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Teaching children's mental health to family physicians in rural and underserviced areas

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Objective: To evaluate a curriculum for teaching family physicians (FPs) in rural and underserviced areas about children's mental health, and to evaluate a collaborative model of teaching using child psychiatrists and FPs.
Methods: A child psychiatrist and a rural FP provided training to rural FPs in attention-deficit/hyperactivity disorder (ADHD) and disruptive behaviour disorders (DBDs). Training consisted of a half-day workshop in 11 communities located in southwestern Ontario. Workshops included didactic teaching, observation of standardized videos demonstrating interviewing skills, and interactive discussion. Participants completed pre- and posttraining questionnaires about their confidence in managing these conditions, and completed standardized questionnaires on the effectiveness of the workshop and videos. One month after the training, participants were randomly assigned to receive individual interviews. Three months later 2 questionnaires were mailed to participants for evaluation of their confidence after their training and for evaluation of the impact on their practice.
Results: Fifty-six FPs attended the workshops and, of these, 80% completed the study. Family physicians reported improved confidence in their abilities to diagnose and treat ADHD and DBDs after the training.
Conclusion: Didactic presentations by child psychiatrists and FPs, followed by video examples of interviewing skills, and informal discussions with small groups, was found to be an effective curriculum for teaching rural FPs about children's mental health.

Objectif : Évaluer un programme de formation en santé mentale des enfants à l'intention des médecins de famille des régions rurales et sous-desservies, ainsi qu'un modèle de formation fondé sur une collaboration entre pédopsychiatres et médecins de famille.
Méthodes : Un pédopsychiatre et un médecin de famille rural ont offert à des médecins de famille ruraux une formation sur le trouble déficitaire de l'attention avec hyperactivité (TDAH) et les troubles de comportement perturbateurs (TCP). Cette formation a pris la forme d'ateliers d'une demi-journée offerts dans 11 communautés du sud-ouest de l'Ontario. Les ateliers incluaient l'enseignement de notions théoriques, le visionnement de vidéos standardisées, une formation sur les techniques d'entrevues et une discussion interactive. Les participants ont répondu à des questionnaires avant et après la formation portant sur leur degré de confort vis-à-vis de la prise en charge de ces troubles et ils ont répondu à des questionnaires standardisés sur l'efficacité de l'atelier et des vidéos. Un mois après la formation, on a assigné aléatoirement les participants à des entrevues individuelles. Trois mois plus tard, on a posté aux participants 2 questionnaires sur leur degré de confort après la formation et sur l'impact de la formation sur leur pratique.
Résultats : Cinquante-six médecins de famille ont participé aux ateliers et parmi eux, 80 % ont mené l'étude à terme. Les médecins de famille ont dit qu'après avoir suivi la formation, ils avaient acquis une plus grande confiance en leur capacité de diagnostiquer et de traiter le TDAH ou les TCP.
Conclusion : Des exposés théoriques des pédopsychiatres et des médecins de famille suivis d'exemples vidéos de techniques d'entrevues et de discussions informelles par petits groupes ont constitué un programme efficace de formation en santé mentale des enfants à l'intention des médecins de famille ruraux.

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INTRODUCTION

Many shared care initiatives have occurred between psychiatrists and family physicians (FPs) in Canada,[1–4] and there has been a growing interest in the area of children's mental health.[5–7] Child and adolescent mental health problems are the leading health problems that face Canadian children after infancy.[8] Since child psychiatrists are concentrated in large urban centres, FPs in rural and underserviced areas are essential for the assessment and treatment of children and adolescents with mental health problems.[9]

Child and adolescent mental health problems are prevalent, with 1 in 5 children having a diagnosable emotional and/or behavioural disorder.[10] It is estimated that 15%–20% of young people with psychologic or psychiatric problems are seen in primary care.[11]

A survey of child and adolescent mental health training in Canadian family medicine residency programs revealed minimal teaching of child psychiatry.[12] Since physician competency in the psychosocial aspects of medicine is most strongly related to residency and not to postresidency experience,[13] it is logical to assume that most FPs do not feel adequately equipped to detect and manage common child psychiatry problems.

