

Depression in Rural Family Practice

Easy to Recognize, Difficult to Diagnose

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Judged against established standards for the treatment of major depressive disorders, the performance of generalists is woefully inadequate.

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Objective: To explore rural family physicians' decision-making processes when they encounter depression.

Design: Exploratory qualitative "field study" using individual in-depth interviews and participant observation. Interviews were audiotaped, transcribed, and analyzed by an editing approach.

Setting: Rural Nebraska family physicians' offices.

Participants: A purposeful sample of six rural Nebraska family physicians, including five men and one woman, aged 35 to 65 years; two in solo practice, three in two-person practices, and one in a group practice; in communities with populations ranging from 600 to 6500.

Main Outcome Measures: Themes common to all interviews.

Results: Themes included the following: depression is

easy to recognize but difficult to diagnose; depression is readily treatable but requires negotiation to manage; and depression is important but time and resources are limited. The inadequate diagnosis and treatment of depression appeared to be partly artifactual and must be understood against a background of perceived stigma, high prevalence of depressive symptoms, structural barriers to care, and context of rural practice.

Conclusions: Rural family physicians may have a more deliberate, organized, and rational approach to depressive disorders than previously reported. Depression is commonly recognized by rural family physicians; however, they hesitate to diagnose this condition because of diagnostic uncertainty, perceived stigma, the desire to preserve the physician-patient relationship, time and financial pressures, and a lack of supporting resources.

(*Arch Fam Med.* 1995;4:427-431)

DEPRESSION IS one of the most common problems seen in primary care practice, with 5% to 10% of primary care patients meeting the criteria of the *Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition*, for major depressive disorder^{2,3} and many more having minor depressive disorders.⁴ Studies have shown that patients with depression have poorer health, poorer interpersonal and occupational functioning, increased health service use, and increased disability.^{2,4} Nevertheless, the literature also indicates that primary care physicians routinely fail to diagnose or treat depressive disorders.

Coyne et al⁵ assessed 266 family practice patients for depression by interview and found 21 patients with major depression; 10 received intervention and six were taking psychotropic agents. Similarly, in a convenience sample of 302 ambulatory patients, Froom et al⁶ found that 41 pa-

tients met criteria for current major depressive disorder and only 16 had the diagnosis on their charts. Main et al⁷ found that depression went unrecognized in one third to one half of depressed patients, while Rost et al⁸ indicated that, among patients recognized as having major depression, fewer than one fourth received adequate pharmacologic intervention and fewer than one half reported significant improvement at 5-month follow-up.

Factors associated with the failure of appropriate diagnosis and treatment include physician attitudes on the efficacy of treatment of depression,^{9,10} distances to mental health professionals,¹¹ insurance coverage,² physician and patient perceptions of stigma,¹² patient presentation,¹³

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SUBJECTS AND METHODS

This exploratory "field study" investigated primary care physicians in rural practice and their perceptions of the diagnosis and treatment of depression. Because qualitative designs of this type may be susceptible to bias, a multidisciplinary study team was assembled that consisted of a family physician with content interest and previous research and clinical procedure experience in treating depression (J.L.S.), a medical anthropologist (B.F.C.), and a medical student (G.E.). The multiple perspectives represented helped to ensure that neither the design nor the analysis would be unduly influenced by any single point of view. To expose additional bias that might influence the research, early team meetings focused on personal preconceptions and experiences with depression, as well as a summary of the existing literature. This information helped in designing the interview guide, as well as the analysis process.

The primary data were in-depth interviews,^{14,15} 1- to 2-hour narrative interviews in which the respondent is asked open-ended questions designed to elicit long, in-depth responses. Miller and Crabtree^{15(p195)} noted, "The depth interview is a powerful data-collection tool when the focus of inquiry is narrow, the respondents represent a homogeneous group and are familiar and comfortable with the interview as a means of communication, and the goal is to generate dominant themes and narratives."

