Healtncare Quarterly

ISSUE 2: CHILD AND YOUTH MENTAL HEALTH

Child Health in Canada

The second of four special issues prepared with The Hospital for Sick Children, Toronto, Mary Jo Haddad, Editor-in-Chief

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Five Strategies for Change p.14 Stan Kutcher

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Why Worry about Bullying? p.72 Debra Pepler et al.



"When civil society is enabled, there are many avenues through which it can engage on behalf of children"

Clyde Hertzman in our first issue on child health focused solely on social determinants





his second instalment in our Child Health in Canada series explores a multi-faceted topic that weighs especially heavy on the minds of parents, teachers, care providers, policy makers, social workers and many others: mental health. After all, as Stan Kutcher asserts in his contribution to this issue, "there can be no health without mental health."

The mental well-being of our children and youth is a major cause for concern. In Ontario, for instance, half a million children grapple with mental health problems (Children's Mental Health Ontario [CMHO] 2010a). A recent study in the United States similarly revealed that approximately one in five young people in that country – the same proportion as in Ontario (CMHO 2010a) - suffer from a "mental disorder" that is severe enough to undermine their normal functioning (National Institute of Mental Health 2010, September 27). The consequences of leaving such problems untreated include school failure, family conflict, drug abuse, violence and suicide (CMHO 2010b). And we should never forget that mental health problems among the young are not neatly confined to the early years: 70% of Canadian adults who have mental health issues developed symptoms before age 18 (Mental Health Commission of Canada [MHCC] 2010).

Where Are We with Child and Youth Mental **Health? Where Do We Need to Go?**

Issue one of this Child Health in Canada series concluded with an interview I conducted with Michael Kirby, the chair of MHCC. That dialogue set the stage for many of the discussions you will encounter here, including the effects on young people of mental health-related policies, services, funding, treatment models and public perceptions.

Our first essay is by Simon Davidson. Like his MHCC colleague Kirby, Davidson takes a strong stand on the need for improved mental health services for children and youth. Even though mental health disorders are widespread, "child and youth mental health services continue to be significantly less resourced than physical health services and seriously fragmented at all levels," states Davidson. The relative lack of evidence-informed practices in child and youth mental health, he notes, compounds those problems.

Nevertheless, Davidson sees "pockets of excellence and reasons for optimism." Among the reasons for feeling positive is MHCC's Evergreen framework, which governments will soon be able to use when creating policy frameworks tailored to young people. MHCC is also developing a compendium of best practices in school-based mental health and addictions services, has prioritized working with youth and healthcare providers to reduce stigma and discrimination, is locating best practices for multi-stakeholder knowledge exchange and has struck an MHCC Youth Council. Beneficial developments occurring outside MHCC include the child and youth mental health policy frameworks in certain provinces and Ontario's Provincial Centre of Excellence for Child and Youth Mental Health. Davidson concludes with a list of elements that, he argues, would characterize a sustainable system of child and youth mental health care, including involving young people in developing their own care plans and the overall system, ensuring consumer-driven services that are provided when and where they are needed and fostering an integrated system that prioritizes care continuity.

The kind of "transformational change" Davidson envisions is echoed loudly in Stan Kutcher's essay. Taking a wide view of the matter, Kutcher asserts that mental health care for children and youth "is a point where human rights, human well-being, best evidence arising from best research, economic development and the growth of civic society intersect." At present, however, Kutcher sees a troubling gap at that intersection: "the availability of appropriate mental health care for children and youth in Canada does not come close to meeting the need."

Attributing that chasm largely to the "pernicious" historical reality that entails the provision of mental health care through a "parallel health system," Kutcher argues that this silo approach to care does not work: it neither provides the kind of "holistic" care youth and their families need nor facilitates access to best evidence. Whereas Davidson's suggestions for change are located primarily at the provincial/territorial level, Kutcher urges a national approach, which could involve, for example, creating a federal commissioner or minister of state for child and youth health.

Challenges within the System

Having set up various high-level concerns, we next shift to explorations of particular challenges affecting Canada's mental health system. Ene Underwood starts us off with a portrait of a high-risk youth - "Kayley" - whose mental health needs stem from childhood abuse and neglect. Underwood uses the story of Kayley and four other "vulnerable" children to illustrate the complex roles of child welfare agents in dealing with mental health issues and as background for proposing four strategies that address prevention and intervention, supportive transitions back to the community, supportive transitions between the youth and adult systems and stronger service-delivery integration.

Better youth-to-adult transitions and more robust integration are recurrent themes throughout this collection. They figure prominently, for example, in the contribution by Melissa Vloet, Simon Davidson and Mario Cappelli, which addresses "effective transitional pathways" from child and youth to adult mental health systems and services. The team's research led them to the conclusion that the Shared Management Framework is "the most feasible model of service delivery," one that "could easily translate to mental health care in Canada." Discussing their findings with a wide range of Ontario government officials, the team was able to draw on policy makers' perspectives in order to produce recommendations that address transitions at both the policy and practice levels.

One of the strongest points Kirby made when I interviewed him was that Canadians need to erase the stigma associated with mental health disorders. Heather Stuart, Michelle Koller, Romie Christie and Mike Pietrus tackle that thorny subject in their article, which presents findings from an MHCC Opening Minds educational symposium targeted at journalism students. This contact-based intervention had a significant impact on students' perceptions, an important result when one considers the role journalists can play in shaping public attitudes toward mental health.

Child and Youth Mental Health in the Community

Michael Chandler opens our community-focused section with a passionately argued piece that advocates a "radical reframing" of the topic of mental health among Indigenous Canadians. Committed to challenging normative ways of conceiving and discussing mental health issues, Chandler points out that wholesale accounts of problems among Indigenous people are unable to accurately represent the complexities and differences that exist within and among the country's more than 600 culturally distinct First Nations bands. Instead of "empty abstractions," he states, we need "fine-grained analyses." Chandler's second argument aligns with this emphasis on local specificity: we must, he urges, tap "Indigenous knowledge" if we hope to deal successfully with their issues of well-being. In Chandler's discussion of suicide and suicide prevention among British Columbia's Indigenous communities, I think you will find his "lateral transfer" approach at the very least intriguing and, I suspect, even highly persuasive.

Geographical remoteness, steep costs and the concentration of psychiatrists and other mental health care providers in urban centres demands creative solutions for dealing with mental health problems among children and youth living in rural communities (including many Indigenous Canadians). A particularly powerful solution is discussed in the article by a group of researchers affiliated with The Hospital for Sick Children; Antonio Pignatiello and co-authors address the benefits of the TeleLink Mental Health Program. This telepsychiatry program provides remote Ontario communities with timely, equitable access to specialist clinical services. While not a perfect modality, it currently serves a valuable function and, the authors conclude, illuminates telepsychiatry's "requisite components" and points the way to more sophisticated developments.

Our next essay examines "community" in the context of a justice system that needs to do much more in terms of understanding and supporting young people who commit crimes. Key to this, Alan Leschied argues, is an appreciation of the significant extent to which mental health disorders factor into youths' criminal activities. Echoing many of the observations made by other contributors around stigma, resource scarcity and lack of service coordination, Leschied propounds six mental healthfocused strategies aimed at both reducing risk for young people and increasing community safety.

The public's generally unsympathetic view of young offenders largely stems, Leschied believes, from a lack of awareness of the deep connection between mental health disorders and criminality. A related knowledge gap might be present in the public's attitudes toward street-involved youth, the subject of Elizabeth McCay's article. Overlapping with many of the family-dysfunction and foster-care dislocations addressed by Underwood, McCay's article starts from the well-documented finding that "mental health challenges are ubiquitous to youth who are street involved." McCay's explanation of the causes of mental disorders in this population is awfully bleak. I was surprised, therefore, to learn of the "resilience" McCay and others have discovered among these individuals. Taking that resilience as a sign of the potential for healing, McCay advocates for more research on evidence-based interventions specific to this population, as well as for bold policies that support early intervention.

Over the past several years, Canadian media have reported extensively on the disturbingly widespread incidence of bullying among children and youth. In our next article, frequent media commentator Debra Pepler and three of her colleagues urge us to understand bullying as a "destructive relationship problem," one that poses risks for physical and psychosocial health – both for those being bullied and, I was somewhat surprised to learn, for the bullies themselves. In addition to providing a review of the extensive literature on bullying and its effects, the authors urge healthcare professionals to act on their moral duty to screen for and report all signs of bullying behaviour and "peer victimization."

One of the most pervasive efforts to curb bullying, aggression and violence among Canadian young people is Roots of Empathy (ROE). Although widely implemented, ROE has rarely been evaluated. Rob Santos and four co-investigators examined ROE's "real-world effectiveness" among students in Manitoba. Their findings indicate significant violencereduction benefits, outcomes that potentially last up to three years following program completion. Given the call by several of the contributors (e.g., Davidson, Chandler and McCay) to this issue of Child Health in Canada for evidence-based child and youth-focused mental health strategies, these preventionfocused results warrant a good deal of attention.

Inspiration

Much in this issue of Child Health in Canada might well leave you feeling daunted by the enormity of the organizational, political, clinical, financial and social challenges we face. If that is the case, I urge you to take an extra 10 minutes to read the concluding interview Gail Donner conducted with Karen Minden, one of the founders and the first chief executive officer of the Pine River Institute. Minden's work in establishing Pine River and ensuring its effectiveness in helping young people overcome their mental health and addiction problems is a model of intelligence and devotion that will, I am confident, inspire you to re-double your own efforts.

Before I turn this issue over to you, however, I want briefly to thank the authors of the essays for their remarkable support. Longwoods's editorial director Dianne Foster Kent and I have rarely before met with such an enthusiastic response to invitations to contribute. We believe that our authors' eagerness demonstrates the deep commitment this varied community of care providers, researchers, policy makers and administrators has for advancing the mental well-being of children and youth.

 Mary Jo Haddad, RN, BScN, MHSc, LLD, CM President and Chief Executive Officer The Hospital for Sick Children Toronto, Ontario

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ISSUE 2: CHILD AND YOUTH MENTAL HEALTH

Child Health in Canada

1 The Editor's Letter

Mary Jo Haddad

WHERE WE ARE AND WHERE WE NEED TO BE

The State of Child and Youth Mental Health in Canada: Past Problems and Future Fantasies

Simon Davidson

How can it be, that in 2010, despite the best efforts of many, the state of child and youth mental health in Canada is unknown to countless people? It is a shameful state of affairs that, the author states, makes one wonder how much our society really cares about the well-being of our children and youth. In this article, the author examines several facets of the current, and unfortunate, state of child and youth mental health in Canada. But not stopping there, he outlines two promising initiatives under way and shares his hopes for the future.

14 Facing the Challenge of Care for Child and Youth Mental Health in Canada: A Critical Commentary, Five Suggestions for Change and a Call to Action

Stan Kutcher

Much is currently known about what could be done to improve the organization and delivery of mental health care for young people; yet there is a gap between what we know can be done and what is being done. The challenge is to move quickly and efficiently to address how to best deliver widely accessible, effective and efficient care, realizing that this may require a transformation of how we have traditionally approached this issue. Concurrently, it is essential that action be driven as much as possible by best evidence not by best practice. In this article, the author discusses five areas in particular need of urgent address.

FACING THE SYSTEM CHALLENGES

22 Improving Mental Health Outcomes for Children and Youth Exposed to Abuse and Neglect

Ene Underwood

Children exposed to abuse and neglect are at a significantly higher risk of developing mental health conditions than are children who grow up in stable families. The author draws on case studies, the literature and proven initiatives that have been implemented in a number of children's aid societies to demonstrate four strategies that can improve mental health outcomes - increasing admission prevention and early intervention to support at-risk youth at home; supporting transitions from intensive residential treatment back to the community; ensuring youth transitioning to the adult system have the supports they need; and increasing integration in service delivery between children's mental health and child welfare.

"We Suffer from Being Lost": Formulating Policies to Reclaim Youth in Mental Health Transitions

Melissa A. Vloet, Simon Davidson and Mario Cappelli The greatest financial and institutional weaknesses in mental health services affect individuals between the ages of 16 and 25. The authors describe a project that sought to identify bodies of evidence supporting effective transitional pathways and to engage policy leaders in a discussion of youth mental health transitions to highlight stakeholder perspectives.

Reducing Mental Health Stigma: A Case Study

Heather Stuart, Michelle Koller, Romie Christie and Mike Pietrus

The authors describe a study that evaluated a contactbased educational symposium designed to reduce mental health-related stigma in journalism students. They found a significant reduction in stigma after the symposium, with the majority of students indicating that their views of mental illness had changed.

CHILD AND YOUTH MENTAL HEALTH INTHE COMMUNITY

50 The "Mental" Health of Canada's Indigenous Children and Youth: Finding New Ways Forward

Michael Chandler

The author discusses the common misperception that all First Nations, Métis and Inuit youth are equally at risk of, or already manifest, some disproportionate array of mental health problems. The real truth, he explains, is that while some fraction of Indigenous communities do have more than their "fair" share of childhood psychopathologies, it is equally true that many more do not. The author then endeavours to persuade the reader that Indigenous knowledge is an untapped resource in our efforts to deal with Indigenous health and mental health problems where they occur.

58 Youth Justice and Mental Health in Perspective

Alan W. Leschied

Research indentifies that a significant proportion of youth within the justice system possess some form of mental health disorder, and that the presence of an emotional disorder can provide important explanatory value regarding the causes of crime. Evidence is now overwhelming that services within the youth justice system need to account for the causes of crime in order to effectively reduce the likelihood of reoffending.

64 Experience of Emotional Stress and Resilience in Street-Involved Youth: The Need for Early Mental Health Intervention

Elizabeth McCav

Mental health challenges are of paramount importance to the well-being of Canadian adolescents and young adults, with 18% of Canadian youth, ages 15-24, reporting a mental illness. However, it is unlikely that this statistic accounts for those invisible youth who are disconnected from families and caregivers, bereft of stable housing and familial support. Mental health risk is amplified in street-involved youth and must be recognized as a priority for policy development that commits to accessible mental health programming, in order to realize the potential of these vulnerable, yet often resilient, youth.

72 Why Worry about Bullying?

Debra J. Pepler, Jennifer German, Wendy Craig and Samantha Yamada

In this article, the authors review research to identify bullying as a critical public health issue for Canada. There is a strong association between involvement in bullying and health problems for children who bully, those who are victimized and those involved in both bullying and being victimized. The authors argue that by understanding bullying as a destructive relationship problem that significantly impacts physical and mental health, healthcare professionals can play a major role in promoting healthy relationships and healthy development for all Canadian children and youth.

Effectiveness of School-Based Violence Prevention for Children and Youth: A Research Report

Robert G. Santos, Mariette J. Chartier, Jeanne C. Whalen, Dan Chateau and Leanne Boyd

Aggression, bullying and violence in children and youth are prevalent in Canada (18%) and internationally. The authors evaluated the effectiveness of Roots of Empathy (ROE), a school-based mental health promotion and violence prevention program for children that has been widely implemented but rarely evaluated.

Transforming Child and Youth Mental Health Care via Innovative Technological Solutions

Antonio Pignatiello, Katherine M. Boydell, John Teshima, Tiziana Volpe, Peter G. Braunberger and Debbie Minden Live interactive videoconferencing and other technologies offer innovative opportunities for effective delivery of specialized child and adolescent mental health services. In this article, an example of a comprehensive telepsychiatry program is presented to highlight a variety of capacitybuilding initiatives that are responsive to community needs and cultures; these initiatives are allowing children, youth and caregivers to access otherwise-distant specialist services within their home communities.

MAKING A DIFFERENCE ...

103 Faith in the Goodness of People

Gail Donner, in conversation with Karen Minden

Karen Minden is a founding board member and first chief executive officer of the Pine River Institute, a residential treatment and outdoor leadership centre northwest of Toronto, Ontario, which aims to heal young people ages 13-19 who are struggling with mental health issues, particularly substance abuse. In 2010, Minden was awarded the Order of Canada for Social Service. In this interview, Minden candidly discusses how struggles within her own family motivated her to start up the institute, and shares the journey from an idea to the reality of Pine River.

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"An intriguing aspect of social determinants is that they appear important for almost every disease studied."

Neal Halfon et al. in our first issue on child health focused solely on social determinants



The State of Child and Youth Mental Health in Canada:

Past Problems and Future Fantasies

Simon Davidson

erezin (1978), a geriatric psychiatrist from Harvard, says that as we get older, our personality does not change, it just gets more so! How can it be then, that in 2010, despite the best efforts of many, the state of child and youth mental health in Canada is unknown to countless people? How can it be that despite the fact that nothing has changed for years, except to get more so, few know about the plight of Canadian child and youth mental health services? How can it be that in Ontario, politicians, regardless of political party (all parties have been in power at some time during the past 20 years), have known the facts about child and youth mental health and have effectively turned a blind eye?

It is a shameful state of affairs that makes one wonder how much our society really cares about the well-being of our children and youth. There is too much meaningless rhetoric, especially from politicians: "Our children and youth are our future!" This is talk that has never been walked. And, yet, if we were to make the relatively modest financial investments required to ensure that the physical and mental health of our children and youth were as good as possible, we would have a much better chance of maximizing their potential, of reducing stress in their lives and their families, of optimizing their life trajectory, of improving the calibre of the workforce in Canada and, ultimately, of improving the physical and mental health among the Canadian population as a whole. It makes imminent good sense; yet, our leaders continue to turn a blind eye! Perhaps

it is because improving the health of our children and youth will take many years, whereas politicians often focus on their brief tenure and securing their next term of office. As well, children and youth simply do not have a vote.

Recently, in Ontario, there has been a considerable focus on mental health and addictions across the lifespan. Essentially, there are two initiatives simultaneously under way (not necessarily matching up, although the recommendations are similar in several areas). The first derives from the recently released report of the Select Committee on Mental Health and Addictions (Legislative Assembly of Ontario 2010). This committee is made up of members of all political parties. In essence, the committee endorses what many of us have said for years. There is no system of mental health services across the lifespan in Ontario; the committee recommends that all mental health services (including child and youth services) be funded out of the Ontario Ministry of Health and Long-Term Care (MOHLTC) and that there be an overarching agency similar to Cancer Care Ontario to implement the mental health strategy for the province. The mission for the proposed Mental Health and Addictions Ontario is to reduce the burden of mental illness and addictions by ensuring that all Ontario residents have timely and equitable access to an integrated system of excellent, coordinated and efficient promotion, prevention, early intervention, treatment and community support programs. MOHLTC has simultaneously been working on a 10-year mental health addictions strategy titled Every Door is the Right Door. This report has not yet been released but has many similarities to the report from the Special Committee. However, a major difference involves the proposed governance structure - the 10-year strategy recommends that a committee made up of several ministries oversee the implementation of the mental health strategy.

Current State of Child and Youth Mental Health in Canada

So, what is the state of child and youth mental health in Canada today? Let's use Ontario as a lens through which to exemplify past problems in service delivery.

Proportion of Children and Youth Receiving Help

In Canada, it is estimated that between 14% (Waddell et al. 2002) and 25% (Health Canada 2002) of children and youth suffer from at least one diagnosable mental illness. The vast majority, however, are undiagnosed. The Ontario Child Health Study (Offord et al. 1987) found that 18.1% of four- to 16-year-olds had experienced at least one of four diagnosable mental illnesses in the previous six months. It can also be argued that mental disorders as a group constitute the largest burden of disease globally (World Health Organization 2001). These illnesses are all characterized by substantial morbidity, mortality (suicide is the leading cause of death among children and youth, after accidental death) and negative economic impact. Offord et al. (1987) estimated that only one in six children and youth (four to 16 years of age) with a diagnosable mental illness had received any intervention in the previous six months. (These data are 28 years old, and new data are required.)

Consider adults requiring hip or knee replacement. If services for this population were the same as they are for children and youth with mental health problems and only one in six adults requiring a hip or knee replacement received one, would our Canadian society tolerate or accept this situation? I suggest that in such a situation, governments would fall. It should be no different for our children and youth suffering with mental illness. In fact, their services should be a greater priority since the impairment to their life functioning and the compromising of their future life trajectories are much greater and over their lifetime will cost our society much more.

Early Identification and Intervention

Early identification and proper diagnosis and mental health treatments have been demonstrated to be effective in young people in both primary and specialty care settings alike. Such timely interventions can decrease disability, improve economic activity, enhance quality of life and reduce mortality (Kutcher and Davidson 2007). Yet help is frequently sought late for a range of reasons, including parents not recognizing mental health problems, professionals failing to identify troubles and the

family-based stigma associated with having a mental disorder. Many families have reported that the stigma of mental illness is worse than the illness itself. They have also found that navigating available mental health services is enormously challenging.

Wait times are long. Some wait times, for example, for dual diagnosis problems that include autistic spectrum disorder together with other mental illnesses, can be as long as two years. For more acute problems, wait times may be somewhat shorter. However we look at the wait times issue, children and youth who have to wait for help run the risk of losing at least one school year, falling behind their peer group and incurring iatrogenically induced impaired functioning that goes even deeper than the impaired functioning associated with their original disorder. It is estimated that 70% of children and youth mental health problems can be solved through early diagnosis and interventions (Leitch 2007).

Continuity of Care

The fit (therapeutic alliance) between a young person and family/ caregivers and a therapist is fundamental to any form of assessment or intervention (Cheng 2007). In such situations, transitioning youth into adult mental health services can become a substantial problem. Why should young people who are doing well in therapy transfer to adult mental health services simply because they have reached a certain chronological age? This transition is done very poorly in Canada in comparison to some other countries, most notably the United Kingdom and Australia.

Also, because child and youth mental health services are under-resourced, we are not able to offer families a full continuum of mental health services. Such a continuum should include health and wellness promotion and also illness prevention services. Yet, in most programs, less than 10% and in all likelihood less than 5% of the operating budget addresses this end of the continuum.

Potential Cost Savings

Over two-thirds of mental illnesses have their onset prior to age 25, and these are mostly chronic disorders that have a substantial impact on multiple personal, interpersonal, social and physical health domains (Kessler et al. 2005). Therefore, if such a majority of mental illnesses and addictions have their onset in childhood and adolescence, facilitating early identification and intervention to yield the best possible outcomes would make good sense. The relatively modest investment required will yield far better outcomes, create a healthier workforce and likely cost less over time.

Fragmentation

Romanow describes Canadian mental health services across the lifespan as the "orphan child of health care" (2002). It is therefore fitting that Kirby often refers to child and youth

mental healthcare services as "the orphan of the orphan." It is outrageous that in 2011, child and youth mental health services continue to be significantly less resourced than physical health services and seriously fragmented at all levels. There are ongoing tensions between the ministries that fund child and youth mental health services (although it must be recognized that over the past year communication between ministries, at least in Ontario, has improved). Tensions also exist between community- and hospital-based mental health services, as well as between sectors and between service providers of different disciplines. These factors potentiate the fragmentation.

In addition, the many disciplines that provide child and youth mental health services are generally trained in silos. Upon graduation, it is magically expected that these professionals will know how to work effectively within multidisciplinary teams with very little preparation and training. Given that there is considerable overlap in the work of the different disciplines, would it not be more effective to train all of these students together in the areas of overlap and in learning formally about how to function in multidisciplinary teams? For their particular area of expertise, they could get their training separately.

Best Practices and Benchmarks

So how do we ensure that those who manage to wait and access child and youth mental health services actually get the service that they need? Do these families know their rights? Are they offered explanations around all of their options for intervention? In the field of child and adolescent mental health, evidenceinformed practices are not yet the rule of the day. Best practices in knowledge translation and dissemination in child and youth mental health are not well established.

Finally, it is surprising that we do not have any well-established benchmarks around expectations of the professionals who are hired to work in child and youth mental health. Across Ontario, we do not even know what the ratio should be between direct and indirect clinical service per mental health professional per 37.5-hour work week. As speculative as this example is, if the current standing were 15 hours of direct service and 22.5 hours of indirect service, and through legitimate efficiencies that did not compromise indirect care we could reverse the direct and indirect ratios in this example, without costing government a cent, direct service provision in Ontario could increase by 50%!

Where Do We Go from Here?

In Ontario, this unacceptable model of child and youth mental health service delivery dates back more than 30 years. The funding of child and youth mental health services, predominantly in the community, was shifted from the Ministry of Health to the then Ministry of Community and Social Services and its subsequent iterations and now the Ministry of Child and Youth Services. Regardless of the funding source, child and youth mental health services have not emerged as the critical priority they should be. Since 1992 there have only been two base funding increases for child and youth mental health service agencies funded by the Ministry of Child and Youth Services. These occurred in 2003 (3%) and 2006 (5%) (Auditor General of Ontario 2008: 125). Because more than 85% of operating budgets are allocated to human resource salaries and benefits within child and youth mental health services, the lack of annualized increases translates into service reductions, even longer wait times and poorer outcomes for children, youth, families and caregivers facing mental health challenges. Categorically, it is true that over the same time period, agencies funded by MOHLTC have received increased funding each and every year. How can our provincial decision-makers justify the serious inequity between service provision addressing physical illnesses of our children and youth and provisions addressing their serious mental health needs? Is it simply a 30-year oversight because child and youth mental health services are predominantly not funded by MOHLTC and are therefore forgotten? Leitch (2007) identifies the need to improve mental health services to Canadian children and youth as one of five specific priority recommendations.

Ironically, within this desert of child and youth mental health services, there are pockets of excellence and reasons for optimism! There are several innovative child and youth mental health programs and research studies across Canada, many of which remain best kept secrets due to inadequate knowledge mobilization strategies. It is beyond the scope of this article to mention them, for fear of omitting some.

The Mental Health Commission of Canada has prioritized child and youth mental health, and there are several funded initiatives under way. Within the National Strategy priority of the Commission, there are two child and youth initiatives. The Evergreen framework is complete and approved and due for release in the next few months. This non-prescriptive document, with national and international consensus, contains all of the ingredients for governments to consider when developing a child and youth policy framework that meets their particular needs and fiscal realities. The second initiative entails developing a comprehensive compendium of national and international best practices in school-based mental health and addictions services.

Within the Opening Minds anti-stigma, anti-discrimination priority area, the commission has prioritized working with youth and healthcare providers (including mental healthcare providers) to reduce stigma and discrimination. Within this area, the Child and Youth Advisory Committee has a family unit self-stigma initiative goal directed toward children and youth with lived mental illness experience and their siblings and parents. The hope is that a better understanding of mental illness will lead to stigma-reducing interventions for these families, permitting them to feel supported in society and be more willing to seek help early. There is also a knowledge mobilization initiative in

child and youth mental health within the commission's knowledge exchange priority area. The goal is to find best practices for use in creating comprehensive, credible, easily available child and youth mental health information for all stakeholders. Finally, and proudly, we have a Youth Council at the commission. Its purpose is to ensure that the youth voice is well heard and that the commission can get the youth viewpoint on all matters, products and projects under consideration. There are several other initiatives being explored. These include, but are not limited to, the development of universal parenting programs; First Nations, Inuit and Metis child and youth mental health pilot projects; and a national epidemiological child and youth mental health survey with ongoing longitudinal surveillance.

Also on a positive note, there is increasing awareness across Canada about the importance of mental well-being and of creating systems of care to address this as well as mental illness. The recent development of the Institute of Families brings further promise. Its vision is that families flourish as a result of being valued and engaged as integral partners in child and youth mental health.

In some of the provinces and territories, there is a serious interest in developing or renewing mental health frameworks and implementing them. Some jurisdictions, including Ontario, now also have child and youth mental health policy frameworks. While it is not infrequent that child and youth mental health services be funded by several different ministries, at least in recent times there is better communication between the ministries. This trend notwithstanding, in my opinion, all child and youth mental health services would be better served by being funded out of only one ministry.

The creation of the Ontario Centre of Excellence for Child and Youth Mental Health, seven years ago has been favourably received. The centre underscores the importance of child and youth mental health and makes new resources accessible to agencies. The major foci involve agencies increasing the use of evidence-informed practices, honing evaluation techniques, building local and provincial partnerships of care and fostering the existence of service agencies as learning organizations within the child and youth mental health sector.

In some more localized communities, often through necessity due to impoverished services and sometimes based on smart proactive planning, there are collaborations and even integrations. Such contemporary approaches allow the focus to be where it should, on what is in the best interests of the children and youth we are attempting to serve. A wonderful consequence is the reduction of territoriality and competition between agencies and sectors.

I suggest that the landscape outlined for Ontario is similar to or better than that of most other provinces and territories in Canada.

Hopes for the Future

Imagine that a province/territory decides to make the appropriate and modest investments in child and youth mental health. Imagine that this decision is non-partisan. It is prioritized, sustainable and ongoing for many years. Imagine that we have a system of child and youth mental health care that contains the following elements:

- Children and youth with lived mental health experience and their parents and caregivers are engaged and empowered in the establishment of not only their own individual healthcare plans but also the system of care that they desire and envision.
- Services are consumer driven and are provided to people in need at their preferred time and location (e.g., an agency or school - many youth prefer to not miss school when receiving their mental health care; several new school-based initiatives and interventions are outlined by Kutcher on p. 18).
- There is a shift from fragmentation to integration made up of a balanced, full continuum of services in which mental health, inclusive of universal programs, is an integral part. The importance of continuity of care is prioritized so that individuals and families with lived experience continue their care through key periods and transition into other services at appropriate junctions, rather than transfer to other services based on chronological age.
- Care is culturally safe and diversity oriented for all.
- Families assert their rights, and professionals discuss with them the full cadre of interventions that have proven efficacy. Families can choose their preferred intervention and all interventions, or at least the majority, are evidenceinformed practices. (Kutcher elaborates on the use of best evidence on p. 17).
- There is adequate and sustainable funding to engage in contemporary research that guides the mental healthcare, informs the promotion and well-being of our children and youth and further develops evidence-informed practices to enhance outcomes (see Kutcher's discussion on p. 17).
- Knowledge is translated, disseminated and mobilized resulting in valid, reliable, comprehensive and available information for all stakeholders.
- Mental health professionals are trained in new and contemporary ways. Students of different disciplinary backgrounds are trained together in the areas of overlap and also in regard to how multidisciplinary teams work. These individuals are trained separately in regard to the specific expertise that they have and bring to the multidisciplinary team. (Kutcher further elaborates on this topic by discussing the shortfalls and changes needed in training of not just healthcare professionals but teachers too [p. 19].)

- Indirect services are made as efficient, effective and time limited as possible, recognizing the importance of team meetings, phone calls, paperwork and the like. Direct faceto-face assessment and intervention services are provided the majority of the time, and the benchmark for direct care and indirect care is well established, well monitored and well measured.
- The most contemporary approaches are used to measure outcomes and impact and to ensure that the system of care we are providing not only attains its goals but is also nimble, efficient and flexible and can be reoriented as necessary.

In conclusion, for years, not much in child and youth mental health data has changed, it has just become more so! Government, all political parties included, has turned a blind eye to the comprehensive mental health needs of our children and youth and their families and caregivers. What happened to the United Nations Rights of the Child, to which Canada is a signatory? What happened to substantiating political comments that "our children and youth are our future" with action? Ask our youth, and they will tell you that they are not just our future, they are our present! They are in fact the next generation of adults who will vote.

Transformational change in child and youth mental health is necessary. This includes substantial changes in the cadre of fragmented services that currently exist and entails the establishment of integrated communities of practice in child and youth mental health that we can proudly refer to as a system of care!

As well, more funding is essential. It is noteworthy that between 2010 and 2014, in the province of Ontario alone, signed contracts for federal transfer payments will increase by a cumulative total of \$1.95 billion. It is time to right the inequities of the past and to be sensible in making the appropriate and modest investments in child and youth mental health that will, in the long run, lead to a much-enhanced Canadian fabric in which we have a more versatile, healthy and dynamic workforce and individuals who have a lower prevalence of mental illness.

