

Managing depression in primary care

Community survey

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ABSTRACT

OBJECTIVE To investigate family physicians' practice patterns for managing depression and mental health concerns among adolescent and adult patients.

DESIGN Cross-sectional survey.

SETTING London, Ont, a mid-sized Canadian city.

PARTICIPANTS One hundred sixty-three family physicians identified through the London and District Academy of Medicine.

MAIN OUTCOME MEASURES Practice patterns for managing depression, including screening, pharmacotherapy, psychotherapy, shared care, and training needs.

RESULTS Response rate was 63%. Family physicians reported spending a substantial portion of their time during patient visits (26% to 50%) addressing mental health issues, with depression being the most common issue (51% to 75% of patients with mental health issues). About 40% of respondents did routine mental health screening, and 60% screened patients with risk factors for depression. Shared care with mental health professionals was common (care was shared for 26% to 50% of patients). Physicians and patients were moderately satisfied with shared care, but were frustrated by long waiting lists and communication barriers. Most physicians provided psychotherapy to patients in the form of general advice. Differences in practice patterns were observed; physicians treated more adults than adolescents with depression, and they reported greater comfort in treating adults. Although 33% of physicians described using cognitive behavioural therapy (CBT), they reported having little training in CBT. Moderate interest was expressed in CBT training, with a preference for a workshop format.

CONCLUSION Although 40% of family physicians routinely screen patients for mental health issues, depression is often not detected. Satisfaction with shared care can be increased through better communication with mental health professionals. Physicians' management of adolescent patients can be improved by further medical training, consultation, and collaboration with mental health professionals. Training in evidence-based treatment of depression is particularly warranted given physicians' limited knowledge of CBT.

EDITOR'S KEY POINTS

- This survey revealed concerns about family physicians' practice patterns for managing depression and other mental health issues among adolescent and adult patients.
- Although 40% of family physicians devoted a "moderate" portion of their time to mental health issues, most of that time was spent with adults. Respondents were moderately comfortable providing mental health services to adults, but less than comfortable dealing with adolescents.
- Most participants stated they shared care for some of their patients, but they reported many more negative aspects than positive aspects of such care, including long waiting lists, lack of available or appropriate community services, and poor communication with mental health professionals.
- Most respondents had not received training in cognitive behavioural therapy.

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Depression is a major public health issue, with an estimated prevalence between 8.2% and 10.4% among those 15 years old and older.^{1,2} Family physicians have a central role in identifying and treating depressed patients.

Depressed patients tend to visit primary care physicians' offices frequently and first seek treatment in this sector.^{3,4} Given the pivotal role of family physicians in managing depression, this study sought to describe their practice patterns in providing mental health care to identify gaps in service delivery and to assess physicians' training needs.

Previous research has suggested that family physicians frequently fail to diagnose depression; they are reported to detect only 15% to 36% of cases.^{5,6} Although numerous factors contribute to poor detection rates,^{7,8} including the severity of patients' symptoms, family physicians' screening practices are of great importance. Interviewing patients about symptoms relevant to a diagnosis of depression might not happen during provision of medical care,⁹ particularly if patients do not have recognizable characteristics.¹⁰ Results of surveys to date indicate that routine screening is uncommon,⁸ and use of self-report questionnaires is limited,¹⁰ despite evidence supporting their usefulness.¹¹⁻¹³ This evidence, however, comes from surveys in the United States and might not be generalizable to the mental health practice patterns of Canadian family physicians.

In addition to screening and detecting depression, family physicians offer follow-up care and treatment to many patients. Consistent with early treatment guidelines (eg, from the Depression Guideline Panel¹⁴), pharmacotherapy is the most frequently provided treatment.¹⁵⁻¹⁷ Survey results¹⁰ indicate that family physicians prescribe antidepressants to 85% of their depressed patients and counsel only 40%. In fact, the National Population Health Survey⁴ noted an increase in use of antidepressants between 1994 and 2000; about 5% of Canadians (aged 15 and older) were taking antidepressants in 2000. This suggests an increase in recognition of depression, in patients seeking help, and in treatment demands on family physicians.

Patients' access to other evidence-based treatments for depression, however, has not improved proportionately. For example, cognitive-behavioural therapy (CBT) has been shown to be effective in several trials,^{18,19} and has been found more effective than medication in preventing relapses.²⁰ Assessing physicians' knowledge of CBT and referrals to mental health professionals (MHPs) might shed light on why this treatment option is underused.