An interview guide that consisted of five open-ended "grand tour" questions was designed with the use of information from the relevant literature, experiences of the multidisciplinary team, and pilot interviews. The questions were as follows: (1) "Based on your experience, can you tell me about depression in your practice?" (2) "Based on your experience, can you tell me about the depressed patients you see?" (3) "What influences your diagnosis of depression?" (4) "When you have a patient who you feel might be depressed, how do you decide what to do?" and (5) "From your experience, how is depression different from other medical problems?" Open-ended planned and unplanned follow-up probes were available to the interviewer to keep the interview on the topic and to ensure that additional insights would be elicited. Other areas of

interest included rural physicians' perceptions of the prevalence and characterization of depression in practice; categories of patients with depression; the use of the *Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition*, in the diagnosis of depression; and factors that influence diagnosis of depression.

In conducting the project, one investigator (G.E.) followed up all respondents for 1 or 2 days as they performed their daily activities in their practice and then completed the interview. Field notes from this period of observation were reviewed to complement data analysis. The study was approved by the Institutional Review Board, and written informed consent was obtained before each interview. No physician refused participation.

SAMPLING

The long interview method emphasizes gathering comprehensive data on relatively few respondents, generally six to eight.¹⁴ A purposeful sample¹⁶ of six family physicians was drawn to represent practitioners from different practice types (solo and group practices) and practice locations (degree of rurality), both genders, and a range of ages (and thus residency experience). Such factors were believed to have potential important influence on decision making.

DATA ANALYSIS

Data analysis followed the strategy suggested by McCracken¹⁴ and Crabtree and Miller.¹⁷ This "editing style" is the most commonly used text analysis technique and has many variations based on the specific fieldwork method employed.¹⁸ Audiotaped interviews were transcribed (each approximately 15 to 20 pages). Research team members individually highlighted text they believed to be relevant and made interpretive notes or observations in the margins. The research team then discussed each transcript line by line as a group. The goal of this lengthy, often rancorous process was to reach consensus about what was important and how it should be interpreted. Observational field notes were referenced to provide context to the interviews. Consensus observations were then organized into categories from which themes for each interview were identified. Overall themes common to all interviews were then developed.

and physician training.⁹ Rural physicians face potentially greater challenges because of a dearth of referral specialists and mental health services, the stigma of mental health disorders in small communities, and large demands on their time. Past studies have largely relied on chart reviews or standard surveys, and, while these hypothesized associations have tentative quantitative support, the reasons why these associations exist still elude researchers.

The goals of this research were to identify and describe rural family physicians' perceptions of their diagnosis and treatment of depression and to improve our understanding of the complex and conflicting expectations of primary care practice. Because the data required to address the research goals are not readily obtainable by means of traditional epidemiologic study designs, a qualitative field study that used in-depth, open-ended in-

terviews was selected to obtain the details necessary for this exploratory, descriptive research.

RESULTS

The sample of six family physicians represented solo and group practices from towns with populations that ranged from 600 to 6500 (**Table**). The physicians will be referred to here by pseudonyms. Dr Boyle, who was nearing retirement age, was the oldest and had been in practice more than 30 years. Drs Davis and Ellis had begun practice only 2 years earlier. Only Dr Boyle had not completed a residency in family practice.

The in-depth interviews provided rich information about rural physicians' perception and treatment of depression. Each respondent expressed an impression that depression was common in their practices and that treat-

Demographic Characteristics of Rural Physicians Interviewed

Name*	Age, y	Sex	Type of Practice	Population of Town
Dr Allen	39	M	Solo	1000
Dr Boyle	65	M	Solo†	3700
Dr Clark	37	M	2-Person	6500
Dr Davis	36	M	2-Person	<1000
Dr Ellis	37	F	2-Person	<1000
Dr Fitch	35	M	Group	3800

*All names are pseudonyms.