As Kirby stated on various occasions, "It is time to bring mental health and mental illness out of the shadows forever." Mental health and mental illness begin with our children and youth. There are urgent and amazing opportunities to appropriately and thoughtfully transform child and youth mental health in Canada. To quote Tennessee Williams, "There is a time for departure even when there's no certain place to go." HQ

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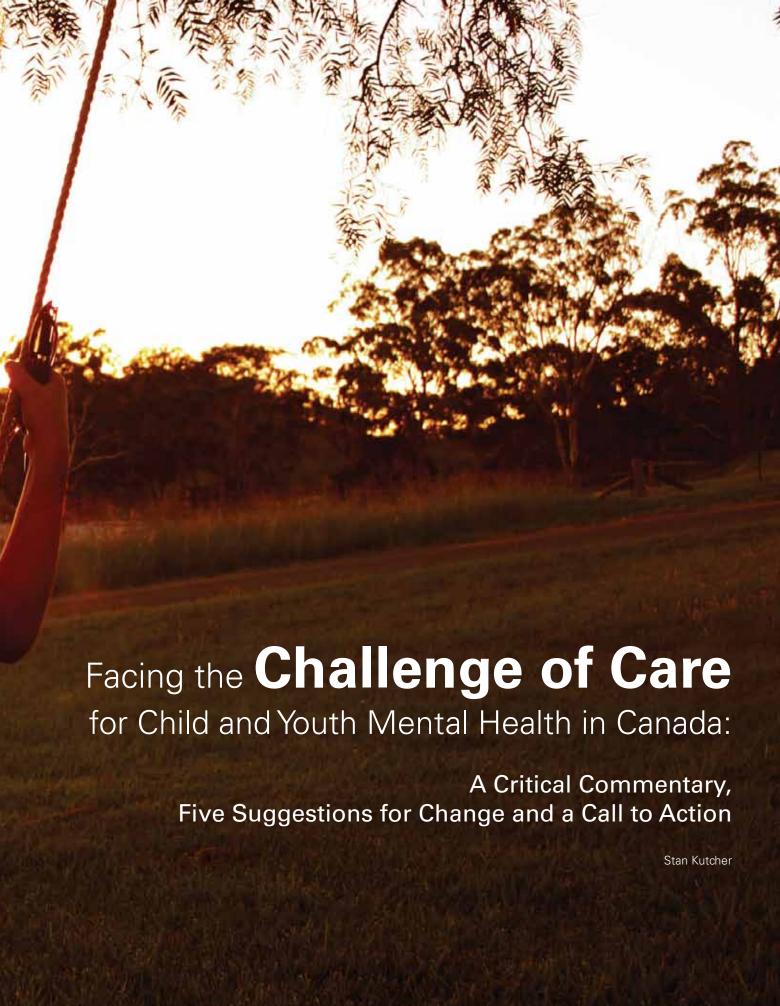
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europsychiatric disorders contribute most to the global burden of disease in young people (World Health Organization [WHO] 2003), approaching about 30% of the total global disease burden in those aged 10-19 years. Comparative data are not available for Canada, but the proportional burden of mental disorders in Canadian youth would be expected to be higher as our rates of human immunodeficiency virus/acquired immunodeficiency syndrome, tuberculosis, malaria and iron-deficiency disorders are substantially less than those in low-income countries. National estimates identify that about 15% of Canadian young people suffer from a mental disorder, but only about one in five of those who require professional mental health care actually receive it (Government of Canada 2006; Health Canada 2002; Kirby and Keon 2006; McEwan et al. 2007; Waddell and Shepherd 2002). And recent reports suggest that the human fallout from this reality may go beyond the well-known negative impacts of earlyonset mental disorders on social, interpersonal, vocational and economic outcomes. For example, rates of mental disorder are very high in incarcerated youth, suggesting that, for some, jails are becoming the home for mentally ill young people (Kutcher and McDougall 2009).

The reasons for this wide gap in care availability versus need are multiple and complex but include a lack of health human resources trained to effectively deliver needed mental health care; archaic mental health service silos operating in parallel to usual healthcare; stigmatization of brain diseases including mental disorders; inadequate availability of effective and appropriate child and youth mental health care at the primary care level; an inadequate development of scientifically validated interventions and substantially inadequate funding for children's mental health care. Suffice it to say, the availability of appropriate mental health care for children and youth in Canada does not come close to meeting the need (Kirby and Keon 2006; Kutcher and Davidson 2007; Waddell et al. 2002).

The availability of appropriate mental health care for children and youth in Canada does not come close to meeting the need.

Current estimates identify that about 70% of all mental disorders are diagnosable prior to age 25 years (Kessler et al. 2005; Kutcher and Davidson 2007). This includes, for example, the classic neuro-developmental conditions such as the autism spectrum disorders, attention deficit hyperactivity disorder (ADHD) and fetal alcohol syndrome, as well as mental disorders that have primarily a prepubertal onset (such as separation anxiety disorder) and those that can be diagnosed in the 10-15 years post puberty (e.g., major depressive disorder, schizophrenia,

substance abuse, panic disorder, anorexia nervosa, etc.). These mental disorders tend to be persistent (chronic or reoccurring), exert substantial short- and long-term morbidity, be closely related to premature death by suicide, increase the risk for numerous physical illnesses (e.g., heart disease and diabetes) and decrease optimal social, economic and personal successes. While early identification, correct diagnosis and proper provision of best evidence-based interventions are known to improve both shortand long-term outcomes, even the best available treatments may not provide persistent and long-term disorder-free periods following a single application of an intervention; thus, longterm care or ongoing monitoring and follow-up are frequently required (Kessler et al. 1995; Kutcher et al. 2009; Leitch 2009).

Primary prevention of child and youth mental disorders is still very much an inexact undertaking, and while there is relatively strong evidence for the effectiveness of secondary prevention, primary prevention of mental disorders as distinct from primary prevention of long-term mental distress and social disability is not yet sufficiently well understood. Mental health promotion, while intrinsically appealing in and of itself, has yet to unambiguously demonstrate substantive and long-term positive impacts on sustained and persistent improvements in population mental health indicators or on significant improvements in the onset, course or outcome of child and youth mental disorders. Added to these ongoing challenges is the relative dearth of evidencebased care in child and youth mental health in comparison to that found in other areas of pediatric or adolescent medicine or to that found in care of adult mental disorders.

Nonetheless, much is currently known about what could be done to improve the organization and delivery of mental health care for young people; yet there is a gap between what we know can be done and what is being done. While there are many different reasons for the existence of this gap, one of the most pernicious and difficult to change is the historical reality of mental health care being primarily provided by a parallel health system - mental health services. At its zenith, this model was based on the mental hospital or asylum, but even with the closing of most of the mental hospitals across Canada, the silo separation of mental health from the rest of health has persisted. This separation (e.g., stand-alone community mental health services) may have perpetuated the stigma associated with mental disorders and delayed the development of evidencebased interventions in the mental health arena. It is increasingly becoming evident that perpetuating this silo approach does not serve the holistic health needs of youth or their families and that access to best evidence-provided mental health care cannot be most appropriately achieved without full integration of mental health care with all healthcare (Kutcher and Davidson 2007; Kutcher et al. 2009; Leitch 2009; WHO/Wonca 2010).

The challenge now is to move quickly and efficiently to address how to best deliver widely accessible, effective and

efficient child and youth mental health care, realizing that this may require a transformation of how we have traditionally approached this issue. Concurrently, it is essential that action directed toward the improvement of child and youth mental health care be driven as much as possible by best evidence not by best practice, and that the application of plans, programs and interventions be based not on what feels right but on what has been demonstrated to be right.

While there are many domains that require attention, in my opinion, five areas stand out as in particular need of urgent address. These are (1) developing and effectively applying child and youth mental health policy; (2) increasing the availability of evidence-based care options through research and effective translation of best evidence; (3) enhancing the capacity of the primary healthcare sector to provide effective and cost-effective child and youth mental health care; (4) integrating schools with healthcare providers in the service of mental health promotion, early identification and effective intervention; (5) enhancing the capacity of all human service providers to implement mental health interventions consistent with their current and ongoing roles. While these are sequentially discussed here, concurrent development and application of all five domains may be expected to more quickly impact the availability and provision of child and youth mental health care.

Child and Youth Mental Health Policy

According to the World Health Organization (WHO 2005), a mental health policy is the foundation for the development and delivery of all aspects of mental health care, ranging from promotion to long-term interventions. Unfortunately, as recent research has demonstrated, a substantial minority of Canadian provinces and territories has developed and applied child and youth mental health policies (Kutcher et al. 2010). And, as this recent assessment has shown, those child and youth mental health policies that are available are not consistent across jurisdictions and are often deficient in key domains (Kutcher et al. 2010). Clearly, there is an immediate need for all provinces and territories to move forward to ensure that there are up-to-date child and youth mental health policies in place that are based on human rights and driven by best evidence; these policies should be used to guide the approach of the provinces and territories to addressing child and youth mental health needs within their jurisdictions.

Canada has no national child and youth mental health policy and, indeed, given our federal system and the constitutional allocation of responsibilities and authority for healthcare, this may not be appropriate. Nevertheless, a national child and youth mental health framework may be of value to assist and support provinces and territories in their development and application of mental health policies, plans and programs. The recently completed national Evergreen Framework project of the Child and Youth Advisory Committee of the Mental Health

Commission of Canada (MHCC) (Kutcher and McLuckie 2009) is a step in that direction. (The Evergreen Framework can be accessed at www..teenmentalhealth.org or www. mentalhealthcommission.ca). Time will tell if it will be used effectively.

Enhancing Evidence-Based Intervention Capability through Research and **Effective Translation of Best Available Evidence**

Healthcare consumers, their families, health providers, payers and policy makers all want, need and require best evidence-based interventions. Unfortunately, the patient-oriented evidence base in child and youth mental health is comparatively underdeveloped, and in many areas in which clear and compelling evidence of effectiveness and costeffectiveness exists (see, e.g., the diagnosis and treatment of ADHD [Canadian Attention Deficit Hyperactivity Disorder Resource Alliance (CADDRA): 2009] there is a lack of public knowledge and indeed substantial misinformation or even disinformation (see, e.g., Abraham 2010, October 18) that hampers its application. In comparison to other medical interventions (e.g., those in epilepsy or oncology), there are few, if any, consistently applied national treatment protocols and few nationally consistent expectations of the routine use of guideline-based treatment protocols from local, regional or provincial funders, regulators or service provision authorities.

In substantial part, this may be due to the relative lack of patientoriented research that has occurred and is occurring within the field of child and youth mental health. This is impacted by relatively small amounts of designated funding for such research and the very small pool of properly trained investigators who can carry out such research. Few examples exist of child and youth mental health research teams who are active in clinical research anywhere in Canada. There is an immediate and substantial need to improve the child and youth mental health research environment and infrastructure across the entire nation.

Perhaps with the launch of the upcoming Canadian Institutes of Health Research (CIHR) Strategy for Patient-Oriented Research (CIHR 2010), there will be an opportunity for the creation of child and youth mental health research support units. However, given the lack of advocacy by and for child and youth mental health research supporters, this may not occur. The impending release of the just-completed report from the newly established Institute of Families, Making Mental Health Research Work for Children, Youth and Families, may have some impact on this need (Anderson et al. in press). This report represents an innovative approach to establishing child and youth mental health research priorities by bringing together members of the child and youth mental health research community with families and youth who have lived experience of mental disorders to map out meaningful research directions. While useful, this approach will not in and of itself be able to drive any national or provincial/territorial research agenda. That will require active interventions at the political level, perhaps begin-

> ning with this issue being placed on the agenda of federal and provincial/territorial health meetings.

Enhancing Mental Health Care Capacity in Primary Care

The importance and positive impact of effectively addressing mental health in primary care has been long recognized, but only recently have systematic approaches to this been undertaken, nationally and internationally (Canadian Collaborative Mental Health Initiative 2005; Cheung 2007; Kutcher and

Davidson 2007; WHO 2010; WHO/Wonca 2010). It is appreciated that with the availability of appropriate mental health care competencies and infrastructure supports, substantial proportions of common child and youth mental disorders can be effectively diagnosed, treated and managed in primary care settings. The WHO/Wonca (2010) publication Integrating Mental Health into Primary Care outlining this need has recently been followed by the publication of the mhGAP Intervention Guide, which provides basic mental health care frameworks that might be globally applied (WHO 2010). The Pan American Health Organization's Mental Health for the Americas has also identified the need for addressing child and youth mental health and primary care (Pan American Health Organization 2007). Other jurisdictions have implemented novel approaches to meeting mental health needs in primary care, including expanding the clinical role of nurses holding additional mental health competencies and creating family care teams, to name a few (Collins et al. 2010).

Nationally, the application of a consultative mental health care model (Canadian Collaborative Mental Health Initiative 2005) has resulted in increased interaction between primary care and specialty mental health services in some jurisdictions. Other approaches, using needs-driven, competencies-based child and youth mental health care training for application by primary care practitioners, are being implemented and evaluated. A national MAINPRO- and MAINCERT-certified web-based training program in youth depression, endorsed by the Canadian Medical Association was launched Canada-wide in February 2011 under the umbrella of continuing medical education for Canadian physicians (www.MDcme.ca).

While these initiatives are a welcome step in the right direction, they are still being developed and applied piecemeal without national coordination or systematic evaluation that includes analyses of comparative effectiveness and costeffectiveness of various approaches. Provincial and territorial governments could move this process ahead by ensuring that

primary healthcare delivery of child and youth mental health is embedded both in their primary healthcare and child and youth mental health policies/plans. A federally supported approach to the application and evaluation of this method may be expected to provide a useful and comprehensive analysis of outcomes that could then be applied in various jurisdictions dependent upon regional and local realities.

Integration of Child and Youth **Mental Health and Schools**

The role of schools in the provision of health promotion, case identification and even service delivery has long been recognized and globally applied (Koller 2006; New Zealand Ministry of Health 2003; UCLA School Mental Health Project 2009; Weist et al. 2003: WHO 1996). But in Canada, it has only recently been recognized that schools provide an important vehicle through which mental health promotion, mental disorder prevention, case identification, triage and intervention/continuing care can be realized (Canadian Council on Learning 2009; Joint Consortium for School Health 2009; Santor et al. 2009). Good mental health is also a learning enabler; thus, addressing mental health needs in the school setting may have positive impacts on both mental health and educational outcomes (Canadian Council on Learning 2009; Santor et al. 2009).

Schools provide an important vehicle through which mental health promotion, disorder prevention, case identification, triage and intervention can be realized.

Nationally, several initiatives in school mental health have recently begun, and the MHCC Child and Youth Advisory Committee has undertaken a Canada-wide scan of currently available school mental health programs and models. For example, evidence-based programs such as FRIENDS (http:// www.mcf.gov.bc.ca/mental_health/friends.htmto:mcf. cymhfriends@gov.bc.ca) and Roots of Empathy (www. rootsofempathy.org) provide interventions designed to enhance pro-social behaviours. A Pathways to Care model that addresses the spectrum of mental health components (from mental health literacy-based promotion through mental health care provision) is currently being piloted in a number of locations (Wei et al. 2010, 2011). The Community Outreach in Pediatrics/ Psychiatry and Education program (McLennan et al. 2008) provides another promising model that needs further evaluation. Mental health school curricula such as Healthy Minds, Healthy Bodies, which targets primary and junior high schools (Lauria-Horner and Kutcher 2004), and the Mental Health Curriculum

for Secondary Schools (which can be accessed at www.teenmentalhealth.org), which targets high schools, are now nationally available. Other initiatives including teacher training in mental health, school-based gatekeeper training and others are either just recently available in some areas or are under development (Szumilas and Kutcher 2008, June). The Joint Consortium for School Health (2009) has recently begun to focus activity in school mental health using a variety of innovative webinars and other approaches to advance information sharing and knowledge translation in this domain. Canadian participation in the cross-national school mental health initiative Intercamhs (International Alliance for Child and Adolescent Mental Health and Schools; www.intercamhs.org) has increased in recent years. Evergreen, the national child and youth mental health framework, contains many suggestions for addressing mental health in the school setting.

Once again, while there exist a number of important and innovative initiatives pertaining to school mental health in Canada, these are not integrated, are not coordinated and have largely developed outside of a policy framework and without dedicated research or program funding. What is now needed is a national initiative such as a school mental health network that can, as part of its functioning, play the necessary developmental, research and collaboration-enhancing roles that are needed to move this agenda forward. Unfortunately, no national vehicles with acceptable authority and needed funding are uniquely positioned to be able to meet this need. The Public Health Agency of Canada may be an appropriate federal source of support, but intra-agency leadership to enable that support may be needed, and federal leadership will require putting child and youth mental health on the national political agenda. Mental health funding opportunities supported by the private sector (such as that recently announced by Bell Canada; http:// letstalk.bell.ca/?EXT=CORP_OFF_URL_letstalk_en) and possible partnerships among existing players in this domain may provide a unique opportunity to move this needed innovation forward.

Enhancing the Child and Youth Mental Health Care Competencies of **All Human Service Providers**

Understanding child and youth neuro-development and the complex interplay between genetics and environment must be a fundamental component of training for all human service providers who work with children and youth. Furthermore, knowing about child and youth mental disorders is essential for those human service providers working in family and community service organizations, the justice system, healthcare and recreation. Whether these providers are located within the public or private sectors (such as non-governmental organizations), the capacity to

understand development and how to identify or appropriately support and intervene in situations in which mental disorders can be detected is an essential competency. Furthermore, healthcare providers, including pediatricians, family physicians, nurses, social workers etc. should be well versed in the full spectrum of mental health care of children and youth consistent with their roles.

Unfortunately, training in child and youth mental health of both human service providers and many healthcare providers who work primarily or in large part with children and youth is inadequate. For example, residents in pediatrics often spend less than three months out of their four or five years of residency training in child and youth mental health, even though it is estimated that the mental health case load of community-based pediatricians may reach as high as 40-60% of their practice (personal communication, Dr. Diane Sacks, MHCC Child and Youth Advisory Committee; April, 2010) To my knowledge, there is no compulsory minimum training in child and youth mental health in all residency training programs for family physicians. Teachers, who comprise the professional group who spend the largest amount of time with non-diagnosed children and youth, receive little or in some cases no training in child and youth mental health and the identification of mental disorders in this age group.

While some of the shortfall in competencies can be made up with continuing professional education, to adequately address this issue will require modifications to the training programs for all human services and health human resources providers. This includes programs delivered through universities and community colleges. Without this fundamental change, we cannot expect that the professionals who spend much of their time with our young people will have the competencies required to meet their mental health care needs.

Given the diverse nature of the educational experiences of various professional groups, the different educational institutions that offer programs and the roles of numerous professional organizations in the creation of standards and core competencies that guide the development and delivery of training programs, it is unlikely that a coordinated and comprehensive approach to this issue created and applied by the players responsible for professional education will be made available at any time in the near future. In some cases, the marketplace may play a role, such as in the development of new mental health provider designations (e.g., the graduate certificate in child and youth mental health at Thompson Rivers University), and institutions of higher education may respond. Provincial governments and health authorities may possibly influence this process either by partnering with educational institutions to create and deliver such training or by creating job categories or competencies that will encourage

their development.

Conclusion

Nationally, and globally, we are realizing that there can be no health without mental health, and that not only is child and youth mental health a key foundational component to personal, family, community and civic well-being but that enhancement of mental health and the early identification, diagnosis and effective evidence-based treatment of mental disorders may result in positive long- and short-term benefits at all levels of society. Whether the argument for investment in child and youth mental health care is made on grounds of equity and social justice or economics, the outcome is the same. And, while the field is in need of additional best evidence to guide care delivery, there is ample knowledge currently available to effectively and efficiently better address this need. This application, however, must be built on a de-stigmatized appreciation of the burden of neuropsychiatric disorders in young people and requires political will at federal, provincial and local levels. It also requires substantial changes to how we currently think about and provide child and youth mental health services. At its most basic, we need to stop thinking about silo and parallel mental health services and begin thinking about mental health care that is fully integrated across the human services and healthcare sectors. We need to establish that changes made are supported by best evidence policies, services and interventions, and we need to ensure that youth, families and researchers are included in developing solutions, implementing change and evaluating outcomes.

There can be no health without mental health.

This I understand is a tall order, but it is a challenge that we all need to take up. Child and youth mental health care is a point where human rights, human well-being, best evidence arising from best research, economic development and the growth of civic society intersect. The MHCC has been a useful first step in addressing this challenge, but it does not carry the responsibility, authority or funding capacity needed to move this agenda effectively across Canada. The next step is to put child and youth mental health care on the national healthcare agenda.

My suggestion is for the federal government to place this issue on the list for discussion and resolution during the upcoming negotiations of the Health Accord. Our Canada Health Act (Health Canada 1984) has been a useful policy instrument toward the creation of our national public health model; and the next iteration of the Health Accord gives us an opportunity to move the goalposts farther ahead while remaining true to the spirit of the act.

One consideration for a structural solution to this need, in addition to a legislative approach, would be to create at the federal level a National Commissioner of Child and Youth Health, reporting to the minister of health or perhaps directly to Parliament, who would integrate mental health into other child and youth health priorities. A version of this approach has been proposed by Leitch in her report Reaching for the Top (2009). An alternative would be to create a Minister of State for Child and Youth Health who would have a similar responsibility. Whatever the model, political action at the national level seems to be essential to help to move this agenda forward. HQ

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Improving Mental Health Outcomes for Children and Youth Exposed to Abuse and Neglect

Ene Underwood

Without doubt, children and youth exposed to abuse and neglect rank among our most vulnerable citizens when it comes to mental health.

Abstract

Children exposed to abuse and neglect are at significantly higher risk of developing mental health conditions than are children who grow up in stable families. Multiple complexities arise in supporting the needs of these vulnerable children: complex family circumstances; the need to balance the goals of protecting the children and strengthening family connections; and the involvement of multiple players from biological families to foster parents to case workers to children's mental health professionals. This article draws on case studies, the literature and proven initiatives that have been implemented in a number of children's aid societies in Ontario to demonstrate four strategies that can improve mental health outcomes for children exposed to abuse and neglect. These strategies are increasing admission prevention and early intervention to support at-risk youth at home; supporting transitions from intensive residential treatment back to the community; ensuring youth transitioning to the adult system have the supports they need; and increasing integration in service delivery between children's mental health and child welfare.

"Kayley" is a third-generation client of one of Ontario's Children's Aid Societies (CASs). Fetal alcohol exposed and diagnosed with multiple mental health conditions, Kayley began life with her birth mother who was frequently absent and unable to provide for her young daughter. When she was three, Kayley was adopted by her grandmother. Kayley first came to the attention of CAS at the age of five because her grandmother was struggling with her own depression and because CAS was concerned that she was being abusive in her attempts to discipline Kayley. Today, Kayley is 16 years old. Her complex mental health needs have resulted in multiple placements in treatment facilities and treatment foster homes often resulting in extended periods of time away from her home community. In spite of her many moves, CAS has assisted in enabling her to maintain contact with her grandmother and her siblings. Although she is currently doing well following a recent discharge from intensive residential treatment, she remains a high-risk youth and lacks many of the skills she will need to successfully transition to adulthood.

s Kayley's story demonstrates, there are multiple layers of complexity in supporting the mental health needs of children and youth who are involved with child welfare. There are often complex family circumstances, and in many cases there are parents with mental health conditions, addictions or other challenges that require support. There is the need to balance the protection of the child with the goal of retaining and strengthening family connections. There are multiple players beyond the family and the mental health team: foster parents, the children's worker, the resource worker supporting the foster parents and, in some cases, adoption workers or other staff from the child welfare team. Finally, regarding youth involved in child welfare who are not reunited with their birth families or placed for adoption, there are the added challenges of preparing these youth for a successful transition to adulthood and to the adult mental health system.

This article examines the inter-relationship between childhood maltreatment and children's mental health and proposes four strategies for supporting this vulnerable group of children and youth.

Link between Child Maltreatment and **Mental Health**

Over the past decade, there has been a growing appreciation of the significant relationships between child maltreatment and lifelong health. Evidence has demonstrated links between childhood maltreatment and a range of illnesses in adulthood, such as fibromyalgia, irritable bowel syndrome, chronic lung disease and cancer (Fuller-Thomson and Brennenstuhl 2009; Gilbert 2009; Krug et al. 2002). Perhaps the most prevalent of these health linkages – in both childhood and adulthood – is the relationship of child abuse and neglect to mental health conditions.

While the prevalence of mental health conditions in the overall child population is reported at 14% (Waddell et al. 2002), the rate in children involved in child welfare are much higher. In a study of Ontario crown wards, Burge (2007) found that 32% had at least one diagnosed mental disorder. In a similar study, Ford et al. (2007) reported that 46% of children in care had at least one mental health condition, three times the rate (15%) found among children from disadvantaged homes. Another study found children in foster care to be 16 times more likely to have psychiatric diagnoses and eight times more likely to be taking psychotropic medication than were children in community samples (Racusin et al. 2005). A 2009 report from British Columbia stated that youth in care were 17 times more likely to be hospitalized for mental health issues than were the general public (Representative for Children and Youth of British Columbia 2009).

Higher-than-average mental health needs are not observed just in children in foster care. Though less studied than children removed from their homes, children receiving child welfare services while remaining in their homes have also been found to have higher documented needs for mental health services than children not involved in child welfare (Burns et al. 2004; Farmer et al. 2001).

The mental health impacts of child abuse and neglect can take many forms: depression, anxiety disorders, eating disorders, sexual disorders, suicidal behaviour and substance abuse (Draper et al. 2008). In addition, victims may have low self esteem, psychological distress and difficulties establishing intimate relationships (Draper et al 2008). The 2008 Canadian Incidence Study of Reported Child Abuse and Neglect (Public Health Agency of Canada 2010) found that in cases of substantiated maltreatment, 19% of children and youth exhibited symptoms of depression, anxiety, or withdrawal; 15% showed aggression; 14% exhibited attachment issues; and 11% demonstrated symptoms of attention deficit hyperactivity disorder (ADHD).

Beyond the profound impact that this combination of childhood maltreatment and poor mental health can have on individuals, it also exacts a tremendous economic toll on society. Poor health, low educational attainment, lower workforce participation, higher rates of homelessness, teenage pregnancies, crime and incarceration have all been correlated with childhood maltreatment. One Australian study has estimated the lifetime costs associated with outcomes for young people leaving care at \$740,000 per individual (Raman et al. 2005). No doubt this figure is even higher for young people leaving care who have serious mental health conditions.

What Is Behind the Relationship between Childhood Maltreatment and Children's **Mental Health?**

Four overall factors have been linked to the relationship between childhood maltreatment and children's mental health: early neurological development; direct impacts of the abuse itself; biological and environmental factors associated with parental mental health; and, finally, factors arising from the disruption and trauma associated with being involved in the child welfare system (Burge 2007).

Early attachment theorists refer to the "inner working model" that children develop at an early age based on a mental representation of their parent. This mental image allows children to be comforted at times when their actual parent is not physically present. Researchers have found that children who are maltreated develop dysfunctional inner working models. The result is poor affect regulation, perceptual bias, self-defeating thoughts and defective interpersonal behaviour. In short, the internal working model in children who have experienced neglect and abuse can become a framework for serious maladaptive behaviour (Crittenden 2000; Sanders and Fulton 2009, June).

Farmer et al. (2001) demonstrated relationships between parental risk factors and the use of mental health services by children and youth involved with child welfare. Highest parental risk factors associated with children's mental health use were found to be: physical impairment (49.7%), cognitive impairment (47.3%), severe mental illness (34.0%), impaired parenting skills (30.4%), monetary problems (30.2%), drug and alcohol abuse (28.3%) and domestic violence (25.5%). The 2008 Canadian Incidence Study (Public Health Agency

Child Welfare and Children's Mental Health in Ontario

In 2009–2010, spending on child welfare in Ontario represented approximately \$1.4 billion. In many ways, the organization of child welfare in Ontario mirrors the organization of healthcare. Child welfare is delivered through 53 independently governed agencies who receive funding through transfer payments from the provincial government. In parallel to healthcare, where the largest proportion of spending is represented by the relatively small portion of patients who receive in-patient care, the largest proportion of spending in child welfare relates to services to children who are "in care" - foster care or group care. In Ontario child welfare, approximately 27,000 children and youth receive in-care services each year, accounting for approximately 40% of total expenditures. A much larger number of children and youth who have been maltreated or are at risk for maltreatment are supported in their homes with their families. The Ontario Association of Children's Aid Societies estimates that for every one child in care, another nine children are being supported by CASs at home with their families.

The 2009-2010 spending on core children's mental health services in Ontario was \$384 million (excluding funding for complex special needs). Transfer-payment recipients include stand-alone agencies that provide child and youth mental health services, 17 hospital-based outpatient programs and First Nation and non-profit Aboriginal organizations and service agencies, including 27 friendship centres. The provincial government also funds the Provincial Centre of Excellence for Child and Youth Mental Health at the Children's Hospital of Eastern Ontario, and the Ontario Child and Youth Telepsychiatry Program. Beyond the formal mental health system, many children and youth receive mental health services through schools, private providers, CASs and other sources. As with child welfare services, the vast majority of children's mental health services are communitybased, and children requiring intensive out-of-home treatment are the minority.

of Canada 2010) found that in cases of substantiated child maltreatment, 27% of primary caregivers had mental health issues and 38% had alcohol or drug addictions.

Children and youth who require out-of-home care as a result of maltreatment are exposed to additional risks - particularly as a result of multiple moves and, in rare cases, as a result of abuse by other children or caregivers while in out-of-home care.

A study of children in foster care in England found that the rate of mental disorders tended to decrease with the length of time in their current placement. The rate fell from 49% on children and youth in their current placement for less than a year to 31% in children and youth in their placement for greater than five years (Meltzer et al. 2003).

Four Strategies to Make a Difference

Without doubt, children and youth exposed to abuse and neglect rank among our most vulnerable citizens when it comes to mental health. The inherent complexities of their needs together with the confounding variable of multiple systems responding to these needs require a heightened level of collaboration and integration. Four strategies have been proven to make a difference in the mental health outcomes for this vulnerable population:

- 1. Increase admission prevention and early intervention to support at-risk youth at home.
- 2. Support transitions from intensive residential treatment back to the community.
- 3. Ensure that youth transitioning to the adult system have the supports they need.
- 4. Increase integration in service delivery between children's mental health and child welfare.

Increase Admission Prevention and Early Intervention to Support At-Risk Youth at Home

By the age of five, "Darius" had been exposed to domestic violence at home and abuse by his mother. He began to exhibit increasingly aggressive and explosive behaviours in preschool, and by age six was expelled from grade one. His father and stepmother very much wanted to keep Darius at home, but they were showing signs of extreme distress and didn't know how to cope with his aggression toward his younger siblings and his challenging behaviours. A CAS worker arranged an assessment of Darius's mental health needs and then collaborated with the local children's mental health organization and board of education to put a plan in place. Arrangements were made for a child and youth worker to spend half-days with Darius to give his father some relief and to transport him to a special school support program three days a week for one-on-one teaching. In parallel, his father and stepmother participated in a parenting skills program and received one-on-one parent coaching from their CAS worker. Today, Darius is nine years old, living at home and doing well in a specialized school program for children with mental health needs.

Leaders and clinicians in healthcare are very familiar with the term "iatrogenic" disease. This refers to the risks that can arise as a result of the treatment itself or from the experience of being hospitalized - leading to adverse events. In child welfare, the decision to protect a child by removing him from his home presents its own risks. O'Donnell et al. (2008) point to emerging research that demonstrates that children placed in foster care can sometimes be more damaged by the trauma of being removed from their parents (and, in some cases, being subject to multiple placements) than if had they remained with their families.

The challenge, however, is that vulnerable children who remain with their families are often less likely to receive the mental health services that they need than if they were in foster care. In one study of children with child welfare involvement with comparable mental health needs, children in foster care were roughly three times as likely to be receiving mental health services as were children at home with their families (Leslie et al. 2005). Comparable trends have been demonstrated with children who are in kinship care - living with relatives as an alternative to foster care. While youth in kinship care experience more placement stability and higher levels of well-being than youth in foster care, these youth are less likely access mental health services (Leslie et al. 2005; Winokur et al. 2009). Similarly, studies have found that children and youth with younger caregivers are less likely to use mental health services and, if they do access them, are more likely to drop out of treatment (Villigrana 2010).

The challenge, however, is that vulnerable children who remain with their families are often less likely to receive the mental health services that they need than if they were in foster care.

Yet, there is evidence that timely access to mental health services can reduce the risk of out-of-home placement for at-risk children and youth. A 2006 Tennessee study of children and youth served by an integrated child welfare and youth justice agency reported that 65% of children and youth had significant mental health, behavioural or psychosocial challenges. The study found that access to specialty mental health services reduced the probability of an out-of-home placement by 36% during the 18-month study period (Glisson and Green 2006).

The question becomes this: with so much evidence favouring early intervention, how do we increase the odds of at-risk kids getting the benefit of these services while keeping them safe at home? It's not easy. In Ontario, policy changes in 2006 associated with the Transformation Agenda for child welfare placed increase emphasis on admission prevention and early intervention. These policy changes envisioned a future in which CASs would work proactively with vulnerable families and community resources to support children at home. Sometimes this would mean directly supporting the needs of children, and sometimes it would mean addressing parent risk factors in terms of their own mental health, addictions or parenting capacity. However, the current funding formula for the child welfare sector has remained somewhat misaligned with this policy direction. Moreover, wait times for children's mental health services are frequently out of step with needs. The same is true of access to community supports to address parental risk factors.

Identification of needs is also a challenge. A 2009 survey of Ontario CASs found that only 55% endorsed using some form of structured screening tool in the identification of mental health needs of children and youth in their care - and there was significant variation in the tools being used (Czincz and Romano 2009).

Notwithstanding the challenges, several Ontario CASs have initiated proactive programs in partnership with local mental health providers to provide timely in-home support to at-risk children and their families. As an example, the Family and Children's Services of St. Thomas and Elgin (a CAS) employs a children's mental health worker who provides mental health counselling and support for children and families with the goal of preventing admissions and supporting the reunification of foster children back home with their families. The initiative has proven very successful in providing effective mental health support in a community where the wait time for a local mental health provider is typically one year.

Support Transitions from Intensive Residential Treatment Back to the Community

"Arjun" was 13 when he was transferred from a CAS foster home to a mental health treatment facility as a result of escalating aggression, substance abuse and conflict with his peers. As a young boy, Arjun had been sexually abused by his father, who had subsequently been incarcerated. Arjun's mother disappeared when he was three. After 18 months at the treatment centre, Arjun had made met all his treatment goals and discharge to foster care was recommended. The CAS felt that, given Arjun's history, it would be unable to find a suitable foster-care home. Two months later with no identified family-based option in view, the treatment centre recommended that the CAS find a group care placement that would foster independence and a more home-like setting for Arjun. Six months after he was ready for discharge, a placement had still not been found. Arjun became discouraged and began to regress. Ultimately, Arjun's behaviours escalated to the point where he was charged with assault and placed in a youth justice facility.

As Arjun's story illustrates, timely and appropriate discharge can be crucial to overall treatment outcomes. For youth with serious attachment disorders, the risks of discharge delays can be great as the secure environment of residential treatment centres can provoke a false sense of safety and security that exacerbates the feelings of abandonment when the prospect of discharge is imminent (personal communication, C. MacLeod, executive director, Roberts-Smart Centre, 2010).

