Treatment and follow-up of anxiety and depression in clinical-scenario patients

Survey of Saskatchewan family physicians

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Abstract

Objective To explore family physicians' recommendations for treatment of, and number of weeks to first follow-up visit for, clinical-scenario patients presenting with symptoms of either a major depressive episode (MDE) or generalized anxiety disorder (GAD), as well as physicians' perceived barriers to optimal care for these patients.

Design Cross-sectional survey.

Setting Saskatchewan.

Participants A total of 331 family physicians practising in Saskatchewan as of December 2007.

Main outcome measures Type of treatment and number of weeks to first follow-up visit recommended for clinical-scenario patients, as well as family physicians' barriers to providing optimal care.

Results The response rate was 49.7% (331 of 666 surveys returned). Most physicians recommended treatment of the GAD-scenario patient (93.7%) and the MDE-scenario patient (90.1%). Most physicians recommended immediate (65.6%) rather than delayed (28.1%) treatment of the GAD-scenario patient, and immediate (55.6%) rather than delayed (34.5%) treatment of the MDE-scenario patient. Pharmacotherapy alone (26.3%) was the most commonly recommended immediate treatment of the GAD-scenario patient; combination pharmacotherapy and counseling (15.8%) was the most commonly recommended immediate treatment of the MDE-scenario patient. Most physicians recommended that the first follow-up visit occur within 2 weeks for the GAD (79.4%) and the MDE (82.5%) clinical-scenario patients. Physicians were more likely to identify themselves rather than patients and the health care system as barriers to providing optimal care to the GAD (39.4%) and the MDE (39.8%) clinical-scenario patients.

Conclusion Most family physicians recommend immediate treatment and early follow-up for patients presenting with symptoms of GAD or MDE. Physician-related barriers outweigh patient and health system barriers to providing optimal care to patients with common psychiatric disorders.

EDITOR'S KEY POINTS

- This study explored family physicians' recommendations for types of treatment and number of weeks until first follow-up for clinical-scenario patients presenting with symptoms of either a major depressive episode or generalized anxiety disorder, as well as physicians' perceived barriers to providing optimal care to these patients.
- Most family physicians suggested immediate treatment, as well as follow-up within 2 weeks, to patients with symptoms of these common psychiatric disorders.
- Family physicians most often cited a lack of time on their part, patient noncompliance, and poor or no access to counseling as challenges to providing optimal care to such patients.

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Traitement et suivi suggérés dans le cas de scénarios cliniques d'anxiété et de dépression

Enquête auprès de médecins de famille de la Saskatchewan

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Résumé

Objectif Établir ce que les médecins de famille recommandent comme traitement et comme nombre de semaines précédant la première visite de suivi pour des scénarios cliniques de patients présentant les symptômes d'un épisode de dépression majeure (ÉDM) ou d'un trouble anxieux généralisé (TAG), de même que ce qu'ils entrevoient comme obstacles au traitement optimal de ces patients.

Type d'étude Enquête transversale.

Contexte La Saskatchewan.

Participants Un total de 331 médecins de famille pratiquant en Saskatchewan en décembre 2007.

Principaux paramètres à l'étude Recommandations des médecins concernant le type de traitement pour les scénarios cliniques et pour le nombre de semaines précédant la première visite de suivi, et les obstacles s'opposant au traitement optimal de ces types de patient.

Résultats Le taux de réponse était de 49,7% (331 sur 666). La plupart des médecins recommandaient un traitement pour le patient du scénario de TAG (93,7%) et pour celui du scénario d'ÉDM (90,1%). La plupart recommandaient un traitement immédiat (65,6%) plutôt que différé (28,1%) pour le patient du scénario de TAG, et un traitement immédiat (55,6%) plutôt que différé (34,5%) pour celui du scénario d'ÉDM. Le traitement immédiat le plus fréquemment recommandé dans le cas du scénario de TAG était pharmacologique (26,3%); dans le cas du scénario d'ÉDM, le traitement immédiat le plus souvent recommandé était une combinaison de médication et de counseling (15,8%). La plupart des médecins recommandaient une première visite de suivi en moins de 2 semaines dans le cas du scénario de TAG (79,4%) et dans celui du scénario d'ÉDM (82,5%). Les médecins étaient plus susceptibles de croire qu'ils étaient eux-mêmes, plutôt que les patients ou le système de santé, responsables des obstacles à un traitement optimal des patients des scénarios de TAG (39,4%) et d'ÉDM (39,8%).