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Shared care between MHPs and primary care providers is increasingly seen as a model for addressing the high demand for mental health services. Research evaluating the frequency of shared care and physicians' satisfaction with it is limited. Surveys^{21,22} highlight a need to improve collaboration between MHPs and family physicians through better communication and joint treatment planning. Our survey sought to further evaluate the qualitative aspects of shared care for depression.

METHOD

Participants and setting

Surveys were mailed to 259 family physicians practising in London, Ont, and surrounding communities. London is a mid-sized Canadian city with a medical school and teaching hospital, which were the institutional bases for the study. Inclusion criteria were specialization and current practice in family medicine, as indicated by registration with the London and District Academy of Medicine. Physicians from other specialty areas (eg, pediatrics) were excluded from participating.

Measures and materials

A brief questionnaire was constructed to address family physicians' mental health practice patterns. The questionnaire contained 18 questions requiring various types of responses (eg, forced-choice, Likert scale) to evaluate physicians' mental health screening and treatment practices with adult and adolescent patients. A team of MHPs provided feedback during survey development, and the questionnaire was pilot-tested on 3 family physicians before distribution.

The reliability of the survey was not assessed and was limited by the diverse areas covered by questions and the response formats utilized. The validity and accuracy of the survey results have not been evaluated and would require comparative analyses with physicians' billing practices. Such information, available only through the Ontario Health Insurance Plan, is highly confidential and is beyond the scope of our research.

The University of Western Ontario's Human Subjects Ethics Review Board approved the study. To assure a high response rate, elements of the Dillman survey method were used,²³ including multiple mailings, personalized correspondence, and token incentives. The survey was carried out over a 6-week period in spring 2004.

Statistical analyses

Paired *t* tests compared the frequencies of physicians' practices among adults and adolescents, and chi-square analyses compared frequencies within categories. The statistical power of these analyses to detect differences was estimated at 80%, based on the sample size, with an alpha level of .01 and a medium effect size.²⁴

RESULTS

The response rate was “good”²⁵ at 63% (N=163) and consistent with rates reported in earlier research.^{10,21} Participants’ sex was representative (36% female, 64% male) of community family physicians. On average, respondents had been practising for 20 years (ranging from 3 to 47 years). About 36% of participants were in solo practices, 35% were in group practices, 16% were in 2-physician practices, 5% were in academic practice, 3% were in hospitals, and 5% were in other types of practices. Most had completed mental health training as part of their medical education (74%); 13.4% reported receiving mental health training solely through continuing education.

Patient contacts for depression

About 40% of participants devoted a “moderate” portion of their time (defined as 26% to 50% of their clinical time) and another 35% spent “some” of their time (defined as 10% to 25%) on mental health issues (Table 1). Most mental health contacts were with adults (51% to 75%) rather than with adolescents (10% to 25%). Chi-square analyses demonstrated significant differences between patient groups (chi-square (*df* 4) -10.1, *P*<.001). Mood problems were most common. About 62% of participants indicated that “a great deal” (defined as 51% to 75%) of contact with patients for mental health issues was for depression.

Screening methods

About 40% of physicians reported routinely screening all adults, and 60% reported screening only those at risk. Similar practices were reported for adolescents (39% universal screening; 61% “at risk” screening), and results of Student *t* tests were non-significant across patient groups. Most physicians screened by interviewing alone (86% with adults; 92.5% with adolescents) rather than by using questionnaires or both methods (Table 2). This yielded a statistically significant difference between adults: chi-square (*df* 2) 139.2, *P*<.001; and adolescents: chi-square (*df* 2) 109.2, *P*<.001. When adolescents were screened, 54.5% of physicians interviewed both adolescents and their parents.

Treatment practices

More than half the physicians (53%) reported shared

care for some of their patients (10% to 25%) (Table 1). Another 22% reported referring a moderate portion of their patients (26% to 50%) to MHPs. Physicians referred patients both for consultation on medication and for psychotherapy (70%) more frequently than for either medication consultation (12%) or psychotherapy alone (18%). Overall, physicians reported being moderately satisfied with shared care. In open-ended qualitative responses, however, physicians reported significantly more negative aspects (45%) than positive aspects (15%) of shared care (chi-square (*df* 3) 51.4; *P*<.001).

Common difficulties included long waiting lists (47%); lack of available, appropriate community services (32%); and poor communication with MHPs (28%). Positive aspects included viewing collaborative treatment as enjoyable and beneficial for patients (37%) and the high quality of care and communication received (32%).

With regard to treatment patterns, 83% scheduled psychotherapy sessions with adults, and 63% scheduled them with adolescents, showing a statistical difference (*t* [*df* 141] -5.4, *P*<.001; medium effect size -.47²⁴). Physicians spent an average of 3 hours per week with adults and 1.5 hours with adolescents. The predominant psychotherapy approach was “general advice” (85%), followed by CBT (33%) and interpersonal therapy (33%).