Stewart et al. (2010) have reported on a two-year study of CAS-involved and non-CAS-involved youth with comparable mental health needs at time of admission. The study found that six months after the start of treatment, CAS-involved youth showed a greater improvement than did non-CAS-involved youth. However, two years post-discharge, the non-CAS youth continued to show improvements. For CAS-involved youth, the pattern was different. While the CAS-involved youth still showed marked improvements versus their status at time of admission, they had lost ground from where they were six months into treatment.

The authors posited several explanations for this decline among CAS-involved youth. Caseworker involvement during treatment is sometimes variable for CAS-involved youth. Sometimes a youth's caseworker may change during treatment. Family involvement may also be variable during and following treatment. In some cases, a youth may be returning to a different home setting than the one left prior to admission.

Informal interviews with leaders from child welfare and children's mental health providers have also confirmed the imperative for increasing the level of continuity for CAS-involved youth during and after their residential treatment. Programs have been cited in which staff from the treatment centre provide intensive pre-discharge training and post-discharge support to foster parents, child welfare workers, schools and even the local police to encourage the successful transition of at-risk youth back into the community. Some communities benefit from having a mechanism to provide a "central clearinghouse" that child welfare and other agencies can access for information and case resolution for very-high-risk youth.

Ensure That Youth Transitioning to the Adult System Have the Supports They Need

"Carly" was admitted to care when she was 15, when conflict at home became extreme. She has been diagnosed with ADHD, obsessive compulsive disorder, mood disorder, anxiety disorder and paranoid personality traits. She refuses all medications but one. After a brief and successful period in a residential treatment facility, Carly transitioned to a foster home where she remains today at the age of 18. Although her CAS has worked hard to introduce Carly to services in the adult mental health sector, she has refused to participate, citing that they are too stringent and structured. Her older brother had also been in care and has complex mental health needs. He is now 23, but Carly, the CAS and the adult mental health agency to which he was referred cannot find him. Carly last saw him two years ago. She has since shared with her CAS worker that she is sure he is homeless or in jail.

By some estimates, as much as half of all lifetime mental health disorders begin in the middle teenage years, and three quarters by the mid-20s (Kessler et al. 2007). Hence, it is critical for us as a society to ensure that we are effectively responding to and supporting the needs of young adults as they make the critical passage from youth to adulthood.

For youth who have experienced childhood abuse or neglect - and most particularly, for youth in foster care who will "age out of the system" without the support of a permanent family - navigating the passage from adolescence to adulthood can be precarious. In a study of 106 young people leaving care, Dixon (2008) found that 12% reported mental health problems at the outset and that this figure doubled by the 12- to 15-month follow-up. There is considerable evidence that these youth are not accessing the mental health services they need in their early adult years. In a study of 616 young adults who had contact with the child welfare system, Ringeisen et al. (2009) found a significant decrease in the use of mental health services from 48% in mid-adolescence to 14% five to six years later.

Multiple factors contribute to this mismatch between the mental health needs and service access of young adults with former child welfare involvement: the movement from a childoriented to an adult-oriented system; a lack of insurance for medication and counselling; an aversion to anything that represents "the system"; and other factors. Individuals' age at time of leaving care is also a significant factor, with early leavers having a lower likelihood of accessing supports and consequent poorer outcomes (Dixon et al. 2006).

So ... how do we fix this? In Ontario, the Select Committee on Mental Health and Addictions (2010) has recommended the reintegration of child and youth mental health services into the healthcare system. This structural change might strengthen connections between adolescent and adult mental health services. However, this direction has been criticized as having the potential to weaken linkages between children's mental health and all other children's services, including child welfare. Moreover, there are concerns that this direction could overly focus on the pathology of mental illness rather than a more holistic determinants-of-health approach to child and youth mental health.

Some CASs and children's mental health providers have experienced success in formalizing proactive collaborative planning with the adult mental health sector. In the Erie St. Clair Local Health Integration Network, the child welfare and children's mental health agencies have collaborated with the community adult mental health agencies to develop a protocol for supporting these important youth transitions. This protocol sets out a process through which all CAS-involved youth who may require adult mental health services are identified prior to their 16th birthday. A timely and supportive transition process is then designed for each youth, and each youth is fully engaged in informing and participating in this process.

Many advocates have been urging for a number of changes that would improve the odds for older youth in care as they navigate the mental health and other challenges associated with their transition to adulthood. A major theme relates to changing the rules to enable youth in care to remain with their foster families beyond their 18th birthday - the current date at which youth age out of care in Ontario. Advocates such as the National Youth in Care Network (www.youthincare.ca) and others (Laidlaw Foundation 2010; Ontario Association of Children's Aid Societies 2006; Rowden 2010, May 21) propose that young adults should be able to remain in their foster homes until the age of 21 and then be supported up to the age of 25 by way of emotional, education and living supports and access to health benefits programs. There is also increasing emphasis on encouraging adoption or legal guardianship for older youth. All of these strategies would go a long way to improving the continuity of services and social supports for older youth in care and improving their mental health outcomes during and after this critical transition to adulthood.

Increase Integration in Service Delivery between Children's Mental Health and Child Welfare

"Robert" lives in one of the communities in Ontario where child welfare and children's mental health are delivered through a single integrated organization. At age 12, Robert was brought into care after a teacher expressed concerns about his escalating violent behaviours, anxiety and limited apparent parental supervision. Robert was placed in a small intensive treatment residence operated by the integrated agency. Case conferences engaged Robert's workers from the child welfare and the children's mental health teams as well as his family in determining the best course of treatment for him. His workers knew that moves were extremely traumatic for Robert. As a result, the team worked together to plan an extended transition period from the residential treatment home. Foster parents were identified for Robert months before his discharge, and they worked with the team and Robert to plan for his transition. Once in his foster home, both Robert and his foster parents benefited from ongoing supports from the combined child welfare and children's mental health team. Today, Robert is 18, living in the same foster home and supported by the same workers in planning for his transition to adulthood.

The theme of enhancing coordination and timely access to children's mental health services recurs in every new policy paper and every conversation with leaders in the child welfare and children's mental health sector. There is an understandable concern that too great an integration between child welfare and children's mental health could result in disproportionate access for child welfare-involved youth at the expense of youth in the general population with comparable needs. However, this pattern is not borne out in the research. Hurlburt (2004) found that increasing the coordination between child welfare and children's mental health services resulted in a greater likelihood of service access correlating with need, regardless of child welfare status. Hurlburt thus argues that increasing the coordination between these two sectors may facilitate the targeting of scarce resources to children with the greatest levels of need. Bai et al. (2009), reporting on a study of child welfare-involved children over a 36-month period, concluded that the more intense the coordination between children's mental health and child welfare, the better the service access and child outcomes.

The question is, how do we achieve this level of childfocused service integration and coordination? An examination of service models locally and internationally points to three potential answers: integration through policy, integration through amalgamation and integration through collaboration.

The United Kingdom's approach arising from the Every Child Matters green paper (Boateng 2003) is perhaps the most frequently cited example of achieving service integration through policy. The future envisioned in this paper included a radical reorganization of all children's services to revolve around the needs of children and their families. Emphasis was placed on "joining up" children's services from prevention to early intervention, early years, special needs, child welfare, young offenders and elementary and secondary education. A Common Assessment Framework (CAF) was introduced to support interagency collaboration at the case level and to ensure that children receive the right combination of services at the appropriate time. Services are governed locally through children's trusts, which have the responsibility to commission services from provider agencies and hold them accountable for outcomes.

In Ontario, a more localized but promising dynamic that emerged a decade ago was the establishment of integrated child and family services agencies. These agencies are in place in a number of communities across the province and were formed by the amalgamation of multiple local children's service providers under a single governance structure. Services include child welfare, children's mental health and, in some cases, services such as youth justice, developmental services, early years and other family supports. Agencies have reported significant improvements in cross-sector collaboration, reduced service duplication and often a reduction in overall waiting lists for children's mental health services. Staff have reported an increased understanding of roles and greater productivity in case conferencing and case management. Clients have expressed an appreciation of the "one number to call" and one door to access when they need help and support.

In Ontario, the most common current approach to integration lies in voluntary collaborative approaches between agencies. One example involves a pilot partnership between Kinark Child and Family Services (a children's mental health provider) and the CASs of Halton, Peel and Guelph/Wellington. These organizations have developed a service delivery model through which a youth, once identified to the service, becomes a shared responsibility. Priority of admission and types of service needs are agreed upon jointly by representatives from all partner agencies. The goal of the service is to stabilize the placement of children by developing behaviour management strategies that can be implemented by caregivers in the existing placement, thereby avoiding the need to move the child. A secondary goal is to increase the understanding and skills of foster parents and group home staff in addressing the mental health needs of youth in their care.

... the more intense the coordination between children's mental health and child welfare, the better the service access and child outcomes.

Conclusion

Kayley. Darius. Arjun. Carly. Robert. This article has provided a glimpse into their stories and the strategies that make a difference for them and thousands of others like them. But it has left a number of important issues unaddressed. The article has not attempted to speak to the profound and unique challenges relating to the child welfare and mental health needs of Aboriginal children and youth. Neither has it commented on the inherent issues in the level and distribution of funding for children's mental health services and the balance of funding to child welfare and other inter-related sectors. Finally, it has not examined the use of psychotropic drugs among children involved in child welfare – a matter that in recent years has been highlighted as an area of concern.

These unaddressed issues are a reminder of the many added complexities associated with meeting the mental health needs of children and youth who have experienced maltreatment. The four strategies described in this paper can - and are - making an important difference in the face of these complexities. These strategies hold tremendous potential to give our most vulnerable children and youth what we wish for all of our children - the opportunity to be happy and healthy, surrounded by the people and services that enable them to fully embrace life's opportunities. HQ

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VE SUFFER FROM BFING

Formulating Policies to Reclaim Youth in Mental Health Transitions

Melissa A. Vloet, Simon Davidson and Mario Cappelli

^{*} This quotation is from an 18-year-old woman currently transitioning between child and adolescent mental health services and adult mental health services who consented to participate in transitional work conducted by our research group.

Abstract

The greatest financial and institutional weaknesses in mental health services affect individuals between the ages of 16 and 25. The current project sought to identify bodies of evidence supporting effective transitional pathways and to engage policy leaders in a discussion of youth mental health transitions to highlight stakeholder perspectives. Three efficacious pathways from youth health service environments to adult health service structures were identified in the literature: the Protocol/Reciprocal Agreement Structure, the Transition Program Model and the Shared Management Framework. Evidence was presented to a panel of policy officials occupying various roles, up to the position of assistant deputy minister, from the provincial ministries of health, education, child and youth services and training, colleges and universities in Ontario. The panel was then engaged in a discussion regarding youth mental health transitions, and thematic analysis was used to identify policy- and practicelevel considerations. The Shared Management Framework was recommended as the preferred transitional model from a policy perspective; however, continued research is required to determine the appropriateness of this approach for all stakeholders involved in youth mental health transitions.



espite remarkable advancements in the medical management of chronic illness, little attention has been directed toward the psychosocial implications of negotiating the interface between youth and adult services for populations growing up with such conditions. The paucity of existing literature indicates that the development of a coordinated transition system linking pediatric services to adult systems of care will pose one of the most significant challenges to the healthcare system this century (Viner and Keane 1998). This is particularly evident in the area of mental health, where achieving continuous care is considered the most demanding transition area from a systems perspective since it requires the highest degree of interpersonal contact between service users and healthcare providers (Haggerty et al. 2003).

Approximately 70% of all psychiatric disorders have an onset occurring in childhood or adolescence/early adulthood (Kessler et al. 2005; Kim-Cohen et al. 2003). Affected youth are often diagnosed with conditions that prove to be chronic and require care throughout the developmental spectrum. The available outcome data uniformly demonstrate that in the absence of appropriate treatment, youth with mental health concerns become "more vulnerable and less resilient" with time (Wattie 2003). Feedback from multiple stakeholders involved in the transition between child and adolescent mental health services (CAMHS) and adult mental health services (AMHS) in Canada suggests that, overall, CAMHS appears siloed from AMHS (Government of Ontario 2009; Mental Health Commission of Canada [MHCC] 2009). This lack of integration results in significant barriers at a point where effective transition of services is necessary to achieve the recovery-oriented reform described by MHCC (2009).

Research in the United Kingdom, Australia and the United States has identified similar fragilities at the interface between CAMHS and AMHS, with the greatest financial and institutional weaknesses in mental health services being reported during the transition between CAMHS and AMHS, affecting individuals between the ages of 16 and 25 (McGorry 2007; Pottick et al. 2008; Singh et al. 2005). Patrick McGorry, one of the world's leading experts in youth mental health and the 2010 Australian of the Year, explains: "Public specialist mental health services have followed a paediatric-adult split in service delivery, mirroring general and acute healthcare. The pattern of peak onset and the burden of mental disorders in young people means that the maximum weakness and discontinuity in the system occurs just when it should be at its strongest" (2007: S53). The discontinuity between CAMHS and AMHS "jeopardize(s) the life chances of transition-age youth (ages 16-25 years) who need to be supported to successfully adopt adult roles and responsibilities" (Pottick et al. 2008: 374) and is counterintuitive given the research identifying adolescence and young adulthood as developmental periods associated with higher rates of psychological morbidity. Young people with psychiatric problems are characterized as a vulnerable population due to several factors, including increased risk-taking behaviours, lower rates of school completion and difficulties negotiating role transitions to adult-oriented social and occupational responsibilities (Davis et al. 2004; Health Canada 2002; Roberts et al. 1998).

Intervening at the level of the CAMHS-AMHS transition represents one of the most important ways that we can facilitate mental health promotion, mental illness prevention and recovery (MHCC 2009). The importance of this policy target was recently highlighted by both the Select Committee on Mental Health and Addictions (2010) and the Ministry of Child and Youth Services (2006) in Ontario, which recommended adopting a continuous/collaborative transitional system of care for youth with mental health concerns. In order to bridge the policy-practice gap, the identification and implementation of an appropriate model of care for youth navigating mental health transitions in Ontario is required.

"The pattern of peak onset and the burden of mental disorders in young people mean that the maximum weakness and discontinuity in the system occurs just when it should be at its strongest."

Methods and Objectives

The current project sought to (1) identify bodies of evidence supporting effective transitional pathways and (2) engage policy leaders in a discussion of CAMHS-AMHS transitions to highlight stakeholder perspectives. By including multiple sources of evidence (i.e., scientific literature, best practices and policy-level experience), the research team was able to conduct a thematic analysis that led to the identification of policy- and practice-level considerations for policy leaders.

Results

Objective One: Identify Bodies of Evidence

The literature scan identified three bodies of evidence supporting efficacious pathways from youth health service environments to adult health service structures: the Protocol/Reciprocal Agreement Structure, the Transition Program Model and the Shared Management Framework.

Protocol and Reciprocal Agreement Structure

Government and policy leaders in the United Kingdom developed and disseminated National Service Framework tools including protocol and reciprocal agreement templates. These tools were intended to act as cost-effective service contracts between healthcare settings, to facilitate in the clarification of

roles and responsibilities of service providers at both ends of the transition and to provide a foundation for the continuous care of transitioning youth (Health and Social Care Advisory Service 2006). However, the efficacy of the protocol/reciprocal agreement approach has proved suboptimal largely due to a pervasive policy-practice gap. Evidence indicates that less than a quarter of mental health service providers in the United Kingdom identified specific CAMHS-AMHS transition agreements (Singh et al. 2010; UK Department of Health 2006). When available, CAMHS-AMHS protocols are typically directed by institutional factors rather than evidence from best practice (Singh et al. 2010). This structure, although feasible within the Canadian healthcare context, is significantly constrained by antiquated chronological age demarcations directing service eligibility for youth, arbitrary service boundaries that continue to direct systems of care and a lack of interface with community care (Singh et al. 2010).

Transition Program Model

Globally, the best-known transition program for CAMHS-AMHS is called headspace. This program evolved as a community-based model of care to complement Australia's Orygen and address gaps in service delivery while providing integrated, holistic care for youth. It is funded by the government of Australia as part of its commitment to the Youth Mental Health Initiative and was designed to promote and facilitate improvements in the mental health, social well-being and economic participation of Australian youth aged 12-25 years. This transition model is composed of service delivery sites (communities of youth services), staffed by a full complement of healthcare providers (e.g., general practitioners, psychiatrists, psychologists, addictions counsellors, social workers and administrative personnel). In contrast to the protocol structure described above, headspace explicitly considers developmental age and interfaces with the community in an effort to deconstruct eligibility constraints and service boundaries. However, despite the preliminary evaluation data supporting the efficacy of headspace as a transition program (e.g., Muir et al. 2009), the funding model for this structure is not feasible in the Canadian public healthcare context.

Shared Management Framework

The Shared Management Framework has previously been applied in several healthcare contexts to direct the transitions of youth with chronic conditions from child service environments to adult service environments. Recently, the application of this framework by Holland Bloorview Kids Rehabilitation Hospital and the Toronto Rehabilitation Institute was recognized as a leading practice by Accreditation Canada (2008). The model is typically composed of (1) a transition team to facilitate the movement of youth and (2) a transitions coordinator (this could be a nurse or social worker) who is hired by both organizations and helps direct the "development of a transition program while also assisting

with training, evaluation, and even management of a transition clinic, among other tasks" (Provincial Council of Maternal Child Health 2009: 14). In most cases, separate clinics continue to operate out of both youth and adult locations; however, in some cases, dedicated transitions clinics have been erected. This model bridges community- and hospital-based care; however, it requires a high level of stakeholder investment. Despite this, it appears to be the most feasible model of service delivery and one that could easily translate to mental health care in Canada.

Objective Two: Engage Provincial Policy Leaders

With the collaborative spirit of provincial contacts in Ontario, our research team was able to conduct a meeting with a panel of policy officials occupying various roles, up to the position of assistant deputy minister, from the provincial ministries of health, education, child and youth services and training, colleges and universities in Ontario. The research evidence was presented and policy officials provided their informed perspectives on transitions. Several key policy- and practice-level considerations emerged from the discussion.

Policy-Level Considerations

The first theme in policy-level considerations was accountability to the mental health strategies. Policy leaders agreed that the transition from CAMHS to AMHS must reflect valued targets that have been documented in the Ministry of Child and Youth Services framework (2006), the Select Committee on Mental Health and Addictions' final report (2010), the Romanow report (2002) and the MHCC framework (2009). They suggested that selecting a model to facilitate the CAMHS-AMHS transition would target key goals including (1) developing a coordinated system of care with clearly delineated service plans that are appropriate to the service user, (2) involving families in the process and (3) reducing stigma of mental health.

Theme two documented the risks and consequences of policy imposition. There was a reluctance to mandate professional practice in CAMHS-AMHS transitions since policy imposition has proved unsuccessful in the past. Indeed, the work of Singh and colleagues (2010) supports the notion that simply advocating for a protocol structure does not translate into a better system of care. Before any action can be taken at the policy level to select an appropriate healthcare model for CAMHS transition, ministries need to have information about best practices for transitions and evaluations of the financial incentives and disincentives to determine feasibility and course of implementation. In order for policy recommendations to be useful, they must also be informed by stakeholder (i.e., policy leaders, service managers, care providers, youth and families) perspectives.

The final theme was funding and accountability. At this point there exists some uncertainty around how the implementation of a transitional model might be funded. Options explored included (1) shifting the funding envelope locally and (2) having directed funds that follow the client/patient. However, a pilot project to help determine feasibility of the desired transitional model is considered the best first step at this stage. In order for any proposed transitional model to exist in the long term, it would have to be supported by outcome data. Some conversation about how this data could be obtained and tracked occurred. The consensus was that in order to fund a permanent transitional model of care, a systematic evaluation combined with an interdisciplinary and cross-ministerial data convergence of mental health-related outcomes would be necessary, and longitudinal outcomes would have to be tracked.

Practice-Level Considerations

Theme one in practice-level considerations was roles and responsibilities. Communication lapses and role confusion often accumulate at the interface between CAMHS and AMHS. When this occurs, youth transitioning from CAMHS to AMHS may be perceived as a risk transfer rather than a shared responsibility. The panel of policy leaders was primarily of a CAMHS orientation and expressed significant concerns over the lack of representation of AMHS perspectives. In order to promote a shared care approach, it will be necessary to engage leaders in AMHS.

Theme two involved acknowledging developmental needs and special populations. Concerns were expressed about the lack of flexibility in terms of funding youth in transition given the chronological age demarcations that currently act as barriers within the system. An acute awareness about the impracticality of these types of arbitrary age restrictions was identified, and other programs and community-level agencies that recognize the importance of the developmental model of care were noted. Applying developmental age as a context for the transition was discussed, and evidence from international groups, particularly in Australia, was convincing enough to encourage some thought about modifications to the current system. It appeared that applying developmental age as a context for the transition is a valued target for future policy development in this area.

The policy leaders also acknowledged that most youth who make contact with the system are treated similarly despite their differing developmental needs. This approach lacks a best fit for the client/patient and may result in care or treatment plans that are not well-suited to the concerns of the youth or the families involved. The lack of fit is especially compromised during the CAMHS-AMHS transition and represents a systematic weakness in the mental health system that needs to be targeted.

The third theme was transitional planning. Concerns were identified about delays in the planning for CAMHS-AMHS transitions and the lack of coordination between interfacing institutions including hospitals, colleges, universities, housing services and employment. A more proactive approach is considered a necessary element to improve CAMHS-AMHS transi-

tions. Improvements to transitional planning were highlighted at both the service level and policy level. In particular, closer communication between transitional planning groups at the ministerial level was identified as a desired goal.

The fourth and final theme was the rights and needs of youth. Despite the costly nature of crisis-driven reconnection in the system, some youth desire a "fresh start" as they move forward to AMHS. This can create a number of barriers to access in social, occupational and community domains for the youth involved. Discussion occurred surrounding ongoing projects aimed at bridging connections between education and healthcare to support young people who are transitioning. Policy leaders suggested that, at the present time, more information from youth is required to determine how they can best be supported in their mental health journey.

More information from youth is required to determine how they can best be supported in their mental health journey.

Summary of Results

By combining the evidence in the literature with the policy leaders' perspectives, we generated a list of key recommendations. These are presented in Table 1.

Discussion

In consultation with the policy leaders, the Shared Management Framework was selected as the most appropriate approach for CAMHS-AMHS transitions. However, the literature unequivocally supports the use of core public funding in order to apply a CAMHS-AMHS transitional model in a public service context such as that in Canada (Muir et al. 2009). This will require a significant shift in perspective and will necessitate that the rigidity of funding boundaries be reassessed for this population. Nonetheless, given that the shared management model is informed by best practice guidelines, empirical research in the field and stakeholder contributions from other healthcare settings, this framework has excellent potential for translation to mental health.

In an effort to ensure the shared management model will be a good fit for all stakeholders involved in the CAMHS-AMHS transition, the policy leaders suggested that more research on stakeholder perspectives is needed. Combining the literature scan and policy perspectives collated in this study with the views of stakeholders directly involved in CAMHS and AMHS will inform adaptations that may be required to promote effective transitions using the Shared Management Framework. At the present time, our group is conducting research with youth, parents and mental health providers involved in the CAMHS-

TABLE 1.

Policy and practice recommendations

Policy-Level Recommendations

- 1. The development of a CAMHS-AMHS transitional model reflects current policy goals for mental health care in Canada.
- 2. Policy makers should be involved in the shaping of clinical practice rather than simply imposing standards. In order to select the most appropriate transitional model, policy makers require both information about the best-supported models for CAMHS-AMHS transitions and stakeholder perspectives.
- 3. Transitional planning needs to be viewed as a shared responsibility rather than a risk transfer
- 4. AMHS perspectives need to be engaged at both the policy and service levels in order to support a successful model of transition for youth.
- 5. The current model of funding needs to be adapted to reflect the shared role of CAMHS and AMHS in the transition.
- 6. Longitudinal outcome data are required to evaluate future transitional programs/ models of care.

Practice-Level Recommendations

- 1. Developmental considerations should play a major role in helping to direct the transitional process for youth.
- 2. A developmental model for youth transitioning from CAMHS to AMHS should be
- 3. Transitional plans need to be flexible to adapt to the individual needs of service users and their families in different service environments.
- 4. Transition plans must be initiated earlier than they currently are.
- 5. Families are important stakeholders and need to be engaged in the transition process while still respecting the burgeoning autonomy of the youth in transition.

AMHS transition. Preliminary data support the use of this framework, and investigations are currently ongoing. Applying the Shared Management Framework to establish transition team programs in mental health care currently holds significant promise in terms of positioning Canada as an international leader in the mental health care of young people and their families. A policy-ready paper on CAMHS-AMHS transitions is being prepared by our group for the Ontario Centre of Excellence for Child and Youth Mental Health. The paper will be released in 2011 and will be accessible through the centre's website (www.onthepoint.ca). HQ

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"Almost every modern social and environmental problem – be it illness, drugs, violence, increasing prison populations, obesity, mental illness or long working hours – is more prevalent in less equal societies."

Avram Denburg and Denis Daneman in our first issue on child health focused solely on social determinants



Reducing Mental Health Stigma:

A Case Study

Heather Stuart, Michelle Koller, Romie Christie and Mike Pietrus

Abstract

The purpose of this study was to evaluate a contact-based educational symposium designed to reduce mental healthrelated stigma in journalism students. Repeated surveys conducted before (n = 89) and again after the intervention (n = 53) were used to assess change. The estimated average response rate for each survey was 90%. The instrument, adapted from prior research, contained items pertaining to stereotypical content, attitudes toward social distance and feelings of social responsibility (Cronbach's alpha =.74).

There was a statistically significant reduction in stigma (reflecting a 5% reduction in the aggregated scale score). A large, item-specific change was noted pertaining to attributions of dangerousness and unpredictability (reflecting a 26% improvement). The majority of students reported that the symposium had changed their views of people with a mental illness. Half of these students considered that they would change the way they would report stories involving someone with a mental illness. A potential unexpected negative side effect was that 14% fewer students reported post-test a willingness to go to a doctor if they experienced a mental illness.

Though it is difficult to draw firm conclusions from an uncontrolled study, it would appear that this relatively brief, contact-based intervention changed journalism students' views of people with a mental illness. More controlled investigation is needed to rule out alternative explanations that could account for this change.

n the two years leading up to its final report, Out of the Shadows at Last, the Standing Senate Committee on Social Affairs, Science and Technology (2006) reviewed the state of mental health and addictions in Canada - the first national review. As part of its investigation, the committee received several thousand testimonials from Canadians who shared stories about the profound stigma and discrimination they face. The committee recommended that a Mental Health Commission be created to provide national leadership in mental health to begin to address the many problems the committee had uncovered. In 2007, the commission was funded by the federal government with a 10-year mandate. One component of the commission's mandate is to diminish the stigma and discrimination experienced by Canadians living with mental illness. In 2009, the launch of the commission's 10-year Opening Minds anti-stigma, anti-discrimination initiative marked the largest systematic effort to combat mental illness-related stigma and discrimination in Canadian history.

The Opening Minds program is approaching stigma reduction in a highly focused way: targeting specific groups and areas for change; supporting interventions that are based on the best available evidence; developing and building upon grassroots networks of individuals and agencies already engaged in anti-stigma programming; developing tools that can be used to broadly disseminate best practices; and contributing to the best practice literature through systematic evaluation and research. Since the inception of the program, two evaluation networks have been created, both of which are now actively engaged in field work. One focuses on youth, and the other focuses on health professionals. A third network, focusing on stigma in workplaces, is under development.

This article presents the evaluation results of a contact-based educational intervention that was undertaken as part of the youth initiative to reduce stigma among journalism students. The intervention was a half-day symposium that brought students into direct contact with three presenters who had personal experience with mental illness. They shared their stories and described the impact of stigma (including the impact from negative media portrayals) on their everyday lives. Two media specialists - one mass media expert and one journalist - talked about the media's pivotal role in the creation and maintenance of stigma, particularly in adopting story lines that portray people with a mental illness as violent and unpredictable, or using negative and disrespectful language to sensationalize story content. Although the media are a major source of stigmatizing images, to our knowledge, this is the first time contact-based education has been targeted to this important group. The complete symposium can be viewed on line at the Mental Health Commission of Canada's website (http://www.mentalhealthcommission.ca).

Background

I would do anything to have breast cancer over mental illness. I would do anything because I [would] not have to put up with the stigma.

-Helen Forristall

The term *stigma* has been variously used to refer to an undesirable trait (such as a mental illness) that marks the bearer (Goffman 1963); a cognitive-emotional process that results in negative stereotypes, prejudicial feelings and discriminatory behaviours (Corrigan 2000); and a complex social process involving individual, group and structural elements that intersect to disempower, marginalize and disenfranchise (Link and Phelan 2001). In the colloquial use of the term, stigma has become equated with a negative attitude, leaving human rights advocates feeling that the discourse has become too narrow and incapable of drawing attention to the central issues of social injustice and discrimination (Everett 2004). However, as the opening quotation suggests, the conceptualization that appears to resonate best with the lived experiences of those who have a mental illness is the one that defines stigma in its most pervasive sense, as a social force that perpetuates social injustices, diminishes life chances, jeopardizes recovery and impinges on self-esteem. It is within this broader understanding that stigma is used in this article, and it is within this broader understanding that young journalist students were targeted for this anti-stigma intervention.

News and entertainment media create and maintain public stereotypes of the mentally ill. Because they make a living from selling the news, journalists often use stigmatizing images to frame news stories and grab audience attention. A catchy news story is one that presents conflict or controversy or raises issues of public safety. News stories often convey vivid, sensationalized and inaccurate portrayals of people who have a mental illness, ones that emphasize violent and bizarre behaviour. A single dramatic event may be reshaped and repeated to provide a steady flow of negative information that has the power to overshadow positive depictions and reinforce deep-seated cultural stereotypes and fears. Stereotypical images are consolidated with each negative report. The frequency and intensity with which news media cover a violent incident can give the mistaken impression that dangerousness and unpredictability are part and parcel of being mentally ill, and heavy exposure to such images cultivates misinformation, misconception, fear, hostility and intolerance (Stuart 2006a).

Even very young children (as young as five years old) can project elements of mental illness stigma by using negative stereotypes or derisive terminology. This is because media socialization begins early. Television occupies more of children's time than any other structured activity, including school. It has been estimated, for example, that children have already received the equivalent of three years of television instruction by the time their formal schooling begins (Wahl 2003). With regular reinforcement from news and entertainment media, children's thinking about mental illness follow a developmental path, with prejudices eventually becoming fully engrained and deeply resistant to change (Adler and Wahl 1998; Spitzer and Cameron 1995).

Because news media are a major source of mental health information, they have been the targets of several different anti-stigma approaches. For example, there are a number of media-monitoring projects that have been initiated by members of advocacy groups

and the mental health community in an attempt to create reporting guidelines (Kisely and Denney 2007; Pirkis et al. 2008). However, journalists may view reporting guidelines as an imposition; if guidelines are seen as an attempt to restrain journalists' freedom, this may cause a backlash and engender charges of censorship.

There is also some evidence that engaging reporters and providing them with appropriate background materials and storylines can improve the number of positive media images of mental illness, though it may have little effect on the number of negative images (Stuart 2003). When an appropriate rapport has been established between journalists and mental health experts, even violent incidents can be presented in a balanced manner, used to educate the public about the difficulties faced by people who experience a mental illness and contextualize acts of violence as rare events (Mayer and Barry 1992).

A third approach is to educate journalism students – before their opinions have crystallized – to raise their awareness about the role of media in creating and perpetuating negative stereotypes. Campbell and colleagues (2009) offered an interdisciplinary, active educational experience to five journalism students and 14 psychiatric residents. After a workshop led by medical and journalism faculty, interdisciplinary teams of students were charged with designing an anti-stigma intervention. Following the project, journalism students reported a greater awareness of the impact of stigma and the media's role in creating it. However, they were also less likely to consider that they had the ability to improve society's ideas about mental illness.

TABLE 1. Pretest and post-test characteristics

Characteristic	Pretest % (n = 89)	Post-Test % (<i>n</i> = 53)
Gender*		
Male	31.3 (25)	30.2 (16)
Female	68.8 (55)	69.8 (37)
Not stated	(9)	
Age group [†]		
19–21	51.3 (41)	39.2 (20)
22–24	27.5 (22)	31.4 (16)
25+	21.3 (17)	29.4 (15)
Not stated	(9)	(2)
Contact (multiple responses possible)*		
Close friend ^A	30.4 (24)	37.7 (20)
Family member ^B	46.8 (37)	49.1 (26)
Any close friend or family member ^c	67.1 (53)	67.9 (36)

 $[\]chi^2 (df = 1) = 0.017, p = .897$

Numerous studies have shown that people who have had interpersonal contact with someone who has had a mental illness hold more positive and less stigmatizing attitudes (Kolodziej and Johnson 1996). Creating opportunities for positive interpersonal contact in the context of educational programs (termed contact-based education) has become one of the most promising anti-stigma practices (Corrigan et al. 2001). For example, undergraduate university students were randomly assigned to a contact-based educational intervention consisting of a video depicting the personal stories of nine people who had been treated for a mental illness, followed by active discussion. Knowledge scores improved by 8.8%, attitude scores by 5.5% and scores reflecting a willingness to accept a person with a mental illness by 9.5%. There were no changes in the control group (Wood and Wahl 2006). Such results provide strong evidence that contact-based education can bring about small but important reductions in stigma.