This absence of training in child psychiatry is consistent with studies of FPs in other countries. These studies have indicated FPs feel uncomfortable, unskilled[14,15] and inadequately trained to diagnose child and adolescent psychiatric disorders.[16–20]

To determine the educational needs of FPs in the area of child and adolescent mental health, a cross-sectional cohort of FPs living in rural and underserviced areas of southwestern Ontario were surveyed with respect to their confidence, knowledge and skills in managing children's mental health problems.[7] The majority (84.3%) of respondents felt they needed more training in child and adolescent psychiatry. Of the respondents who wanted more training, most suggested the following: 1) continuing medical education (CME) in the community; 2) small-group teaching by a child psychiatrist; and 3) self-instructional packages. When FPs were asked to rank topics in child psychiatry in order of importance, behavioural disorders, attention-deficit/hyperactivity disorder (ADHD), problem adolescents and interviewing skills were ranked the highest. Based on the results, a curriculum for a half-day workshop was developed by child psychiatrists and primary care physicians to teach small groups of FPs in their own communities.

METHODS

Family physicians located in 11 rural and underserviced communities in southwestern Ontario interested in the management of child and adolescent mental health problems participated in this study.

About 3 months before the workshop date, invitations were mailed to FPs to participate in the study. Included with the invitation were a letter of information and consent, the workshop agenda, learning objectives, and a preaddressed and postage-paid envelope. A telephone follow-up was done for those who did not respond.

The 3.5-hour workshop, which was accredited by the College of Family Physicians of Canada, consisted of a teaching module focusing on ADHD, oppositional defiant disorder (ODD), conduct disorder (CD) and interviewing skills in children and adolescents. An FP and a child psychiatrist provided the teaching. Teaching involved a didactic presentation followed by 2 videos showing an interview of a child with ADHD and an adolescent with ODD and CD. This was followed by an outline of questions for discussion. The interviewers in the videotapes were child psychiatrists, and the child and adolescent were standardized. ("Standardized patients are trained actors who portray patients during an interview and physical examination with a medical student or doctor in training."[21]) Each participant received a reference booklet at the beginning of the workshop.

Before the start of the teaching each participant was asked to rate their confidence on a 4-point Likert scale. A questionnaire was administered before the training, which included questions about the impact of ADHD and ODD in their practice, physician confidence level and barriers to treatment. Immediately after the training session questionnaires were administered to assess the effectiveness of the educators and videotapes.

About 1 month after the workshop, telephone interviews were conducted on a random basis by an independent interviewer in reference to the educational usefulness of the workshop, the most effective and least effective part of the educational experience, suggestions for future workshops, and other comments. About 3 months after the workshop, 2 questionnaires were mailed to all participants attending the workshop to evaluate their posttraining confidence in their ability regarding the learning objectives, and the degree to which they thought the training improved their ability; and to evaluate the impact of the workshop on their practice, change in treatment practice, barriers and suggestions.

The module was evaluated quantitatively and qualitatively. Statistical Package for the Social Sciences (SPSS, Inc.) was used for quantitative frequency data. Telephone interviews and responses to open-ended questions were coded and categorized in a repetitive fashion using a systematic process to extract and interpret themes and illustrative quotes.[22,23] Frequency of categories and themes was calculated and 2 raters were used to establish interrater reliability of the themes identified from a sample of the telephones interviews.

RESULTS

Invitations were mailed to 574 rural FPs in southwestern Ontario, and 30% of the FPs responded. Of those who responded, 39% agreed to participate in the study. Out of the 67 FPs who consented to participate in the study, 84% attended the workshop; and out of the 56 who attended the workshop, 80% completed the study. The evaluations are based on 45 FPs who completed the study. Eleven communities participated. Greater than 70% of FPs rated the educators "very good to excellent." Most said the seminar met the stated goals and objectives. At least 60% of FPs rated the handouts and references supplied as "very good to excellent." Most of the FPs rated the 2 videotapes as "good to very good." Pre- and posttraining confidence levels for all learning objectives, including knowledge, attitude and skills, are reported in Figure 1. Results show that there was an increase in "somewhat confident" responses in all learning objectives.