†Partnership for 35 years until last year, when the partner retired.

ment of depression was an important health concern. From their descriptions, depression could be placed on a continuum of severity ranging from what was termed *depressive symptoms*, *reactive symptoms*, *exogenous depression*, or *minor depression* to *severe*, *endogenous*, or *major depression*, to those individuals who were actively suicidal. These physicians based their treatment largely on the patient's functional ability and characteristically used follow-up or discussion (talk therapy) as an initial, *intentional* intervention. Referral for counseling was usually used later, with one physician (Dr Clark) essentially discounting the usefulness of counseling given the perception of stigma. Pharmacologic therapy was also guided by function, and all physicians used medications for a patient with significant major depression. Patients who were actively suicidal were referred.

From the analysis of transcripts, three interrelated overall themes were uncovered: (1) depression is easy to recognize but difficult to diagnose, (2) depression is readily treatable but requires negotiation to manage, and (3) depression is important but time and resources are limited. Each of these overall themes encompass a series of underlying ideas, which are discussed in detail with the use of sample verbatim quotes from the transcripts.

DEPRESSION IS EASY TO RECOGNIZE BUT DIFFICULT TO DIAGNOSE

All six physicians believed that depression was common and relied on a common group of symptoms to diagnose depression. Each clearly articulated symptoms they associated with depression: "By delving you find out that they have problems with sleep, appetite, weight loss, job problems" (Dr Boyle). While derived from the *Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition*, these symptoms were augmented by physicians' clinical judgment. For example, Dr Fitch noted, "One of the advantages we as family doctors have that a lot specialists don't is because I know my patients. When I walk into that room I can tell if that lady who has had arthritis for 6 months or 7 months or a year, I can tell where she is on the depression scale." Physicians described a diagnostic process that relied on a gut feeling tempered by their knowledge of the patient, the patient's environment, and life events. "I think a gut feeling for me has been better than any of the tools" and "You

know that feeling, you go into a room you come out and feel depressed, that person is depressed."

Nevertheless, they all expressed reasons they would not make a diagnosis of depression even when they recognized that a particular patient probably had this problem.

The depression out here is a taboo and people don't like to admit that they are depressed, especially among the men, simply because it is a mental illness and mental illness in rural Nebraska is perceived as being really not acceptable.

These physicians believed that their patients were reluctant to admit or accept a diagnosis of depression and found it easier to treat depression without a formal diagnosis. Dr Ellis noted, "For the most part in my practice, I don't label it nor talk to the patient as if I understand that they are depressed. . . . In my chart I understand what the heck is going on but I don't necessarily document it that way."

The physicians saw depression as a vague symptom complex and became unwilling to offer a diagnosis of depression because of these ambiguities and stigma. Like the others, Dr Allen, in contrasting depression with other diagnoses, noted,

Physical illness is fairly easy to diagnose from a standpoint of, you got signs and symptoms you can look in the throat, you can see the pustules in the throat, you can feel the tumor, you can see on x-ray. . . . Depression being a mental illness, you don't have those obvious things. You have basically a subjective symptom complex.

Dr Ellis went further:

In the first place, I don't think, except for maybe major depression, you can be that sure . . . it isn't like, say, a strep infection, you know you get a culture and it says strep, or an infection and white count is elevated. I don't think there are that many definite things that you can hang your hat on and it's maybe more, or at least a part of it is how the doctor reacts or how he considers it.

A final concern expressed by these physicians was the impact the diagnosis would have on reimbursement and the future insurability of the patient. This was clearly expressed by Dr Clark:

One additional thing. . . . Medicare pays 50% of the fee now on diagnoses that fall around depression whereas they pay 80% on everything else. So do you think I'm going to write down depression on a Medicare patient? . . . Not only are they mad that I thought they were depressed, now they are mad because Medicare won't pay because you put it down.

Dr Ellis noted,

If you have a diagnosis of a mental illness, most insurance companies will not pay for anything that ever happens to you in the future in the area of mental illness. That is like being diagnosed with AIDS [acquired immunodeficiency syndrome], you know, as far as your insurance goes you may not get any insurance. . . . It is hard enough to get any health care benefits for people with that diagnosis.