Contact-based education has been shown to reduce prejudice and social intolerance in high-school (Pinfold et al. 2005; Stuart 2006b), undergraduate (Corrigan et al. 2001; Corrigan et al. 2002; Reinke et al. 2004), psychology (Holmes et al. 1999; Wallach 2004), social work (Shera and Delva-Tauiliili 1996; Shor and Sykes 2002) and medical students (Altindag et al. 2006). To our knowledge, there are no examples of contact-based education used to reduce stigma among journalism students. Toward this end, we provided a two-hour symposium that gave students an opportunity to have direct personal contact with three people who had different experiences with mental illnesses - two had

 $^{^{\}dagger}\chi^{2}$ (df = 1) = 1.97, p = .372.

 $^{^{\}dagger}A = \chi^{2} (df = 1) = 0.77, p = .379; B = \chi^{2} (df = 1) = 0.06, p = .802; C = \chi^{2} (df = 1) = 0.01, p = .920.$

personally experienced a serious mental illness and one had a seriously ill parent. In addition, we included two media experts to help link the speakers' personal experiences of stigma to journalism practices. In keeping with previous research with university students (e.g., Wood and Wahl 2006), we expected to see small but statistically significant changes reflecting a 5–10% improvement in our aggregated scale score. In addition, because a key focus of the symposium was on media images of dangerousness and unpredictability, we also expected to see a large reduction in the proportion of students who subscribed to this stereotype. Finally, we expected students to provide qualitative reports indicating ways in which they would change their behaviours as a result of their participation in the session.

Methods

Design

We surveyed students before and after the symposium. Because all journalism students were targeted to receive the intervention on a given day (and classes had been released only for that day), there was no possibility of developing a comparison group. Surveys were anonymous.

Study Sample

Though the symposium was targeted to journalism students, faculty members from other health- and social service-related classes requested permission for their students to attend, and class time was released for this purpose. Interested teachers and members of the general public also attended. The pretest response rate based on the broader sample of students was 87% (122 of 141 were returned). The post-test response rate based on all attendees was 92% (254 out of 276). Because the content of the symposium was targeted to journalism students, our analysis is restricted to this group.

Measures

We adapted items from a questionnaire used by several program sites that participated in the World Psychiatric Association's global anti-stigma program to evaluate contact-based highschool programs (Pinfold et al. 2005; Stuart 2006a). Our Stigma Evaluation Survey contained 20 self-report items. We assessed changes in attitudes (six items), expressions of social acceptance (eight items) and feelings of social responsibility (six items). All items were scored on a five-point agreement scale, ranging from strongly agree to strongly disagree. To avoid potential response sets, we varied the wording so that some items were positively worded and others were negatively worded. We reverse scored items so that higher scores would reflect higher levels of stigma. Cronbach's alpha was .74, indicating that the scale had good reliability in this sample. We also measured gender, age (based on year of birth) and prior contact with someone with a mental illness (a close friend or family member). Finally, we included open-ended questions on the post-test survey asking respondents what they liked and disliked about the symposium and what they thought they would do differently having heard the presentation. The terms mental illness and the mentally ill were used throughout to frame the survey questions as these are known to be well understood and to prompt stereotypical responses.

Results

Eighty-nine journalism students completed the pretest survey, and 53 completed the post-test survey (60% of the original cohort). Table 1 describes the characteristics of the pretest and post-test groups. There were 12% fewer younger students (aged 19-21) in the post-test sample, and 7% more people who reported that they had a close friend with a mental illness. To minimize the possibility of bias, we weighted the post-test sample to be proportionally equivalent to the pretest sample with respect to age group and gender. We did not weight on the basis of contact because students' willingness to disclose personal contact may have changed as a result of the intervention.

Table 2 shows the item-specific proportions for the pre- and post-test groups. For ease of presentation, scores were re-coded into agree, neutral and disagree. Items that were reverse coded are marked with (R). Because weighted n-sizes do not correspond to the original data, only percentages have been shown.

Considering the pretest scores, the journalism students reported positive and non-stigmatizing attitudes in a number of important areas. For example, they tended not to subscribe to common stereotypes that portray people with a mental illness as being able to "snap out of" their illness, too disabled to work, or untrustworthy. They also agreed that people with a mental illness are often treated unfairly. However, only about half (55%) disagreed with the stereotype that people with a mental illness are dangerous, unpredictable and untreatable. In hypothetical social interactions, they reported feeling mostly comfortable interacting with people who have a mental illness in situations involving casual or less intimate social interactions (e.g., where they could control the level of social proximity and engagement), such as living next door to, sitting in class next to or giving a job to someone with a mental illness. They were less comfortable making close friends with someone who had a mental illness or engaging in professional relationships requiring a high level of competency and trust, such as going to a physician who had been treated for a mental illness or letting someone with a mental illness babysit their children or teach schoolchildren. Most stated that they themselves would be comfortable going to a doctor if they had a mental illness, and that they were generally socially conscious when it came to causes that did not require a close, interpersonal commitment, such as donating to a charity to support people with a mental illness, signing a petition to support better programming or supporting more tax dollars to improve services. They were less likely to want to volunteer their time or

TABLE 2. Self-report stigma items*

Stereotyped Attribution Items	Pretest %	Post-Test % (Weighted)
(R) Most people with a mental illness could snap out of it if they wanted to		
• Disagree	90.9	93.9
• Neutral	6.8	6.0
• Agree	2.3	_
(R) People who are mentally ill are too disabled to work		
• Disagree	80.7	88.3
Neutral	15.9	7.1
• Agree	3.4	4.6
(R) People with mental illnesses are untrustworthy		
• Disagree	85.1	93.8
Neutral	9.2	6.2
• Agree	5.7	_
People with mental illnesses are often treated unfairly		
• Agree	85.2	91.7
Neutral	8.0	1.4
• Disagree	6.8	7.0
(R) People with mental illnesses tend to be dangerous and unpredictable		
• Disagree	55.1	81.1
Neutral	34.8	8.7
• Agree	10.1	10.1
(R) There are few effective treatments available for the mentally ill		
• Disagree	56.2	51.7
• Neutral	22.5	36.5
• Agree	21.4	11.8

Nould not mind if someone with a mental illness lived next door to me Agree	Social Distance Items	Pretest %	Post-Test % (Weighted)
 Neutral Disagree R) I would be upset if someone with a mental illness sat next to me in class Disagree Neutral Neutral Agree R) If I was an employer, I would not give someone with a mental illness a job Disagree Neutral Neutral Neutral Agree Neutral Agree Sa Agree Sa Ba I would make close friends with someone who had a mental illness Agree Neutral Neutral Agree Neutral Neutral Disagree Neutral Disagree Sa.4 65.9 Neutral Disagree 6.8 2.7 (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Disagree Si.7 67.7 Neutral Neutral Si.7 67.7 Neutral Neutral Si.7 67.7 Neutral Neutral Si.7 67.7 Neutral Neutral 	I would not mind if someone with a mental illness lived next door to me		
• Disagree 3.5 1.3 (R) I would be upset if someone with a mental illness sat next to me in class - Second 1954 • Disagree 87.5 95.4 • Neutral 10.2 4.6 • Agree 2.3 − (R) If I was an employer, I would not give someone with a mental illness a job - To.1 79.1 • Neutral 24.1 12.5 • Agree 5.8 8.3 I would make close friends with someone who had a mental illness - Second 19.2 65.9 • Neutral 39.8 31.4 • Disagree 6.8 2.7 (R) I would not go to a physician if I knew that he or she had been treated for a mental illness - Second 19.2 67.7 • Neutral 51.7 67.7 • Neutral 25.3 21.1	• Agree	92.0	96.8
(R) I would be upset if someone with a mental illness sat next to me in class • Disagree • Neutral • Agree (R) If I was an employer, I would not give someone with a mental illness a job • Disagree • Disagree • Neutral • Neutral • Agree 10.2 4.6 2.3 — (R) If I was an employer, I would not give someone with a mental illness a job • Disagree • Neutral • Agree • Agree • Agree • Agree • Neutral • Neutral • Disagree • Neutral • Disagree • S3.4 • Disagree • (R) I would not go to a physician if I knew that he or she had been treated for a mental illness • Disagree • Disagree • Disagree • Disagree • Neutral • Neutral • Disagree • Disagree • Disagree • Disagree • Neutral		4.6	1.8
 Disagree Neutral Agree (R) If I was an employer, I would not give someone with a mental illness a job Disagree Neutral Neutral Agree 125 Agree Agree I would make close friends with someone who had a mental illness Agree Neutral Agree Neutral Disagree Neutral Disagree (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Disagree Neutral Disagree (B) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Neutral Disagree Neutral 25.3 21.1 	• Disagree	3.5	1.3
 Disagree Neutral Agree (R) If I was an employer, I would not give someone with a mental illness a job Disagree Neutral Neutral Agree 125 Agree Agree I would make close friends with someone who had a mental illness Agree Neutral Agree Neutral Disagree Neutral Disagree (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Disagree Neutral Disagree (B) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Neutral Disagree Neutral 25.3 21.1 	(R) I would be upset if someone with a mental illness sat next to me in class		
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(R) If I was an employer, I would not give someone with a mental illness a job • Disagree 70.1 79.1 • Neutral 24.1 12.5 • Agree 5.8 8.3 I would make close friends with someone who had a mental illness • Agree 53.4 65.9 • Neutral 39.8 31.4 • Disagree 6.8 2.7 (R) I would not go to a physician if I knew that he or she had been treated for a mental illness • Disagree 51.7 67.7 • Neutral 25.3 21.1		10.2	4.6
 Disagree Neutral Agree Agree I would make close friends with someone who had a mental illness Agree Neutral Disagree (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Disagree Neutral Disagree 10.7 Neutral Neutral 25.3 21.1 	• Agree	2.3	-
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• Neutral 24.1 12.5 • Agree 5.8 8.3 I would make close friends with someone who had a mental illness • Agree 53.4 65.9 • Neutral 39.8 31.4 • Disagree 6.8 2.7 (R) I would not go to a physician if I knew that he or she had been treated for a mental illness 51.7 67.7 • Disagree 51.7 67.7 • Neutral 25.3 21.1		70.1	79.1
 Agree I would make close friends with someone who had a mental illness Agree Neutral Disagree (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree 53.4 65.9 39.8 31.4 Disagree 6.8 2.7 (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Neutral 51.7 67.7 Neutral 25.3 21.1 		24.1	12.5
 Agree Neutral Disagree (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Disagree Neutral 51.7 67.7 Neutral 25.3 21.1 	• Agree	5.8	
 Neutral Disagree (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Disagree Neutral 51.7 67.7 Neutral 25.3 21.1 	I would make close friends with someone who had a mental illness		
 Neutral Disagree (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Disagree Neutral 51.7 67.7 Neutral 25.3 21.1 	• Agree	53.4	65.9
 Disagree (R) I would not go to a physician if I knew that he or she had been treated for a mental illness Disagree Neutral 51.7 67.7 Neutral 25.3 21.1 		39.8	31.4
illness • Disagree 51.7 67.7 • Neutral 25.3 21.1	• Disagree		
• Disagree 51.7 67.7 • Neutral 25.3 21.1			
• Neutral 25.3 21.1		51.7	67.7
	• Agree	23.0	11.1

Table 2 Continued.

I would let someone with a mental illness babysit my children		
• Agree	25.0	30.7
• Neutral	39.8	40.9
Disagree	35.2	28.4
• Disagree	33.2	20.4
(R) I would not want someone with a mental illness to be a schoolteacher		
• Disagree	51.1	64.3
Neutral	33.0	28.8
• Agree	15.9	6.9
I would go to the doctor if I thought I had a mental illness		
• Agree	88.5	74.3
Neutral	9.2	18.4
• Disagree	2.3	7.4
Social Responsibility Items	Pretest %	Post-Test % (Weighted)
I would sign a petition to support better programs for the mentally ill		
Agree	94.3	92.7
• Neutral	3.5	7.0
• Disagree	2.3	1.3
I would make a one-time donation to a charity to support mentally ill people		
• Agree	80.5	73.4
Neutral	13.8	19.8
• Disagree	5.8	7.0
Lyould make a regular denotion to a sharify to support montally ill poorle		
I would make a regular donation to a charity to support mentally ill people	40.4	FO 1
• Agree	49.4	53.1
Neutral	37.9	34.1
• Disagree	12.6	12.8
I would support spending more tax dollars to improve services for the mentally ill		
• Agree	71.3	84.9
Neutral	23.0	7.6
• Disagree	5.8	7.6
Lucyld icin an advaceny program to improve the rights of the montally ill		
I would join an advocacy program to improve the rights of the mentally ill	E4.4	40.0
• Agree	51.1	46.8
Neutral	34.1	36.2
• Disagree	14.8	17.0
I would volunteer my time to work in an agency for the mentally ill		
• Agree	43.2	45.4
Neutral	44.3	33.3
• Disagree	12.5	19.3

^{*(}R) signifies an item that was reverse coded in the scale calculation. Higher-scale scores reflect higher levels of stigma. Post-test results are weighted to pretest results for gender and age group.

join an advocacy program to improve the rights of the mentally ill.

Comparing the pretest to the post-test findings, the largest item-specific change was with respect to students' views of dangerousness and unpredictability. In the post-test sample, 81% disagreed that people with a mental illness are violent and unpredictable, reflecting a 26% improvement. The remaining five attribution items all changed in the expected direction. For example, a greater proportion of students in the post-test sample disagreed that people with a mental illness were untrustworthy

(a 9% change), were too disabled to work (an 8% change), were often treated unfairly (a 7% change) or could snap out of it if they wanted to (a 3% change). In addition, there was a drop of 10% in the proportion of post-test students who agreed that few treatments are available for mental illness.

Seven of the eight social distance items also changed in the expected direction. A greater proportion of post-test students thought that they would not mind if someone with a mental illness lived next door to them (a 5% change) or sat next to them

TARLE 3 Predicted mean scale scores in pretest and post-test groups*

	Pretest Model (CI)	Post-Test Model (CI)	Mean Difference (CI)
Mean scale score	43.6 (42.9–44.3)	39.5 (38.7–40.4)	-4.1
Gender			
Male	43.0 (41.7-44.2)	39.4 (38.7-40.6)	-3.6
Female	43.9 (43.1–44.7)	39.6 (38.5–40.8)	-4.3
Age group			
19–21	45.8 (45.1-46.5)	42.0 (40.8-43.1)	-3.8
22-26	41.5 (40.6-42.4)	38.8 (37.8-39.8)	-2.7
25+	41.2 (40.1–42.3)	37.1 (35.8–38.5)	-4.1
Close friend			
No	44.1 (43.3-44.9)	40.9 (39.9-41.9)	-3.2
Yes	42.5 (41.3–43.7)	37.2 (36.2–38.3)	-5.3
Family member			
No	45.8 (45.1–46.5)	41.7 (40.7–42.6)	-4.1
Yes	41.1 (40.5–41.8)	37.3 (36.5–38.2)	-3.8

CI = confidence interval

in class (an 8% change). Post-test students were also more likely to report that they would hire someone with a mental illness if they were an employer (a 9% change) or make close friends with someone who had a mental illness (a 12% change). With respect to professional relationships, a greater proportion of post-test students would agree to let someone with a mental illness babysit their children (a 6% change) or teach schoolchildren (a 13% change) or would go to a doctor who had been treated for a mental illness (a 16% change). Surprisingly, 14% fewer post-test students indicated they would be willing to go to a doctor for treatment if they thought they themselves had a mental illness.

With respect to social responsibility items, students in the post-test sample were less willing to make a one-time donation to a charity to support people with a mental illness (a reduction of 7%) but more willing to make a regular donation (a 4% increase). The proportion willing to sign a petition was high in both groups (93–94%). Fourteen percent more post-test students were willing to support spending additional tax dollars to improve mental health services. A small positive change was noted in the proportion of post-test students who would volunteer their time (2%), and a small negative change was noted in the proportion of post-test students who would be willing to join an advocacy group (-4%).

Table 3 presents the results of a least squares regression model estimating the total stigma scale score and 95% confidence intervals for pre- and post-test groups adjusting for gender, age group and contact variables and assuming independent samples. Results show a statistically significant mean drop of 4.1 points from pretest to post-test, reflecting a 5% drop in the average scale score. The model was statistically significant and explained 18% of the variance. Table 3 also shows the estimated mean differences for each group based on the fitted model. All groups showed statistically significant changes in the expected direction. Mean differences ranged from 2.7 (for those aged 22-26) to 5.3 (for those having a close friend with a mental illness).

What Would Respondents Do Differently?

The majority of post-test students (72%) responded to an open-ended question, indicating

that they thought they would behave differently as a result of the symposium. Theme-based coding of their comments indicated that 61% of those who thought they would change said they would alter their views about people with a mental illness. Also, almost half (46%) said they would pay more attention to the way in which media stories are covered, such as being "more conscientious about covering the subject" or "very aware of the wording" they use when writing stories.

Summary and Conclusion

This article describes the results of a contact-based anti-stigma intervention provided to journalism students sponsored by the Opening Minds anti-stigma program of the Mental Health Commission of Canada. Three people with different personal experiences with mental illness shared their stories and discussed the impact of stigma on their daily lives. Two media experts discussed the role of the media in creating and maintaining stigma. Students completed surveys prior to the seminar and then again following the presentations. We assessed changes in attitudes, expressions of social acceptance and feelings of social responsibility using a 20-item scale (Cronbach's alpha =.74). A statistically significant decrease in scale scores from 43.6 to 39.5 points was noted, reflecting a 5% reduction in stigmatizing attitudes following the symposium. In addition, a large, itemspecific change (reflecting a 26% reduction in stigma) was noted

^{*}Mean values are predicted from a least squares regression assuming independent samples with all variables included in the model;

 $R^2 = .18 (n = 119), F(6, 112) = 4.13, p < .001.$

with respect to students' stereotypic views of mental illness as connoting dangerousness and unpredictability - a stereotype that was specifically targeted during the symposium. The majority of students reported that the symposium had changed their views of people with a mental illness, and half of these indicated they thought they would change the way they would report stories involving someone with a mental illness. These findings suggest that the symposium was successful in reducing stigma, particularly with respect to stereotypes of dangerousness and unpredictability, and in raising awareness of how news media can contribute to this process.

A potential and unexpected negative side effect of the symposium was that 14% fewer post-test students reported a willingness to go to a doctor if they were experiencing a mental illness, perhaps because they became more aware of the stigma and discrimination that people with a mental illness face. Mental health-related stigma is widely considered to be a key barrier to seeking help and is considered to be the major cause of the large treatment gap (Corrigan 2004). By promoting a greater awareness of the level of stigma and discrimination faced by people with a mental illness, we may have inadvertently encouraged label avoidance as a coping strategy, where students would be less willing to go to a doctor for diagnosis. However, because our presenters also talked about the importance of having received treatment for their own recovery, this interpretation remains highly speculative, but worthy of more detailed future investigation.

Simple evaluation designs, such as the pretest/post-test survey used here, are useful precursors to more rigorous evaluation because they are less intrusive and more cost-effective than larger, more controlled studies. They can help determine the usefulness of a program by indicating whether program participants change in the desired direction (Posavac 2011). However, pretest/post-test designs are also subject to over-interpretation because they do not control for the many competing explanations that may account for observed changes.

In our study, we experienced 40% attrition from pre- to post-test. We understand that there was some confusion among students as to whether they should complete two surveys. Some did not complete a post-test survey because they thought they had already completed the study questionnaire. Also, as the symposium drew to a close, a number of students left the room before the evaluation instrument could be collected. Thus, it may be that attrition was unrelated to stigma. We statistically matched pretest and post-test groups on age group and gender, thereby minimizing any bias that may have been related to these variables.

An important difficulty we experienced was our inability to individually match students on pre- and post-test surveys. We did not receive ethics clearance to collect the identifying information that was required to undertake this level of matching. Consequently, we could not determine which students did not provide a post-test measure. Secondly, we were unable to

optimize our analysis by using statistics that would take the dependence of the samples into consideration. As a result, estimates of variance were inflated, resulting in wider confidence intervals. This makes it more difficult to detect statistically significant differences. However, because we did not report any null findings, this is less of a concern.

With one-group evaluation designs, it is also impossible to rule out the impact of external events as an explanation for change. In our case, the types of external events that typically occur would have been negative, such as a widely publicized violent incident involving someone with a mental illness. Research has shown that such events increase stigma (Angermeyer and Matschinger 1995). Because our pre- and post-test measures were taken on the same day, it is unlikely that any external event would be a credible explanation for our findings.

Finally, because we used self-report measures, we cannot know the extent to which the symposium created a social desirability response. Students may have been less willing to state their real attitudes and beliefs and more knowledgeable about what constituted a socially and politically correct response. Inclusion of a social desirability scale would have been helpful to rule out this possibility, but it would have increased respondent burden and rendered data collection too unwieldy. Thus, we are unable to rule out social desirability as a competing explanation for our findings.

Despite these limitations, our results are consistent with findings from contact-based education programs targeting other target groups (Holmes et al. 1999; Pinfold et al. 2005; Shera and Delva-Tauiliili 1996; Shor and Sykes 2002; Stuart 2006a; Wallach 2004), including experimental designs where participants were randomized to study and control conditions (Altindag et al. 2006; Corrigan et al. 2002; Reinke et al. 2004; Wood and Wahl 2006). Thus, while it is difficult to draw firm conclusions from a single uncontrolled study, placed within the context of the existing literature, it would appear that this relatively brief contact-based intervention changed journalism students' selfreported views of people with a mental illness. More controlled investigation is needed to rule out alternative explanations that could account for this change. However, in the mean time, these results are encouraging and suggest that those who administer journalism programs could consider including contact-based education to help students understand mental illness-related stigma and the role of the media in this process. The results also support the future planned work of the Opening Mind program in promoting contact-based education to de-stigmatize mental illnesses among various youth groups. HQ

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The "Mental" Health of Canada's Indigenous Children and Youth:

Finding New Ways Forward

Michael Chandler

Re-writing One's Own Job Description

Focusing, as it is meant to do, on child mental health, this special issue of Healthcare Quarterly singles out for attention a distinctive category of concerns that, when viewed through lenses common to many Indigenous peoples, is arguably better left unmarked. That is, attempts to carve up the world in such a way that health concerns centre on matters of the "mind," on the one hand, and on "physical" ill health, on the other, are expressive of a form of self-understanding that is more consonant with the classic dualisms of traditional, "Western," Cartesian thought (e.g., the mental in counter-distinction to the physical; selves set off against societies), and quite out of place in those more holistic frameworks of understanding favoured by many of the world's Indigenous peoples (Chandler 2010).

Why such putative cultural differences might make a difference - or at least a difference in what is written here - is that any account of health matters in which Indigenous people might actually recognize themselves requires, as a constitutive condition of its coherence, a kind of radical reframing - a shift in axes that replaces the arguably "false" dichotomy between mental and physical health with something better approximated by the much-overheard and more broadly inclusive notion of personal and community "well-being."

Of course, a preference for understanding things holistically is by no means unique to Indigenous groups. Such holistic concepts similarly mark the "wet edge" of verdant thoughts running through the minds of many contemporary Euro-American intellectuals (Overton 2010). Still, and whoever deserves the credit, out-of-fashion "split narratives" and other such "fundamental" antinomies meant to locate minds and bodies on opposite banks of some unbridgeable divide fit especially awkwardly within the usual course of Indigenous thought. Consequently, and all in the hope that what is said here will have some ring of authenticity to those whose health and well-being are under discussion, all talk about what is or is exclusively "mental" about "mental health," and where individuals leave off and whole cultural communities begin, will be replaced by a different way of imagining - a way in which remarks about the individual and the physical are seen to blend seamlessly into a more relational system of accounting that is simultaneously about the mental and the social.

With or without any serious effort to accommodate a more Indigenous way of framing the problem, any scant five or six pages within which to rehearse the myriad ways in which the psychological well-being of First Nations, Métis and Inuit youth is known to be compromised runs the serious risk of reducing to still another exercise in name-calling - a further rehashing of woes that could only serve to further stigmatize a group about which almost nothing good is ever said. Instead, it is hopefully sufficient, for present purposes, to simply offer up a guildedged guarantee that, for almost any arbitrarily chosen form of psychopathology one might care to nominate, ample evidence is already in hand demonstrating that, on some running average, Indigenous youth regularly fair more poorly than do their non-Indigenous counterparts.

Why all of this has proven to be so is hardly a mystery. As a generally recognized consequence of past and present government policy and public practice, Canada's Indigenous peoples continue to be poorly housed, inadequately nourished, underemployed and improperly educated. Over and above such more easily documented deprivations, Indigenous groups are also routinely targets of racial prejudice and consistently denied the usual rights of self-determination; their languages and cultural practices are criminalized, and their ways of knowing discounted and turned into a laughing stock. This short list is, of course, only a sampler, and one could easily go on and on, adding further salt to existing wounds, but to what point? Nor are there believable grounds for surprise upon hearing, once again, that those who have been most deeply and permanently scarred by such depravations and mean-spirited practices are the young - not only because they are more defenceless but also because they stand at the end of a long train of traumas all promoting the inter-generational transfer of psychopathology.

An Alternative Agenda

So, where does all of this leave the expectant reader? If "mental health" is not a category of self-understanding common within the Indigenous world, and, even if it were, if further rehearsing the litany of woes common to Indigenous youth threatens to do more harm than good, then what still remains to be usefully said?

Two such prospective things are put on offer here, both of which are thought to have important implications for future policies and practices. The first of these is that it is simply wrongheaded (as well as hurtful and deeply misleading) to go on imagining, as is commonly done, that First Nations, Métis and Inuit youth are all equally at risk of, or already manifest, some disproportionate array of mental health problems. Rather, and as I will be at pains to show, the real truth is that while some modest fraction of Indigenous communities do actually possess more than their "fair" share of childhood psychopathologies, it is equally true that many more do not. That is, strong evidence is already in hand (e.g., Chandler and Lalonde 1998, 2004, 2009; Chandler et al. 2010) demonstrating that health problems in general, and "mental" health problems in particular, are never uniformly distributed across the whole of any roughly assembled collection of Indigenous persons; and that, instead, instances of such difficulties tend to regularly "pile up" in some quarters and not at all in others. Consequently, the practice of rudely aggregating evidence collected in ways that collapse across those important dimensions of cultural differences that divide this Indigenous community from that necessarily produces only imaginary numbers or "actuarial fictions" summary conclusions that apply to no one in particular and that lack any discernible human meaning. What potential advance in our understanding could possibly accrue, for example, from the revelation that the youth suicide rate for the whole of Canada's more than 600 culturally distinct First Nations bands is five, or 20, or any number of times higher than that of the general population? What, exactly, would we be better prepared to do upon learning that, across the nation, the high-school dropout rate for Indigenous youth is somewhere between 40 and 60%?

The truth is that while youth suicides and school failures (to name only two such common failings) are epidemic in some Indigenous communities, elsewhere many other communities, in still greater numbers, graduate the bulk of their students and suffer no youth suicides at all (Chandler et al. 2010). Perhaps summary figures depicting national averages are of some passing interest to those assigned the task of preparing federal budgets, or still another banner headline, but it remains difficult to see how such empty abstractions could possibly be brought to bear by those concerned with actually solving Indigenous problems in well-being, if and where they occur. In short, I mean to argue here that any enterprise that begins by supposing the existence of some "monolithic indigene," some Aboriginal "everyman" (young or old), whose propensities for disorder are extrapolated using only broad-scale averages - any summary effort to paint all Indigenous persons with the same defamatory brush – amounts to a fool's errand.

What all of this comes down to, then, is the certainty that anything less than a sober commitment to undertaking more fine-grained analyses – analyses that do not ride roughshod over the important dimensions of cultural differences that set Indigenous communities meaningfully apart (Hodgkenson 1990), not simply from the general population, but from one another - can only result in a further squandering of scarce resources; money and talent have been misspent on "solving" problems where they do not exist, while a blind eye has been turned to those real, but scattered, health tragedies that mark some Indigenous communities, but not others.

Any summary effort to paint all Indigenous persons with the same defamatory brush amounts to a fool's errand.

The *second* matter to be taken up here is a natural by-product of the first, and is all about "Indigenous knowledge" and how it might be brought to bear. My point here will be to persuade you that Indigenous knowledge is an untapped resource in our efforts to deal with Indigenous health and mental health problems where they occur.

If, in some imaginary world, starkly different from our own, lack of well-being should prove to be distributed uniformly, both within and between Indigenous and non-Indigenous groups, then there would simply be no one to turn to for new insights about how mental health problems might be best avoided or solved. Here in our real world, in our own country, however, nothing like this ordinarily happens. Instead, problems of all sorts tend to be wildly distributed, and, as a matter of "best practices," common sense demands that we regularly and usefully turn research attention to those who are most troubled or most problem free. Who among us is especially "cancer prone" or "cancer free," or otherwise "immune" to some particular virus? We all want to know, and are at pains to discover what, in particular, sets those with and without such problems well apart. The logic of doing just this is so compelling as to require no defence. Oddly, however, it is a logic ordinarily abandoned when it comes to efforts to understand the many problems in well-being that plague young people in Indigenous communities.

On How We Might Have Gone So Wrong

In searching for reasons as to why attention has been so inexplicably turned away from the real variability that characterizes Indigenous communities, a short list of candidate reasons easily pops up. Perhaps first on any such short list is the broad - some would say "universal" or "species wide" (Medin et al. 2010) - tendency to mistakenly imagine that out-group or minority-group members are not only different from "us" but are, otherwise, all as alike as peas in a pod. At least for those of us reared in the West, we are, each of "us," conventionally understood as defined by our own signature uniqueness and, perhaps, the distinctiveness of the groups with which we are identified. By contrast, "they" – those *outré* minority group members – can scarcely be told apart. Simple xenophobia and a predilection for stereotyping out-group members can, then, offer a partial explanation for our apparent readiness to paint all members of all Indigenous groups with the same undifferentiated but discriminatory brush. What such accounts do not do, however, is offer an explanation for our collective failure to entertain the very possibility that certain especially well-adapted Indigenous persons, or groups, might actually prosper in ways that hold a key to some better understanding of otherwise-seemingly intractable health and mental health problems.

A further and less commonly considered way of understanding the mistaken propensity for imagining that all Indigenous groups stand or fall together, and that there is no utility in examining the relative success with which some of these communities have avoided or overcome serious health problems, is to be found in what appears to be the near impossibility of imagining that at least some Indigenous communities may actually possess real Indigenous knowledge, or competencies, or "best practices" that could be drawn upon, or usefully "'transferred" to, others who are less fortunate. What makes such prospects unthinkable, I will go on to argue, is that whatever dubious moral leg ordinary colonialist practices have traditionally stood upon tends to be shorn up by the common conviction that whatever Indigenous cultures might claim to know is, by definition, childlike, backward and automatically mistaken and, so, invariably demands the guiding hand of more enlightened Western ways of knowing.

Before having more to say about such forms of "epistemic violence" (Spivack 1985: 126), however, and all in an effort to ground this account in something more concrete and "evidence based," I want to narrow the focus of this discussion by introducing a working case in point - one concerned with youth suicide in British Columbia's more than 200 First Nations communities.

A Case in Point: Community-Level Rates of Suicide in BC Indigenous Youth

In narrowing in on this particular example as a way of illustrating the special burden of mental health problems borne by at least some of Canada's Indigenous youth, it needs to be said that almost any of the usual psychiatric disorders might have served as well. Suicide, although perhaps not a "distinct psychiatric disorder" (Kirmayer et al. 2010: 12), does, nevertheless, have one important advantage over most other contenders, primarily because legal obligations force the keeping of careful records about who are and are not believed to have taken their own life. Consequently, suicides, including those among Indigenous youth, provide potentially richer epidemiological data than do most other mental health problems.

For present purposes it is also interestingly the case that suicide is a tragedy exquisitely engineered to try the patience of any committed, card-carrying Cartesian dualist - anyone wedded to the importance of driving wedges between mental and physical health, or otherwise bent upon treating individuals as though they are somehow separated from the societies of which they are a part. Essentially by definition, suicides implicate both troubled minds and broken bodies. Similarly, and at least since Durkheim (1897/1951), it has been broadly understood that, what at first might appear the loneliest of private acts actually varies dramatically between whole social classes or nation states, and can only be fully understood by drawing upon frameworks of understanding that disrespect all iron-clad divisions between minds and bodies, between individuals and whole cultural communities. As such, suicides cry out to be understood as occupying a space located somewhere between such forced dichotomies, and as more clearly the expression of a collapse in general "wellbeing" than are many other examples of psychosocial pathology.

What actually needs to be done already seems simple enough: first determine where suicide rates are heartbreakingly high, and only then deploy one's best preventive efforts specifically to these troubled groups.

For all of these reasons, and for almost two decades, my research colleagues and I have tracked the rates of suicide among BC's First Nations youth (Chandler and Lalonde 1998, 2004, 2009) - not, as is most typically done, only at the provincial level, but for each of British Columbia's more than 200 separate bands and 27 band councils. This hard task was taken up out of the conviction that, given the radical cultural diversity known to characterize BC's Indigenous populations, no single, overarching summary statistic or generic portrait could possibly do. Adding apples and oranges would be a mere misdemeanour compared with the indictable offense of wrongly supposing that the distinctive bands that comprise the province's historically diverse First Nations communities all deserve to be seen as adding up to the same single, seamless, homogenized arithmetic whole. In pursuit of such matters, my research colleagues have generated some 30 books, monographs, articles and chapters, all meant to put the lie to any easy assumption about the interchangeability of Indigenous persons and groups. Two kernel ideas have emerged from these efforts - ideas that have already been hinted at, and that bear directly upon the take-home message of this essay. The first of these (already introduced above) is that all generic claims about the rates of youth suicide in Canada, or any of its provinces, amount to actuarial fictions that do more

to confound than enlighten. The *second* is that evidence already in hand clearly demonstrates that many of BC's First Nations communities clearly possess Indigenous knowledge about how to create a cultural community in which young people find life worth living - knowledge that could be "laterally" transferred to other bands whose rates of youth suicide are heartbreakingly high. What have not yet been adequately brought out, however, are the action and policy implications that follow from these matters of fact. The balance of what follows is given over to a detailing of some of these action implications.

