

Brief Communication

The Feasibility of a Mental Health Curriculum in Elementary School

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Objective: To establish the feasibility and short-term impact of implementing a novel curriculum, in a linguistically and geographically isolated francophone community, to enhance elementary schoolchildrens' knowledge and attitudes regarding mental health (grades 1 to 7; $n = 158$).

Methods: The project team developed a curriculum that covered expected emotional development, depression, anxiety disorders, and attention-deficit hyperactivity disorder (ADHD) to be delivered by the school's usual teachers. Committee members led focused discussions (grades 1 to 7) and administered evaluation questionnaires (grades 4 to 7) surveying students' knowledge and attitudes before and after implementation.

Results: Teachers were enthusiastic about the project. Parents were initially skeptical, but posthoc interventions by school staff secured participation consent for 98% of the students. Baseline data (for grades 4 to 7) revealed little knowledge and some negative attitudes regarding mental illnesses; postprogram data indicated improved knowledge and suggested improved attitudes.

Conclusions: The project was made feasible by the high degree of involvement of local community members. Childrens' (grades 4 to 7) mental health awareness and understanding was enhanced by the curriculum. Effects on help-seeking behaviour and case identification have yet to be assessed.

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Information on funding and support and author affiliations appears at the end of the article.

Clinical Implications

- Elementary schoolchildren are receptive to customized educational material on mental health, depression, anxiety, and ADHD, when delivered by their usual teachers.
- The knowledge and attitudes of students in grades 4 to 7 can be improved with a mental health curriculum.
- Increased knowledge of symptoms of mental disorders could enhance early help-seeking behaviour.

Limitations

- We did not include control subjects in this preliminary study.
- Self-reported attitudes, although submitted anonymously, may reflect what children perceived to be desired attitudes rather than their actual attitudes.
- Because of budget and time constraints, we conducted the follow-up assessment shortly after the end of the program. It remains to be examined how long the improvements in knowledge and attitude will persist and whether help-seeking behaviour increases as a result.

Key Words: *education, intervention, children, depression, anxiety, attention-deficit hyperactivity disorder*

Most mental health disorders onset in childhood and adolescence (1). Depression, anxiety, and behavioural disorders such as attention-deficit hyperactivity disorder (ADHD) collectively affect 15% to 20% of youngsters (2). Unresolved mental health problems lead to learning problems, decreased academic performance, more truancy and dropping out, and special education referral (3). Early identification and early effective intervention can improve short- and long-term outcomes (4–7). However, available data indicate that most youngsters with treatable mental disorders are not correctly identified and not appropriately treated (8–11).

Stigma surrounding mental illness remains a significant barrier to help-seeking behaviour, case recognition, and effective treatment (12,13). Dispelling stigma requires community education programs, including school programs, that aim to improve early recognition of the problem, encourage early help-seeking behaviour and create a supportive environment for the individual (14). Extracurricular interventions in elementary schools have been found to decrease the use of special education and conduct problems, to improve academic skills, and to increase positive peer interactions and parent involvement in school (15).

Our project assessed the feasibility of incorporating a mental health curriculum at the elementary level to be taught by schoolteachers. We describe the development, delivery, and short-term impact of this pilot project on childrens' knowledge and attitudes. A francophone rural community within a predominantly anglophone province was chosen, because the community has less access to valid mental health information.

Method

Sample

The sample consisted of all students of a francophone elementary school in rural Nova Scotia, except 3 fifth graders whose parents denied consent for their participation ($n = 158$, distributed evenly across the 7 grades). All participating students who were in school on the allotted assessment days took part in baseline and postcurriculum assessments.

Procedure

The steering committee consisted of 2 of the authors and invited representatives of the target community: a francophone teacher consultant, the principal and vice principal of the participating school, a parent, 3 high school students, and local representation from 6 regional and national health and education organizations. The curriculum was developed in English and translated into French by professional translators. The content was refined to be age-appropriate for 4 grade groups: grades 1 and 2, grade 3, grades 4 and 5, and grades 6 and 7.

The teachers attended a full-day training workshop at the September 2001 professional development day. The project's main objectives, the students' key learning objectives, and the curriculum were detailed.

We obtained the written consent of parents or guardians prior to students' participation in the curriculum. Local committee members played a critical role in obtaining consent by addressing hesitant parents' concerns regarding this controversial subject. The teachers implemented the curriculum in 4 hourly sessions each week for 16 weeks, replacing the usual health program.