DEPRESSION IS READILY TREATABLE BUT REQUIRES NEGOTIATION TO MANAGE

All six physicians perceived that they were able to recognize depression and that depression was a treatable illness. They reported “many successes” and looked at the treatment of depression as “just part of the job.” Nevertheless, they all believed that treatment of depression was a long process that required negotiation with the patient.

A dimension of the negotiation process was dealing with stigma during the course of multiple visits: “After spending a lot of time with the patient, the patient doesn’t see being treated for depression is any different than having a cold or chronic sinusitis” (Dr Davis). “Sometimes you know you just have to confront them with it. Then sometimes they’ll accept it; most of the time as you work along, they will accept it and deal with it” (Dr Boyle).

Physicians were concerned that offering the diagnosis of depression could affect the physician-patient relationship. As Dr Ellis explained,

I bring it up that I think that they are depressed, and then I don’t see them again for 3 to 6 months; they just don’t come back. You know, it makes me feel bad because I actually was stressing what I think was the real problem and they reward me with that diagnosis by not coming in any more. I find that kind of frustrating. I find it much better to just not say anything and have them continue to see me and try to work with them.

Dr Fitch also uses an artful practice: “Generally if you make that suggestion—back off and don’t be real pushy—then sometimes they will come back they will say, ‘Listen, you know, I thought about what you said and you are really right.’” In fact, Dr Ellis believed strongly that “when you say you want to refer somebody to a psychiatrist or psychologist what’s the first thing that pops into their mind? *One Flew Over the Cuckoo’s Nest*.”

Finally, physicians deliberately miscode depression. Dr Fitch explained,

What I will tend to do in a younger person is, even though I realize it is depression, I will treat it with Tofranil [imipramine hydrochloride] and I will put down situational anxiety or I will put down something other than depression, and I will code it as that, because once I have put that diagnosis of depression, of mental illness, [it] does have a bearing on whether or not they will ever get insurance. . . . that is probably the biggest barrier [to] actually writing depression down for billing purposes.

Thus, depression was dealt with in a longitudinal fashion, responding to patient concerns.

DEPRESSION IS IMPORTANT BUT TIME AND RESOURCES ARE LIMITED

The time and resources available for dealing with depression in rural communities were believed to be limited. Physicians reported frustration or delayed addressing depression because of time constraints. As Dr Clark stated,

When I see a patient who comes in with multiple complaints, bum, the first thing that pops into my mind before anything else is depression. . . . Am I going to sort through this in 10 minutes and that it’s going to take me 45 minutes, and it’s go-

ing to put me 35 minutes behind. I mean that’s the frustration of the whole thing.

Dr Davis explained,

In an acute visit, sometimes you suspect there is an aspect of depression but you can’t address it at the time because you don’t have time. And so you note that and you try to follow up on it in future visits.

Dr Davis continued, “If you have 15-minute spots for patients, it is a lot easier sometimes when someone comes in to deal with the physical complaint than just deal with the depression.”

This lack of time was coupled with a lack of perceived resources. As Dr Allen discussed, “The rural management of depression is different from urban because of the availability of resources, like having psychiatrists all over the place.” Dr Fitch amplified: “I think the resources out here are so slim. . . . I think it would be an advantage if we had better access to mental health care . . . we don’t have the resources, the counselors we need.” All physicians saw limitations on time and resources as important factors affecting treatment of depression.