Actuarial Fictions and Other Forms of Stereotypy

Even for a research group such as our own, already committed to the expectation that youth suicide rates would vary from one Indigenous community to the next, our actual results — the radically saw-toothed profiles depicted in Figures 1 and 2 were not fully anticipated. As can be seen from an inspection of Figure 1, close to half (more precisely 41%) of BC's First Nations bands were found to have experienced no (i.e., zero) youth suicides across the 14-year period for which our data are now complete. In many others, where occasional suicides had occurred, the observed rates were less than, or no different from, those of the general population. In dramatic contrast, other of these communities evidenced suicide rates many hundreds of times the provincial average. Obviously, simply adding up all of these wildly disparate community-level rates could only produce a summary statistic representative of no one in particular.

Concerned that our results might be at least partially owed to the so-called small "n" problem that naturally plagues studies of suicide (or anything else) in restricted populations, we also opted to further aggregate our own data at a slightly higher level of analysis (see Figure 2) by re-examining youth suicide rates, this time at the level of whole "tribal" or "band councils" (administrative groups normally composed of 10 or more otherwise separate, but geographically proximate, historically affiliated and often culturally synchronic tribal groups). Again, even by our unforgiving standard of zero suicides across an entire study period, more than one in five of these more populous band councils did not experienced a single youth suicide, and once again, the general pattern of results was wildly saw-toothed, with some groups showing sharply elevated youth suicide rates.

Given these results, how might anyone with ambitions to mount a suicide prevention program in British Columbia best proceed? Setting aside for the moment what the actual content of any such prevention effort might look like, it seems evident that any such candidate program should, first and foremost, focus attention on those particular communities that actually experience high suicide rates. Naturally enough, there have been "one-off" undertakings, prompted by some rash of suicides in specific Indigenous communities that fit such a targeted model. More broadly, however, in British Columbia, in Canada and

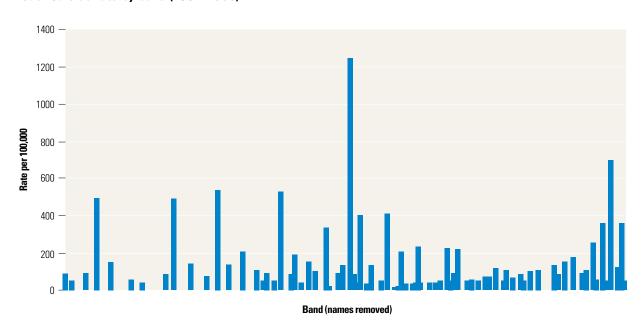


FIGURE 1. Youth suicide rate by band (1987-2000)

around the Indigenous world, there have been building efforts to invent various all-purpose, national or province-wide suicide prevention programs. A comprehensive international survey of both the published and grey literatures pertaining to such effort, commissioned by the First Nations and Inuit Health Branch of Health Canada, has just been released by the Cultural and Mental Health Research Unit of the Department of Psychiatry, Jewish General Hospital - an effort spearheaded by Kirmayer and his colleagues (2010). As far as it is possible to determine, in none of the more than 400 references cited by this working group is there a single instance in which such broad-based prevention programs actually began with the prerequisite surveillance efforts that might have made it possible to specifically target communities with demonstrably higher suicide rates among Indigenous youth. Rather, relying upon overarching national or provincial statistics, plans were made and set in motion to offer up some "one-size-fits-all" intervention strategy intended to fit anyone and everyone. There are, of course, economies of scale and matters of public sentiment that argue for rolling out such unified "plans," but none of this is responsive to the fact that Indigenous communities, otherwise notorious for their uniqueness, not only lend themselves badly to any sort of assembly-line treatment, but, more critically, sometimes do and sometimes do not manifest the problems that prompted the mounting of such suicide prevention strategies in the first place. Current practices notwithstanding, what actually needs to be done already seems simple enough: first determine where suicide rates are heartbreakingly high, and only then deploy one's best preventive efforts specifically to these troubled groups.

All such straightforward marching orders aside, everything so far said still leaves open the question of what any such evidencebased suicide prevention strategy might actually look like.

The Lateral Transfer of Indigenous Knowledge

Having hopefully gotten beyond the broadly shared but unsupported assumption that suicide (or is it alcoholism and poor parenting?) is somehow an endemic feature - perhaps even a racial attribute - of simply being Indigenous, where ought one to turn for fresh insights concerning how youth suicide might be best understood and prevented? The officially authorized answer to this question is, of course, research – a solution strategy likely to work only when the attention of the research community already happens to be focused on the problem at hand. It is not. Instead, most of the energy and most of the resources given over to the problem of suicide among Indigenous people have been less about surveillance and more about prevention – a popular agenda that, nevertheless, threatens to put the cart before the horse.

As it is, many countries with substantial Indigenous populations (e.g., Australia, Canada, New Zealand, the United States and various other circumpolar places) have recently moved to create national suicide prevention strategies, and what Australian Aboriginal psychiatrist Helen Milroy has called substantial "suicide prevention industries" (Kirmayer et al. 2010: 85). While there is, perhaps, much to admire (e.g., high

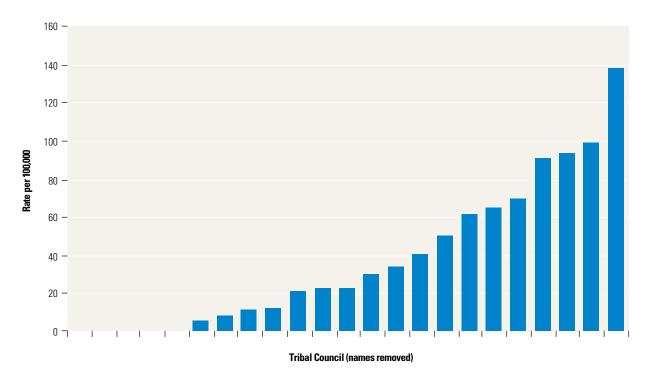


FIGURE 2 Youth suicide rate by tribal council (1987-2000)

energy expenditures, worlds of good intentions) about many of these attempts to jump ahead to possible solutions to problems not yet well understood, far too little attention has been given over to sorting out what does and does not work.

In their careful review of such prevention programs, Kirmayer and colleagues (2010) reluctantly conclude that there is little or no evidence to suggest that any of these programs do actually work to "prevent" suicides. Those few that do have actionable evaluative components tend to have an educational focus and to base their claims for effectiveness on a reduction of ignorance about suicide, rather than any reduction in the actual incidence of suicide per se. If one further narrows the search by focusing only on that short list of prevention programs that directly target suicides among Indigenous people, or, more narrowly still, among Indigenous youth, then there appears to be no empirical evidence at all showing that such efforts have resulted in fewer deaths.

While still thin on the ground, there do exist other programs of research (including that of my own working group) that have endeavoured to identify various social determinants of suicide among Indigenous youth. Although not manifestly about suicide prevention, what these several research efforts have shown is that First Nations bands that have successfully worked to re-build

connections to their own cultural past and have regained some measure of control over their own civic lives do enjoy dramatically reduced rates of youth suicide (Chandler and Lalonde 2009). By demonstrating some of the circumstances associated with lower suicide rates, such findings (while more about causes than cures) do offer some indirect insights into the kinds of rehabilitative efforts that communities might undertake in their own efforts to create the sorts of socio-cultural environments that convince Indigenous youth that life is worth living.

Finally, and perhaps most importantly, it needs to be pointed out that any expectation that real insights into the causes and cures of suicide among Indigenous youth must necessarily await the completion of various government-sponsored initiatives automatically betrays evidence of a lingering residue of neo-colonialist thought – one that, as Fanon has pointed out, "wants everything to come from itself" (1965: 63). That is, once having gotten around to addressing the spectacular burdens of ill health facing certain of Canada's Indigenous communities, the standard way of doing business (what so-called knowledge transfer is routinely taken to mean) ordinarily hinges upon (1) first turning to the research community for novel ideas about the likely causes and consequences of this or that health problem; (2) before then funnelling such "insights" to some centralized

"policy" centre (most often in Ottawa or Washington), where program planners fashion various generic intervention strategies; and (3) then uniformly visiting these programs upon often-unwelcoming Indigenous communities. Among the many reasons to speak against such generic, context-insensitive, one-size-fits-all, top-down, trickle-down solution strategies – reasons beyond the facts that they are so often resented and undermined, and otherwise reinforce the presumed positional inferiority of Indigenous communities thought incapable of managing their own affairs – is the fact that such extra-terrestrial, "made in New York City" interventions so rarely seem to work

It is simply true that those bands that have "zero" youth suicide rates must also have successfully created a socio-cultural environment within which their own young people consistently choose life over death.

The alternative to be argued for here – a strategy involving the lateral transfer of Indigenous knowledge – advocates taking an opposite tack that aims to capitalize on the persistence of real Indigenous knowledge already known to be sediment within those communities that have shown themselves to be relatively problem free. To return to our working example of band-level youth suicide rates in British Columbia, it is simply true on its face that those bands that have "zero" youth suicide rates – rates substantially lower than those found in the general population - must also have successfully created a socio-cultural environment within which their own young people consistently choose life over death. No one not otherwise still caught up in some "civilizing mission" (Gandhi 1998: 16) – some neo-colonialist view that automatically brands Indigenous knowledge as necessarily primitive or child-like - could fail to see hopeful prospects in any enterprise meant to support the lateral transfer or sharing of such Indigenous knowledge and cultural practices with other communities where youth suicides remain epidemic. At least in a world in which knowledge transfer is too often taken to mean the use of Western knowledge as a weapon wielded against those who are obligated to suffer it, and where our "best" alternatives seem to be the root and branch transplant of top-down intervention strategies that serve to further marginalize Indigenous voices, new efforts to help broker such transfers of Indigenous knowledge between communities would seem strategies worth investing in. This will not be easy either, but it is at least evidenced based and promises to avoid many of the top-down, made-in-Ottawa strategies now being heavily resourced. HQ

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Youth Justice and Mental Health in Perspective

Alan W. Leschied

Abstract

Research indentifies that a significant proportion of youth within the justice system possess some form of mental health disorder, and that the presence of an emotional disorder can provide important explanatory value regarding the causes of crime. Evidence is now overwhelming that services within the youth justice system need to account for the causes of crime in order to effectively reduce the likelihood of reoffending. Such an ethic within youth justice service delivery not only reduces symptoms and risk within the youth and their families but also is linked to increasing community safety through reductions in reoffending. This review characterizes the relevance of mental health disorder in considering the needs of anti-social youth, and how this appreciation is linked to the delivery of effective services as well as what constitutes supportive youth justice legislation





Background and Context

The youth justice system, relative to the systems governing child welfare and children's mental health, is arguably the most contentious of the three branches of children's services. While maintaining the safety of at-risk children who may experience maltreatment or responding to the needs of a depressed or suicidal youth can readily garner the public's empathy and advocacy, helping those youth whose behaviour creates risk for the community's safety – be it property or person – often draws nothing from the public but their enmity. This review highlights an understanding of the context in which youth who come into conflict with their communities can receive more informed and effective responses from service providers and support from the public, specifically in the context of an appreciation of the extent and nature of mental health disorder.

What Kinds of Crime Do Youth Commit?

Statistics Canada's The Daily (2008) reported that in 2006 approximately "180,000 young people were implicated in some violation of the Criminal Code, excluding traffic offences"; this translates to 6.8% of the Canadian youth population aged 12-18. The vast majority of crimes committed by young persons are of a property nature (i.e., theft or break and enter) with an estimated 25% involving some form of assault. Another young person is the most likely target of youth violence. Gender breakdowns suggest that males commit the majority of crimes; although over the past decade, there has been an increase in the rate of crimes committed by females, particularly in violencerelated offenses.

Who Are the Youth Who Commit Crime?

Research tells us that the vast majority of youth who enter the youth justice system do so when they are in their early to mid-adolescence, committing less serious property-related offenses, and age out of anti-social behaviour as they enter later adolescence and early adulthood. The more chronic and persistent youthful offenders are found to be those who begin their antisocial careers early through the committal of minor offenses but do not desist with time; rather, they increase both the frequency and severity of their offending pattern throughout their adolescence (Loeber and Stouthammer-Loeber 1996; Moffitt 1993).

Similar to findings in the literature in adult corrections, youth who are in conflict with their communities reflect risk in areas related to their thoughts and perceptions or their justifications and rationalizations related to their criminal activity (Andrews and Bonta 2008). Further, in the context of youthful offending, again in the general case, systemic approaches to understanding influences on youth committing crime highlight the roles of families, peers and school as critical socializing agents in developing attitudes that are either less or more favourable toward criminal activity. These general concepts regarding

young people who are in conflict with their community reflect that the vast majority of youth who are apprehended by the police are involved in court diversion programs, or what are referred to within legislation as alternative measures, are either on probation or in custody within the youth justice system. The balance of this review focuses on those youth who come into conflict with their community and who possess some form of mental health disorder. A review is provided of the literature that furthers understanding regarding the link between mental health disorder and youth crime, and addresses the practice and policies that need to be in place to further community safety by addressing the needs of emotionally and behaviourally disordered youth.

"Youth involved with the juvenile justice system frequently have more than one co-occurring mental and substance use disorder."

Situating Mental Health Disorder with Youthful Offenders

Data reported by the International Society of Psychiatric-Mental Health Nurses (2008) reflect that 50-75% of youth in the justice system possess some form of mental health disorder: "One fifth or 20% of all children and adolescents ... experience a diagnosable mental health disorder before the age of 21. ... [However] the number of adolescents with undiagnosed mental health disorders committed to the juvenile justice system has exploded with estimates that between 50% and 75% of the youth who are committed to juvenile justice have diagnosable mental health problems" (2008). However, studies have reflected that when the sample of youth in detention or custody is considered separately from the general youth justice population, more precise estimates are available, as these youth will be more likely to have had some form of assessment prior to their placement. These estimates reflected that approximately 60% of the males and more than two thirds of the females met the diagnostic criteria for a mental health disorder or had a diagnosis-specific impairment for one or more psychiatric disorders. These data included the fact that half of the males and almost half of the females had a substance abuse disorder, and more than 40% of males and females met criteria for disruptive behaviour disorders. Affective disorders were also prevalent, especially among females; more than 20% of females met the criteria for a major depressive episode. Rates for most mental health disorders were higher among females (Teplin et al. 2002). (This fact is elaborated upon in a later section as it is worthy of separate comment.)

Why are the rates so high? Several issues can be indentified to address why the rate of mental health disorder in the youth

justice population is in excess of three times the rate in the general adolescent population: stigma, availability of resources, misunderstandings regarding what the youth justice system provides and a lack of coordination between children's service sectors.

Stigma

The stigma attached to being considered in need of some form of emotional support as an adolescent continues to restrict many from accessing or responding positively to the possibility of psychological service. While emotional difficulties go untreated, young people act out in ways that belie the fact of their problems, which means that ultimately they are sanctioned through youth justice for their behaviour.

Availability of Resources

There is a lack of community resources that relate specifically to the nature of emotional disorders. This shortage affects the population of children and adolescents who have a mental health disorder, some of whom subsequently come into contact with the youth justice system.

Misunderstandings Regarding What the Youth Justice System Provides

While most youth justice systems have as their mandate services that attempt to meet the psychological needs of offenders, these services are often not supported to meet the exceptional demands of seriously disordered young offenders. Yet, too often, there is a belief that once in the justice system the youth will be "taken care of," and other service providers may consequently default to the youth justice system.

Lack of Coordination between Children's Service Sectors

Most children's service systems suffer from a lack of coordination across service sectors and jurisdictional boundaries, such as between child welfare, children's mental health and youth justice. Young people who have co-morbid mental health difficulties shared by a behavioural component that has the potential to bring them into the youth justice system sometimes suffer from this lack of coordination. For example, Judy Finlay, Ontario's child advocate from 1991 to 2007, reported on children emerging from the child welfare system entering the youth justice system: "Ironically, the youth's last chance for rehabilitation is often in the very system [child welfare] that is the least equipped to deal with his or her mental health needs" (Findlay 2003: 1)

Etiology of Mental Health Disorder in Anti-social Youth

The larger question, however, relates to the nature of the mental health disorder in certain children and youth that increases their likelihood of becoming part of the youth justice system. The

following section addresses issues related to the etiology of child and youth mental health and behavioural disorder that is linked to young people who enter the youth justice system and who possess an emotional disorder. It summarizes the correlates of mental health disorder, the impact of maltreatment, substance abuse and relevant gender differences.

Mental Health Correlates

Research suggests that the estimate of one in five youth having a diagnosable mental health disorder is true not only for Ontario but also generally across cultures (Offord et al. 1987). The link between childhood and adolescent factors and anti-social behaviour can include the following: attentional problems, motor restlessness and attention seeking; emotional concerns consistent with depression including withdrawal, anxiety, selfdeprecation and social alienation; family characteristics such as a variety of negative parenting strategies including coerciveness, authoritarian behaviours, a lack of child supervision and a family situation that might include violence, inter-parental conflict and poor communication (Leschied et al. 2008). These findings have been reported in numerous US and UK studies over the past two decades; recent Canadian-based data reported a similar pattern based on trajectory studies of youth who enter the young offender system. (In a forthcoming special issue of the Canadian Journal of Criminality and Criminal Justice featuring research related to prevention, four separate studies based on Canadian youth show considerable overlap in the trajectory of characteristics that determine those youth most at risk for reoffending. That list of risk factors will be of interest in identifying an overlap with mental health risk as well.

Legacy of Maltreatment

Children who experience either maltreatment or exposure to violence in their families of origin are twice as likely to report clinically significant elevations for emotional and behavioural disorder compared with children and youth who do not report maltreatment. Not only does the impact of being maltreated set the stage for the development of serious emotional disorder, for some it also translates into their own perpetration of violence and, hence, entry into the youth justice system. As mentioned above, there is a high correlation between the childhood experience of violence, either directly or vicariously through exposure within the family, and the subsequent committal of violence. Specifically in girls, this fact is reflected in elevated depression, suicidal ideation and self-harming behaviour.

Substance Abuse

Research suggests that the use of illegal substances accounts either directly or indirectly for a substantial number of youthrelated offenses. MacKinnon-Lewis et al. have asserted, "Youth involved with the juvenile justice system frequently have more

than one co-occurring mental and substance use disorder" (2002: 355). Substance abuse is embedded in a series of early life circumstances, including coercive family processes, social stress, poverty, poor academic outcomes and social disengagement. It is difficult to disentangle the effects of substance use and anti-social disorder as many of the predictors for anti-social behaviour overlap with the predictors of substance use, such as inconsistent parental discipline and harsh, punitive parental practices; low parental monitoring of a child/youth behaviour; deviant peer associations; depression; low self-esteem; and poor academic achievement. What is inescapable is the strong link between substance use, alcohol consumption and involvement in an anti-social lifestyle.

Gender Differences

Unique to the studies on co-morbidity with violence and risk is that girls who behave aggressively report higher levels of depression and suicidal ideation than do boys. Indeed, a review of this literature indicates that girls with higher scores on aggression reported elevations on depression at a rate close to 40%. In addition, relative to boys who are aggressive, girls report higher rates of diagnosis of attention deficit hyperactivity disorder, involvement in substance abuse and suicide risk. More than for boys, when girls act violently, it is important to assess for the presence of an underlying mental health disorder.

Effective Services for Mental Health Disordered Youth in the Justice System

So, what does the knowledge relating mental health disorder and youth in the justice system mean to services and the law? The following sections review knowledge regarding evidencebased treatments and legislation that can support the delivery of an effective youth justice system that considers the significant percentage of youth who possess a mental health disorder.

The general principles regarding effective interventions for children and youth translate what the literature reflects as constituting effective services with justice-involved youth who have a mental health disorder. (For a more detailed description of effective services in youth justice, please refer to Leschied [2008].) These intervention strategies include the following:

- Targeted services that capitalize on the knowledge that mental health disorder and youth anti-social behaviour are linked and can be bi-directional. That is, youth who are involved in the justice system and who may do so as a result of family-based maltreatment, for example, have an increased likelihood of experiencing a mental health disorder; and the presence of a mental health disorder increases the risk that a child or youth will act out anti-socially.
- Empirically based services that reflect the extensive body of knowledge regarding effective service, such that prevention

- and intervention strategies are guided by the literature that has evaluated service outcomes.
- Multiple pathways that acknowledge the link between mental health disorder and youth anti-social behaviour, and interventions that reflect the coincidental occurrence of a variety of risk factors.
- Gender-informed services that acknowledge that the link between mental health disorder and anti-social behaviour are unique with respect to gender. For example, the literature reflects that girls are more likely to experience an underlying mental health disorder such as depression and suicidal ideation relative to boys.
- Services that are developmentally appropriate. For services to be effective, they need to be age appropriate and connect meaningfully with the children and youth who are the receivers of the services.
- Acknowledgement of service implementation as a "science" in its own right. In order to be effective, services need to be implemented in ways consistent with the principles of effective service delivery (a useful source is found in Bernfeld et al. 2001).

Legislation Reflects Public Response

Legislation is often viewed as the touchstone upon which a community's response is measured when judgments are made regarding the youth justice system. Over the past 30 years, Canadians have seen three major changes to the law as it affects youth who are in conflict with their community. These legislative responses have influenced the nature and extent to which the mental health needs of youthful offenders are taken into consideration.

The Juvenile Delinquents Act, in effect since 1908, lasted for almost eight decades before being repealed in 1984. The act created a court and justice process that was informal, placing an emphasis on the role of judges who broadly interpreted the best interest of the child provisions under the law in providing dispositions that could reflect the parens patriae or social welfare role of the court.

The Young Offenders Act (YOA), which replaced the Juvenile Delinquents Act, was legislation that reacted against the lack of due process provided young persons, as well as reigning in the social welfare role of the court in seeking a greater balance for accountability for youth behaviour. However, one major, unintended consequence of this legislation was the dramatic increase in the rate of placements of youth in custody, which, through to the end of the 1990s, reflected that Canada had the highest rate of incarceration per capita for youths proceeding through the court in any Western industrialized nation. Importantly, treatment and rehabilitation provisions within the YOA were seen as less important relative to the need to ensure behavioural accountability.

Extensive revisions were subsequently made to the YOA, in part as a reaction to the punitive nature of its interpretation, along with an increasing respect for the fact that high rates of incarceration, while being expensive, were not "purchasing" as much community safety as could a system predicated on balancing accountability with addressing the needs of youth. Following extensive community consultation, the YOA was repealed in 2003, replaced by the Youth Criminal Justice Act (YCJA), which is currently the federal law that governs youth justice in Canada. Hallmarks of the YCJA include an emphasis given to extrajudicial measures that attempt to ensure that the court process is reserved for the most serious offenders – a move away from the concept of general deterrence, with its belief that sanctions alone could be a meaningful response to youth offending. YCJA emphasizes that the nature of the offender is critical to the process as much as the nature of the offense.

Does the YCJA support the delivery of mental health services to young offenders? Effective legislation should ensure that the court is held as a last resort for the most serious and chronic offenders; the court is flexible to the extent that alternative resources both within the community and within the system itself can be readily accessed for mentally disordered youth; and that once youth are within the youth justice system, there are adequate resources from relevant professional disciplines that can both assess and treat them. Benchmarked against previous legislation in Canada, there is much to support within the YCJA. One significant advancement in some Canadian youth justice jurisdictions has been the inception of youth justice mental health courts, which provide inclusive, crossdisciplinary services targeting emotionally disordered youth at all points within the process from policing, through diversion from the courts, to dispositions that include custody. (For an excellent overview of the operations of mental health courts, see Schneider et al. 2007.)

However, even the most casual observer of the Canadian youth justice system is aware that ideology is never entirely divorced from the debate in regards to youth justice. Proposals to increase sanctions and resurrect deterrence as a reason for youth justice dispositions frequently emerge. Therefore, vigilance in informing the public and legislators with respect to what we know about how to effectively address the causes of crime – which, not incidentally, is also linked to increasing community safety – is a critical part of the function of researchers and service providers.

Dedication

During the course of writing this review for Healthcare Quarterly, Professor Emeritus Don Andrews of Carleton University passed away following a brief illness. Through his research and enthusiastic support for both colleagues and students, Don became a beacon in guiding the debate on risk assessment and effective service in youth and adult justice systems. His reach was inter-

national in scope, his influence pervasive within the Canadian correctional research community. This article is written in the spirit of how Don thought about the issues in guiding correctional practice and policy. HQ

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The Need for Early Mental Health Intervention

Elizabeth McCay

Youth who are compelled to survive on the street can be found in all major urban centres worldwide (Ensign and Ammerman 2008). In Canada, it is estimated that 8,000-11,000 are homeless each night (Canada Mortgage and Housing Corporation 2001). Typically, street-involved youth live and work in urban centres (Boivin et al. 2009). Although definitions of street-involved youth are highly varied, there is general agreement that these youth are precariously housed; have residential instability (e.g., live in shelters, abandoned buildings or on the street); and are emotionally and psychologically vulnerable (Public Health Agency of Canada 2006; Roy et al. 2009). Youth frequently leave home due to conflict, abuse and extreme deprivation within the home environment (Kidd 2009; Miller et al. 2004; Public Health Agency of Canada 2006). Many youth come to be on the street through the child welfare system; they often wish to escape the frustrations of foster care, such as feeling overburdened by inappropriate rules or frequent moves between homes. Others have had to leave foster homes or group homes to escape abuse or simply because they have reached the age of 16 (Karabanow 2008; Serge et al. 2002). There is some indication that the proportion of children from the child welfare system is increasing within the street youth population (Serge et al. 2002).

Mental Health Challenges

It has been well established that mental health challenges are ubiquitous to youth who are street involved (Adalf and Zdanowicz 1999; McCay et al. 2010; Yonge Street Mission 2009). Researchers have documented exceedingly high levels of mental health symptoms, such as depression, hopelessness, anxiety and psychosis, among street-involved youth (McCay 2009; Stuart and Arboleda-Florez 2000). Mental illness in youth is a significant risk factor for homelessness (Ensign and Ammerman 2008) and can emerge as a result of the adverse conditions of life on the street, such as exposure to violence, a

lack of basic necessities, participation in survival sex and drug use (Kipke et al. 1997; McCay et al. 2010; Morrell-Bellai et al. 2000). Addiction on the part of youth or their families and caregivers has been identified as a significant issue that leads to homelessness (Kidd 2009; Mallet et al. 2005). Parents may feel overwhelmed by their child's use of substances and the associated behavioural patterns, leading to a breakdown of the relationship, at which point the child may be impulsively kicked out. Alternatively the parents may be incapable of providing physical and psychological nurturance for their child due to their own addictions (Kidd 2009). For Aboriginal youth, mental health challenges, such as addictions and unhealthy family relationships, have been identified as factors that contribute to youth homelessness (Baskin 2007). However, underlying structural issues, such as poverty and overrepresentation of children in the child welfare system, are thought to be of major importance in understanding homelessness in Aboriginal youth (Baskin 2007).

The length of time on the street

It is not surprising that the conditions associated with living on the street may exacerbate pre-existing mental illness (Whitbeck et al. 2004) or precipitate the emergence of mental health symptoms in these young people. A great number of youth are predisposed to mental health symptoms due to the occurrence of physical or sexual abuse in the home environment, which may lead to symptoms of post-traumatic stress disorder, such as flashbacks, anxiety and anger. Youth living on the street are also exposed to dangerous conditions where they may be physically or sexually assaulted, which may also result in trauma-related symptoms (McManus and Thompson 2008; Stewart et al. 2004) or the exacerbation of prior trauma symptoms. The prevalence of trauma-related symptoms ranges from 18-24% among youth who are homeless and is substantially higher than in non-homeless youth, with transience between cities increasing the occurrence of trauma symptoms (Bender et al. 2010; McManus and Thompson 2008).

High levels of substance abuse have been documented for the majority of street youth cohorts, with more than 50% of youth study participants reporting drug and alcohol use suggestive of a serious level of abuse (Goering et al. 2002; Klein et al. 2000; McCay et al. 2010). The use of substances can be a means of coping with the ongoing emotional turmoil and stress associated with life on the street (McCay et al. 2010; Rachlis 2009; Rew 2003). Youth have been found to use crystal methamphetamine to cope with distress, to stay awake for long periods in order to

protect themselves and as a substitute for prescribed psychiatric medications (Bungay et al. 2006). In addition, street-involved youth are engaged in injection drug use at alarmingly high rates. For example, studies in Vancouver and Montreal indicated that 41% and 60% of youth, respectively, reported prior injection drug use (Kerr et al. 2009; Roy et al. 2007). Factors found to be associated with increased injection drug use included being older than 22 years, involvement in survival sex and hepatitis C infection (Kerr et al. 2009), suggesting that the length of time on the street leads to a hierarchy of increasingly risky behaviour and heightened difficulty stopping behaviours such as injection drug use (Steensma et al. 2005). Substance use, in particular, is very common form of risky behaviour and is associated with high rates of mortality in street youth populations (Roy et al. 2004).

Youth who are highly engaged in substance abuse to cope with the stress of life on the street and who have a history of physical and sexual abuse have been found to experience high levels of mental health symptoms (Adalf and Zdanowicz 1999). It is not surprising that mental health problems such as loneliness, a lack of social connectedness, self-harm behaviours, depression, anxiety and suicidality are experienced by street youth who must not only cope with past and current traumas but also survive on the street. Of most concern is the fact that suicide has been found to be the leading cause of death among street-involved youth (Roy et al. 2004). In a major study (Molnar et al. 1998) of suicide and abuse, suicidal behaviour was found to be closely linked to physical and sexual abuse prior to leaving home. In another recent study, about one half of the participants engaged in some form of self-harm and approximately one third reported at least one suicide attempt (McCay 2009). Overall, a pervasive sense of loneliness, hopelessness, despair and low self-esteem places homeless youth at risk for suicide (Kidd 2006; Kidd and Shahar 2008; McCay 2010).

Not only do youth have to cope with the extreme challenges of their circumstances, they also have to deal with the existence of social stigma toward homelessness, generally, and toward mental health issues, specifically. Youth perceive the existence of social stigma and identify that living a life associated with homelessness, illustrated by negative labels such as "squeegee kids," can result in a profound sense of shame and worthlessness. Further, the burden of stigma associated with mental health challenges is thought to exceed the experience of stigma associated with homelessness (McCay et al. 2010). For youth, feeling doubly stigmatized can profoundly influence behaviour, so much so that youth report that they avoid seeking help for fear of being further stigmatized. Not surprisingly, perceived social stigma has been found to contribute to feelings of low self-esteem, loneliness and suicidality (Kidd 2009). It is the propensity to internalize the negative views of others that is most closely related to mental health indicators, such as those noted above. Youth are particularly vulnerable to the internaliza-

tion of external stigma, given the fluid and sensitive nature of self-definition at this transitional developmental phase.

Resilience in Spite of Distress

Life for these young people is frequently complex and composed of paradoxes. Experiences of tension, challenge and sadness frequently associated with victimization are often juxtaposed with the determination to strive for a better life. Studies have demonstrated the will of youth to move beyond life on the street (McCay 2009; Rew and Horner 2003). Leaving the home environment to escape abuse and surviving life on the street can be viewed by youth as an important independent first step in taking care of themselves and gaining self-respect (Rew 2003).

Leaving the home environment to important independent first step in taking

Even with exceedingly severe levels of mental health symptoms and emotional distress, there is some evidence that street youth possess moderately high levels of resilience (the capacity to overcome adversity) and self-esteem (Adalf and Zdanowicz 1999; McCay et al. 2010; Rew et al. 2001). For example, youth demonstrate strengths such as the capacity to take care of themselves, including the need to take a break from drug use and finding water and food (Bungay and Malchy et al. 2006). Additional strengths include seeking resources and focusing on self-improvement through gaining emotional maturity, learning skills, focusing on the positive and adopting healthier behaviours (McCay 2009; Rew 2003).

Supportive relationships with others such as family (immediate or extended), peers and shelter staff have also been identified as resources that are adopted by youth. The description of family relationships as supportive differs considerably from the description of problematic unstable home environments frequently identified as the cause of youth homelessness (Kidd 2003; McCay 2009). This observation suggests that in some cases it may be possible to repair strained difficult relationships to the benefit of some youth. On the other hand, youth may derive most of their support from friends in the shelter system or on the street (Karabanow and Clement 2004; Kidd 2003; McCay 2009). Peers are frequently described as "street family." The importance of positive, caring relationships with shelter staff is also critical for some youth (Karabanow and Clement 2004; McCay 2009). Positive relationships with staff may have long-lasting effects that go well beyond the pursuit of a particular goal, transferring to a fundamental belief in the self as a valued and capable young person.

In addition to being determined to leave the street (Miller, 2004), it is noteworthy that youth describe goals for the future such as going to college or finding a job (McCay 2009). This is consistent with the developmental stage of emerging adulthood, where youth prepare themselves for adult careers and relationships (Arnett 2007).