We assessed students' baseline and postintervention knowledge and attitudes by means of age-appropriate individual questionnaires (grades 4 to 7) containing self-rated and objective assessments of knowledge and attitudes, as well as by focus group discussions (grades 1 to 7). Baseline assessments of students' knowledge and attitudes were repeated 1 to 2 weeks postcurriculum. Committee members led midcurriculum discussions with teachers and a postcurriculum discussion with teachers and parents to explore observed changes in students' knowledge and attitudes. An independent evaluator compiled and analyzed the data.

The Curriculum

The curriculum contained 4 modules: expected emotional development, depression, anxiety disorders, and ADHD. Key messages were imparted didactically and through interactive activities designed to elicit thinking and discussion about the issues and to reinforce new information. Key messages included new terminology, information to dispel common misconceptions, warning signs and symptoms related to each disorder, and guidelines on what to do when such symptoms are recognized.

Results

Grades 1 to 3

Students in grades 1 to 3 who voiced opinions at baseline could provide examples of when they might feel particular emotions (such as sadness or fear) or act in particular ways (that is, doing something inappropriate without thinking). At baseline, students in grade 1 indicated that they would talk with an adult about feeling scared more readily than about feeling sad. We noted qualitative postcurriculum improvements in first graders' reported attitudes toward seeking immediate help from a trusted adult when feeling sad and in all 3 grades when having trouble learning (this suggests improvement when compared to baseline responses of waiting until they got into trouble and were punished). Qualitative comparison of the 3 grades' baseline responses suggested that first-grade students were more likely to talk to an adult about

problem feelings or behaviours than were second- or third-grade students and that students in grade 2 would seek help more quickly than would students in grade 3. Postcurriculum responses reinforced these impressions.

Grades 4 to 7

Of the students in grades 4 to 7, 92 and 84 were present for baseline and postcurriculum assessments, respectively; those absent, presumably because of illness, were not assessed.

Postcurriculum questionnaires revealed that most students (80% to 89%) self-rated their knowledge of 4 aspects of mental health and mental illness as improved or much improved. Postcurriculum response rates to all questions were significantly higher than at baseline (when nonresponses were common). Further, significantly more correct responses (χ^2 , $P < 0.05$) were obtained postcurriculum in questions probing the following facts regarding anxiety and ADHD: the occurrence of these disorders in children; the recovery of people with these disorders; characteristic symptoms; and appropriate actions to take when symptoms are recognized. Knowledge of anxiety and ADHD prevalence rates did not change significantly. Prevalence (unpaired t -test, $P < 0.05$) was the only aspect of knowledge about depression that showed statistically significant improvement.

Compared with baseline, significantly more students responded and agreed that it was important to know about each of the disorders (χ^2 , $P < 0.05$). Likewise, significantly more students at postcurriculum indicated that they would befriend someone with either anxiety or ADHD than indicated at baseline, and fewer students indicated that they would not befriend such a person. The only tested attitude that did not show change was whether students would befriend someone with depression. This null result was attributable partly to compassionate attitudes being fairly common at baseline, but also to some residual stigma surrounding depression.

Teachers' Midcurriculum Feedback

Teachers reported that students in grades 1 to 3 learned keenly about mental health and showed no reticence in discussing their feelings with teachers. Students in grades 4 to 7 were also receptive to learning about mental health but were less open to discussing their feelings with teachers. One teacher reported that a child with a disorder featured in the curriculum now felt less shame about the disorder and about taking medication for it and that the classmates were now more accepting of this student.

Parents' Feedback

Some parents reported noticing improvements in their children's knowledge or attitudes. For example, one parent reported that the child realized, unaided, that an aunt had panic

attacks, and several parents confirmed that classmates were more accepting of the aforementioned child with the disorder.

Discussion

We examined the implementation feasibility of a mental health curriculum in a linguistically and geographically isolated francophone community in Nova Scotia, by assessing the short-term impact on elementary schoolchildren's (grades 1 to 7) knowledge and attitudes (that is, stigma) regarding mental health and common mental illnesses.

Involving local community members in the project from start to finish was critical to the project's success. The school staff cooperation was excellent. We obtained objective, subjective, and anecdotal evidence indicating improvements in knowledge and attitudes of students in grades 4 to 7, particularly regarding anxiety and ADHD. We also observed improved knowledge of help-seeking behaviour strategies (in students grades 4 to 7). We observed qualitative indications that with increasing age across all 7 grades, children were more reluctant to ask for help, more inhibited discussing their emotions, and more inclined to harbour negative baseline attitudes about mental health disorders. If school programs on mental health were started at entry level, attitudes of stigma could be lessened.

Long-term goals should be to incorporate mental health information into regular school curricula, along with an expanded school-based mental health service (16,17), primary care education, or other care continua where children would have ready access to appropriate resources.

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