Pre- and posttraining questionnaires

Out of 45 FPs completing the study, 33 physicians answered the MAINPRO-C pre- and posttraining questionnaires. Before the workshop FPs reported concerns with diagnosis, assessment, management, medication, referrals, time constraints, and demands from parents and schools. After the workshop FPs reported using better interviewing techniques and reported using ADHD scales. Family physicians' confidence increased in diagnosis and treatment, specifically for ADHD. Some FPs were more confident in prescribing medication. Other FPs gained more confidence in treatment and prescribing medication. There was still a need for ongoing information in ODD, interviewing, assessing and identifying,

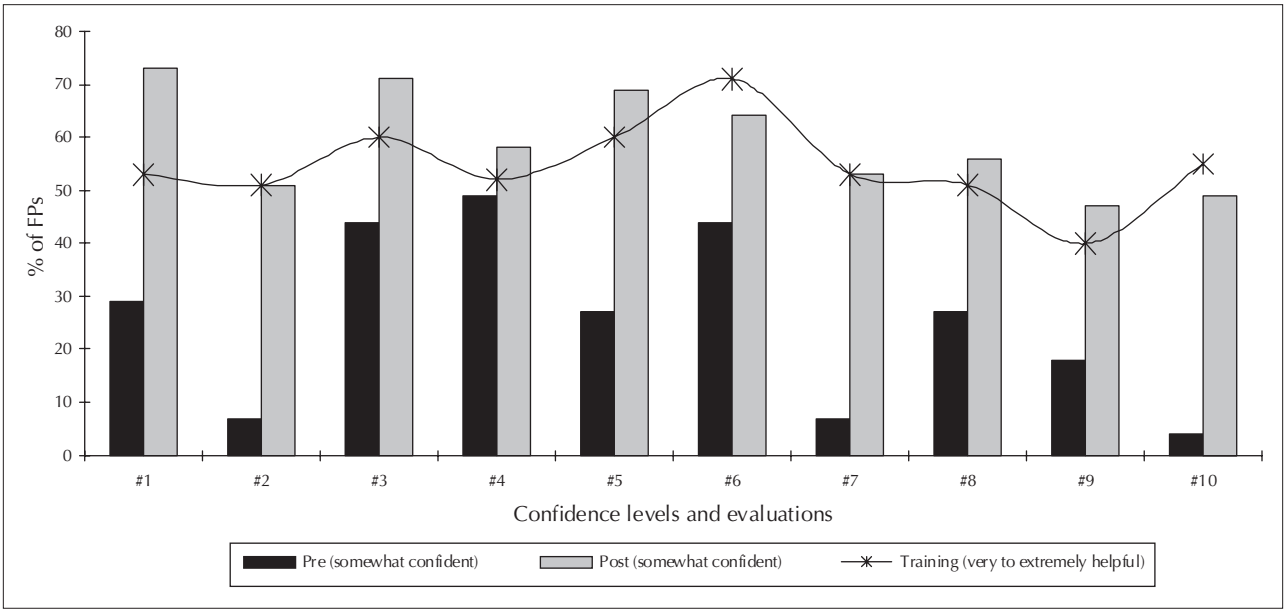


Fig. 1. Overall frequency percentage of pre- and posttraining confidence levels and posttraining evaluation of the workshop by 45 family physicians (FPs) completing the study, based on a 4-point Likert scale.
Knowledge: #1 = Describe the disruptive behaviour disorders; #2 = Develop a management plan for the child or adolescent with a disruptive behaviour disorder and their families; #3 = Describe the indications for referral to a psychiatrist or children's mental health professional.
Attitude: #4 = Appreciate the interacting biological, familial, social, cultural and psychological factors in the generation of disruptive behaviour disorders; #5 = Understand the factors that place a child or adolescent at risk for disruptive behaviour disorders both within the child or adolescent, and in the child or adolescent's environment; #6 = Recognize the importance of the role of the FP in the detection of disruptive behaviour disorders in children and adolescents.
Skills: #7 = Competently interview children and adolescents; #8 = Differentiate transient adjustment problems from more severe disruptive behaviour disorders; #9 = Differentiate individual from family problems; #10 = Manage a child or adolescent with a disruptive behaviour disorder.

managing, treating and medicating individuals with ADHD. Some FPs were still unsure of how to resolve problems with family conflict, family counselling, crisis management and access to new expensive drugs for financially disadvantaged families. Barriers in introducing new knowledge and skills, patients' reluctance to receive treatment, and parents' fears and lack of understanding of the disorders were still common issues. Family physicians suggested a need for more written material to keep information up to date, and education materials for parents, teachers and other health care professionals. Other suggestions included access to family counselling, specialist referrals when needed, local resources that used a team approach, and collaboration with the children's mental health network, along with a regional resource list of private and public services.