Barriers to Accessing Services

There is clearly an urgent need to significantly increase access to mental health services in order to address the severe and complex mental health problems of street-involved youth. However, at the present time only a small percentage of youth are using mental health services, suggesting problems with access to and availability of appropriate services (Bungay et al. 2006; McCay et al. 2010; Rachlis et al. 2009). One obstacle to the use of existing services is the degree of stigma associated with disclosing mental health challenges. Feelings of uncertainty associated with the disclosure of mental illness are consistent with those experienced by the general population. For some youth, there seems to be a great deal of skepticism regarding psychiatric treatment, as well as the fear of discrimination associated with the disclosure of mental health challenges to staff (McCay et al. 2010). The labelling of services as mental health services also seems to be problematic to youth, primarily due to social stigma and a fear of long term labelling (Kidd et al. 2007; Yonge Street Mission 2009). Youth also appear to be highly sensitive to whether staff really care about them or are just doing a job. This is a highly salient issue given the number of youth who have experienced physical and emotional trauma in their home environment or have grown up in transient foster homes. As such, issues of trust and engagement with staff are paramount (Collins and Barker 2009).

A striking barrier with regard to accessing mental health services is the lack of evidence-based interventions to address the mental health problems of street youth (Slesnick et al. 2007). The literature suggests that insufficient attention has been given to protective factors for and strengths of street-involved youth (Bender et al. 2007). Interventions that focus on developing protective factors as well as the critical relationship between self-esteem and resilience can enhance youths' abilities to face challenges and solve problems (Bender et al. 2007). Kidd (2003) undertook an extensive review of the literature relevant to intervention programs for street youth. Virtually all of the studies reviewed were descriptive and focused on psychopathology, with little attention given to evidence-based interventions. Clearly, there is a critical need for intervention research directed toward the implementation and evaluation of effective strategies pertaining to the mental health challenges of homeless youth (Klein et al. 2000; Nyamathi et al. 2005; Slesnick et al. 2007).

Policy Implications

The longer the time that youth spend on the street, the greater

the chance that they will engage in high-risk behaviours, such as prostitution, suicide attempts (McCarthy and Hagan 1992), substance abuse and injection drug use (Steensma et al 2005); these behaviours ultimately increase the risk of chronic homelessness (Goering et al. 2002). Further, the longer youth stay on the street, the more they are likely to experience mental health challenges and to define themselves as street youth with limited opportunities for the future and diminishing expectations of leaving the street (Yonge Street Mission 2009). Nonetheless, a significant number of youth do view their situation as temporary. For example, one in five youth using the services of a downtown drop-in program were homeless for less than three months, and a number of these youth were able to exit the street within this time frame. This highlights the existence of a critical window of opportunity for intervention (Yonge Street Mission 2009).

It is noteworthy that street youth describe goals for the future such as going to college or finding a job.

Given the significant immediate and long-term risks associated with prolonged life on the street, policy needs to be directed toward programs that support early intervention for youth while they remain open to the possibility that life on the street may be a short interruption in their development to adulthood, rather than an indentured state of hopelessness and chronic homelessness. Challenges associated with entering and exiting life on the street are inextricably linked to mental health. Mental health challenges, such as pre-existing mental illness, substance use and abuse for youth, parents and guardians, have been identified as a primary cause of youth homelessness. Youth who grow up within the child welfare system and have been subjected to highly transient and disruptive childhoods are particularly vulnerable to the negative consequences of life on the street.

The mental health challenges of youth are severe and complex. These challenges include pervasive issues of depression, anxiety, psychosis, addictive behaviours, self-harm and suicidality. Even with these severe mental health symptoms, youth also demonstrate a range of strengths, as well as the capacity for resilience. The interface between psychological resilience and acute distress offers a critical perspective for identifying evidence-based interventions, such as dialectical behaviour therapy (DBT), which offers great promise. DBT focuses on interrupting the negative emotional spiral that is associated with a range of self-harm behaviours, including addiction, while at the same time providing opportunities for

support and to acquire the emotional skills necessary to assume a healthy independent adult life. As new therapeutic programs are developed, it is imperative that the strengths of these youth be recognized and encouraged within the context of supportive relationships, while concurrently coaching youth to deal with the realities of hopelessness and despair.

From the perspective of youth (McCay, 2009), accessible mental health services should be offered on site, such as at shelters where they reside or at drop-in programs. Youth are unlikely to access traditional mental health services, which are located in institutional settings. This seems to be linked to a general mistrust of the system and to the perceived stigma associated with mental health challenges. According to youth, effective mental health services would be non-stigmatizing and non-threatening with careful attention given to engaging youth in therapeutic relationships (Karabanow and Clement 2004; McCay 2009). As such, the development of multi-faceted mental health programs within existing services for street youth could incorporate a range of services, including assessment and treatment, case management with an emphasis on relationship building and mental health promotion. Immediate attention could also be given to acute risk factors such as suicidality, self-harm, emotional distress and substance abuse, while also addressing ongoing treatment issues. On-site mental health programming would go a long way toward increasing accessibility and decreasing stigma for street-involved youth, providing an ideal milieu for implementing evidence-based interventions, as described above.

Peer mentorship programs could also be offered within the context of existing programs for street youth, enabling staff to work closely with youth. Peer mentors would provide an opportunity for youth who are overcoming challenges to acquire a critical understanding of supporting strengths in others in order to overcome vulnerability. The availability of peer mentors offers an effective modality to engage youth who have a great deal of difficulty trusting staff, given their traumatizing backgrounds (Karabanow and Clement 2004; Kidd 2003).

At the level of the community, strategies are required to reduce the negative or stigmatized attitudes toward streetinvolved youth to create a climate of greater understanding and acceptance for youth in the community. As noted previously, youth are vulnerable to the internalization of external stigma, given the fluidity of self-definition at this transitional developmental phase. Strategies that target attitudes toward both street youth and mental health issues would be most helpful in supporting the development of this group that is frequently "doubly stigmatized." Of critical importance is the need for programs in the schools that target the prevention of youth homelessness. Given that issues such as substance abuse create considerable strain for families during the adolescent period, programs are required for both youth and their parents. These

programs could be based on a resilience perspective and could include mental health promotion skills for youth and their families, such as effective communication, conflict resolution and understanding risk taking. In addition, increased awareness in primary healthcare settings with regard to identifying youth who are at risk of entering street life is required, particularly for youth living within the context of troubled families or the child welfare system. It is recognized that the transition out of care for youth who have never had a real home is highly sensitive and requires the development and evaluation of programs that allow for gradual independence (Serge et al. 2002).

Policy needs to be directed toward programs that support early intervention possibility that life on the street may be a short interruption in their development to

Conclusion

Given the pervasiveness of mental health challenges and, in particular, the high suicide rate among street-involved youth, it is imperative that programs directed toward the treatment of mental health and addiction problems be identified as a public health priority (Roy et al 2009). Mental health programs that are embedded within broader programs of support that effectively address the social determinants of health are essential to assist vulnerable adolescents to navigate the transition to adulthood (O'Sullivan and Lussier-Duynstee 2006). The At Home/Chez Soi program sponsored by the Mental Health Commission of Canada is an exemplary model, where housing in addition to mental health support is provided for adults living with mental health challenges (Goldbloom 2010). From a policy perspective, it is important to keep in mind that street-involved youth are part of our national community of children and youth who require mental health services. Although child and youth mental health services have been severely underfunded, decision-makers are now recognizing the urgency of financially supporting child and youth mental health in order to support the health and wellbeing of future generations (Haddad 2010). The urgent mental health needs of street-involved youth need to be recognized as a top priority within the funding envelope of child and youth mental health. It is only through directing our attention and resources to the mental health and resilience of all children and youth within our communities that will we realize our goal of supporting the entire youth population to achieve a healthy, productive and satisfying adulthood. HQ

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CHILD AND YOUTH MENTAL HEALTH IN THE COMMUNITY

Misconceptions include the ideas that bullying occurs only in schools, is a problem that children naturally grow out of, and is harmless.

Why Worry about

BEIN

Debra J. Pepler, Jennifer German, Wendy Craig and Samantha Yamada

YOU'RE

G BULLIED

AK OUT.

http://gemmaz.deviantart.com/art/bullying-speak-out-127339210?offset=0 http://gemmaz.deviantart.com/art/dear-bully-156817185

Abstract

In this article, the authors review research to identify bullying as a critical public health issue for Canada. Drawing from recent World Health Organization surveys, they examine the prevalence of Canadian children and youth involved in bullying others or being victimized. There is a strong association between involvement in bullying and health problems for children who bully, those who are victimized and those involved in both bullying and being victimized. Health problems can manifest as physical complaints (e.g., headaches), mental health concerns (e.g., depression, anxiety) and psychosocial problems (e.g., substance use, crime). In Canada, there has recently been a disturbing incidence of Canadian children who have committed suicide as a result of prolonged victimization by peers. Healthcare professionals play a major role in protecting and promoting the health and well-being of Canadian children and youth. Given the significant mental and physical health problems associated with involvement in bullying, it is important that clinicians, especially primary care healthcare professionals, be able to identify signs and symptoms of such involvement. Healthcare professionals can play an essential role supporting children and their parents and advocating for the safety and protection for those at risk. By understanding bullying as a destructive relationship problem that significantly impacts physical and mental health, healthcare professionals can play a major role in promoting healthy relationships and healthy development for all Canadian children and youth.

This review provides an overview of the nature of bullying and the physical and psychological health problems associated with involvement in bullying. The review is followed by a discussion of the implications for health professionals and a protocol for assessing the potential link between bullying and a child's physical and psychological symptoms.

What Is Bullying?

Bullying is a type of abuse that can take different forms at various ages. In this article, we limit our discussion to bullying among children and adolescents; however, bullying can occur within the family, workplace or any other setting at any age (Duncan 1999; Hirst 2011; Noble et al. 2011). Bullying is defined as the use of power and aggression to cause distress or control another (Juvonen and Graham 2001; Olweus 1991). Two elements of bullying are key to understanding its complexity. First, it is a form of aggressive behaviour imposed from a position of power: children who bully have more power than the children they victimize, and this power is often not evident to adults. (Note that we avoid labelling children as "bullies" or "victims" because these labels constrain thinking of the problem as solely a characteristic of the individual, rather

than as problem that emerges from complex social dynamics.) Children can acquire power through a physical advantage such as size and strength but also through a social advantage such as a dominant social role, higher social status in a peer group or strength in numbers, or through systemic power within society that undermines the foundation of marginalized groups (e.g., racial or cultural groups, sexual minorities, economically disadvantaged or disabled persons). Power can also be achieved by knowing another's vulnerability and using that knowledge to cause distress. Children's vulnerabilities, about which health professionals may have awareness, include physical disability, obesity, learning problems, sexual orientation and family background. Recent research indicates that children with special healthcare needs are more likely to be bullied, whereas those with a chronic behavioural, emotional or developmental problem are more likely to be involved in bullying others or in both bullying and victimization (Van Cleave and Davis 2006). The second key element is that bullying is repeated over time. With each repeated bullying incident, the power dynamics become consolidated: the child who is bullying increases in power, and the child who is being victimized loses power. Interventions are required to support children, neutralize the power dynamics and promote healthy relationships. Although formal definitions include repetition, children are of the opinion that even a single occurrence of the use of power and aggression should be identified as bullying (Smith and Levan 1995).

Through our research, we have come to understand bullying as a destructive relationship problem - children who bully are learning to use power and aggression to control and distress others; children who are victimized become increasingly powerless and unable to defend themselves from this form of abuse. The use of power and aggression may be carried out through many forms of bullying. Although bullying was traditionally thought of as physical aggression, this form is only one of many strategies that children use to control and distress others. Bullying can be broadly categorized into direct and indirect forms of aggression (Olweus 1991). Direct bullying is an overt expression of power between the individual who is bullying and the individual who is being victimized. This form can include physical aggression (e.g., hitting or kicking) and verbal aggression (e.g., insults, racial or sexual harassment or threats). Indirect bullying is the manipulation of social relationships (e.g., gossiping and spreading rumours) to hurt or exclude the individual being victimized; it is often referred to as social or relational aggression. In recent years, a new form of bullying has emerged with technology, referred to as cyber bullying. It involves the use of electronic devices such as the Internet and text messaging to humiliate, exclude, spread rumours and in other ways cause distress to one or more individuals.

Prevalence of Bullying

Over the past 20 years, various studies around the world have indicated prevalence rates for involvement in bullying ranging between 10 and 23% of school-aged children. Every four years, the World Health Organization (WHO) conducts a global Health Behaviour in School-Aged Children (HBSC) study, with 35 countries participating in the latest reported 2006 survey, including Canada. The survey assesses a wide range of behaviours, including bullying and victimization, among 11-, 13- and 15-year-old students. Canada's ranking on the world stage is disappointing at 21 and 26 out of 40 countries for boys' and girls' bullying, respectively (Craig et al. 2009). (The higher the ranking is, the higher the amount of bullying.) On the survey, 23.3% of boys and 17% of girls reported bullying others at least once in the previous two months. Similarly, 50.8% of boys and 47.8% of girls reported being victimized at least once in the previous two months (Molcho et al. 2009). Across all age and frequency categories of bullying and victimization, Canada consistently ranked at or worse than the middle of the international group. In Canada and around the world, bullying problems have been perpetuated by misconceptions. This hinders the recognition of bullying as a critical issue impacting children's health and development. These misconceptions include the ideas that bullying occurs only in schools, is a problem that children naturally grow out of and is harmless. Although these ideas are refuted by research (e.g., Pepler et al. 2008), their perpetuation contributes to the lack of recognition of bullying as a critical public health problem for a substantial proportion of Canadian children and youth.

Bullying Is a Health Problem

Research points to a strong association between involvement in bullying and significant health problems. Both children who bully and those who are victimized experience elevated levels of physical and psychosocial health problems; those who are involved in both bullying and victimization experience the highest rates of problems (Craig 1998). The potential connections between early indicators of health problems and involvement with bullying may not come to the attention of parents and healthcare professionals because of the covert nature of bullying and the shame and fear of reporting experiences of victimization. We have developed a research fact sheet on the health and academic indicators for bullying or victimization or both - the Promoting Relationships and Eliminating Violence Network (PREVNet)/Substance Abuse and Mental Health Services Administration (SAMHSA) fact sheet "Psychosocial Problems and Bullying" is available on the PREVNet website (www.prevnet.ca) in the Download section.

Physical health problems are prevalent among children who have been chronically victimized by their peers. These children are at an increased risk for physical symptoms compared with

non-victimized children. For example, they are 1.3–3.4 times more likely to report headaches and 1.3-3.3 times more likely to report stomach aches than are non-victimized children (Due et al. 2005; Williams et al. 1996). Victimized children are also more likely to report psychosomatic symptoms: they are 1.3-5.2 times more likely to report difficulty sleeping and 1.2–2.4 times more likely to report bedwetting (Due et al. 2005; Williams et

Findings from research on the physical and psychosomatic symptoms in children who bully others and those who both bully and are victimized suggest that (1) children involved in both roles may be most at risk and (2) children who bully others are equally likely as victimized children to experience these symptoms (Kaltiala-Heino et al. 2000; Klomek et al. 2007). Aggressive behaviour in children and adolescents is also related to other antisocial behaviours such as substance abuse. Youths who bully others are almost five times more likely than their non-aggressive peers to report alcohol use (Pepler et al. 2001). Research has shown that alcohol serves as a gateway to the use of other illegal substances, such as marijuana and heroin (Loeber et al. 1998). Adolescents who bully others are approximately seven times more likely than their peers to report using drugs (Pepler et al. 2001). Therefore, involvement in bullying is associated with risk-taking behaviours in adolescence; bullying in childhood might be an early indicator of risk for these problems in adolescence.

Several Canadian children have committed suicide as a result of prolonged and serious victimization by peers.

Several studies have documented the links between involvement in bullying and mental health problems. Mental illness is associated with a heavy burden of suffering for those afflicted and is also a burden for the health system. Among 15- to 24-yearolds, more than 10% of all hospital admissions in 1999 were due to seven mental illnesses: anxiety disorders, bipolar disorders, schizophrenia, major depression, personality disorders, eating disorders and attempted suicide (Health Canada 2002). Although there are no long-term follow-up studies exploring the connection between previous involvement in bullying and the incidence of specific mental health diagnoses, research indicates that psychological symptoms are more strongly associated with bullying involvement than are physical symptoms (Due et al. 2005). There are numerous studies on the prevalence of anxiety and depressive symptoms in children involved in bullying. Victimized children are 1.6-6.8 times more likely to report depressive symptoms than are children uninvolved in bullying (Due et al. 2005; Kaltiala-Heino et al. 1999; Williams et al. 1996). Depression was found to be equally likely in children who are victimized and children who bully; at even higher risk for depression are those children who both bully others and are victimized (Klomek et al. 2007; Williams et al. 1996). Similar patterns emerge for anxiety problems among children who bully, are victimized or both (Williams et al. 1996). Recent longitudinal studies reveal that psychosocial symptoms emerge following involvement in bullying (Fekkes et al. 2006; Kim et al. 2006) and may also contribute to further victimization (Fekkes et al. 2006). There is some evidence that psychiatric problems associated with involvement in bullying may persist into later life (Kumpulainen and Rasanen 2000; Sourander et al. 2007).

Over the past years, several Canadian children have committed suicide as a result of prolonged and serious victimization by peers. Suicidal ideation, attempts and completion in relation to bullying present a serious health concern. Children involved in dual roles, bullying others and being victimized, are estimated to be 12 times more likely to show severe suicidal ideation than do children uninvolved in bullying; those children who either bully or are victimized are also at high risk for suicidal ideation (Kaltiala-Heino 1999; Klomek et al. 2007). Although it is not possible to estimate the number of suicide attempts and completions caused directly by bullying involvement, the increased risk of suicidal ideation suggests that bullying may be a predisposing factor.

Bullying Is a Psychosocial Problem

Both victimized children and children who bully are at risk for poor functioning at school. School functioning has been measured by attitude toward school and grades and absenteeism (Nishina et al. 2005; Rigby 2003; Tremblay 1999). Victimized children are more likely to dislike and avoid school: one fifth to one quarter of frequently victimized children report bullying as the reason for staying home (Rigby 2003). Children who bully are also at risk for school problems. Physically aggressive children are significantly more likely than their non-aggressive peers to drop out of school (Tremblay 1999). Although there is a clear relationship between bullying and poor functioning at school, it is unclear whether the effect is direct or indirect. Children who exhibit serious psychosocial problems may experience associated problems with attention, behaviour and emotional regulation, which interfere with their ability to learn at school (Nishina et al. 2005).

School functioning has long-term effects on health and wellbeing. Low scholastic achievement may result in school dropout, the inability to attain post-secondary education and the limitation of job opportunities, potentially leading to decreased socioeconomic status (SES). Low SES, in turn, is significantly related to an overall lower life expectancy and increased likelihood of disease, such as cancer and cardiovascular disease (Advisory Committee on Population Health 1999; Auger et al. 2004; Wilkinson and Marmot 2003).

Roles of Healthcare Professionals

Given the significant mental and physical health problems associated with involvement in bullying, it is important that healthcare professionals be able to identify the associated signs and symptoms. The critical issue is to ascertain whether bullying is playing a role in the etiology of children's presenting concerns. Children involved in bullying or victimization may present to healthcare professionals with a range of problems, from seemingly minor complaints (e.g., headache or stomach ache) to more severe concerns in need of immediate attention (e.g., depression or suicide ideation). The psychosomatic symptoms, mental illness and suicidal behaviour seen in children who have been bullied by peers are also among the symptoms experienced by children who have been abused at the hands of their caregivers (Runyan et al. 2002). For every one child reporting a concern about being sexually abused by an adult, there are three children reporting concern about being beaten up by a peer (Finkelhor et al. 1995). Healthcare professionals have a legal duty to report suspicions of child abuse. Although bullying and victimization may not be explicitly included in that duty to report, we contend that healthcare professionals have a moral and ethical duty to investigate suspicions of peer victimization as the consequences are just as serious from a health perspective.

We contend that healthcare professionals have a moral and ethical duty to investigate suspicions of peer victimization.

Children involved in bullying may experience health problems and school difficulties (e.g., attention or behavioural problems). They may present to a healthcare professional with health problems, but through further questioning of children and parents, the professional may discover that there are school difficulties also. To screen for bullying involvement and to explore whether the presenting symptoms might be associated with bullying experiences, healthcare professionals should be straightforward and ask children and adolescents whether they are being bullied at school, in sports or recreational activities or in their neighbourhoods. It is equally important to ask whether they are bullying others. To assess the severity of the bullying, there are five additional questions that can be posed to children and their parents (Craig and Pepler 2003); these are listed in Table 1, and the reasoning behind these questions is presented here. The more frequently children are involved in bullying, either as the children who bully or those who are victimized, the higher their risk is for health and other problems. Children with prolonged involvement in bullying are more likely to have established behaviour patterns and reputations within their

TABLE 1.

Preliminary protocol for assessing risk of being bullied or bullying others

I want to ask you a few questions about your friends. Do you have friends at school and out of school? How do you get along with them? Have you been bullied at school, in sports or in your neighbourhood?

If yes, continue with the following questions:

- How often are you bullied?
- How long have you been bullied?
- Are you bullied just at school or also in other places, such as at home, on a sports team or at a rec centre?
- How much does the bullying affect you? How do you feel when vou are bullied?
- What do you do to try to stop the bullying? Does it work? If not, what else can you do to stop the bullying?

The goal is to ensure that the child has a trusted adult to turn to if bullying occurs. If victimization is chronic, frequent, pervasive and severe, the child will need support in settings where bullying occurs and may need a referral for mental health services.

Have you been involved in bullying others at school, in sports or in your neighbourhood?

If yes, continue with the following questions:

- How long have you been bullying?
- How often do you bully?
- Are you involved in bullying just at school or in other places, such as at home, on a sports team or at a community centre?
- Can you tell me about the types of bullying that you have used? How do the kids you bully feel?
- Have any adults talked with you to help you stop bullying?

The goal is to ensure that the child has an appropriate level of support to stop using power aggressively to control or distress others. If bullying is chronic, frequent, pervasive and severe, the child will need support in settings where bullying occurs and may need a referral for mental health services.

peer group that maintain their involvement. With prolonged involvement in bullying or victimization, the risk of associated problems increases.

Although children most often report that bullying occurs at school, it can also occur at home, in community settings and via cell phones and the Internet (Pepler et al. 1993, Raskauskas and Stoltz 2007). When bullying occurs across different relationships, it is an indication that behaviour patterns related to bullying or victimization are becoming consolidated and that the child is experiencing significant relationship problems. Because relationships are a critical social determinant of health, children who experience problems across multiple relationships are at increased risk for health problems.

Regarding the effect of bullying, although it is difficult to directly compare the impact of different forms of aggression,

TABLE 2.

Indicators of bullying and victimization for children and adolescents

Bullying

- Depressive symptoms
- Anxiety symptoms
- · Alcohol and other substance use
- · Poor functioning in school
- In extreme cases for bully-victims, suicidal ideation or suicide attempt

Parents may have observed other behavioural signs of bullying:

- Little concern for others' feelings
- Aggressive and manipulative behaviour with siblings, parents and others, or with animals
- Possession of unexplained things or extra money

Victimization

- Headaches
- · Stomach aches
- · Difficulty sleeping
- Bedwetting
- Depressive symptoms
- Anxiety symptoms
- Absenteeism from school, refusal to attend school
- Reduction in motivation and performance at school
- · In extreme cases, suicidal ideation or suicide attempt

Parents may have observed other behavioural signs of victimization:

- · Loss of possessions, need for money, hunger after school
- Injuries, bruising, damaged clothing, broken possessions
- · Expression of threats to hurt him- or herself or others

such as physical versus cyber bullying, the seriousness of the behaviour can be measured by the level of distress it causes the victimized child. The more serious the bullying or the more significant the impact on the child being victimized, the more likely it is that both the child who is bullying and the child who is being victimized are at risk for the health problems outlined in Table 2. Physicians should refer children who have been involved in bullying or victimization to available resources, or for psychological or psychiatric support if they determine that further assessment is necessary.

Although physicians often have limited time in which to deal directly with patients, initial queries that result in a suspicion of involvement with bullying can be followed up with other efforts to gather additional information through observations and interviews with children as well as with their parents, educators and other children who have frequent and regular opportunities to observe the identified child in daily social interactions. The challenge for healthcare professionals is that their exposure to children is often limited to office visits. Consequently, it is necessary for them to collect collateral history from parents and, in severe cases, to be involved as part of a multidisciplinary team to support the healthy development of children involved in bullying or victimization.

Identification and assessment of the extent of involvement are the first steps to helping children and parents address problems associated with bullying and victimization. Because bullying is a relationship problem, the interventions to address it must be composed of relationship solutions. Children who bully require interventions to stop their aggressive behaviour, promote empathy and pro-social behaviour and reduce peer pressure to engage in these behaviours. Children who are victimized may need support in developing assertive strategies as well as friendship skills and opportunities. The healthcare professional's role in these interventions may involve helping other adults to recognize the physical and psychological symptoms associated with the experience of being bullied; supporting the child; directing parents toward resources; advocating on behalf of the child to school officials or other community agencies; providing referrals to treatment settings, as appropriate; and encouraging parents to take an active role in monitoring their children and engaging them in positive school and community activities. Healthcare professionals who identify children involved in bullying can play an important advocacy role by writing a letter to the school or perhaps even visiting a class to educate classmates about the special needs of children or youth who bully or are victimized (Cummings et al. 2006).

When bullying occurs across different relationships, it is an indication that the child is experiencing significant relationship problems.

Canadian resources are available from PREVNet (www. prevnet.ca); the Canadian Red Cross (www.redcross.ca/article. asp?id=000294&tid=030); and the Canadian Public Health Association (http://www.cpha.ca/en/activities/safe-schools/ bigdeal.aspx) among others. The US Department of Health and Human Services has a number of available resources on bullying (www.stopbullyingnow.hrsa.gov) as does Melissa Institute for Violence Prevention and Treatment (www.teachsafeschools.org/ bully.pdf).

Conclusion

Healthcare professionals play a major role in promoting the health and well-being of Canadian children and youth. With an increased understanding of bullying as a risk to the health and development of young Canadians, healthcare professionals can expand their practice in ways that position them to be catalysts in promoting healthy relationships and social change. With the

potential to help children, their parents, schools and communities, a small effort by healthcare professionals to help a child at risk because of bullying or victimization may have a profound systemic effect in promoting healthy relationships in all of the contexts in which children and youth live, work and play. HQ

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Effectiveness of School-Based Violence Prevention for Children and Youth

Cluster randomized controlled field trial of the Roots of Empathy program with replication and three-year follow-up

Robert G. Santos, Mariette J. Chartier, Jeanne C. Whalen, Dan Chateau and Leanne Boyd

Abstract

Aggression, bullying and violence in children and youth are prevalent in Canada (18%) and internationally. The authors evaluated the effectiveness of Roots of Empathy (ROE), a school-based mental health promotion and violence prevention program for children that has been widely implemented but rarely evaluated.

Eight school divisions were randomly assigned to either a treatment group that received ROE in 2002-2003 (445 students) or a wait-list control group (315 students). These were compared on three child mental health outcomes (physical aggression, indirect aggression and pro-social behaviour), rated by teachers and students (self-rated). The three wait-list school divisions received ROE in 2003-2004 (new cohort of 265 students) and were compared with the control group from 2002-2003 on the three outcomes, for replication purposes. For both comparisons, the authors report multi-level modelling analyses regarding (1) immediate effects after ROE completion at the end of the school year (pretest to post-test) and (2) long-term ROE effects up to three years after post-test.

ROE had replicated, beneficial effects on all teacher-rated outcomes, which were generally maintained or further improved across follow-up. However, ROE had almost no statistically significant or replicated effects on student-rated outcomes. This is the first evaluation to suggest that ROE appears effective when implemented on a large scale under real-world delivery conditions.

The health and well-being of Canada's children and youth, including their mental health, is a top priority for healthcare providers (Andresen 2006; Davidson 2011; Eggertson 2007; Kutcher 2011; McEwan et al. 2007; Sibbald 2006). Aggression, bullying and violence in children and youth are major public and population health problems internationally (Craig and Pepler 2003, 2007; Glew et al. 2005; Murray 2006; Nansel et al. 2001, 2004; Smith-Khuri et al. 2004; Williams et al. 2007), with Canada ranking dismally on bullying (26th) and victimization (27th) among 35 countries (Craig and Pepler 2007). Bullying is prevalent in Canada, where 18% of children have reported being bullied in the previous five days (Craig and Pepler 2003). Bullying is strongly associated with poor child physical health, mental health and psychosocial adjustment (Arsenault et al. 2006; Gini and Pozzoli 2009; Nansel et al. 2001, 2004; Pepler et al. 2011; Rigby 2003), including school and peer problems (Juvonen et al. 2003), youth violence (Nansel et al. 2003) and youth suicide (Kim and Leventhal 2008; Klomek et al. 2010). Herein, healthcare providers have four roles: identifying the problem, screening for mental health comorbidities, counselling families and advocating for violence prevention (American Medical Association Council on Scientific Affairs 2002; Pepler et al. 2011; Weir 2001; Wright 2005). For children with associated problems, the need for specialized treatment far exceeds the available supply (Davidson 2011; Kutcher 2011); developing and disseminating evidence-based mental health promotion and



bullying prevention approaches is therefore imperative (Waddell et al. 2005).

Improving children's social-cognitive skills can be efficacious in preventing chronic aggression and conduct problems (Dodge and Pettit 2003; Rutter et al. 1998). Because of their population reach, schools are a natural setting for mental health promotion and violence prevention (Kutcher 2011; Mytton et al. 2002; Patel et al. 2007) and classroom teaching is the most common efficacious approach (Cooper et al. 2000).

Because of their population reach, schools are a natural setting for mental health promotion and violence prevention.

Preventing childhood aggression, bullying and violence are top priorities for Canadian policy makers also. However, many remain critical of Canada's record at integrating research and practice in the prevention of child and youth mental health problems (Davidson 2011; Kutcher 2011; Kutcher and Davidson 2007; McLennan et al. 2004) because in widely disseminated programs, rigorous evaluation, or even minimal evidence of effectiveness, is frequently absent (Cooper et al. 2000; Smith et al. 2003). For example, several provincial governments have recently begun implementing Roots of Empathy (ROE) (Weir 2005), a new school-based, violence prevention program for children, developed in Canada (Gordon 2005) that has rarely been evaluated.

Intervention

Students in ROE participate in a structured, age-appropriate, 27-session curriculum (Gordon 2005) that is delivered to entire classrooms by trained, certified instructors. ROE centres on classroom visits by a family - a parent and his or her newborn infant. (There are nine pre-family sessions, nine family sessions and nine post-family sessions.) Therein, students observe parentinfant interaction and learn about early brain development, temperament, attachment, the reading of emotional cues, the conveyance of thoughts and feelings and social inclusion. ROE is based on theory that when children learn to label emotions and take the perspective of others, their empathy and pro-social behaviour increase, while their physical and indirect aggression decrease - thereby preventing violence (Gordon 2005).

As of the 2006-2007 school year, ROE was being implemented in over 2,000 kindergarten to grade eight classrooms across Canada, involving over 50,000 children and youth, with pilots in Australia, Japan and New Zealand (Schonert-Reichl and Hymel 2007). Similar numbers of students have been reached annually across Canada in subsequent school

years through 2010-2011, with a cumulative estimated total of 363,000 students reached since 1996, according to the ROE website (2011). In 2008, the Assembly of First Nations passed a resolution endorsing ROE, describing it as "compatible with traditional First Nations' teachings and worldviews." Notwithstanding this widespread use and support, to date there has been no published peer-reviewed evaluation of ROE. Most evaluated school-based violence prevention programs have been models or demonstrations that were evaluated for efficacy only; their real-world effectiveness is largely unknown (Wilson et al. 2003; Wilson and Lipsey 2007).

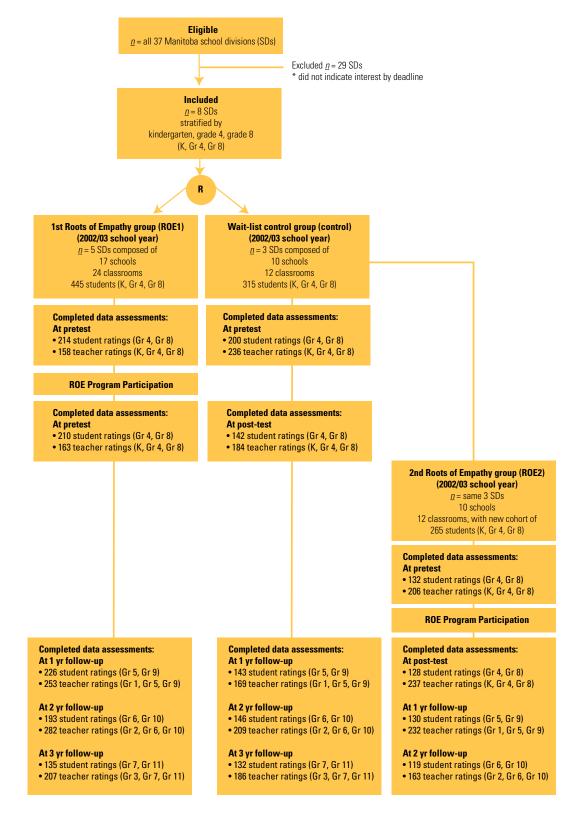
In this article, we follow the Consolidated Standards of Reporting Trials (CONSORT) guidelines (Campbell et al. 2004). The objective of our study was to evaluate the real-world effectiveness of ROE in preventing violence (reducing aggression and increasing pro-social behaviour) in children and youth at the individual level, immediately after program completion and up to three years afterwards, in two successive samples determined via cluster random assignment, in order to provide rigorous evidence to inform provincial government decisionmaking regarding the future expansion of ROE in Manitoba, including questions related to relative effectiveness by student gender and grade level.

