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Comprehensive School Mental Health: An integrated "School-Based Pathway to Care" model for Canadian secondary schools

Une approche polyvalente de la santé mentale à l'école : le modèle intégré "School-Based Pathway to Care" au sein des écoles secondaires canadiennes

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Article abstract

Adolescence is a critical period for the promotion of mental health and the treatment of mental disorders. Schools are well-positioned to address adolescent mental health. This paper describes a school mental health model, "School-based Pathway to Care," for Canadian secondary schools that links schools to primary care providers, mental health services, and the wider community, enabling them to address youth mental health in a collaborative manner. The model highlights the fundamental role of mental health literacy, gatekeeper training, and education/health system integration in improving adolescent mental health, and enhancing learning environments and academic outcomes.

COMPREHENSIVE SCHOOL MENTAL HEALTH: AN INTEGRATED "SCHOOL-BASED PATHWAY TO CARE" MODEL FOR CANADIAN SECONDARY SCHOOLS

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ABSTRACT. Adolescence is a critical period for the promotion of mental health and the treatment of mental disorders. Schools are well-positioned to address adolescent mental health. This paper describes a school mental health model, "School-based Pathway to Care," for Canadian secondary schools that links schools to primary care providers, mental health services, and the wider community, enabling them to address youth mental health in a collaborative manner. The model highlights the fundamental role of mental health literacy, gatekeeper training, and education/health system integration in improving adolescent mental health, and enhancing learning environments and academic outcomes.

UNE APPROCHE POLYVALENTE DE LA SANTÉ MENTALE À L'ÉCOLE : LE MODÈLE INTÉGRÉ "SCHOOL-BASED PATHWAY TO CARE" AU SEIN DES ÉCOLES SECONDAIRES CANADIENNES

RÉSUMÉ. L'adolescence constitue une période critique pour la promotion de la santé mentale ainsi que le traitement des désordres mentaux. En ce sens, les écoles sont bien placées pour s'attaquer aux problèmes de santé mentale vécus par les adolescents. Cet article trace le portrait d'un modèle de santé mentale en milieu scolaire, le modèle "*School-based Pathway to Care*", modèle déployé au sein d'écoles secondaires canadiennes. Celui-ci met en lien les établissements scolaires avec les institutions fournissant des soins de santé de base et des services de santé mentale. Ce faisant, il permet aux différents intervenants de collaborer, s'attaquant ainsi ensemble aux problématiques de santé mentale des jeunes. Ce modèle souligne l'importance de la littérature portant sur la santé mentale, de la formation des surveillants et de l'intégration des systèmes d'éducation et de santé dans l'amélioration de la santé mentale des adolescents, des environnements scolaires et des résultats académiques.

Promoting student health and well-being has long been a goal of education policies at the secondary school level. Traditionally, the focus has been on physical health and the delivery of programs designed to enhance healthy

eating habits, encourage physical activities, prevent tobacco and substance use, and promote sexual health (Campbell, Waters, O'Meara, Kelly, & Summerbell, 2002; Kirby, 2002; National Drug Research Institute, 2002). However mental health, an essential component of general health and well-being, has been largely absent from the national education agenda (Kirby & Keon, 2006; Santor, Short, & Ferguson, 2009). The absence of a mental health focus in secondary schools is especially unfortunate given the fact that adolescence is the life stage during which most mental disorders have their onset (Health Canada, 2002; Kessler et al., 2005; Waddell & Shepherd, 2002).

The Canadian political federation provides for both health and education as primarily the responsibility of the Provinces and Territories but the federal government is active in both domains. In the health domain, the Canada Health Act (1984) provides a framework that outlines the criteria by which federal health transfer funding (the Canada Health Transfer) flows from the federal to provincial/territorial governments. In the education sector, the federal government has allocated funds for a variety of research and scholarship support programs, mostly directed towards post-secondary institutions. Nationally, child and youth mental health policies, plans and programs which might be expected to address the interface between health and education systems are not widely available and those that are suffer from a variety of challenges (Kutcher, Hampton, & Wilson, 2010). Thus, from a national perspective, although the need to address youth mental health through the education sector has been clearly identified, there exists no comprehensive framework through which that may occur.