Table 1. Time physicians reported spending on mental health care in their practices: Percentages refer to time physicians reported they spent caring for patients in each category of patient contact (N = 163).

PATIENT CONTACT	TIME SPENT ON MENTAL HEALTH ISSUES				
	LITTLE (<10%) %	SOME (10%-25%) %	MODERATE AMOUNT (26%-50%) %	A GREAT DEAL (51%-75%) %	ALMOST ENTIRELY (76%-100%) %
All patients	6.2	34.5	40.1	17.3	1.9
Patients with depression	0.7	4.0	13.5	61.5	20.3
Adolescents	30.7	61.2	6.7	0.7	0.7
Adults*	1.3	4.6	31.1	42.5	20.5
Care shared with mental health professionals	20.0	53.2	22.1	3.3	1.3

*Chi-square analyses yielded a statistically significant difference between patient groups (*P*<.001).

Table 2. Participants' screening practices for mental health difficulties: Percentage of physicians reporting each type of screening practice.

PATIENT GROUP	INTERVIEW %	QUESTIONNAIRE %	INTERVIEW AND QUESTIONNAIRE %
Adults	86.4*	6.4	7.3
Adolescents	92.5*	2.4	4.5

*Chi-square analyses yielded statistically significant differences across screening methods (*P*<.001).

Participants reported feeling moderately comfortable with providing mental health services to adults and not comfortable providing them to adolescents (Table 3). Paired *t* tests revealed statistically significant differences across patient groups, with physicians reporting greater comfort in managing the medical needs (*t* [*df* 136] 15.7, *P* < .001; large effect size 1.34²⁴) and counseling and psychotherapy needs (*t* [*df* 137] 12.1, *P* < .001; large effect size 1.03²⁴) of adults than those of adolescents.

Table 3. Number of respondents offering various types of care to adults and adolescents and how comfortable physicians were in providing care: Ratings were based on a 5-point Likert scale (1—not at all comfortable, 3—comfortable as long as consultation is available, 5—very comfortable working independently).

TYPE OF CARE	NO. OF RESPONDENTS OFFERING CARE	MEAN SCORE (STANDARD DEVIATION)
Adult medical needs	151	3.9* (0.7)
Adult psychotherapy	151	3.5* (0.8)
Adolescent medical needs	137	2.8 (0.9)
Adolescent psychotherapy	137	2.5 (1.0)

*Student *t* tests were statistically significant across patient groups (*P* < .001).

Level of knowledge and interest in training for CBT

Despite the fact that 32% of participants reported using CBT, most (78%) had not received training in CBT and reported little knowledge of it. For the 22% who reported having training in CBT, the training lasted on average 10 hours (range, 1 to 40 hours). Moderate interest was expressed in learning CBT for depression; 43% of participants provided personal contact information for future CBT training.

Among the various educational formats suggested, most participants preferred workshops (67%; median 3.3 on a 5-point Likert scale), followed by group instruction and consultation (median 2.9). This preference was statistically significant (*t* [*df* 86] 3.3, *P* < .001; effect size was small: .35²⁴).

DISCUSSION

Consistent with previous research findings,²¹ more than 50% of family physicians spent a substantial portion of their time (26% to 50%) treating patients with mental health issues, most of which were related to depression. About 40% of participants routinely screened all patients for mental health difficulties, which contrasts with a 1999 finding in an American study of only 9%.¹⁰

This difference might reflect the growing awareness of mental health issues in medical communities and in the general population^{17,21,26} and variations between the American and Canadian health care systems.

Family physicians in London seem to recognize the importance of detecting mental health difficulties and to interview their patients for depressive symptoms. Given that 60% of participants based screening on the presence of risk factors (eg, positive family history), further research is needed to see whether this is a useful criterion.

Use of interviews rather than questionnaires

Physicians relied mainly on interviews rather than questionnaires or both methods to screen adults and adolescents for mental health issues (Table 2). This finding most likely reflects time restrictions and the many practice demands placed on primary care physicians.⁹ Also, while brief screening measures for depression have been developed, medical professionals are often denied access to these instruments by requirements for licensure. Physicians might view direct interviewing for depressive symptoms as more efficient than administering questionnaires.

Further research is necessary to explore the advantages of using questionnaires (eg, increased detection) in primary care over patient interviews. Improving access to and dissemination of brief screening measures might promote routine patient screening¹² and increase detection rates.