Methods

In 2002, a "natural experiment" opportunity arose in Manitoba to rigorously evaluate ROE. Limited provincial government funding was available to implement ROE in five school divisions in the 2002-2003 school year. In June 2002, the provincial government's Healthy Child Manitoba Office (HCMO) invited all 37 public school divisions to express their interest in ROE. Eight school divisions expressed interest by the August 30, 2002, deadline and were eligible for ROE funding. All eight school divisions agreed with our proposal that cluster random assignment (at the school division level) was the fairest approach to ROE resource allocation. This design also reduced the likelihood of ROE "spillover effects" between treatment and control groups (Campbell et al. 2004). School divisions also agreed with our proposal to pre-stratify implementation along three grades (kindergarten, grade four and grade eight) to examine the relative effectiveness of ROE for different grades. School divisions prioritized and identified classrooms in each of these three grades for ROE implementation prior to random assignment in September 2002 and government-funded ROE training in October 2002.

As a quality assurance study, this ROE program evaluation did not require Research Ethics Board review (Canadian Institutes of Health Research et al. 1998, 2010). It was not registered as a clinical trial. Under the The Healthy Child Manitoba Act, HCMO is legislatively mandated to evaluate provincial government programs for children and youth.

FIGURE 1. Selection and flow of clusters and individual participants through the phases of the randomized trial



Randomization

As illustrated in Figure 1, in this cluster randomized controlled field trial, HCMO randomly assigned the eight school divisions to either a treatment group that received ROE in the 2002-2003 school year (ROE1; 445 students) or a wait-list control group (315 students). HCMO used a computerized random number generator for the random assignment process. Sample sizes were determined by the number of students in each of the classrooms prioritized and selected by school divisions prior to randomization.

Measurement

In October 2002, following written school division notification to parents regarding the ROE evaluation, HCMO collected sociodemographic data (student gender and grade level) and pretested ROE1 and control groups on three child mental health outcomes: physical aggression (6 items: e.g., threatening people, bullying others, kicking or hitting other children), indirect aggression (5 items: e.g., trying to get others to dislike a person, telling a person's secrets to a third person) and pro-social behaviour (10 items: e.g., comforting a child who is crying or upset, offering to help other children who are having difficulty, inviting others to join a game). These were rated by teachers (kindergarten, grade four, grade eight) and self-rated by students (grade four, grade eight) using parallel instruments previ-

ously validated in Canada's National Longitudinal Survey of Children and Youth (Human Resources Development Canada and Statistics Canada 1996). These individual-level instruments served as our primary outcome measures of violence prevention.

Using the same three measures, rated by teachers and students, we post-tested ROE1 and control groups at the end of the 2002-2003 school year and annually for three years thereafter. Neither students nor teachers were blinded to group

TARIF 1 Physical aggression: observed (unadjusted) mean scores and SDs for ROE1, control group and ROE2, across measurement time points, as rated by teachers and students (range of score: 0-12)

			Teacher Ratings				
Comparison Group	Pretest	Post-Test	1 y Follow-Up*	2 y Follow-Up*	3 y Follow-Up*		
ROE1 Mean score SD <u>n</u>	2.06 2.87 158	1.52 2.70 160	1.71 1.78 261	1.21 2.24 288	1.10 1.80 206		
Control group Mean score SD <u>n</u>	1.10 2.22 243	1.56 2.82 193	2.14 2.11 169	1.49 2.60 215	1.44 2.58 188		
ROE2 Mean score SD <u>n</u>	1.61 2.67 212	1.52 2.73 240	1.92 2.75 233	1.68 3.08 168			
			Student Ratings				
Comparison Group	Pretest	Post-Test	1 y Follow-Up*	2 y Follow-Up*	3 y Follow-Up*		
ROE1 Mean score SD <u>n</u>	2.13 2.07 219	2.26 2.10 208	2.69 1.73 234	1.66 1.88 195	2.19 2.15 134		
Control group Mean score SD <u>n</u>	2.01 2.41 200	1.88 2.28 146	2.76 1.79 145	1.63 1.87 151	1.80 1.97 137		
ROE2 Mean score SD <u>n</u>	2.18 1.94 140	2.11 2.22 139	2.25 2.20 129	1.80 1.98 117			

^{*}Follow-up data were collected annually for three years for ROE1 and collected annually for two years for ROE2.

assignment at pretest or post-test. It is unlikely that the teachers who provided the three annual follow-up ratings were aware of group assignment (i.e., which children in their class had previously participated in ROE or not), but we did not measure this awareness directly.

The three school divisions randomized to the wait list received ROE in the subsequent 2003-2004 school year (ROE2; new cohort of 265 students). ROE2 was pretested and

ROE1 = first Roots of Empathy group; ROE2 = second Roots of Empathy group; SD = standard deviation.

TABLE 2. Indirect aggression: observed (unadjusted) mean scores and SDs for ROE1, control group and ROE2, across measurement time points, as rated by teachers and students (range of score: 0-10)

	Teacher Ratings					
Comparison Group	Pretest	Post-Test	1 y Follow-Up*	2 y Follow-Up*	3 y Follow-Up*	
ROE1 Mean score SD <u>n</u>	2.35 2.89 159	1.53 2.15 162	1.27 2.15 261	1.66 2.53 264	1.25 2.11 202	
Control group Mean score SD <u>n</u>	1.41 2.25 235	2.02 2.66 188	1.68 2.56 170	1.33 2.21 212	1.49 2.35 186	
ROE2 Mean score SD <u>n</u>	1.61 2.34 208	1.56 2.27 239	1.90 2.42 225	1.64 2.81 161		
		Student Ratings				
Comparison Group	Pretest	Post-Test	1 y Follow-Up*	2 y Follow-Up*	3 y Follow-Up*	
ROE1 Mean score SD <u>n</u>	2.10 2.01 219	1.87 1.76 209	1.68 1.92 235	1.35 1.62 195	1.49 1.66 136	
Control group Mean score SD <u>n</u>	2.16 2.19 204	2.21 2.10 148	1.88 2.13 147	1.33 1.58 157	1.79 1.95 133	
ROE2 Mean score SD <u>n</u>	1.77 1.85 141	1.81 1.86 135	1.78 1.89 140	1.54 1.89 118		
*Follow-up data were collected annually for three years for ROE1 and collected annually for two years for ROE2. ROE1 = first Roots of Empathy group; ROE2 = second Roots of Empathy group; SD = standard deviation.						

post-tested in 2003-2004 and followed up for two years afterwards, on all outcomes, and compared with the control group from the 2002-2003 sample (see Figure 1).

Analyses

Given clustering in data and ROE delivery, we used multi-level modelling (SAS PROC MIXED) to account for three levels of variability: intra-individual change in students over time (in the three outcomes), inter-individual differences between students (gender) and inter-group differences between classrooms (assign-

ment to ROE or control group, grade level). The latter level encompassed the school division level of randomization, as well as the school level, given that these were fixed (i.e., stratified by grade level and identified as blocks for inclusion in the evaluation prior to randomization). Intra-class correlation coefficients (ICCs: variance between classes divided by [variance between classes + variance within classes + residual]) at pretest (range: 0.11-0.29) indicated that a considerable amount of variance was due to variation between classrooms (i.e., students in the same classroom were more similar to each other than to students from other classrooms). We found ICCs similar to those in other schoolbased studies (Bloom et al. 2007; Hedges and Hedberg 2007; Raudenbush et al. 2007). Multilevel modelling accounted for clustering within classrooms and over time and incorporated all participants who were observed at least once (Allison 2002; Donner and Klar 2004; Murray et al. 2004; Raudenbush and Bryk 2002; Schafer and Graham 2002).

Overall, HCMO obtained data on 93% of the original sample, with approximately 50% of observations missing at any time point (see Figure 1). Our multi-level modelling used maximum likelihood estima-

tion, allowing for results to be interpreted as if there were no missing data, under the assumption that data were missing at random (Allison 2002; Raudenbush and Bryk 2002; Schafer and Graham 2002).

For both comparisons (ROE1 versus control and ROE2 versus control), we report multi-level modelling (intention to treat) analyses for the three outcomes regarding (1) immediate effects after ROE completion at school year end (pretest to posttest) and (2) long-term ROE effects over follow-up (post-test through one year, two years and up to three years). We also

explored student gender and grade level as potential moderators of ROE effects.

Results

For each outcome, Tables 1, 2 and 3 show observed (unadjusted) scores for all groups across measurement times, as rated by teachers and students.

At pretest, teacher ratings of ROE1 and ROE2 indicated statistically significantly higher physical aggression (ROE1 only), higher indirect aggression and lower pro-social behaviour compared with the control group (all p < .05). However, student ratings were generally similar between groups (except higher pro-social behaviour in ROE2, p < .05).

We found acceptable levels of internal consistency reliability (Cronbach's alpha) for all outcomes across all groups and measurement times, with generally higher coefficients for teacher ratings (range .80-.95) than student ratings (range .67-.94).

As shown in Table 4, multilevel analyses found that, as rated by teachers, ROE had beneficial immediate effects on all outcomes, reducing physical aggression and indirect aggression and increasing prosocial behaviour, replicated in both ROE1 and ROE2. By comparison, as self-rated by students, ROE effects were less pronounced and fewer were statistically significant or replicated. For all outcomes across

measurement times, teacher ratings and student self-ratings were not highly correlated (mean Pearson rs of 0.30, 0.20, and 0.28 for physical aggression, indirect aggression, and prosocial behaviour, respectively).

As shown in Table 5, multilevel analyses found that, as rated by teachers, beneficial outcomes were generally maintained (as indicated by the lack of statistically significant differences between groups) or continued to improve following ROE completion, with one exception: Some of the ROE1 gain in prosocial behaviour was not maintained.

TABLE 3. Pro-social behaviour: observed (unadjusted) mean scores and SDs for ROE1, control group and ROE2, across measurement time points, as rated by teachers and students (range of score: 0-20)

	Teacher Ratings					
Comparison Group	Pretest	Post-Test	1 y Follow-Up*	2 y Follow-Up*	3 y Follow-Up*	
ROE1 Mean score SD <u>n</u>	8.84 5.57 158	11.23 5.57 163	10.36 5.91 253	10.61 5.52 282	10.23 5.12 207	
Control group Mean score SD <u>n</u>	10.68 4.95 236	11.28 4.89 184	10.09 5.07 169	9.67 5.90 209	9.49 5.37 186	
ROE2 Mean score SD <u>n</u>	9.37 5.24 206	11.21 5.10 237	9.21 5.45 232	10.35 5.99 163		
	Student Ratings					

Comparison Group	Pretest	Post-Test	1 y Follow-Up*	2 y Follow-Up*	3 y Follow-Up*
ROE1 Mean score SD <u>n</u>	12.44 3.99 214	12.46 3.78 210	12.86 3.87 226	13.08 3.30 193	12.37 3.37 135
Control group Mean score SD <u>n</u>	12.23 4.09 200	12.27 4.03 142	12.52 3.61 143	13.03 3.41 146	12.84 3.47 132
ROE2 Mean score SD <u>n</u>	13.31 3.78 132	13.77 3.55 128	12.62 3.65 130	13.51 3.19 119	

*Follow-up data were collected annually for three years for ROE1 and collected annually for two years for ROE2. ROE1 = first Roots of Empathy group; ROE2 = second Roots of Empathy group; SD = standard deviation.

Moderators of ROE

Most interactions between ROE and student gender or grade level were inconsistent across samples, but multi-level analyses may suggest that (1) immediately after completion, ROE is more effective in decreasing indirect aggression in girls than in boys and in improving pro-social behaviour for younger students than for older students; and (2) over follow-up, gains in pro-social behaviour may fade in boys or in older children. All of these interaction effects are exploratory and require replication.

TABLE 4 Immediate effects of the Roots of Empathy (ROE) program in violence prevention: Results of multilevel modeling analyses from pretest to posttest, in ROE1-control group and ROE2-control group comparisons, as rated by teachers and students

	ROE1-control group comparison			ROE2-control group comparison		
Child mental health outcomes	Regression estimate (95% CI)	Effect size ^a (95% CI)	p	Regression estimate (95% CI)	Effect size ^a (95% CI)	p
Teacher-rated:						
Physical aggression	-0.64 (-1.09 — -0.20)	-0.25 (-0.43 – -0.08)	0.01*	-0.38 (-0.71 – 0.05)	-0.15 (-0.28 — -0.02)	0.03*
Indirect aggression	-0.30 (-1.81 — -0.80)	-0.51 (-0.70 – -0.31)	0.00*	-0.66 (-1.08 – -0.24)	-0.26 (-0.420.10)	0.00*
Prosocial behaviour	1.08 (0.43 – 2.12)	0.21 (0.01 – 0.40)	0.04*	0.97 (0.08 – 1.86)	0.18 (0.14 – 0.35)	0.04*
Student-rated:						
Physical aggression	0.18 (-0.29 – 0.65)	0.08 (-0.13 – 0.29)	0.45	0.06 (-0.47 – 0.60)	0.03 (-0.21 – 0.27)	0.82
Indirect aggression	-0.41 (-0.86 – 0.03)	-0.20 (-0.41 – -0.02)	0.07	-0.06 (-0.53 – 0.41)	-0.03 (-0.25 — 0.20)	0.80
Prosocial behaviour	0.53 (-0.20 – 1.26)	0.13 (-0.05 – 0.31)	0.15	0.88 (0.04 – 1.71)	0.22 (0.01 – 0.42)	0.04*

^{*}Effect size is calculated using the following formula: unstandardized regression estimate divided by the pooled standard deviation of the outcome of the sample. (Hedges, 2007)

TABLE 5.

Long-term effects of the Roots of Empathy (ROE) program in violence prevention: Results of multilevel modeling analyses from posttest through up to 3 years follow-up after program completion, in ROE1-control group and ROE2-control group comparisons, as rated by teachers and students

	ROE1-control group comparison			ROE2-control group comparison		
Child mental health outcomes	Regression estimate (95% CI)	Effect size ^a (95% CI)	p	Regression estimate (95% CI)	Effect size ^a (95% CI)	p
Teacher-rated:						
Physical Aggression	-0.15 (-0.23 – -0.07)	-0.06 (-0.090.03)	0.00*	0.34 (-0.34 – 1.01)	0.14 (-0.14 – 0.43)	0.33
Indirect Aggression	-0.06 (-0.16 – 0.03)	-0.03 (-0.06 – 0.01)	0.18	-0.04 (-0.33 – 0.24)	-0.02 (-0.14 – 0.10)	0.76
Prosocial Behaviour	-0.65 (-0.880.43)	-0.12 (-0.17 — -0.08)	0.00*	-0.20 (-0.47 – 0.08)	-0.08 (-0.20 - 0.03)	0.17
Student-rated:						
Physical Aggression	-0.00 (-0.09 — 0.08)	-0.00 (-0.04 – 0.04)	0.99	-0.10 (-0.36 – 0.16)	-0.04 (-0.15 – 0.07)	0.46
Indirect Aggression	-0.05 (-0.13 – 0.04)	-0.02 (-0.06 – 0.02)	0.26	0.14 (-0.10 – 0.38)	0.06 (-0.04 – 0.16)	0.25
Prosocial Behaviour	-0.19 (-1.63 – 1.26)	-0.08 (-0.69 – 0.53)	0.01*	0.23 (-0.14 – 0.60)	0.10 (-0.06 – 0.25)	0.23

a Effect size is calculated using the following formula: unstandardized regression estimate divided by the pooled standard deviation of the outcome of the sample. (Hedges, 2007)

^{*} Difference between program group and control group is statistically significant (p < .05).

CI = confidence interval. ROE1 = first Roots of Empathy group. ROE2 = second Roots of Empathy group.

^{*} Difference between program group and control group is statistically significant (p < .05).

CI = confidence interval. ROE1 = first Roots of Empathy group. ROE2 = second Roots of Empathy group.

Discussion and Conclusion

This is the first evaluation to suggest that ROE is effective when implemented on a large scale under real-world conditions. On average, ROE seems to achieve replicable immediate effects, as rated by teachers (mean absolute effect size [ES] = .25), larger effects than those reported in the most comprehensive metaanalysis to date regarding similar programs implemented as smaller-scale models or demonstrations (mean ES = .21) or in routine practice (mean ES = .10) (Wilson et al. 2003; Wilson and Lipsey 2007). Compared with other systematic reviews, our results show that ROE appears to be as effective as, or more effective than, similar programs that have targeted high-risk students (Mytton et al. 2002) or employed curricula, schoolwide approaches or social skills training (Vreeman and Carroll 2007). Translated into everyday terms, if an estimated 15%of schoolchildren get into a fight in a school year, an ES of 0.25 for ROE represents a reduction in fighting to about 8%, approximately half the baseline rate (Wilson et al. 2003). This suggests practical significance and, given associated morbidity, probable clinical importance from the perspectives of mental health promotion and mental illness prevention. The enhancement of empathy and the promotion of optimal social contact are also essential to reducing mental health stigma (Hinshaw and Stier 2008; Stuart et al. 2011). At an estimated cost for ROE of C\$108 per child per year (C\$4 per child per session for 27 sessions), ROE has high potential cost-effectiveness given the enormous cost of conduct disorder alone (an estimated average of C\$7,944 per child per year from age 10 to 28; Scott et al. 2001). A second cluster randomized trial of ROE, in British Columbia (Schonert-Reichl et al. 2007, March), appears to replicate our immediate effects; it also plans a three-year follow-up. ROE appears close to meeting international standards of evidence for effectiveness (Flay et al. 2005). Few studies of similar programs have followed long-term effects. Our findings suggest that ROE may be beneficial up to three years after completion.

While we found similar results in ROE1 and ROE2, ESs in the latter were more modest. This may be attributable to (1) ROE2 and the control group being from the same school divisions; (2) larger pretest aggression scores in ROE1 (previous studies found larger pretest aggression scores predict larger program ESs; Wilson and Lipsey 2007); (3) differential quality of implementation (Wilson and Lipsey 2007); or (4) school or community context (Hughes et al. 2005; Metropolitan Area Child Study Group 2007). We did not measure implementation or context, and these merit future measurement.

Student self-rated ROE effects were smaller than teacherrated effects, and fewer were statistically significant or replicated. Evaluations of similar programs typically find smaller ESs when using student ratings, and only 22% of studies used them (Wilson and Lipsey 2007). Our modest correlations between student and teacher ratings are consistent with the psychopa-

thology literature; each informant may contribute different but useful information (Achenbach et al. 2005; De Los Reyes and

Strengths of our evaluation include internal validity and ecological validity through a rigorous design (cluster random assignment with multiple outcome informants and longitudinal follow-up) to evaluate ROE under real-world conditions. Our results are notable as many efficacious interventions do not improve outcomes when exported from laboratory conditions into routine practice (Flay et al. 2005), particularly in the first implementation year. We encourage other governments to evaluate untested programs via random assignment prior to larger-scale implementation.

We encourage other governments to evaluate untested programs via random assignment prior to larger-scale implementation.

Our evaluation had limitations. As a natural experiment, our evaluation did not calculate a priori statistical power (Guittet et al. 2005). Our statistically significant findings suggest that our ICCs and number of groups per condition (the two primary determinants of power in cluster randomized trials; Murray et al. 2004) permitted sufficient statistical power. By chance, ROE1 and ROE2 differed from the control group at pretest and, due to limited resources, observations for some time points were missing. Both were addressed through multi-level modelling, which controlled for pretest differences (and other potential confounders over time) and provided robust maximum likelihood estimates of missing data.

Canada faces continuing challenges in improving child and youth mental health, particularly in prevention (Andresen 2006; Davidson 2011; Eggertson 2005; Kutcher 2011; McLennan et al. 2004; Waddell et al. 2005, 2007). As with other major public health problems, the burden of suffering associated with aggression, bullying and violence will not be significantly reduced by clinical services alone; effective prevention programs are also urgently needed (Craig and Pepler 2003; Offord et al. 1998; Waddell et al. 2005, 2007). Our evaluation suggests that ROE is effective and worthy of consideration in emerging evidencebased mental health strategies for children and youth across Canada. HQ

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Transforming Child and Youth **Mental Health Care**

via Innovative Technological Solutions

Antonio Pignatiello, Katherine M. Boydell, John Teshima, Tiziana Volpe, Peter G. Braunberger and Debbie Minden



Abstract

Live interactive videoconferencing and other technologies offer innovative opportunities for effective delivery of specialized child and adolescent mental health services. In this article, an example of a comprehensive telepsychiatry program is presented to highlight a variety of capacitybuilding initiatives that are responsive to community needs and cultures; these initiatives are allowing children, youth and caregivers to access otherwise-distant specialist services within their home communities. Committed, enthusiastic champions, adequate funding and infrastructure, creativity and a positive attitude represent key elements in the adaptation of this demonstrated user-friendly modality.

t is consistently documented that almost 20% of children worldwide have one or more mental health disorders (Waddell and Shepherd 2002; World Health Organization ■ 2003). A similar prevalence rate applies in the province of Ontario, but only one in six receives services (Offord et al. 1987). In Ontario, the ratio of child psychiatrists to children and youth with mental health needs is approximately one to 6,148 (Steele and Veitch Wolfe 1999), which is much lower than an estimated need of one to 1,390 (Thomas and Holzer 2006). Estimates of young people with psychological or psychiatric problems who are seen in primary care range from 15 to 40% (Clatney et al. 2008; Hilty et al. 2009; Stretch et al. 2009). Consequently, a large burden of responsibility for children's mental health falls on family practitioners, pediatricians, nurses and nurse practitioners (Myers et al. 2008), social workers and child and youth workers (Provincial Centre of Excellence for Child and Youth Mental Health 2006), many of whom feel inadequately trained, ill equipped and uncomfortable in both recognizing and managing child and adolescent psychiatric disorders (Fremont et al. 2008; Paing et al. 2009).

Geographical, economic and cultural factors often impede access to specialized children's mental health services (Kelleher et al. 1992; Letvak 2002). In sparsely populated areas, costs associated with travel and time off work pose barriers to accessing care. Furthermore, it is difficult to recruit and retain specialists and allied healthcare workers, who tend to concentrate in larger urban areas (McCabe and Macnee 2002). For example, although 30% of Ontario child psychiatrists are involved in some outreach activities, only 10% venture more than 150 kilometres from their base practice (Steele and Veitch Wolfe 2006). The shortage of resources and support services in rural communities means that children requiring urgent attention are often placed in residential care outside of their home community (Sheldon-Keller et al. 1996), compromising familiar psychosocial and cultural strengths and supports. Thus, the provision of psychiatric services to children and their families in rural and remote regions must address geographical barriers to access

(Boydell et al. 2006) and the distribution of scarce specialist resources, with attention to the cultural contexts of individual communities. Creative and innovative solutions responsive to these needs and challenges are required.

The Canadian Standing Senate Committee on Social Affairs, Science and Technology (2006) recommends that telepsychiatry be used in rural and remote communities for consultations, education and training of mental health practitioners. The term telepsychiatry designates psychiatric applications employing live, interactive videoconferencing (Myers and Cain 2008), making it possible for two or more individuals any distance apart to interact in real time, and is emerging as one of the most successful uses of this technology (Brown 1998; Ruskin et al. 1998). With interactive technologies, extending the boundaries of the medical home base and improving communication with children and adolescents experiencing mental health challenges and their caregivers are now realizable goals (Spooner and Gotlieb 2004). In this article, a description of an operational telepsychiatry program is presented to illustrate the components that foster success.

Case Report: The TeleLink Mental Health Program

In 1997, The Hospital for Sick Children (SickKids), in Toronto, Ontario, undertook a pilot project to provide support to primary care settings through videoconferencing. Fully operational in 2000, the program subsequently evolved to become the TeleLink Mental Health Program (Pignatiello et al. 2011). The program's mission is to enhance the knowledge, skill set and confidence of children's mental health practitioners using videoconferencing and other technologies by providing timely, equitable access to bilingual (English and French) specialist services. Guided by the strategic directions of SickKids (excellence, integrity, collaboration, innovation, integration of care, research and education) and its academic affiliation with the University of Toronto, TeleLink is committed to matching community needs with best evidence and excellence in care through a range of innovative and responsive service delivery models. Particular attention is paid to fostering partnerships with stakeholders aligned with unique local cultures.

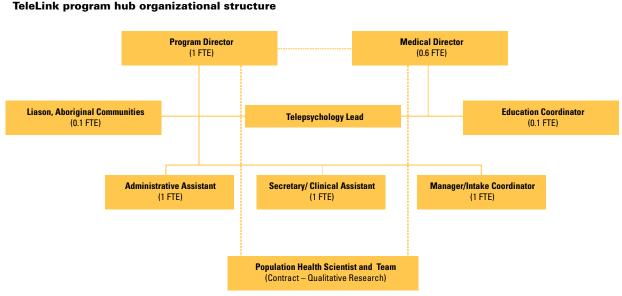
Operationally, the videoconference connection between recipient "far" sites and the TeleLink hub site occurs via Internet protocol (IP) or occasionally integrated services digital network (ISDN) carried on a maximum of three lines (maximum bandwidth 384 kilobits per second). Two or more sites can be connected simultaneously, and videos, PowerPoint presentations and scanned documents can be transmitted. Recording of sessions is possible but not done routinely for clinical services. The hub site is equipped with five stationary studios, with all configurations allowing both hub and far sites to be viewed simultaneously. Core hub site staff (Figure 1) and a designated telepsychiatry coordinator at far sites provide the necessary infrastructure. To foster relationship building with sites servicing Aboriginal clients and to enhance provider capacity on Aboriginal issues, a child psychiatrist stationed in a distant community is assigned as liaison with Aboriginal communities. Funding is derived from diversified sources, including an annual contract with the Ontario Ministry of Children and Youth Services, the purchase of service agreements, donations, research grants, direct billings to the provincial healthcare plan (Ontario Health Insurance Plan) and "in kind" support from SickKids for partial space lease, information technology (IT) and limited accounting assistance.

Twenty-three child psychiatrists within the Division of Child Psychiatry at the University of Toronto provide the bulk of services through a regular weekly or monthly roster. An additional 16 faculty members are available for specific consultations and educational sessions, depending on their expertise and availability. In addition, two social workers and three psychologists with specific areas of expertise comprise the core clinical team.

Currently, TeleLink services may be accessed through multiple routes of referral: 15 primary children's mental health agencies, along with their satellite locations; three community general hospitals with child and adolescent mental health beds; one youth detention centre; one community youth justice diversion program; and, to a developing extent, community physicians. Models of service delivery are tailored to requested services and may include clinical consultation or short-term follow up, professional-to-professional consultation, shared care, program consultation, education and training. Referring clinicians must complete a mental health assessment prior to requesting a consultation. Written consent forms in accordance with the Ontario Personal Health Information Protection Act (Ontario Hospital Association 2004) must also be completed to confirm that the youth or family understand and consent to the provision of psychiatric/psychological consultation via videoconference from TeleLink. Consents also allow for the exchange of relevant information, records and reports between the referral source and TeleLink, and always include the local treating physician, who ultimately considers and facilitates medical and pharmacological recommendations when indicated. Furthermore, participants are made aware that since TeleLink is connected with an academic facility, medical trainees may be present and information collected from the consultation will be entered into a database, in aggregate format, to be used for education, statistics, quality improvement and other purposes permitted or required by law.

Supporting documentation and referrals are triaged by presenting issue and urgency and matched to compatible consultants. For non-urgent referrals, the average time from referral to consultation is approximately two to four weeks; however, urgent consultations are expedited within 24-72 hours. Between April 1, 2009, and March 31, 2010, approximately 95% of all referrals made were completed (Table 1). This unusually high rate appears to be consistent with technologyenabled service delivery (Leigh et al. 2009).

It is a requirement that a child's case manager or primary clinician be present during the clinical intervention to bridge the



FTE = full-time equivalent.

FIGURE 1.

culture, language, formulation, recommendations etc. between the client and consultant, and to confirm and clarify roles and responsibilities (Broder et al. 2002). The presence of the case manager and others involved in the care of the child also serves to increase knowledge and confidence of healthcare providers in an experiential way. Impressions and recommendations are provided verbally at the end of the consultation, and a written report follows within 15 working days. Primary care clinicians may also connect with the core hub medical and administrative staff by telephone, e-mail or fax with any questions or issues prior to or following videoconference appointments. TeleLink maintains an electronic database derived from standard referral forms and sheets completed by all consultants, summarizing those present in the consultation, diagnostic impressions, clinically assessed degree of psychosocial severity and recommendations. Demographic data, intake and scheduling procedures, distribution of final reports and administrative and billing information are also readily monitored. A detailed description of TeleLink program components and results follows.

Services Offered and Results

Clinical Services

From May 1, 2000, to March 31, 2010, a total of 7,056 clinical consultations were provided, of which 21% were follow-ups. Sixty-six percent of clients were male, 17% were Aboriginal, 4% were French and 2% were seen urgently. The age distribution was as follows: 16% were six years old and under, 44% were seven to 12 years old and 40% were 13-18. Diagnostic impressions based on clinical impressions included attention deficit hyperactivity disorder (ADHD) and disruptive behaviour disorders, mood and anxiety disorders, learning difficulties, attachment disorders, autistic spectrum disorders and psychotic or thought disorders. These diagnostic categories are in keeping with other similar programs (Elford et al. 2000; Myers et al. 2004, 2010).

The overall degree of dysfunction based on the psychiatric consultants' clinical impression of social, school, family or occupational function and intensity of intervention recommended was rated as mild (17%), moderate (66%) or severe (17%). Recommendations typically included family and individual interventions or counselling, medication, additional focused assessments (e.g., psycho-educational, speech, hearing etc.), placement and other interventions.

Telepsychology

The use of videoconferencing to deliver psychological services to children is still emerging. To date, psychologists have used videoconferencing primarily in the area of counselling (Botella et al. 2004; Shepherd et al. 2006; Simpson 2001). Psychological assessment services cannot be provided by sole practitioners

but require the assistance of a psychometrist who is available to administer tests directly to the child. A pilot project to determine the feasibility of providing individual psychological assessments to children using videoconferencing was completed, and TeleLink has begun delivering telepsychology services to four distant agencies for children's mental health. Completed sessions included an initial interview with parents and agency personnel, direct testing sessions with the child and a feedback interview where results and recommendations were presented orally, followed by a written report.

From January through December 2009, seven comprehensive psychological assessments were completed. The children ranged in age from five to 15 years (mean age 7.4 years). Of those seen, 57.1% were male. The most frequent diagnoses were learning disability (42.8%), ADHD (42.8%) and intellectual disability (28.6%).

Program Consultations

TeleLink currently provides 25 monthly program consultations wherein a consistent consultant meets with a designated group of mental health providers from a particular team (i.e., schoolbased day treatment programs, residential and foster homes, specialized programs working with children of military families, family health teams etc.) to discuss clinical, program-wide and community issues. Informal evaluations suggest that primary care staff appreciate the education, support and guidance in working with very difficult or complex situations.

TeleLink staff rely on the expertise of local providers, take time to understand cultural strengths and local resources and incorporate this information into appropriate clinical suggestions.

Child and adolescent mental health and psychiatry practice, whether by TeleLink or otherwise, must take into account a wide range of community and cultural variables (Aggarwal 2010; Shore et al. 2006). In rural Ontario, new Canadian immigrants comprise 8% of the population (Beshiri and Alfred 2002), and in Northern Ontario, Aboriginal and First Nations people comprise 11% (15% of children less than one to 19 years old) of the population (Southcott 2004). Farther north, above the 50th latitude, Aboriginal people comprise a large majority of the population. First Nations communities must also themselves be considered diverse, spanning a wide geography, language groups and treaties. To facilitate consultations, TeleLink staff rely on the expertise of local providers, take time to understand cultural strengths and local resources and incorporate this information

TABLE 1. Non-materializing appointments, April 1, 2009-March 31, 2010

Reason	<u>"</u> *	%
Technical – far end	3	0.3
Cancelled by family	4	0.4
Client/family a "no show"	15	1.5
Scheduling issue	5	0.5
Case manager not available	1	0.1
Client hospitalized	2	0.2
Illness	3	0.3
Power outage	1	0.1
Weather	3	0.3
Consultant unavailable	8	0.8
Total	45	4.5

*N = 981 referrals.

into appropriate clinical suggestions. Individual and program consultations and training all allow for a sharing of ideas and appropriate translation of current evidence. A core group of five child psychiatrists at the hub site are now understood to have extensive (five to 10 years) experience with Northern and Aboriginal communities, and in so doing, have developed meaningful relationships with Aboriginal teams and therapists and are generally relied upon in this context. The position of Liaison, Aboriginal communities, has further encouraged communication, participation and understanding of potential barriers to effective care.

Qualitative Research and Evaluation

Qualitative research is a key component of the TeleLink program, drawing on practitioner, family and youth intuition and experience to generate findings that are meaningful, useful and effective for practice. The strength of qualitative research lies in its focus on the specific cultural context and familiarity with "real people in real situations" (Goering et al. 2008). Qualitative findings offer insight into the conditions, values, needs and preferences of research participants (Gilgun 2006).

TeleLink's program of research (Pignatiello et al. 2008) is based on the exchange and linkage conceptual Knowledge-to-Action (KTA) framework. The KTA approach developed by Graham and colleagues (2006) permeates the key components of TeleLink, including clinical collaboration, education, evaluation and research. This model identifies two broad activities: knowledge creation and knowledge action. Knowledge creation refers to the knowledge created by research but also encompasses tacit or experiential knowledge. The action cycle illustrates the eight steps required for knowledge implementation: (1) identification of a problem; (2) identification and selection of knowledge; (3) adaptation of knowledge; (4) assessment of barriers to knowledge use; (5) selection, tailoring and implementation of an intervention to ensure knowledge use; (6) monitoring of knowledge use; (7) evaluation of outcomes; and (8) sustainment of use. The cycle is dynamic, that is, steps and processes influence each other and can in turn be influenced by available knowledge.