Additionally, the Canadian health care system provides for universal public health insurance that permits access to both primary care and specialty mental health services for mental health care. Recently, attention is being paid to promote delivery of mental health care in primary care (Canadian Collaborative Mental Health Initiative, 2005). Thus, in Canada, mental health care is being provided both within the primary care and specialty mental health service sectors.

One strength of the Canadian approach to health care is found in the method by which a national framework based on the principles of the Canada Health Act (Canada Department of National Health and Welfare, 1985) can be interpreted and applied by provinces and territories. Similarly, within provinces and territories, local conditions can modify how provincial/territorial programs are developed and delivered. Thus, the Canadian system allows for a universal model that can be adapted to local conditions. In the same vein, for a national approach to school mental health, it would be ideal to create a model that can be used Canada-wide but can be adapted to meet local conditions.

A comprehensive health approach in secondary schools could address both physical and mental health using the full spectrum of health interventions, from

promotion to prevention, early identification and interventions, and include a seamless link between students in need of health care, health care providers, and student support staff. This paper presents a school mental health model suitable for application in Canada that takes into account the characteristics that frame federal, provincial and territorial approaches to health and education. It provides an innovative approach that integrates mental health components into existing secondary school education frameworks and links those to the publicly funded health care (both primary care and specialty mental health services) and educational systems that characterize the Canadian experience. These components include mental health literacy programs for students and educators, parental/family outreach, training in early identification, triage and referral of students with mental disorders for student support staff, programs to enhance mental health competencies for primary care and specialty mental health services providers, and processes for coordination and collaboration between schools and their communities (e.g., parents, health providers and policy makers). Some of these model components have been developed and currently being implemented in schools in Canada and in other countries through collaboration with international organizations such as UNESCO.

MENTAL HEALTH PROBLEMS AMONG ADOLESCENTS

Adolescence is a time when many of the substantive and persistent mental disorders including major depressive disorder, panic disorder, bipolar disorder, substance abuse, eating disorders, and schizophrenia first appear (American Psychiatric Association, 2000; Kessler et al., 2005). Globally, neuropsychiatric disorders comprise the largest single category of medical disability in young people (Lancet Global Mental Health Group et al., 2007; World Health Organization [WHO], 2004). In Canada, approximately one fifth of young people suffer from a mental disorder, but only one in five of those requiring specialty care receive it (Health Canada, 2002; Waddell, Offord, Shepherd, Hua, & McEwan, 2002). Unrecognized and untreated mental disorders can lead to a variety of negative long- and short-term outcomes, such as poor educational and vocational achievement, problematic social and personal functioning, and reduced life expectancy due to associated medical conditions and suicide (Bhatia, 2007; Kessler, Foster, Saunders, & Stang, 1995).

Mental disorders can also negatively affect young people through their impact on learning. For example, mental disorders may lead to chronic absenteeism or early school leaving (McEwan, Waddell, & Barker, 2007; Saluja et al., 2004) and difficulty meeting expected grade standards or reaching academic potential (Adelman, 2006; Klein, 2002). According to a report by the Canadian Council on Learning (2009), "Poor mental health in Canadian school children poses a significant risk to their academic development and puts them at greater risk of dropping out of school, substance abuse and suicide" (p. 4).

Mental health promotion activities, such as mental health literacy programs, may help to promote positive mental health, de-stigmatize mental illness, enhance early identification of mental disorders in young people, and encourage help-seeking behaviours (Pinfold, Stuart, Thornicroft, & Arboleda-Flórez, 2005; Santor, et al., 2009). The earlier that mental health problems are identified and addressed through appropriate and effective intervention, the more likely beneficial effects may be achieved in both the short- and long-term. For example, early and effective treatment of mental disorders can improve emotional and behavioural difficulties, thus reducing the number of days of school missed due to suspensions and reducing instances of contact with law enforcement (American Academy of Pediatrics Committee on School Health, 2003). Effective treatment can also lead to improved social and behavioural adjustment and school performance, and enhanced learning outcomes (Aviles, 2006; Koller, 2006).