Conclusion La plupart des médecins de famille recommandaient un traitement immédiat et un suivi précoce pour les scénarios de patients présentant des symptômes de TAG ou d'ÉDM. Ce sont plutôt des facteurs liés au médecin plutôt qu'au patient ou au système de santé qui font obstacle à un traitement optimal des patients souffrant de problèmes psychiatriques fréquents.

POINTS DE REPÈRE DU RÉDACTEUR

- Cet article voulait savoir ce que les médecins de famille recommandent comme types de traitement et comme nombre de semaines précédant la première visite de suivi dans le cas de scénarios cliniques de patients présentant les symptômes d'un épisode de dépression majeure ou d'un trouble anxieux généralisé, mais aussi ce qu'ils considèrent comme faisant obstacle au traitement optimal de ces patients.
- La plupart des médecins de famille suggéraient un traitement immédiat ainsi qu'un suivi dans un délai de 2 semaines pour des patients présentant les symptômes de ces problèmes psychiatriques fréquents.
- Les contraintes de temps propres aux médecins de famille, l'inobservance des patients et l'absence ou l'insuffisance d'accès au counseling étaient les obstacles les plus souvent mentionnés comme faisant obstacle à un traitement optimal de ces patients.

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Individuals seeking help for mental health reasons most often consult family physicians.[1] Providing mental health care is a time-consuming process that requires substantial interaction with patients[2] over the course of more than 1 visit.[3] Regardless, family physicians are expected to accurately diagnose and appropriately treat patients presenting with common psychological disorders such as depression and anxiety. However, research based on data from the Canadian Community Health Survey: Mental Health and Well-being (cycle 1.2) reported that during a 12-month period, only 55% of respondents with a 12-month major depressive disorder who had made at least 1 mental health care visit also received care from medical doctors (including psychiatrists) or professional psychological counselors that followed the 2001 Canadian Network for Mood and Anxiety Treatments (CANMAT) guidelines for the treatment of depressive disorders with pharmacotherapy or counseling.[4] A second study, also based on Canadian Community Health Survey (cycle 1.2) data, found that only 37% of respondents with a 12-month anxiety disorder (ie, panic disorder, agoraphobia, or social phobia) who had made at least 1 mental health care visit also received pharmacotherapy or counseling in the general medical sector (eg, from a physician other than a psychiatrist) that met minimal standards of treatment adequacy according to evidence-based criteria.[5]

According to Patten et al,[6] the 2001 CANMAT guidelines "treat the diagnosis of MD [major depression] as a de facto indicator of treatment need" and imply that treatment must immediately follow diagnosis. The 2001 guidelines indicate that a proper diagnosis is essential to the treatment plan and choice of treatment includes antidepressants (pharmacotherapy), psychotherapy, or combinations of psychotherapy and pharmacotherapy.[7] Furthermore, the 2001 CANMAT guidelines recommend that patients be treated for 8 to 12 weeks in order to achieve remission and a minimum of 6 additional months to prevent relapse. Regarding follow-up, "most treatments should lead to some clinical improvement within 4 to 8 weeks,"[7] but the guidelines do not recommend a specific time at which first follow-up should occur.

The 2006 Canadian Psychiatric Association clinical guidelines for the management of anxiety disorders state that "an accurate diagnosis is important before instituting treatment" and "treatment options for anxiety disorders include psychological and pharmacologic treatments."[8] The 2006 guidelines indicate that the choice of treatment is based on the patient's preference, motivation, and capacity to take up treatment, together with the physician's clinical skills and system resources. Regardless of the type of treatment chosen, the patient should receive an adequate trial and be appropriately monitored for at least 12 months. Regarding follow-up, the 2006 guidelines recommend initially monitoring patients with anxiety disorders every 2 weeks.

The challenges that family physicians face in providing optimal care to patients with psychiatric disorders include patient-related issues such as resistance to the diagnosis[9,10] and noncompliance[9-11]; physician-related issues such as time constraints,[9,10,12,13] reluctance to formally diagnose,[9] and knowledge or experience deficiencies[9,10,12-14]; and health care system–related issues such as poor access,[12,14] inadequate specialty services,[11,12,14] and treatment costs.[10,11,14]

The purpose of this study was to explore family physicians' responses to clinical-scenario patients presenting with symptoms of either a major depressive episode (MDE) or generalized anxiety disorder (GAD). These responses included recommended types of treatment, number of weeks until recommended first follow-up, and perceived barriers to providing optimal care.