COMMENT

The current literature exploring depression has shown a high rate of nondiagnosis and assumed that this reflects an equally high rate of nonrecognition. Furthermore, this line of reasoning implies that nondiagnosis would preclude appropriate treatment. Our study suggests that physicians often recognize but decline to formally diagnose depressive disorders. Instead, family physicians appear to distinguish between recognition of depression and formal diagnosis. Rural family physicians report a high degree of watchful waiting for many patients as opposed to more active treatment. Many physicians preferred to keep the tentative diagnosis of depression to themselves. They reported deliberately miscoding, negotiating treatment, and surreptitiously treating depression because of patient reluctance to admit or inability to accept depression as a diagnosis. Simple chart reviews, follow-up interviews with patients (as employed by Coyne et al⁵ and Froom et al⁶), or even concurrent ratings by physicians may therefore underestimate physicians’ recognition and “invisible” treatment of depressive disorders. Because these family physicians report longitudinal relationships with many of their patients, such strategies may be even more effective in the long run, as opposed to offering a diagnosis and therapy that is tenable to the patient.

These findings support the cross-sectional mail survey by Rost et al,¹⁹ which found that 50.3% of the primary care respondents had deliberately miscoded major depression in the preceding 2 weeks. In that study, physicians miscoded because of uncertainty about the diagnosis, concerns about reimbursement and future insurability, and stigma. Thus, there are alternative explanations for apparent inadequate diagnosis.

Moreover, efforts to improve case finding alone may continue to fail to improve diagnosis and treatment outcomes because of the structural barriers to effective care,

including financial disincentives and lack of resources for treatment. Indeed, as Miller²⁰ describes, physicians dealt with the complicated "drama" of depression by enacting "ceremonies of transition" with their patients. They scheduled future appointments or consciously ignored possible depression to avoid "schedule busters." As Brody and Larson²¹ suggested, interventions that address system and structural issues (eg, stigma, reimbursement, resources) must also be pursued.

When analyzing data from the National Ambulatory Medical Care Survey, Olfson and Klerman²² found that primary care physicians more commonly prescribed antidepressants for depressive disorders than did psychiatrists. This finding might be explained by the fact that physicians only formally diagnosed depression when it was severe and thus believed to require pharmacologic intervention.

Thus, the treatment of depression must be understood in the context of rural practice. While there may be underlying knowledge deficits, physicians report employing a deliberate and often highly organized approach to patients with depressive symptoms. Interventions based on the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*,²³ may fail because of a lack of perceived relevance to practice. Educational efforts to teach cost-effective, realistic interventions that address the physician's knowledge base, interviewing skills, problem-solving ability, and attitudes must account for baseline beliefs and practice organization.²⁴ As Greco and Eisenberg²⁵ highlight, "education is unlikely to alter practices that are the result of financial incentives, patients' preferences, or the lack of necessary equipment. Thus, success may require an understanding of the motivations underlying current practice."

Work for the future should further explore decision making in open-ended fashion. Does the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*, classification scheme actually hinder effective diagnosis in primary care practice? Are practice guidelines effective in changing physicians' behaviors and improving patient outcomes? Do physicians project stigma and does "labeling" influence treatment outcomes? Can we influence physicians' attitudes and perceived role responsibility? What types of educational interventions are most effective?

Effective interventions for patients with minor depression and the effectiveness of "invisible" treatment should also be studied. What are the optimal roles of counseling, medication, and other interventions in the primary care sector? Physicians described a much less aggressive treatment approach to depression associated with life events, suggesting that they may undertreat major depression in this context. Our investigation and work by Coyne et al⁵ also raise the question, "How effective is treatment based on physician perception of patient function and distress?"

As Dr Fitch commented, "You get into rural practice and you find out that 80% of your practice is supportive counseling or treating depression or anxiety or other related mental health problems and you've got squat for training." Are we up to this challenge?

Accepted for publication December 1, 1994.