SCHOOLS AS A VENUE TO ADDRESS MENTAL HEALTH NEEDS OF TEENS

The school is an ideal place to address mental health needs of youth. Most young people in Canada attend school, with the average teen spending over thirty hours per week in the classroom. Not only does the school offer a relatively focused and potentially cost-effective opportunity to reach youth, it is also a convenient place where mental health can be linked with other curricula, and programs that address physical health, nutrition, and sexual health.

Promoting health through schools has been a goal of international agencies such as WHO, UNESCO, and UNICEF for decades (WHO Regional Office for Europe, 1996). One result of this work is the concept of the "health promoting school," defined as, "a place where all members of the school community work together to provide students with integrated and positive experiences and structures which promote and protect their health" (WHO Regional Office for Europe, 1996, p. 2). According to WHO, a health-promoting school undertakes activities that include, "both the formal and informal curricula in health, the creation of a safe and healthy school environment, the provision of appropriate health services and the involvement of the family and wider community in efforts to promote health" (WHO Regional Office for Europe, 1996, p. 2). Health promoting schools aim to facilitate positive health (including mental health) and the achievement of learning outcomes through activities in three areas: 1) curriculum, teaching and learning practices; 2) school organization, ethos and environment; and 3) partnerships and services. In Canada, the Pan-Canadian Joint Consortium for School Health (JCSH), which includes members from Ministries/Departments of Health and Education across the country, supports the "comprehensive school approach" for health promoting schools (JCSH, 2009). The JCSH approach targets four areas consistent with the WHO Health Promoting School concept, including: 1) instruction, 2) support services, 3) social support, and 4) healthy environments.

While a number of countries including the United States (UCLA School Mental Health Project, Center for Mental Health in Schools, 2009), Australia (Wyn, 2000), the United Kingdom (Department for children, schools and families [UK], 2009), and New Zealand (Ministry of Health [New Zealand], 2003) have developed national strategies to address child mental health or have begun to create policy frameworks that seek to integrate mental health into whole-school health approaches, this has not widely been the case in Canada. Nationally, child and youth mental health has traditionally been marginalized across all sectors (Kirby & Keon, 2006). Furthermore, most Canadian provinces and territories do not have a child and youth mental health policy (Kutcher et al., 2010).

Recently, there has been an increased interest in school mental health in Canada. For example, some jurisdictions have begun to explore the issue of school mental health (Santor et al., 2009) and the Mental Health Commission of Canada (http://www.mentalhealthcommission.ca) has funded a number of activities, including an environmental scan of current school mental health activities. A national association has been formed to provide a forum for school mental health (The Canadian School Health Community), and a few organizations, including our own, Sun Life Financial Chair in Adolescent Mental Health at IWK Health Centre and Dalhousie University, are implementing mental health promotion programs in secondary schools (e.g. www.yoomagazine.net, www.teenmentalhealth.org). Although fledgling initiatives are underway, to date no nationally applicable model that can take into account the characteristics of Canadian health and education sectors has been developed.

Clearly, there is need for a comprehensive secondary school mental health model that can be applied across Canada. Ideally, this model will be congruent with the epidemiologic realities of mental disorders in youth, and will be able to guide the development and delivery of a spectrum of mental health activities in schools consistent with how health and educational services are delivered within the national context. For example, it will be both consistent and flexible enough to meet national needs and local contexts. It will also be able to integrate the increasing application of mental health care by the primary health system as well as with specialty mental health services. Furthermore, the model should address challenges pertaining to promotion, prevention/early identification, stigma, cross-sectoral collaboration, ongoing support, and parental involvement.

A COMPREHENSIVE CANADIAN SECONDARY SCHOOL MENTAL HEALTH MODEL

Adolescence is a critical period for the promotion of mental health and the prevention, early identification and treatment of mental disorders, and the school is an ideal environment in which to implement such activities. Diverse

approaches to youth mental health in other jurisdictions have demonstrated the importance of linking evidence-based promotion, prevention, and treatment approaches with continuing care networks (Kutash, Duchnowski, & Lynn, 2006; Weist, Goldstein, Morris, & Bryant, 2003; Weisz, Sandler, Durlak, & Anton, 2005). Here, we propose a comprehensive and coordinated model to address mental health problems and promote mental health in the secondary school setting as it exists in Canadian national health and educational contexts. This model is founded on the application of best-available scientific evidence; is rooted in the WHO Health Promoting Schools (WHO Regional Office for Europe, 1996) concept; and is consistent with the realities of Canadian education and health care systems. The goals of the model are: 1) to promote mental health and reduce stigma by enhancing the mental health literacy of students, educators and parents; 2) to promote appropriate and timely access to mental health care through early identification, triage and evidence-supported, site-based mental health interventions; 3) to enhance formal linkages between schools and health care providers; 4) to provide a framework in which students receiving mental health care can be seamlessly supported in their educational needs within usual school settings; and 5) to involve parents and the wider community in addressing the mental health needs of youth.