METHODS

A pilot study of 100 Saskatchewan family physicians and locum tenens physicians was conducted from June to October 2007. The sample was drawn from all Saskatchewan family physicians and locum tenens physicians identified by the Canadian Medical Directory and the mailing list of the College of Physicians and Surgeons of Saskatchewan (N=950) as of May 2007.

The contact list of 950 family physicians used to select the pilot study sample of 100 physicians was updated with the College of Physicians and Surgeons of Saskatchewan mailing list as of December 2007, providing a population of 892 physicians. After excluding the 100 physicians contacted in the pilot study, questionnaires were subsequently mailed to a sample of 792 family physicians and locum tenens physicians actively practising in Saskatchewan. Data were collected from January to April 2008. Eligible participants included family physicians and locum tenens physicians in current full-time or part-time practice, or on leave of absence. Specialists, medical students, residents, retirees, and those employed primarily in nonclinical fields were ineligible. Data collection procedures followed the Dillman tailored design method,[15] emphasizing repeated, personalized contacts and incentives to improve response rates. For this study, physicians were provided an incentive of $10 to complete a questionnaire. This study received approval from the Behavioural Research Ethics Board of the University of Saskatchewan in Saskatoon.

Physicians received an 8-page questionnaire that included 5 parts. In the first part, physicians were asked to review 1 of 2 different clinical scenarios of patients presenting with common psychiatric

disorders. The GAD-scenario patient presented with symptoms that met *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition, text revision,[16] criteria for GAD. Two practising clinical psychiatrists independently agreed that the MDE-scenario patient accurately depicted symptoms of MDE. In the GAD scenario, a 31-year-old male patient presented with symptoms of GAD. In the MDE scenario, a 42-year-old female patient presented with symptoms of MDE. Referring to the scenario, respondents were asked open-ended questions regarding their specific tentative diagnoses, the tests and consultations they would order, the treatment plan they would initiate at this point, and the number of weeks until the first follow-up visit and 2 subsequent follow-up visits, as well as their perceived barriers to providing the best possible care. These items were adapted from an earlier study conducted by Yager and colleagues.[17] Parts 2 and 3 contained questions that are not addressed in the present analysis, specifically questions regarding information and resource use and issues associated with caring for patients with symptoms of depression or anxiety. Parts 4 and 5 of the survey included questions regarding the physician's organizational setting (ie, main patient care setting), as well as personal attributes such as sex and age.

RESULTS

Of the 792 physicians surveyed, 666 were eligible to participate and 126 were ineligible, had moved, had retired, or were deceased. Of the 666 eligible physicians, 129 declined to participate (19.4%), 206 did not respond (30.9%), and 331 returned completed questionnaires. The response rate was 49.7% (331 of 666).

Sample characteristics of respondents to the GAD (N = 160) and MDE (N = 171) clinical scenarios, respectively, were as follows: 74.4% (119 of 160) and 65.5% (112 of 171) were men; mean (SD) age was 50.4 (12.0) and 48.8 (11.6) years; mean (SD) number of years in practice was 20.3 (11.8) and 18.1 (11.4) years; 66.9% (107 of 160) and 66.1% (113 of 171) were in private practice; 20.0% (32 of 160) and 15.8% (27 of 171) were in solo practice; and 26.9% (43 of 160) and 32.2% (55 of 171) were in rural or small-town practice. There were no statistically significant differences in demographic characteristics between the GAD- and MDE-scenario groups.

Treatment

Most physicians (93.7%) recommended treatment of the GAD-scenario patient. As shown in **Table 1**, 65.6% (105 of 160) suggested immediate treatment and 28.1% (45 of 160) suggested delaying treatment until follow-up. In terms of immediate treatment, physicians were most likely to advise pharmacotherapy alone (26.3%) and least likely to advise "other" treatments (1.9%), including diet and exercise changes. When recommended alone or in combination with other types of treatment to be offered immediately, 60.1% (96 of 160) of physicians recommended pharmacotherapy and 37.5% (60 of 160) suggested counseling.