Research evidence in the application of knowledge translation approaches shows increased application when decisionmakers are involved with the research process (Lee and Garvin 2003). Collaboration between researchers and knowledge users is critical to understanding users' context and ensuring that the translated knowledge meets their needs (Gagnon 2009). Ideally, this collaboration should take place in the early phases of the KTA cycle to allow for constructive exchanges on explicit expectations and objectives to be met by the team (Berta et al. 2010). Previously, the traditional view was that knowledge flows are unidirectional, uncomplicated and linear; however, it has been demonstrated that this is a flawed assumption (Henderson et al. 2006). Following from the KTA model, the effective flow of knowledge is conceptualized as bidirectional.

The TeleLink program of research has involved a series of studies including the development of a participatory approach to the design of an evaluation framework for pediatric telepsychiatry (Boydell et al. 2004), family member and caregiver perspectives on pediatric telepsychiatry (Greenberg et al. 2006), medical opinions on telepsychiatry (Greenberg et al. 2003), an analysis of recommendations uptake made during telepsychiatry consultations (Boydell et al. 2007) and the views of young people receiving consultations (Boydell et al. 2010).

This research demonstrates the importance of acknowledging the social context of various communities, the reduced burden experienced by families following the receipt of telepsychiatry services, and the enhanced capacity of service providers to deal with complex mental health issues. Additionally, research identifying factors most likely to increase the uptake of recommendations made in telepsychiatry consultations has been important to the development of best practice guidelines for consulting psychiatrists. Narratives from young people highlight the importance of their relationship with the psychiatrist as well as their capacity to actively take responsibility and exert control within the consultation process. The most positive facet of their telepsychiatry experience was the opportunity to be exposed to a new form of technology.

These research projects have produced an excellent knowl-

edge base reflecting the perspectives of critical TeleLink stakeholder groups regarding issues of access, use, communication, education, technology and administration, program delivery and contextual sensitivity. Group feedback has provided critical information about what is working well and what changes could be made to further enhance the program. Rigorous evaluation and theory-grounded research have contributed to TeleLink's credibility and viability and have impacted both the internal program and broader provincial and international initiatives. Internally, each of the research phases produced findings that were extensively disseminated and then used to change or modify the practice of the program. For example, as a result of our young clients' recommendations for a less formal setting, one studio at the hub was designed with a couch and armchair, dispensing with the standard table behind which the consultant sits. At the provincial level, research results have had a direct impact on one funder's (Ministry of Children and Youth Services) decision to amend the mandate to allow for followup consultations. Internationally, many emerging programs are looking to emulate the model, based on the evidence emerging from our program of research.

Research in TeleLink promotes the creation of a learning culture. Its collaborative approach encourages ongoing interaction and an exchange of ideas, thereby supporting continuous knowledge generation and translation for all program participants. Chunharas (2006) identifies three elements essential to a learning organization: the regular interaction of those who conduct research and those who use it, established mechanisms for knowledge translation and recording of all data for future sharing. The co-creation of knowledge inherent in our research is particularly advantageous to an integrative approach to knowledge translation that relies upon solid relationships between clinicians and researchers. This is culturally congruent with existing Ojibwe, Oji-Cree and Cree values including mamow, or "altogether," and "sharing" (Ningewance 2004).

Education and Training

Practitioners in rural areas lack easy access to continuing education (Fahey et al. 2003). Conferences and other opportunities for professional development are often located in urban centres, requiring rural practitioners to travel great distances at significant expense and time away from their communities. Easier access to continuing education enables them to keep their knowledge and skills up to date, improving the care they provide to their clients. It can also decrease their sense of professional isolation, improving the recruitment and retention of these practitioners in rural communities (Fahey et al. 2003; Smith et al. 2009; White et al. 2007) Videoconferencing is one method of delivering educational services to practitioners in their communities. Most commonly, it has been used for delivering seminars, grand rounds and other similar presentations (Fahey et al. 2003; Rees et al. 2009), although there are reports of its use for clinical supervision of trainees and practitioners (Hilty et al. 2004; Xavier et al. 2007). Studies have demonstrated that education delivered by videoconference was perceived as relatively equivalent to face-to-face teaching (Whitten et al. 1998). They also report a high degree of participant satisfaction, gains in knowledge and evidence of practice changes (Fahey et al. 2003; Rees et al. 2009). As a first step in developing a continuing education program for the staff at our far sites, the TeleLink program initiated a needs-assessment process. Continuing education programs that are based on needs assessment appear to be more effective in changing learner behaviour and the outcomes of patients (Mazmanian and Davis 2002). The needs assessment was multi-modal, including a survey for far-site practitioners, a videoconferenced meeting with site coordinators and a survey of consultants at the hub site.

Based on the needs-assessment results and the literature on effective continuing education, TeleLink developed a program of longitudinal, multi-part seminar series. Interactive teaching methods have been emphasized, including case-based discussions, role plays and game show formats. The seminars have covered a wide range of clinical topics, including ADHD, adolescent depression, family therapy, physical and sexual abuse and individual psychotherapies. Seminars have been geared either to an introductory level or an advanced level, to meet the diverse needs of practitioners at our far sites.

Psychiatry grand rounds at

SickKids have been broadcast to six rural sites at a time.

Between 2002 and 2009, 180 educational sessions were delivered. It was not possible to compile accurate attendance records, but participants did return 6,863 evaluation forms. The seminars had a mean overall rating of 5.63 out of 7. Participants provided extensive comments about the seminars. Recurring themes in these comments included the following (1) interaction and case-based teaching was valued; (2) existing knowledge was reinforced; (3) new knowledge was relevant and applicable to practice; (4) participants were stimulated to reflect on their own work; and (5) the seminars helped to increase the confidence of the participants.

With donated funds, TeleLink has been able to initiate other education programs for different audiences. Psychiatry grand rounds at SickKids have been broadcast to six rural sites at a time. This has allowed physicians from distant communities to access regular academic presentations. TeleLink has also provided two public forums on mental health topics geared toward parents and caregivers.

A second educational goal for the TeleLink program has been to prepare future mental health professionals in the use of videoconferencing. Work in telemedicine has been expanding (Brown 2006), and many future professionals will use this technology. As of 2005, all psychiatry residents at the University of Toronto are required to participate in at least two telepsychiatry consultations at TeleLink. Residents can watch a staff psychiatrist assess a child and family and are also able to participate in the interview and discussion process. Through 2009, 112 residents had participated and completed 164 evaluation forms. Eighty-two percent found the experience interesting and enjoyable, and 78% expressed interest in participating further in telepsychiatry. Residents' comments were highly positive about the experience. To allow residents to further explore this area of work, we have been offering three- and six-month electives at our program. To date, eight residents have participated in these electives.

In small, remote communities where clinicians and clients may be close acquaintances, receiving mental health services from a distant provider via videoconference may offer a greater sense of privacy and confidentiality.

Our experience so far is that telepsychiatry can deliver valued educational services to distant learners and can make use of the same strategies associated with other forms of effective continuing education. We have also found that trainees react very positively when exposed to telepsychiatry and that at least some are disposed to pursue this kind of work in more depth.

Administration, Dissemination and Promotion

The hub site administrative staff meet on a monthly basis to discuss program-related issues and future planning. Steering committee meetings are held quarterly with the core hub team and all far sites via videoconference. As well, the orientation of prospective and new sites is provided through this medium. To keep consultants apprised of relevant information in TeleLink and to disseminate research findings, a periodic newsletter titled Short Circuit is distributed electronically.

TeleLink collaborates regularly with similar programs in other Canadian provinces, as well as the United States, England and Australia (Starling and Foley 2006) to share initiatives, processes, protocols and experiences. At time of preparation of this article, the team has contributed to and has been recognized through 20 publications (peer-reviewed journals, abstracts and book chapters), 65 presentations, 16 associated committees, six news and media opportunities and events, three teaching

awards and one service award, and it has produced a video of the program (AboutKidsHealth n.d.).

Quality Standards Program

A team of physicians and non-physicians was assembled at the hub to devise and implement a quality standards program of clinical activities. The overall framework includes the creation of modules and processes targeting specific selected components; collating and circulating the findings to the program, consultants and indicated stakeholders; and making necessary adjustments. To date, the second round of random file audits is nearly complete. Standards and guidelines for consultant performance appraisals for annual reappointment have been established. Other phases currently in progress include solicitation of feedback from referral sources and from young patients and their guardians regarding the clinical intervention and accompanying report. Modules and processes for tracking positive feedback, concerns and subsequent action taken are nearly complete. On an ongoing basis, issues related to technology and referrals, budgets and daily operations are reviewed at monthly staff meetings. Consultants have informally reported appreciation of the feedback as they rarely have the opportunity for selfmonitoring in their usual practices.

Discussion and Conclusion

The Standing Senate Committee on Social Affairs, Science and Technology (2006) described the current children's mental health system as fragmented and underfunded, with a critical shortage of mental health professionals. It consequently identified telepsychiatry as a promising mechanism of sharing existing limited resources, but only if a basic level of mental health service is already in place. From stakeholders to policy makers, champions at the hub and distant communities represent the key driving force to develop, advance and sustain tele-programs for mental health. Other requisite components of a successful telepsychiatry/telemedicine service include adequate funding for equitable remuneration of service providers, with flexibility of remuneration schemes; current and secure technology; needs-driven service deliverables; infrastructure (policies, procedures, guidelines, for medico-legal due diligence, space and support personnel); and convenience and ease of use for patients and caregivers (Figure 2). Adapters of this novel approach will ask "how" this can be done. Maintaining a presence and actively merging such a program with the day-to-day operations of service providers, hospitals and universities, along with the dissemination of lessons learned and program promotion, are vital to the demystification, uptake and integration of telepsychiatry as a complementary approach to care. TeleLink represents a capacity-building model of service delivery; the possibilities are limited only by one's imagination and willingness to accept this modality. Videoconferencing could readily be incorporated into outreach initiatives, pre-admission

screening, post-discharge follow-ups and urgent consultations to reduce emergency room wait times. Integrative approaches from multiple referral sources working in concert will enable comprehensive, seamless patient care.

The KTA framework that guides the administrative, education, research and quality management components of TeleLink allows for an iterative approach to identifying issues, researching them in a collaborative fashion and arriving at strategies to improve the program. In this manner, practice is optimized.

Through relationship building and partnering with communities, telepsychiatry is well positioned to enhance, but not replace, the delivery of healthcare, reduce professional isolation and improve the distribution of clinical expertise. Limitations imposed by catchment areas virtually disappear, and care can remain local, thus facilitating less intrusive and culturally congruent assessment and treatment plans. Consultant recommendations lend extra weight in advocating for interventions that can be instituted locally (Boydell et al. 2010). In small, remote communities where clinicians and clients may be close acquaintances, receiving mental health services from a distant provider via videoconference may offer a greater sense of privacy and confidentiality, which may in turn reduce the stigma of receiving mental health intervention.

All clinical telepsychiatry programs should include a program of continuing education delivered to practitioners at the distant sites; education should be based on a needs assessment, be longitudinal and make use of interactive teaching methods including case-based discussions. The goal of this continuing education is to improve the knowledge and skills of these practitioners and thus build the capacity of these rural communities to provide excellent mental health care to children and their families. This program of education should also offer opportunities to train students and practitioners at the near end in the use of the technology and the clinical model so that they may be disposed to doing this work in the future. The goal of such training is to increase the number of practitioners delivering videoconferenced services to communities that lack adequate local access to these services, thus ensuring that all children and families have access to appropriate mental health irrespective of where they live.

A population of all ages with diverse presenting problems and degrees of psychosocial severity can be managed by interactive videoconference (Nelson and Bui 2010; O'Reilly et al. 2007; Pignatiello et al. 2008; Yellowlees et al. 2008), employing principles of community systems of care (Winters and Pumariega 2007) and shared care (Kates 2002); however, challenges remain. Evidence for uses of videoconferencing is still emerging but likely will not keep pace with advances in technologies; thus, pioneers will be setting the courses as they venture into unfamiliar territories. Community and agency cultural issues and the provision of recommendations that are feasible and locally available require consideration. Technologically,

FIGURE 2. Key components of a telemedicine program



image resolution is still evolving. Senses of smell and touch, and absolute direct eye contact (Tam et al. 2007) are lost. These can be partly provided by the clinician in the room, but further consideration is warranted. Communication via videoconferencing requires an awareness of etiquette and extra consideration to adjust to the medium. It is important for participants to work with the technology rather than be frustrated by it. Our young participants can serve as role models, embracing technology and innovation.

TeleLink offers a comprehensive, innovative approach to confront the shortage of specialist resources for child and adolescent mental health in rural and remote Ontario, and a model for remote regions elsewhere. Interactive videoconferencing offers an efficient, cost-effective (Elford et al. 2001; Myers et al. 2004; O'Reilly et al. 2007; Persaud et al. 2005) and user-friendly modality (Ermer 1999), providing increased knowledge and training in pediatric mental health to distant and under-serviced areas (Broder et. al 2004; Pignatiello et al. 2008). Medical trainees in urban teaching centres are also expanding their knowledge of and comfort level with rural mental health issues, various complementary service models and the potential of videoconferencing for providing psychiatric and psychological services.

Family physicians supported by specialty services can realize an increase in knowledge and comfort in their recognition and management of children's mental health issues (Clatney et al. 2008; Stretch et al. 2009), and telepsychiatry is well poised to enable that. Often cited as "the next best thing to being there," mental health tele-initiatives do not happen spontaneously but require committed and enthusiastic champions, a positive attitude (Werner 2004) and flexibility to ensure program viability (Hilty et al. 2004; Yellowlees 2005).

Next Steps

Through promotion and further integration within hospital, academic and other provincial telemedicine networks, TeleLink will continue to develop its distance psychiatry and psychology presence and support to primary care clinicians. Collaboration among the multitude of agencies and ministries servicing the needs of children is key in creating community systems of care (Winters and Pumariega 2007), moving past barriers if not realigning fragmented, parallel systems. The exploration and integration of newer technologies in addition to videoconferencing will keep the venues for service deliveries current. Portable technologies that allow access to services right in one's home or at the service provider's fingertips would make for further ease of use. Live, active webcasting of education sessions and virtual chat rooms/offices could enable ready communication and support for professionals and patients. Although TeleLink has generated and learned from its programs of quality standards and evaluation to date, future research initiatives include an examination of technology-enabled knowledge translation of evidence-based practice in applied child and youth mental health settings in rural and remote Ontario communities. With the unique benefit of a large cadre of child psychiatric consultants, research is also under way to identify factors contributing to the recruitment and retention of child psychiatrists, an issue with implications extending beyond TeleLink. HQ

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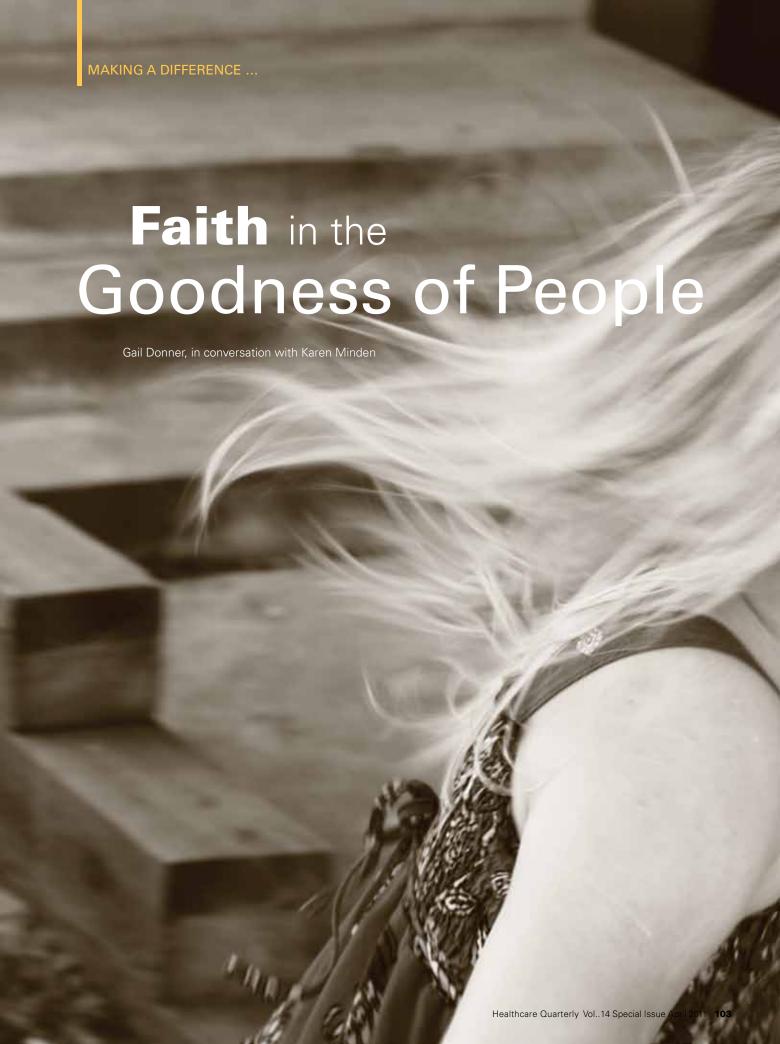
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aren Minden is a founding board member and first chief executive officer (CEO) of the Pine River Institute, a residential treatment and outdoor leadership centre northwest of Toronto, Ontario, which aims to heal young people ages 13-19 who are struggling with mental health issues, particularly substance abuse. In 2010, Minden was awarded the Order of Canada for Social Service. Her background is in research, public policy, philanthropy and international relations, and she has a special interest in Chinese-Canadian relations. Her past work has included being CEO of the Walter and Duncan Gordon Foundation and vice-president of research at the Asia Pacific Foundation of Canada, Karen has a PhD from York University and an MA from the University of California at Berkeley, and she's an adjunct professor at the University of Toronto.

Recently, Gail Donner, member of the Board of Trustees of The Hospital for Sick Children, in Toronto, had a chance to chat with Karen about her work with Pine River Institute.

GD: I'll start by saying thank you very much for agreeing to let me come into your home and talk to you; and congratulations on the Order of Canada - what a wonderful recognition of all your hard work.

Before we talk about Pine River, tell me a little bit about Karen Minden.

KM: When I started university, I was very determined to study something that I didn't know anything about. I was already good in English, art and humanities, but I didn't know anything about political science, and I didn't know much about China. I chose those two areas to study. What I am passionate about is building bridges internationally and fostering understanding between two very different cultures.

So, I learned a language that opened an entire world; I learned about a culture and it became a passion. I spent a year in Beijing as an exchange student. I came back from that experience and continued my training to become a professor of Chinese politics, with an interest in international trade relations and business and a focus on medical modernization and technology transfer.

GD: What was next?

KM: In the early '80s through the mid-90s, I taught political science at the University of Manitoba, and later I taught in the business faculty. I then went on to be vice-president of research at the Asia Pacific Foundation; it was a new position, and the challenge was to build a think tank on Canada-Asia relations. I had a small budget and a small staff, and it forced me to be resourceful and to set up a virtual think tank that took advantage of the little pockets of expertise all across this country, not just in academia - also in business, in government and in the



arts. I realized that partnerships with people who had complementary strengths were absolutely critical. That helped set the tone for how I did things and continue to do things.

GD: How did you later juggle working and having a family? KM: As it turned out, it was a blessing in disguise because I had a much more interesting and varied career than the straightforward path. Working at the Asia Pacific Foundation was an incredible four years, but it required that I be away from home a great deal. By the end of it, I was really quite homesick and my children and husband missed me.

GD: How did you make the transition from that position to working in children's mental health?

KM: Actually, one of my children was really struggling in her early adolescence, and I realized that I needed to put my full attention on how we were going to get some help for this. I took a leave for a while, and we focused on family. It was at that point that we discovered that the best treatment options were in the United States, and so we spent close to a year going back and forth between Winnipeg and Utah. It was a very exciting, challenging year for the whole family. All four of us also did an Outward Bound course. In many ways, it was a gift that allowed all of us to grow as individuals and to become a very strong family unit. We moved to Toronto, where I had a series of jobs, including at Sussex Circle, which was a consulting practice out of Ottawa and Toronto; and then I took on the leadership of the Walter and Duncan Gordon Foundation.

Really, through those few years, the most compelling thing for me was my volunteer work, which I'd started when we were in Winnipeg, and that was to change public policy around child and youth mental health and to improve services.

GD: So that was the genesis of the Pine River Institute?

KM: Yes, and it was an uphill battle. I worked very hard to find somebody or some agency I could support that would actually carry out this vision. I offered in a number of places: "We will raise the money; we will do whatever it takes to make this happen," and there were no takers.

GD: Where did you turn?

KM: I took three weeks and went out to the west coast to a place called the Haven Institute on Gabriola Island. I really thought long and hard about what made sense for me to do next and where I could make a contribution, because frankly when you're approaching your 50s - as I was at the time - you start thinking about mentoring, about giving back, and not so much about building your resumé. It was already pretty full, so this wasn't about achievement. I talked to my husband and said, "I think I should get a PhD in psychology so that I can do this really well," and he laughed. He said, "You can hire psychologists to work with you; look at what you do. You have executive leadership skills." I realized that if it took me six years to do a PhD in psychology, that would be another six years of troubled kids sleeping out in the cold, and I couldn't bear the thought; so the faster, the better.

GD: I gather you were influenced by your father, who was a professor of psychology at York University.

KM: Yes, and I had heard him talk about his profession for many years. My mother was in early childhood education and both my sisters are psychotherapists, so I understood that language. I knew from my father where many of the gaps were, and they were about children and young people, and couples and parenting - family. I know that had an influence.

GD: So you didn't go back to school at that point?

KM: No. I negotiated that I would work part-time to leave myself at least a day a week to do my volunteer work because it took more than evenings or weekends. I was on the founding board of what became Pine River Institute. My job was to find the first CEO after laying this groundwork, and we struck a search committee and started looking around. We worked with an executive search firm and, after some months, the chairman of the board called me and said, "Will you do this? There is nobody else who has the motivation or the skills that we're looking for. Will you do it?" So I thought about it again, and then I said, "Okay, I will do it for 18 months."

GD: And when was that?

KM: Six years ago. We opened four and a half years ago. I took Pine River through start-up. It was very exciting building it. It was very high risk. We had no building, no staff, no track record, and we raised \$4 million in 18 months on a vision. Those of us who spoke about it, and that includes my family members and others, were so passionate about it that you couldn't help feeling inspired.

GD: Was it a success right from the beginning?

KM: No. At the end of a year, it looked like we might not make it. There was no market for private-pay services, and we couldn't afford to subsidize everybody who came in. This is very expensive, intensive residential treatment. The Ministry of Health and Long-Term Care was funding people to go to the United States, but the policy was such that they couldn't fund people to come to Pine River in Ontario. The parents of our students lobbied the government. Some leaders in government learned about our efforts, and the Ministry of Health and Long-Term Care called us and said, "We need to talk." It was at that point that some very creative civil servants came up with a solution. They made us a pilot project. They demanded of us what we were already doing, so we were very much in collaboration. We were committed to measuring our outcomes and had a logic model before we had a building.

GD: Things were happening, but they were happening backwards?

KM: Our board and founders are very committed to contributing to the evidence base for adolescent mental health and substance abuse treatment. We heard from so many families who could not find effective treatment in this country, and there were no outcome data on what approaches or programs worked. There was strong anecdotal evidence about programs in the United States that were working, so we focused on developing an explicit model, with clear measures of success. We had a research director before we had a clinical director. We started collecting data before the kids walked in the door; but before we opened, we also had done a tremendous amount of consultation in the professional community and among consumers, parents and youth, as well as a review of the international literature. We consulted with over 800 individuals before we opened. We reviewed 33 programs in the United States and looked for what we thought were the best, and then we visited 12 programs and asked, "Can you advise us? What would you do differently if you were starting up again? What is it that makes you successful? What do you do?" We cherry-picked from the organizations we thought could be helpful.

GD: So you opened your doors in 2006 and started helping adolescents and building evidence?

KM: We were very clear on what we thought we were treating. We were very clear on what our outcome indicators would be. What does success look like? I was much influenced by the research of my husband, Dr. Harvey Schipper, on quality of life in cancer care. He was one of the pioneers in this field. The Functional Living Index for Cancer was my bible when we looked at how we were going to do our outcome evaluations. What were the indicators? Can you get up in the morning and dress yourself? That's what you would be looking for if you were someone living with cancer. What would be the equivalent for an adolescent struggling with mental health and addiction? The program was very much informed by that, and we started to collect our data. We produced comprehensive reports on our program and outcomes every six months, which far exceeds any standard for accountability, but we are driven by self-accountability.

GD: Are there other Pine Rivers in Ontario? In Canada?

KM: Pine River is a very comprehensive program and provides the continuum of services from crisis through aftercare. There are still young people who need access to programs in the United States, and I think it's really important to keep that door open.

You can talk yourself into or out of anything; but at the end of day, if you didn't give it your best shot ... why leave this world

GD: Absolutely.

KM: That said, we need more capacity here. We're at a point where we could grow; but what's really important to us is whether we can contribute to a better use of existing capacity in the system by developing the knowledge base through knowledge mobilization, which means collaborative research, conferences, symposia and training. We've had a number of interns do their placement at Pine River, and we see that as an opportunity for them to influence the delivery of services where they're going to work.

We also received accreditation with the Council on Accreditation, which is based in New York and has accredited some major mental health programs in Canada and in Ontario.

We've been tracking our outcomes, and we joined an international research consortium, where we collaborate with several dozen other programs aggregating our data so that we can do some comparative analysis.

GD: Great. Have you linked with and learned from similar programs in Canada?

KM: We partnered with the Community Health Systems Resource Group at The Hospital for Sick Children, under Bruce Ferguson. We partnered with Debra Pepler at York University; she's a distinguished research professor of psychology. We've worked very closely with the Provincial Centre of Excellence on Child and Youth Mental Health at CHEO, the Children's Hospital of Eastern Ontario. Its mandate is to build capacity for outcome evaluation, and they've been incredibly helpful to us, as have our research advisors and collaborators. We have four and a half years of data, which isn't a huge number; but compared with any other program, it's making a major contribution to outcome data in this field.

GD: Tell me what success looks like. Maybe tell me about one of the kids.

KM: We had our first alumni reunion this summer. One of the girls who is studying neuro-psychology at university now couldn't come to the reunion. She's with Canada World Youth in Cambodia. That just gives you an example of the kind of achievements some of our graduates are capable of.

If it were your child, what would you do? If I wouldn't send my child to Pine River, then Pine River's not good enough. That's really what motivates me. What are the success indicators? Are these kids doing what normal adolescents would do? Are they in school and achieving? These are some things that are pretty easy to measure. How are their relationships with their families? Are they living at home safely? We look at crisis indicators. Are they still being hospitalized for drug-related or mental health-related issues? Sixty-five percent of the kids who come in have diagnosed suicidal ideation or had suicide attempts. We measure their quality of life, and one of the indicators for quality of life that's most compelling for us is future orientation. Those children who come in with no future orientation, which is 99% of them, leave with a very significant hopefulness for what they want to do in their life.

GD: Are all the kids involved with substance abuse?

KM: Yes. All of our kids have more than one thing going on.

GD: You have a whole multidisciplinary group of people working at Pine River?

KM: Yes. We have a psychologist, who is our clinical director, social workers, psychotherapists, teachers, recreation therapists and creative arts therapists.

GD: You've used the word crisis to describe what's going on with these kids. Why do you say it's a crisis?

KM: If we don't intervene with these children, they will either have chronic morbidity or they will die. It's not just the children who are suffering. It is also the parents, the grandparents, their siblings, their extended family, their friends. Everybody is impacted by this. If you talk to health economists, they can tell you what lost productivity is like, and it's not just the lost productivity of the child. The parents can't work either. I know that this is the case from the work we do, and I know from experience.

GD: What's going to be next for Pine River?

KM: Pine River continues to fine-tune and develop our research capacity and to build collaborative relationships with other researchers because knowledge mobilization is really important for us. We also continue to refine our program internally, and we monitor outcomes rigorously. We have had consistently about an 80% success rate.

We received a very generous grant from the RBC Foundation

last year to develop the aftercare component. That's an area that we want to develop further so that young people - whether they're in Toronto or anywhere else in the country - have the kind of community support to reintegrate. You don't want to take away the scaffolding from a young person too soon.

GD: Any other plans?

KM: We are contemplating expanding the number of beds to a limited degree, but what's most important for us is that existing capacity in the system be rejigged so that it can deliver impactful interventions. We champion the uptake of program, process and outcome evaluation. We are working with partners to make that happen.

GD: What's next for Karen Minden?

KM: I am ready to hand over the leadership of Pine River Institute to the next generation, who can take it to the next level of research excellence and service excellence. I will move to exclusive leadership of the Pine River Foundation, and that will build an endowment to provide bursaries so that no student is turned away for financial reasons. We have the immediate challenge of a capital campaign where we need to buy our facility, which we currently lease. Those are my challenges now.

GD: It's been quite a journey for you. Have you found it fulfilling?

KM: Now that my head is above water, and it has been for some time, I'm very grateful. And it's an opportunity to look to the future and look at the horizon - what can we do? It has been so exciting to meet people like Dr. Mary Jo Haddad, president and CEO of the Hospital for Sick Children; Dr. Catherine Zahn, CEO of the Centre for Addiction and Mental Health (CAMH); Deb Matthews, our minister of health and long-term care; Donna Duncan, the new head of Hincks-Dellcrest; Helen Burstyn at CAMH; Ian Manion at CHEO; Dr. Simon Davidson, CHEO's chief psychiatrist; and Michael Wilson, former chairman of the Mental Health Implementation Taskforce for Toronto and Peel, who has really been a pioneer in putting mental health on the map. It's an exciting group of people, who I think are on fire about child and youth mental health in this country. I feel really lucky to be involved in the field at this time.

GD: I want to try to capture what lessons you can teach other people. You had a personal experience and that showed you that you couldn't get the help your family needed. But not everybody who sees the need and even feels strongly about the need does anything about it. What do you tell people who feel they could help, but don't know how to get started?

KM: There are several parts to this. The first is, if you see something that you think needs to be changed and you want

to do something about it, you may decide quite rationally that you don't have the ability to lead the charge at that particular time – for whatever reason. It may be because you're still needed by your young children, or you're still in the upwards trajectory of your career, or you don't have the skills that you think are required. There are many leaders who would hugely benefit from your help. You know, I did not do this myself.

GD: No, of course.

KM: There were people who came along and said, "I can help you." Just yesterday a real estate executive came to my office and said, "I want to help you get your property. I have the skills to help you with that." There are many ways to help. I can tell you that it feels better to do something than to keep walking past the problem. So for very personal gratification reasons, there's a good motivation to do it.

It's a typical Canadian response to say, "Government should be doing this." There are many ways to make things happen so that you give government the ability to support an initiative later. Governments are not usually meant to be innovators. They should champion an innovation in an area that is of great need to them.

I guess the final test, when making a decision about whether or not to do something, is to imagine sitting on a rocking chair and you're 86 years old; you're looking back on your life where you wish you had done something. If you come to that conclusion, then just do it, because it's not a dress rehearsal. We only get to go around once. You have to do what you're compelled to do and what you believe in. You can talk yourself into or out of anything; but at the end of day, if you didn't give it your best shot ... why leave this world with regrets?

GD: It's wonderful advice. So who sustains you? What sustains

KM: It's a really good question. In my immediate life, in my day-to-day life, my daughters and their partners, and my husband and my mother, my sisters and my extended family are hugely important to me. I have enormous family warmth and support around me. I have a faith that there is a divine presence and that somehow when we need it, we get strength to do things that seem insurmountable. I do have a faith in the goodness of people. I see it every day. I see my staff deal with the most disheartening, difficult issues. They are slapped in the face by people who are difficult and don't have gratitude, and they keep pouring love into the kids and into their families; and then they get results. It's not just their professional expertise; it's the very loving way in which they care for people who they serve.

GD: Thank you so much for taking this much time to talk

KM: It was such a pleasure. HQ



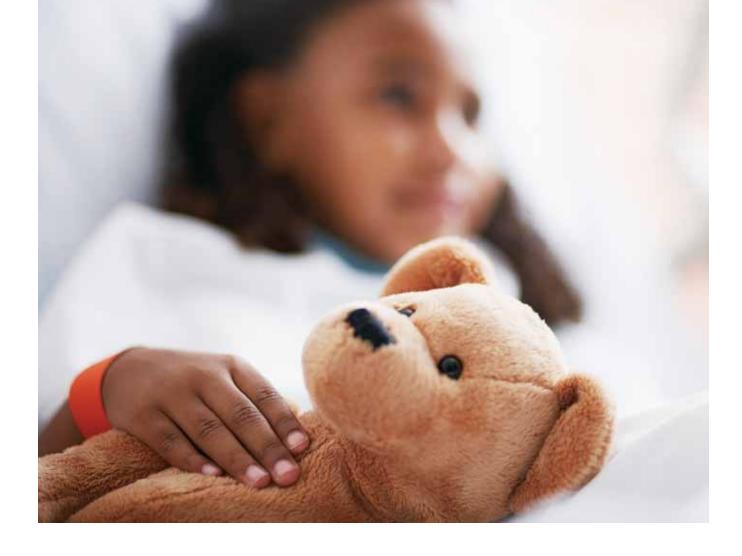
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