The model is comprised of a series of inter-related domains that when taken together create an integrated pathway to care (Figure 1). They include: a) mental health promotion through mental health literacy for youth, educators, and families; b) training for teachers, student services providers, and primary care providers, with knowledge upgrading for mental health professionals, to facilitate early identification, prevention and intervention; c) processes for coordination and collaboration between schools and their communities; and d) evaluation.

In this model, we define secondary schools as those funded by both public and private funding and we also include compensatory schools, alternative schools, and community-based schools. The flexible nature of the model allows for convenient adaptation and customization for adolescents with different needs in various educational settings. Furthermore, although the model has its focus on school settings, it is embedded in the whole community and therefore has the potential to reach youth through its extensive community outreach components, such as community services, youth clubs, and sports teams. Examples of school mental health programs embedded in the model are listed in Table 1 and described in the following section.

Mental health promotion through mental health literacy for youth, educators and families

Various successful health promotion programs include, or are based on, enhancing health literacy (Sanders, Shaw, Guez, Baur, & Rudd, 2009). Similarly, the concept of mental health promotion is based in substantial part on mental health literacy (Francis, Pirkis, Dunt, Blood, & Davis, 2002). Mental health

literacy is defined as, "knowledge and beliefs about mental disorders, which aid their recognition, management, or prevention" (Jorm et al., 1997, p. 182). Addressing mental health literacy during the crucial adolescent years has the potential to foster an understanding of mental health and mental disorders that will serve young people through subsequent life stages. For example, a number of programs (e.g. Beyondblue Schools and MindMattters) that embed mental health as a component of other health-promoting activities have been successful in improving knowledge and changing attitudes among youth (Kelly, Jorm, & Wright, 2007). Improved mental health literacy can also play an important role in stigma reduction (Naylor, Cowie, Walters, Talamelli, & Dawkins, 2009; Pinfold et al., 2005). Despite its importance however, Canada is lacking a systematic mental health literacy strategy to guide related activities in schools (Canadian Alliance on Mental Illness and Mental Health, 2007).

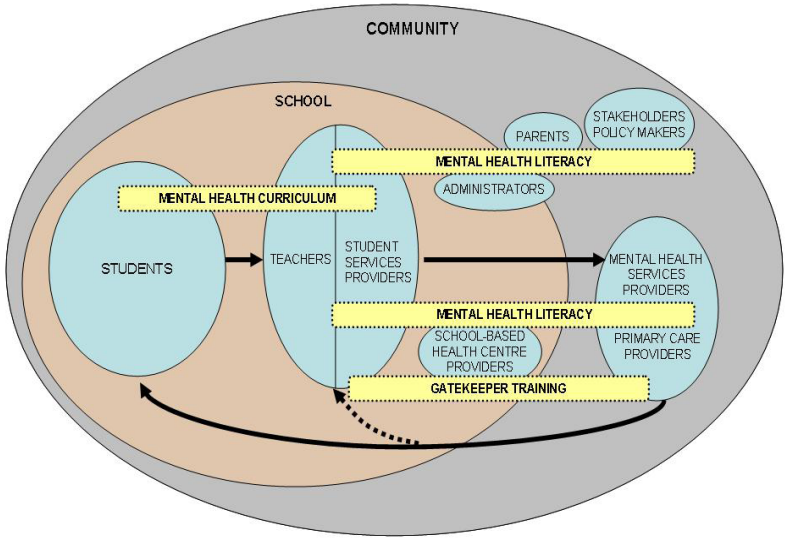

FIGURE 1. *School-based Pathway to Care model*

Schematic of the comprehensive school mental health model, its targets, components, and processes. Circles indicate target groups within the educational system; boxes indicate evidence-based mental health literacy and training programs developed to meet the needs of target groups; and arrows indicate integrated pathway to care for both students in general and students at risk of mental health problems.