Shared care

Many participants reported sharing care with MHPs for both medication management and psychotherapy. Collaboration with MHPs appears to occur regularly in the community and to be a moderately satisfying arrangement for physicians. Consistent with reports in previous research,²¹ shared care had its limitations. Physicians identified difficulties with long waiting lists; lack of available, appropriate mental health services; and poor communication with MHPs. This feedback highlights the demands on family physicians to provide mental health services, given that patients rely on primary care when community services are unavailable. Improving communication with MHPs could further improve physicians' satisfaction with shared care and be achieved through ongoing consultation, as emphasized in psychiatric shared-care models.²⁶

Training in mental health care

Physicians reported providing more mental health services to adults than to adolescents, which might indicate differences in patients' demands for service. For depressed patients, however, physicians reported they felt more comfortable addressing the medical and

psychotherapy needs of adults than those of adolescents. This perhaps draws attention to a lack of training in adolescent mental health care²⁷ and a need for continuing medical education to improve care of these patients. Discomfort with treating adolescents can hinder screening and treatment planning in primary care, which in turn might discourage adolescents from seeking help. Providing physicians with backup consultation from MHPs with expertise in adolescent care could help them feel more comfortable with providing care for teenagers.

In contrast to previous research¹⁰ that indicated only 39.7% of family physicians provided psychotherapy to adults and adolescents, we found that 83% of London family physicians provided such care to adults and 63% to adolescents. General advice was the most common approach, but CBT and interpersonal therapy were also provided by 33% of participants. This was surprising because physicians reported minimal knowledge of CBT; only 22% reported having received training in CBT. Most likely physicians were using specific elements of CBT (eg, behavioural activation) rather than providing comprehensive CBT interventions. Further training in CBT might improve treatment; participants expressed moderate interest in attending a CBT training workshop on depression.

Previous research suggests, however, that educational interventions have minimal effect on family physicians' care of patients with depression.^{28,29} A workshop might be most compatible with the demands of physicians' practices, but developing competence in CBT theory and method requires intensive training. More research is needed to develop and evaluate training models for CBT.

Limitations

Our findings are based on the practices of physicians in southwestern Ontario and might not represent the practices of family physicians in other areas of Canada. Research is needed to evaluate the generalizability of our results.

Conclusion

Family physicians spend a substantial amount of time addressing mental health issues, and depression is the most common issue. Most participants screened patients with risk factors for depression; however, universal screening by all family physicians is needed to improve detection rates. Brief mental health screening questionnaires^{30,31} might help with this process. Physicians frequently share care with MHPs in the community; increased communication and collaboration is required. To increase physicians' comfort in treating adolescents with depression, physicians need ongoing consultation with MHPs and further medical training. Some participants expressed an interest in learning CBT

for depression; however, effective training models have yet to be developed. 

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Contributors

Dr Collins was the primary contributor to conception and design of the study and to acquisition, analysis, and interpretation of data. She takes responsibility for the integrity of the research, and took the lead role in drafting the article and making critical revisions to the content. Dr Wolfe contributed substantially to conception and design of the study and to interpretation of data. She collaborated in drafting the article and making critical revisions to the content. Dr Fisman contributed substantially to conception and design of the study and to acquisition of data, and she consulted on critical revisions to the content. Ms DePace contributed substantially to the acquisition of data and consulted on critical revisions to the content. Dr Steele contributed substantially to conception and design of the study and consulted on critical revisions to the content. All the authors gave final approval to the version to be published.

Competing interests

None declared

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References

- DeMarco RR. The epidemiology of major depression: implications of occurrence, recurrence, and stress in a Canadian community sample. *Can J Psychiatry* 2000;45:67-74.
- Ohayon MM, Shapiro CM, Kennedy SH. Differentiating DSM-IV anxiety and depressive disorders in the general population: comorbidity and treatment consequences. *Can J Psychiatry* 2000;45:166-72.
- Brown C, Schulberg HC. Diagnosis and treatment of depression in primary medical care practice: the application of research findings to clinical practice. *J Clin Psychol [special issue: Clinical utility research]* 1998;54:303-14.
- Patten SB, Beck CA. Major depression and mental health utilization in Canada: 1994 to 2000. *Can J Psychiatry* 2004;49:303-9.
- Kessler RC, Lloyd K, Lewis G, Gray DP. Cross sectional study of symptom attribution and recognition of depression and anxiety in primary care. *BMJ* 1999;318:436-40.
- Leclercq Y. Is depression under-recognized and undertreated? *Int Clin Psychopharmacol* 1998;13:3-6.
- Carney PA, Rhodes LA, Eliassen MS, Badger LW, Rand EH, Neiswander C, et al. Variation in approaching the diagnosis of depression: a guided focus group study. *J Fam Pract* 1998;46:73-82.
- Tylee A. The secondary prevention of depression. In: Kendrick T, Tylee A, Freeling P, editors. *The prevention of mental illness in primary care*. Cambridge, UK: University Press; 1996. p. 167-87.
- Tylee A, Freeling P, Kerry S, Burns T. How does the content of consultations affect the recognition by general practitioners of major depression in women? *Br J Gen Pract* 1995;45:575-8.