Most physicians (90.1%) also recommended treatment of the MDE-scenario patient; 55.6% (95 of 171) recommended immediate treatment and 34.5% (59 of 171) suggested delaying treatment until follow-up (**Table 1**). Family physicians who advised immediate treatment were most likely to suggest a combination of pharmacotherapy and counseling (15.8%) and least likely to recommend counseling alone (7.0%). Whether offered alone or in combination with other forms of immediate treatment, 39.2% of physicians (67 of 171) recommended pharmacotherapy and 33.3% (57 of 171) suggested counseling.

Table 1. Physicians' suggested treatment plans for GAD and MDE clinical-scenario patients

TREATMENT PLAN	GAD CLINICAL SCENARIO (N = 160), N (%)	MDE CLINICAL SCENARIO (N = 171), N (%)
Immediate*		
• Pharmacotherapy alone	42 (26.3)	22 (12.9)
• Counseling† alone	6 (3.8)	12 (7.0)
• Pharmacotherapy and counseling	40 (25.0)	27 (15.8)
• Pharmacotherapy or counseling plus other‡	14 (8.8)	18 (10.5)
• Other alone	3 (1.9)	16 (9.4)
• Total immediate	105 (65.6)	95 (55.6)
Delayed		
• Pharmacotherapy alone	12 (7.5)	7 (4.1)
• Counseling† alone	3 (1.9)	1 (0.6)
• Pharmacotherapy and counseling	3 (1.9)	6 (3.5)
• Pharmacotherapy or counseling plus other‡	2 (1.3)	3 (1.8)
• Other alone	0	1 (0.5)
• Await results before deciding	25 (15.6)	41 (24.0)
• Total delayed	45 (28.1)	59 (34.5)
No treatment	3 (1.9)	2 (7.0)
No response	7 (4.4)	5 (2.9)

GAD—generalized anxiety disorder, MDE—major depressive episode.
*Statements considered indicative of "immediate" treatment included those that did not refer to delaying treatment, delaying a decision regarding treatment, or awaiting laboratory results.
†Included counseling by a family physician and referral for counseling.
‡Treatment or action other than pharmacotherapy and counseling, such as breathing techniques, reassurance, education, and recommendations of more sun, dietary changes, exercise, diary writing, books to read, meditation, sleep, rest, stress reduction, and sick leave.

Follow-up return

Most physicians recommended that the first follow-up visit occur within 2 weeks for the GAD (79.4%) and MDE (82.5%) clinical-scenario patients (**Table 2**). Approximately 1 in 10 physicians advised that the GAD- (11.3%) and MDE-scenario (10.5%) patients return for follow-up after 2 weeks.

Barriers to optimal care

With regard to physicians' perceived barriers to providing optimal care to the GAD-scenario patient, physicians more frequently identified barriers that concerned themselves (39.4%) than barriers that concerned patients (25.0%) and system access (18.8%) (**Table 3**). The outcome was similar with regard to the MDE-scenario patient: 39.8% (68 of 171) indicated barriers that involved themselves, 21.1% (36 of 171) noted patient issues, and 21.1% (36 of 171) cited system issues.

Physicians considered themselves barriers to optimal care insofar as they were "too busy," required specialist referrals or consultations, and lacked knowledge, skills, or experience. Patient-related barriers to care included noncompliance, resistance to the diagnosis, and the inability to afford treatment. System barriers included limited access to services and long wait times for services from counselors, psychiatrists, and laboratory-testing facilities.

DISCUSSION

This study found that for a patient presenting with symptoms of anxiety or depression, family physicians were much more likely to suggest immediate (65.6% and 55.6%, respectively) rather than delayed (28.1% and 34.5%, respectively) treatment. These findings indicate that family physicians preferred not to wait for patients presenting with symptoms of these common psychological disorders to make return visits before recommending treatment. These findings are consistent with a US study that found only 20% of primary care clinicians recommended watchful waiting in the management of a vignette patient with major depressive disorder.[18] Similarly, Marriott et al reported that US primary care physicians were slightly less likely to suggest watchful waiting (41%) for a vignette patient with major depression than they were to suggest immediate treatment with medication or a specialist referral (45%).[19]