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REFERENCES

- Eisenberg L. Treating depression and anxiety in primary care. *N Engl J Med*. 1992;326:1080-1084.
- Wells KB, Hays RD, Burnam MA, et al. Detection of depressive disorders for patients receiving prepaid or fee-for-service care. *JAMA*. 1989;262:3298-3302.
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition*. Washington, DC: American Psychiatric Association; 1987.
- Broadhead WE, Blazer DG, George LK, Tse CK. Depression, disability days, and days lost from work in a prospective epidemiologic survey. *JAMA*. 1990; 264:2524-2528.
- Coyne JC, Schwenk TL, Smolinski M. Recognizing depression: a comparison of family physician ratings, self-report, and interview measures. *J Am Board Fam Pract*. 1991;4:207-215.
- Froom J, Schlager DS, Stenecker S, Jaffe A. Detection of major depressive disorder in primary care patients. *J Am Board Fam Pract*. 1993;6:5-11.
- Main DS, Stulp CS, Miller RS, Matthew J, Barrett JE, Lutz LJ. Primary care clinician attitudes, beliefs and training: their role in the diagnosis and management of depression. Presented at the Sixth Annual National Institute of Mental Health International Research Conference on Primary Care Mental Health Research; October 18-21, 1992; Tyson's Corner, Va.
- Rost K, Wherry J, Williams C, Smith GR. Major depression in rural primary care practices: treatment and outcomes. Presented at the Sixth Annual National Institute of Mental Health International Research Conference on Primary Care Mental Health Research; October 18-21, 1992; Tyson's Corner, Va.
- Marks JN, Goldberg DP, Hillier VF. Determinants of the ability of general practitioners to detect psychiatric illness. *Psychol Med*. 1979;9:337-353.
- Main DS, Lutz LJ, Barrett JE, et al. The role of primary care clinician attitudes, beliefs, and training in the diagnosis and treatment of depression. *Arch Fam Med*. 1993;2:1061-1066.
- Keller PA, Murray JD, eds. *Handbook of Rural Community Mental Health*. New York, NY: Human Sciences Press; 1982.
- Katon W, Von Korff M, Lin E, et al. Distressed high utilizers of medical care: *DSM-III-R* diagnoses and treatment needs. *Gen Hosp Psychiatry*. 1990;12: 355-362.
- Bridges KW, Goldberg DP. Somatic presentation of *DSM-III* psychiatric disorders in primary care. *J Psychosom Res*. 1985;29:563-569.
- McCracken G. *The Long Interview: Qualitative Research Methods Series*. Newbury Park, Calif: Sage Publications; 1988;13.
- Miller WL, Crabtree BF. Depth interviewing: the long interview approach. In: Stewart M, Tudiver F, Bass MJ, Dunn EV, Norton PG, eds. *Tools for Primary Care Research*. Newbury Park, Calif: Sage Publications; 1992:195-208.
- Kuzel AJ. Sampling in qualitative inquiry. In: Crabtree BF, Miller WL, eds. *Doing Qualitative Research: Research Methods for Primary Care*. Newbury Park, Calif: Sage Publications; 1992;3:31-44.
- Crabtree BF, Miller WL. The analysis of narratives from a long interview. In: Stewart M, Tudiver F, Bass MJ, Dunn EV, Norton PG, eds. *Tools for Primary Care Research*. Newbury Park, Calif: Sage Publications; 1992:209-220.
- Miller WL, Crabtree BF. Qualitative analysis: how to begin making sense. *Fam Pract Res J*. 1994;14:289-297.
- Rost K, Smith GR, Matthews DB, et al. The deliberate misdiagnosis of major depression in primary care. *Arch Fam Med*. 1994;3:333-337.
- Miller WL. Routine, ceremony, or drama: an exploratory field study of the primary care clinical encounter. *J Fam Pract*. 1992;34:289-286.
- Brody DS, Larson DB. The role of primary care physicians in managing depression. *J Gen Intern Med*. 1992;7:243-247.
- Olfson M, Klerman GL. The treatment of depression: prescribing practices of primary care physicians and psychiatrists. *J Fam Pract*. 1992;35:627-635.
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*. Washington, DC: American Psychiatric Association; 1994.
- Schulberg HC, McClelland M. A conceptual model for educating primary care providers in the diagnosis and treatment of depression. *Gen Hosp Psychiatry*. 1987;9:1-10.
- Greco PJ, Eisenberg JM. Changing physicians' practices. *N Engl J Med*. 1993; 329:1271-1274.