout the period of organogenesis at doses up to 40 and 120 mg/kg/day respectively. These doses are approximately 2.7 and 16 times respectively the maximum recommended dose of 70 mg/day on a mg/m^2 body surface area basis.

There has been one report of severe congenital bony deformity, tracheoesophageal fistula, and anal atresia (VATER association) in a baby born to a woman who took d-amphetamine sulfate with lovastatin during the first trimester of pregnancy.

Pediatrics (<6 years of age): A study was conducted in which juvenile rats received oral doses of 4, 10, or 40 mg/kg/day of lisdexamfetamine from 7 to 63 days of age. These doses are approximately 0.3, 0.7, and 3 times the maximum recommended human daily dose of 70 mg on a mg/m^2 basis. Dose-related decreases in food consumption, bodyweight gain, and crown-rump length were seen; after a four-week drug-free recovery period, bodyweights and crown-rump lengths had significantly recovered in females but were still substantially reduced in males. Time to vaginal opening was delayed in females at the highest dose, but there were no drug effects on fertility when the animals were mated beginning on 85 days of age. In a study in which juvenile dogs received lisdexamfetamine for 6 months beginning at 10 weeks of age, decreased bodyweight gain was seen at all doses tested (2, 5, and 12 mg/kg/day, which are approximately 0.5, 1, and 3 times the maximum recommended human daily dose on a mg/m^2 basis). This effect partially or fully reversed during a four-week drug-free recovery period.

ADVERSE REACTIONS

Uncommon Adverse Drug Reactions (reported by ≥0.1% to <1% of pediatric patients taking VYVANSE) in a 4-week clinical trial include:

Immune System Disorders: Hypersensitivity; ***Psychiatric Disorders:*** Dysphoria, Logorrhea; ***Eye Disorders:*** Vision Blurred; ***Cardiac Disorders:*** Palpitation and Tachycardia; ***Gastrointestinal Disorders:*** Diarrhea; ***General Disorders and Administration Site Conditions:*** Feeling jittery; ***Investigations:*** Blood pressure increased

Post-Market Adverse Drug Reactions

Body System	Preferred Term
Psychiatric Disorders	Anxiety Euphoria Depression Hallucination Mania Psychotic episodes Suicidal behaviour
Nervous System Disorders	Dyskinesia Restlessness Seizure Tremor
Eye Disorders	Mydriasis
Skin and Subcutaneous Tissue Disorders	Angioedema Hyperhidrosis Urticaria

DRUG INTERACTIONS

Drug-Drug Interactions

Agents that Lower Blood Levels of Amphetamines: Urinary Acidifying Agents: These agents (ammonium chloride, sodium acid phosphate, etc.) increase the concentration of the ionized species of the amphetamine molecule, thereby increasing urinary excretion. Methenamine Therapy: Urinary excretion of amphetamines is increased, and efficacy is reduced, by acidifying agents used in methenamine therapy.

Agents that Increase Blood Levels of Amphetamines: Urinary Alkalinizing Agents: These agents (acetazolamide, some thiazides) increase the concentration of the non-ionized species of the amphetamine molecule, thereby decreasing urinary excretion. Monoamine Oxidase Inhibitors: MAOI antidepressants, as well as a metabolite of furazolidone, slow amphetamine metabolism. This slowing potentiates amphetamines, increasing their effect on the release of norepinephrine and other monoamines from adrenergic nerve endings; this can cause headaches and other signs of hypertensive crisis. A variety of toxic neurological effects and malignant hyperpyrexia can occur, sometimes with fatal results.

Agents Whose Effects May be Reduced by Amphetamines: Adrenergic Blockers: Adrenergic blockers are inhibited by amphetamines. Antihistamines: Amphetamines may counteract the sedative effect of antihistamines. Antihypertensives: Amphetamines may antagonize the hypotensive effects of antihypertensives. Veratrum Alkaloids: Amphetamines inhibit the hypotensive effect of veratrum alkaloids. Ethosuximide: Amphetamines may delay intestinal absorption of ethosuximide.

Agents Whose Effects May be Potentiated by Amphetamines: Antidepressants, Tricyclic: Amphetamines may enhance the activity of tricyclic antidepressants or sympathomimetic agents; d-amphetamine with desipramine or protriptyline and possibly other tricyclics cause striking and sustained increases in the concentration of d-amphetamine in the brain; cardiovascular effects can be potentiated. Meperidine: Amphetamines potentiate the analgesic effect of meperidine. Phenobarbital: Amphetamines may delay intestinal absorption of phenobarbital; co-administration of phenobarbital may produce a synergistic anticonvulsant action. Phenytoin: Amphetamines may delay intestinal absorption of phenytoin; co-administration of phenytoin may produce a synergistic anticonvulsant action.

Agents that May Reduce the Effects of Amphetamines: Chlorpromazine: Chlorpromazine blocks dopamine and norepinephrine receptors, thus inhibiting the central stimulant effects of amphetamines, and can be used to treat amphetamine poisoning. Haloperidol: Haloperidol blocks dopamine receptors, thus inhibiting the central stimulant effects of amphetamines. Lithium Carbonate: The anorectic and stimulatory effects of amphetamines may be inhibited by lithium carbonate.