To treat a patient presenting with symptoms of anxiety, physicians in this study were equally likely to suggest immediate treatment by pharmacotherapy alone (26.3%) and a combination of pharmacotherapy and counseling (25.0%). Few physicians in this study suggested immediate counseling alone (3.8%). Other studies have also reported a marked preference for

Table 2. Physicians' suggested length of time to the first follow-up visit for GAD and MDE clinical-scenario patients

TIME ELAPSED UNTIL FIRST FOLLOW-UP	GAD CLINICAL SCENARIO (N = 160), N (%)	MDE CLINICAL SCENARIO (N = 171), N (%)
1 wk or sooner	55 (34.4)	59 (34.5)
1-2 wk	72 (45.0)	82 (48.0)
3-4 wk	8 (5.0)	7 (4.1)
More than 4 wk	10 (6.3)	11 (6.4)
No response	15 (9.4)	12 (7.0)

GAD—generalized anxiety disorder, MDE—major depressive episode.

Table 3. Physicians' perceived barriers to providing optimal care to GAD and MDE clinical-scenario patients

BARRIERS TO CARE	GAD CLINICAL SCENARIO (N = 160), N (%)	MDE CLINICAL SCENARIO (N = 171), N (%)
Any barrier mentioned*	107 (66.9)	111 (64.9)
Physician-related barriers		
• Too busy	28 (17.5)	27 (15.8)
• Requires specialist referral or consultation	12 (7.5)	11 (6.4)
• Does not provide counseling	8 (5.0)	6 (3.5)
• Needs more information	4 (2.5)	7 (4.1)
• Cannot immediately diagnose	1 (0.6)	9 (5.3)
• Needs to rule out organic cause	2 (1.3)	5 (2.9)
• Diagnostic uncertainty	3 (1.9)	3 (1.8)
• Lacks knowledge, skills, or experience	10 (6.3)	1 (0.6)
• Other	7 (4.4)	14 (8.2)
• Any physician barrier	63 (39.4)	68 (39.8)
Patient-related barriers		
• Noncompliant	16 (10.0)	21 (12.3)
• Resists diagnosis	6 (3.8)	9 (5.3)
• Cannot afford treatment	5 (3.1)	7 (4.1)
• Complex condition	6 (3.8)	2 (1.2)
• Condition persists	3 (1.9)	6 (3.5)
• Drug addiction	7 (4.4)	1 (0.6)
• Suicidal	4 (2.5)	3 (1.8)
• History incomplete	2 (1.3)	3 (1.8)
• Wants physical diagnosis	2 (1.3)	1 (0.6)
• Condition is comorbid	2 (1.3)	1 (0.6)
• Other	1 (0.6)	3 (1.8)
• Any patient barrier	40 (25.0)	36 (21.1)
System access–related barriers		
• Counseling	14 (8.8)	16 (9.4)
• Psychiatrist	7 (4.4)	8 (4.7)
• Laboratory results	3 (1.9)	8 (4.7)
• Specialist	1 (0.6)	4 (2.3)
• CBT provider	3 (1.9)	2 (1.2)
• Other	6 (3.8)	7 (4.1)
• Any system barrier	30 (18.8)	36 (21.1)
No response	53 (33.1)	60 (35.1)

CBT—cognitive behavioural therapy, GAD—generalized anxiety disorder, MDE—major depressive episode.
*Respondents might have noted more than 1 barrier; therefore, categories of "any barrier" do not total 100%.

pharmacotherapy over counseling among family physicians treating patients with anxiety disorders. For instance, in a study of GPs in Thailand, Lotrakul and Saipanish found that most GPs (67%) suggested antidepressants to treat a vignette patient presenting with symptoms of both anxiety and depression.[20] Further, in a study of primary care physicians in Turkey, Kartal et al found that physicians strongly preferred pharmacotherapy alone (72%) to counseling (27%) to treat a vignette patient with GAD.[21] Although the 2006 guidelines for anxiety disorders[8] do not recommend one type of treatment over the other, the present study and other studies indicate that family physicians clearly prefer pharmacotherapy to counseling. This finding is consistent with a pattern evident since the mid-1980s in primary care, whereby the use of pharmacotherapy to treat patients with anxiety disorders has climbed and the use of psychotherapy has declined.[22]