Implementing mental health literacy programs within the school setting provides an opportunity not only to enhance the mental health literacy of students but also of educators, other education staff, parents and the wider community. An example of a school mental health literacy program is the recently piloted and revised secondary school mental health curriculum (Kutcher & Canadian Mental Health Association National Office, 2009). This curriculum was developed by our group in partnership with the Canadian Mental Health

Association (national branch) and is available to educators across the country (www.cmha.ca/highschoolcurriculum; www.teenmentalhealth.org). The *Mental Health & High School Curriculum Guide* consists of a teacher self-study module which provides basic information about mental health and the identification and linking of students experiencing mental health problems with health providers. In addition, it includes six modules for students that address the following domains of mental health: 1) stigma; 2) understanding mental health and mental illness; 3) specific mental disorders that onset during adolescence; 4) lived experiences of mental illness 5) help-seeking and support; and 6) the importance of positive mental health.

Mental health literacy for parents and families can also be integrated into mental health curricula implemented in secondary schools. This can be achieved by providing families with the information taught to students in the classroom and organizing community meetings with selected teachers, student services providers and local mental health experts to review and discuss the material. Posting the curriculum on the Internet so that families can review the material as their interests and time dictate could supplement the more formal approach. Other parental engagement strategies such as using media to promote the curriculum could be developed to meet different groups' needs. In the case of home-centred schooling where parents play the role of both educators and health gatekeepers, the model provides channels for these parents to participate in mental health literacy programs and therefore enhance their competencies in early identification of youth with mental health problems and refer them for appropriate health care.

In this model, the impact of the curriculum on student and teacher knowledge and attitudes is measured using pre and post tests, delivered just prior to study of the curriculum, immediately following the study of the curriculum and at three to six months following the second evaluation. The use of these pre-post tests allows schools to track the effects of the intervention for both students and teachers over time.

Early identification and prevention, triage, and intervention

Teacher training (gatekeeper training). Educators are well-positioned to first recognize when youth are experiencing mental health problems. Thus, training teachers to refer high risk adolescents to student services providers in the schools for assessment (i.e. to be "gatekeepers") is an approach that may be effective for early identification of mental health problems (Issac et al., 2009). The concept of the gatekeeper to mental health care relies on training of "go-to" teachers – those with whom students easily form relationships and feel comfortable discussing problems. Through gatekeeper training, these go-to teachers are empowered to identify mental health problems in their students, and learn the actions necessary to facilitate referrals to mental health resources within the school or community. A number of studies have documented the

benefits of training educators in the promotion of student mental health (Han & Weiss, 2005; Weist, 2005).

TABLE 1. *Examples of school mental health promotion programs corresponding to the comprehensive school mental health model*

	PROGRAM	TARGET AUDIENCE	PROJECT DESCRIPTION	PARTNERS
MENTAL HEALTH CURRICULUM	Mental Health & High School Curriculum	Students	Mental health curriculum for implementation in Canadian secondary schools. Topics include: stigma; mental health & mental illness; mental disorders; experience of mental illness; seeking help and support; positive mental health	Canadian Mental Health Association IWK Health Centre: Halifax, NS
MENTAL HEALTH LITERACY	Mental Health & High School Curriculum Teacher's Guide	Educators	Educational supplement to support teachers implementing Mental Health & High School curriculum.	Canadian Mental Health Association Laing House: Halifax, NS IWK Health Centre: Halifax, NS
	Transitions: Student Reality Check	Post-secondary students Student services providers Community health providers	Student resource includes topics such as time management, relationships, sexual activity, mental illness, suicide and addictions. Offers students self-help information and contains contacts to campus counseling services and other sources of help.	Orygen Youth Health :Australia
	MH-IN: Mental Health Identification and Navigation*	Educators Student services providers School health services providers School administrators Parents Community health providers Community stakeholders Policymakers	Training in topics including mental health, mental disorders, identification of at-risk students, navigation within mental health system	Nova Scotia Department of Education: Halifax, NS South Shore Regional School Board: Bridgewater, NS South Shore District Health Authority: Bridgewater, NS IWK Health Centre: Halifax, NS
GATEKEEPER TRAINING	Understanding Adolescent Suicide and Depression	Educators Student services providers School health services providers School administrators Community health providers	Training in topics including symptoms, physiology, causes, identification and treatment of depression and risk factors, prevention, and screening for suicide risk.	IWK Health Centre: Halifax, NS