All respondents believed that the workshop was a good educational experience, very practical and well presented. Discussions and didactic information stood out as key features of the teaching experience. It was helpful to share other colleagues' problems and solutions, to review the criteria for diagnosing, monitoring and intervention, and to share feedback from the presenters.

DISCUSSION

This study is the first to evaluate a curriculum in which a child psychiatrist and a rural FP taught FPs in rural and underserviced communities in a half-day workshop about children's mental health. The curriculum was effective as a learning experience and FPs who participated believed their confidence in knowledge, skills and attitudes for the treatment of ADHD, ODD and CD improved.

Because of their significant practice workload, one of the challenges for FPs working in rural and underserviced communities is attendance at CME activities. Family physicians prefer learning in small groups in their home community.[24,25] In this study, although the workshop was delivered in the FPs' home communities, only 10% of all local FPs participated in the educational workshop. A combination of "home town" presentations and "rural conference" presentations might be explored. In addition, supplementing the CME opportunities with other types of learning opportunities such as shared mental health care clinics, telepsychiatry, outreach and guidelines for FPs would be beneficial.[26]

The primary strengths of the workshops were the opportunity for small-group attendance with a combination of didactic teaching and discussion. Physicians were able to relate to the problems and solutions of other FPs and were able to ask a child psychiatrist specific questions about their practice. Previous studies on teaching FPs about mental health have also indicated that a group setting is indispensable for achieving effective feedback[27] and that it is important for participants to raise questions and discuss problems that arise in their own clinical practice.[28] Incorporating multiple strategies,[27] which was done in our study, by combining didactic teaching, videotapes to simulate cases and small group discussion, is recommended for CME activities with FPs. Having the sessions co-facilitated by a child psychiatrist and an FP who practised in a rural community appears to have led to a greater understanding of local demands. The importance of having the teaching co-facilitated by a psychiatrist and an FP has not been cited in the literature as a critical element. Rural FPs are able to relate to the rural FP who is facilitating with the child psychiatrist. Family physicians provide an opportunity to stimulate discussions, as the FP facilitator has the first-hand experience and insight to emphasize and relate to rural practice. The child psychiatrist can bring the expertise in child and adolescent mental health. Having a child psychiatrist meet a number of FPs in a half-day workshop in the FPs' rural community reaches more FPs and their patients compared with a psychiatrist seeing 1 patient at a time. To have workshops face-to-face is a more informal approach which may lead to more open discussion and sharing of experiences.

Based on the results of the needs assessment in rural and underserviced areas of southwestern Ontario[7] the curriculum for the half-day workshop was developed by primary care physicians and psychiatrists, which has also been cited in the literature as a key element for an ideal CME activity.[28] Objectives were created for each of the domains of knowledge, skills and attitudes.[28]

Videotapes were developed to be representative of referrals that child and adolescent psychiatrists had obtained from FPs. The videotapes did stimulate questions and discussions about interviewing skills with a child or adolescent. One way in which the curriculum studied could have been enhanced would be to have the FPs practise new skills under observation[28–30] and then provide individualized feedback.[27]

Another strength of the study was that the workshop was evaluated both quantitatively and qualitatively. The participants were not only asked

about their satisfaction with the workshop, the teachers and the tools provided, but also whether they believed their confidence in their knowledge, skills and attitudes had improved as a result of the workshop.

Since there are very few studies addressing the teaching of FPs in rural and underserviced communities, and few studies addressing the teaching of FPs about child and adolescent mental health issues, we plan to complete a needs assessment in several provinces in Canada to determine what FPs in rural communities would like to learn more about in the area of child and adolescent mental health and how they would like to learn. Following the needs assessment various currriculae will be developed based on the results of each province's needs assessment that will incorporate the key elements of adult learning principles and evaluation quantitatively and qualitatively.

CONCLUSION

The findings of this study suggest that didactic presentations followed by video examples of interviewing skills, and informal discussions with small groups were an effective curriculum. Small groups having face-to-face encounters motivates discussions and brings about the sharing of experiences and solutions. The other key features were to provide a CME activity in the FPs' home community and to have both a rural FP and a child psychiatrist facilitate the teaching.

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