Among family physicians in the present study considering treatment of a patient presenting with symptoms of depression, the 2 most common recommendations for immediate treatment included a combination of pharmacotherapy and counseling (15.8%), and pharmacotherapy alone (12.9%). Slightly fewer physicians in the present study recommended treatment by counseling alone (7.0%). Several studies have found that family physicians were more likely to recommend pharmacotherapy than counseling to treat patients with symptoms of depression. For instance, 34% to 94% of family physicians across 6 studies[10,19,20,23-25] recommended pharmacotherapy for depression, compared with 11% to 47% of family physicians across 5 studies who recommended counseling.[10,19,21,23,25] Although we found that family physicians tended to favour pharmacotherapy over counseling to treat depression, the difference was small. Furthermore, our study found that family physicians were equally likely to recommend pharmacotherapy alone and a combination of pharmacotherapy and counseling to treat a patient with symptoms of depression. This study suggests that family physicians find counseling and pharmacotherapy to be somewhat equal in effectiveness, a conclusion that is supported by Hagen et al in a recent review of studies comparing the efficacy of antidepressants and counseling for treating mild to moderate depression.[26]

Our findings indicate that most physicians recommend follow-up within 2 weeks for a patient presenting with symptoms of anxiety (79.4%) or depression (82.5%). These findings fall well within the range identified in 4 previous studies, wherein 50% to 95% of family physicians recommend follow-up visits within 2 weeks for patients newly diagnosed or recognized with depression.[10,19,25,27]

According to this study, physicians were more likely to identify themselves, rather than the patient or the health care system, as barriers to providing optimal care to a patient presenting with symptoms of either depression or anxiety. Specifically, we found that physicians cited being "too busy," requiring specialist referral or consultation, and lacking knowledge, experience, or skills as barriers. These physician-related barriers have also been cited in previous studies, including a lack of time to treat patients with depression[14] and anxiety,[13] a lack of time to counsel and educate patients with respect to depression,[13] low confidence in management skills,[10] a lack of experience,[13] and a lack of knowledge to treat patients with depression and anxiety.[12] Similar to other studies, we found that physicians were more likely to cite patient-related factors such as noncompliance[9-11] and resistance to diagnosis[10,14] than to cite other patient factors as barriers to care. In the present study, physicians more often cited system-related barriers such as poor or no access to counseling and psychiatric services rather than other system-related barriers. Other studies also found that physicians were challenged by poor access to mental health services for patients with depression,[14] the cost of pharmacologic treatment of patients with depression without insurance,[10,14] and a lack of service support to treat patients with anxiety and depression.[13]

Limitations

This study investigated family physicians' responses to clinical-scenario patients presenting with symptoms of either GAD or MDE. Physicians' responses to clinical scenarios allow researchers to indirectly measure clinicians' actions in practice,[28] similar to chart reviews and standardized patients.[27] Clinical scenarios are cost-effective,[28,29] easy to implement,[29] and allow all clinicians to respond to a single patient presenting in exactly the same manner each time.[29] However, paper-based clinical scenarios are limited in that they measure clinicians' responses to only one patient, they do not allow for the patient-physician interactions that shape clinician behaviour, and they might allow clinicians to embellish some actions while diminishing others.[28]

Conclusion

The 2007 National Physician Survey found that 70% of Canadian family physicians offered mental health care.[30] Given the centrality of family physicians in mental health care provision, it is necessary to better understand the nature of the care they provide and the challenges that they face in offering psychiatric services. This study discovered that most family physicians suggested immediate treatment and swift follow-up care for patients with symptoms of common psychiatric disorders. However, physicians most often cited a lack of time on their part, patient noncompliance, and poor or no access to counseling services as

barriers to providing optimal care. Further research into the factors associated with family physicians' decisions to delay rather than provide immediate treatment, as well as the challenges faced by family physicians in providing mental health care, is necessary.

Dr Kosteniuk is a postdoctoral fellow and **Dr Morgan** is Professor, both in the Canadian Centre for Health and Safety in Agriculture at the University of Saskatchewan in Saskatoon. **Dr D'Arcy** is Professor in the Department of Psychiatry and in the School of Public Health at the University of Saskatchewan.

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Contributors

Drs Kosteniuk, **Morgan**, and **D'Arcy** contributed to the concept and design of the study, interpreted the data, critically revised the manuscript, and approved the final version for publication. **Dr Kosteniuk** was responsible for collecting and analyzing the data, and she drafted the manuscript and approved the final version.

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