*MH-IN contains aspects of both mental health literacy and gatekeeper training

A gatekeeper training program for teachers based on the principles noted above has been developed and field-tested among identified go-to teachers in Nova Scotia. It provides training in the identification and support of young people experiencing mental health problems. It also links the go-to teachers with student services providers in their own institutions, thus increasing the likelihood that students who are identified as in need of mental health support will move seamlessly to appropriate care systems. A course syllabus and web portal designed to provide additional useful mental health information is currently under development (www.teenmentalhealth.org).

Student services provider training. Student services providers include guidance counsellors, psychologists, social workers, or other school-based professionals. In schools that have a teen health center or similar resource, the clinic staff may also be involved as student services providers. In this model, when young people have been identified by go-to teachers as likely in need of mental health support, they are referred to student service providers for a more comprehensive assessment, and if necessary, are subsequently referred to outside health care providers. In addition, student service providers continue to support teens who are receiving mental health care in the community by liaising between the school and mental health care providers (primary and specialty services) to ensure that the students' transition through these systems is optimized.

For student service providers to share a common language and level of understanding amongst themselves and the go-to teachers, all student service providers, regardless of professional affiliation, receive further training in this model. Topics in the training include: distinguishing mental disorders from mental distress; suicide risk assessment; cognitive- and interpersonal- based supportive psychological interventions; understanding medications used to treat mental disorders; use of instruments for case identification and ongoing monitoring of psychiatric symptoms. Additionally, local referral patterns for primary care and mental health specialty services are identified, reviewed, and integrated.

In this model, the impact of the training for gatekeepers and student service providers is undergoing evaluation using pre and post tests of knowledge and attitudes delivered before the training, immediately after the training, and at three to six months following the second evaluation. The use of these pre and post tests allows schools to track the effects of the intervention for both gatekeepers and student service providers over time.

A sister program, to the gatekeeper training for teachers described above (Understanding Adolescent Depression & Suicide), also developed by the Sun Life Financial Chair in Adolescent Mental Health team, has been delivered to over 700 student service providers in five Canadian provinces (British Columbia, Alberta, Ontario, New Brunswick, and Nova Scotia). The program provides participants with a critical understanding of depression and suicide

and an evaluation of various clinical and public health approaches to these issues. Through the program, participants learned to use scientific evidence to review and evaluate interventions, and were trained to apply useful clinical tools to identify youth who are at high risk and who need referral to health professionals. Results of this program show significant increase in knowledge about depression and suicide after training (Szumilas & Kutcher, 2007).

An important component of the training programs in this model is the provision of contact information to local services so that referrals can be made and that ongoing communication between health providers and educators is maintained. Depending on the site, this information may include resources for primary care, mental health services, and non-government organizations. Local providers from these groups participate in the customization and delivery of this training program to best accommodate their needs. Thus both primary care and specialty mental health resources that are consistent with the local situation are identified and embedded into the model, making it applicable across Canada.

Primary care provider training. Primary care providers (PCPs) are frequently the first point of contact for youth seeking help with health problems, and increasingly there is a need for PCPs to provide young people with treatment for mental health (Canadian Collaborative Mental Health Initiative, 2005; Cheung, 2007) . With appropriate training, PCPs can play a critical role in the identification of youth at risk of developing mental disorders and in the diagnosis and treatment of these disorders. By virtue of their position as first-contact care providers in the community, PCPs (such as family physicians and nurse practitioners) can also work closely with schools and mental health professionals to promote youth mental health.

A needs-based youth mental health training program for PCPs based on this model is currently being developed by our group. In addition, a comprehensive primary care youth depression program (Identification, Diagnosis and Treatment of Adolescent Depression) is currently available (www.teenmentalhealth.org) and is being prepared for use as a nationally accredited primary care Continuing Medical Education (CME) training program. Prior to the implementation of this pathway, primary care providers are consulted to identify any specific training needs which then can be provided by staff from the specialty mental health services. This is consistent with health care delivery across Canada and serves to enhance the linkage between primary and specialty mental health services.