Agents that May Potentiate the Effects of Amphetamines: Norepinephrine: Amphetamines enhance the adrenergic effect of norepinephrine. Propoxyphene Overdosage: In cases of propoxyphene overdosage, amphetamine CNS stimulation is potentiated and fatal convulsions can occur.

Drug-Food Interactions

Food does not affect the observed AUC and C_{max} of d-amphetamine in healthy adults after single-dose oral administration of 70 mg of VYVANSE (lisdexamfetamine dimesylate) capsules but prolongs T_{max} by approximately 1 hour (from 3.8 hrs at fasted state to 4.7 hrs after a high-fat meal). After an 8-hour fast, the AUC for d-amphetamine following oral administration of lisdexamfetamine dimesylate in solution and as intact capsules were equivalent.

Drug-Laboratory Interactions

Amphetamines can cause a significant elevation in plasma corticosteroid levels. This increase is greatest in the evening. Amphetamines may interfere with urinary steroid determinations.

OVERDOSAGE

Individual patient response to amphetamines varies widely. Toxic symptoms may occur idiosyncratically at low doses.

Symptoms: Manifestations of acute overdosage with amphetamines include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states, hyperpyrexia and rhabdomyolysis. Fatigue and depression usually follow the central nervous system stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning is usually preceded by convulsions and coma.

Treatment: Treatment of overdosage consists of appropriate supportive measures. Consult with a Certified Poison Control Center for up-to-date guidance and advice. Management of acute amphetamine intoxication is largely symptomatic and includes gastric lavage, administration of activated charcoal, administration of a cathartic and sedation. Experience with hemodialysis or peritoneal dialysis is inadequate to permit its recommendation in this regard. Acidification of the urine increases amphetamine excretion, but is believed to increase risk of acute renal failure if myoglobinuria is present. If acute severe hypertension complicates amphetamine overdosage, administration of intravenous phentolamine has been suggested. However, a gradual drop in blood pressure will usually result when sufficient sedation has been achieved. Chlorpromazine antagonizes the central stimulant effects of amphetamines and can be used to treat amphetamine intoxication.

The prolonged release of VYVANSE (lisdexamfetamine dimesylate capsules) should be considered when treating patients with overdose.

Animal Toxicology

Acute administration of high doses of amphetamine (d- or d,l-) has been shown to produce long-lasting neurotoxic effects, including irreversible nerve fibre damage, in rodents. The significance of these findings to humans is unknown.

STORAGE AND STABILITY

Dispense in a tight, light-resistant container as defined in the USP. Store at 25°C (77°F). Excursions permitted to 15-30°C (59-86°F).

DOSAGE FORMS

VYVANSE (lisdexamfetamine dimesylate capsules) is designed as a capsule for once-a-day oral administration. VYVANSE capsules contain 30 mg and 50 mg of lisdexamfetamine dimesylate.

Study references

§ This analogue classroom study was a double-blind, randomized, crossover trial comparing the efficacy and safety of VYVANSE (30, 50 and 70 mg/day) with placebo and with mixed amphetamine salts extended-release (MAS XR: 10, 20 and 30 mg/day) included as a reference arm. Following a 3-day washout period, patients with ADHD aged 6 to 12 years underwent a 3-week, open-label dose-titration period on MAS XR to determine optimal dose (10 mg/day, n=10; 20 mg/day, n=17; 30 mg/day, n=25) based on therapeutic response and tolerability. Following the dose-titration period, subjects entered the double-blind crossover portion of the study where each subject received in random order 1 week of placebo, 1 week of MAS XR (at the individually optimized dose), and 1 week of VYVANSE (in an approximately equivalent dose of amphetamine). VYVANSE provided significant improvement in patient behaviour through the last time point evaluated (12 hours post-dose; 0.8 vs.1.7 for placebo on SKAMP-DS scale; $p<0.0001$).

¶ This study was a double-blind, forced-dose, parallel-group, randomized trial assessing the efficacy and safety of VYVANSE in children aged 6 to 12 years with ADHD. Following a 1-week washout period, patients were randomized to receive VYVANSE 30 mg/day for 4 weeks (n=71), 50 mg/day (30 mg/day for week 1, with forced-dose escalation to 50 mg/day for weeks 2 to 4, n=74), 70 mg/day (30 mg/day for week 1, with forced-dose escalation to 50 mg/day for week 2 and 70 mg/day for weeks 3 and 4, n=73), or placebo capsules for 4 weeks (n=72). VYVANSE is dosed at 30 mg for starting or switching; the maximum recommended dose is 50 mg/day.

References: 1. Biederman J, *et al.* Lisdexamfetamine dimesylate and mixed amphetamine salts extended-release in children with ADHD: a double-blind, placebo-controlled, crossover analog classroom study. *Biol Psychiatry* 2007;62:970-76. **2.** Data on File. Shire Canada Inc., Clinical Study Report NRP104.201. July 13, 2005. **3.** VYVANSE Product Monograph. Shire Canada Inc., January 6, 2010. **4.** Biederman J, *et al.* Efficacy and tolerability of lisdexamfetamine dimesylate (NRP-104) in children with attention-deficit/hyperactivity disorder: a phase III, multicenter, randomized, double-blind, forced-dose, parallel-group study. *Clin Ther* 2007;29(3):450-63.

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Product Monograph available on request at 1-800-268-2772.

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PAAB Member R&D

Shire
Our full attention is on ADHD.