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10. Williams JW Jr, Rost K, Dietrich AJ, Ciotti MC, Zyzanski SJ, Cornell J. Primary care physicians' approach to depressive disorders. Effects of physician specialty and practice structure. *Arch Fam Med* 1999;8:58-67.
11. Brown C, Schulberg HC, Madonia MJ. Assessing depression in primary care practice with the Beck Depression Inventory and the Hamilton Rating Scale for Depression. *Psychol Assess* 1998;7:59-65.
12. Collins KA, Westra HA, Dozois DJ, Burns D. Treatment gaps for anxiety and depression. *Clin Psychol Rev* 2004;24:583-616.
13. Mazonson PD, Mathias SD, Fifer SK, Buesching DP, Malek P, Patrick DL. The mental health patient profile: does it change primary care physicians' practice patterns? *J Am Board Fam Pract* 1996;9:336-45.
14. Depression Guideline Panel, Agency for Health Care Policy and Research (AHCPR). *Recommendations for treating depression within the primary care setting*. Silver Spring, Md: AHCPR; 1993.
15. DeBar LL, Clarke GN, O'Connor E, Nichols GA. Treated prevalence, incidence, and pharmacotherapy of child and adolescent mood disorders in an HMO. *Ment Health Serv Res* 2001;3:73-89.
16. Olsson M, Marcus SC, Druss B, Elinson L, Tanielian T, Pincus HA. National trends in the outpatient treatment of depression. *JAMA* 2002;287:203-9.
17. Wang PS, Berglund P, Kessler RC. Recent care of common mental disorders in the United States: prevalence and conformance with evidenced-based recommendations. *J Gen Intern Med* 2000;15:284-92.
18. Ellis P, Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for Depression. Australian and New Zealand clinical practice guidelines for the treatment of depression. *Aust N Z J Psychiatry* 2004;38(6):389-407.
19. Reinecke MA, Ryan NE, DuBois DL. Cognitive-behavioral therapy of depression and depressive symptoms during adolescence: a review and meta-analysis. *J Am Acad Child Adolesc Psychiatry* 1998;37:26-34.
20. Gloaguen V, Cottraux J, Cucherat M, Blackburn IM. A meta-analysis of the effects of cognitive therapy in depressed patients. *J Affect Disord* 1998;49:59-72.
21. Valenstein M, Klinkman M, Becker S, Blow FC, Barry KL, Sallar A, et al. Concurrent treatment of patients with depression in the community: provider practices, attitudes, and barriers to collaboration. *J Fam Pract* 1999;48:180-7.
22. Little DN, Hammond C, Kollisch D, Stern B, Gagne R, Dietrich AJ. Referrals for depression by primary care physicians. A pilot study. *J Fam Pract* 1998;47:375-7.
23. Dillman DA. *Mail and Internet surveys: the tailored design method*. 2nd ed. New York, NY: John Wiley & Sons Inc; 2000.
24. Cohen J. A power primer. *Psychol Bull* 1992;112:155-9.
25. Babbie E. *The practice of social research*. 5th ed. Belmont, Calif: Wadsworth; 1989.
26. Katon W, VonKorff M, Lin E, Walker E, Simon GE, Bush T, et al. Collaborative management to achieve treatment guidelines: impact on depression in primary care. *JAMA* 1995;273:1026-31.
27. Steele M, Dickie G. Child and adolescent psychiatry teaching in family practice residency training programs: the Canadian experience. *Can Child Psychiatry Rev* 1997;6:100-5.
28. Grimshaw JM, Shirran L, Thomas R, Mowatt G, Fraser C, Bero L, et al. Changing provider behavior: an overview of systematic reviews of interventions. *Med Care* 2001;39(2):2-45.
29. Worrall G, Angel J, Chaulk P, Clarke C, Robbins M. Effectiveness of an educational strategy to improve family physicians' detection and management of depression: a randomized controlled trial. *CMAJ* 1999;161:37-40.
30. Beck AT, Steer RA. *Manual for the revised Beck Depression Inventory*. San Antonio, Tex: Psychological Corporation; 1993.
31. Hamilton M. Development of a rating scale for primary depressive illness. *J Neurol Neurosurg Psychiatry* 1967;2:56-62.