Knowledge upgrading for mental health professionals. Providing mental health professionals with the latest information on treatment strategies is essential to the effective treatment of mental disorders in youth. These strategies can include training in evidence-based psychotherapies and introduction to new pharmacotherapeutic treatments, however specific topics would be determined

based on results of local needs assessments. An information session catered to the needs and resources available in each community could serve as venues in which mental health professionals could be linked to schools and other community organizations. Furthermore, it will enhance the collaboration between the school and the health care for the ongoing care of youth with mental disorders.

Development of an integrated "School-based Pathway to Care" model: Processes for coordination and collaboration between schools and their communities

Through the development and application of mental health literacy and training programs for all stakeholders, an integrated pathway to care is established which promotes mental health, identifies students at risk for mental disorders, facilitates their referral to health care providers, and assists in their integration into the regular school setting once interventions have been initiated. The pathway to care begins with the application of curricula to improve mental health literacy in students, teachers, and parents/guardians. It then proceeds to gatekeeper training for go-to teachers that increases their capacity to identify vulnerable students, and when appropriate, refer them to student service providers. Student service providers, with competencies enhanced by training, are able to better support students who demonstrate substantial mental health problems or mental disorders and to assess and refer those who suffer from mental disorders requiring clinical interventions to health care providers. The pathway to care model continues to provide primary care providers with training that enhances their ability to diagnose and treat common mental disorders and to refer those who need further support to specialty mental health services. The training and collaboration established through the model also benefit other health providers at various levels of health care systems, and assist them to learn how to best communicate and cooperate with schools to promote youth mental health, facilitate successful rehabilitation of students with mental disorders and help them back to schools. Figure 1 depicts how the model loop starts with and closes at students when different levels of both education and health systems work collaboratively.

Evaluation

Another key component of the model is to ensure quality and sustainability through evaluation of desired outcomes, such as changes in knowledge, attitudes, help seeking behaviours, referral process, referral outcomes, and ongoing collaboration. Our team is planning a controlled experimental design of the model that will address these issues as well as engage experts to help us better understand if this approach is both effective and cost-effective. Components of this evaluation have been described above and can be embedded into usual quality assurance assessments conducted by educators and can be customized to local needs. In this way, the model can be adopted by schools and they can determine how well it is working in their jurisdiction. Through this research

study, we also expect to establish measures with strong reliability and validity to evaluate knowledge, attitudes and behaviors. Qualitative program evaluation could be performed at designated times (such as yearly) in collaboration with all stakeholders including students, educators, health providers and policy makers to identify program strengths and weaknesses and modify the model to best meet communities' needs.

Evaluations may also be able to identify barriers to implementation, which if addressed and modified as the model is being applied, may lead to success. It is essential that future application of and research about the "Pathway to Care" address not only outcomes, but barriers as well.

CONCLUSION

Secondary school mental health programs have great potential to improve youth mental health if they be based on a well-conceived, cohesive, theoretical and evidence-based framework. Such programs will also establish a framework that addresses the variety of mental health needs from mental health promotion to case identification, triage, and referral; and from ongoing support within the school setting to the engagement of parents and the wider community. The model presented here meets those criteria, is consistent with the national and local realities of Canadian health and education systems, and encourages collaboration and sharing of information among organizations, agencies, and institutions across all sectors serving young people. And it requires the development and implementation of practices which enhance partnerships among schools, parents, health providers, and community organizations. The potential results: students with mental disorders appropriately identified, referred to health systems, provided with proper treatments and seamlessly returned to their schools – fully supported on their path to recovery.

Due to its comprehensive and flexible nature, the "School-based Pathway to Care" model lends itself for use in many different systems. It is an innovative approach to current mental health service delivery in Canada as it provides a promotion to care continuum that integrates existing education and health system silos. This addresses the needs of young people as the core focus and its flexibility is a strength in a federation such as Canada where each province may be able to fit the model to its own realities. Similarly, it may be considered for application in the international context in those locations where education and health care systems are relatively well developed and there is interest in adapting the model to local needs.

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