Diagnosing depression

There is no blood test

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ABSTRACT

OBJECTIVE To explore and describe primary care physicians' experiences in providing care to depressed patients and to increase understanding of the possibilities and constraints around diagnosing and treating depression in primary care.

DESIGN Qualitative study using personal interviews.

SETTING A hospital region in eastern Canada.

PARTICIPANTS A purposely diverse sample of 20 physicians chosen from among all 100 practising family physicians in the region.

METHOD Invitations were mailed to all physicians practising in the region. Twenty physicians were chosen from among the 39 physicians responding positively to the invitation. Location of practice, sex, and year of graduation from medical school were used as sampling criteria. The 20 physicians were then interviewed, and the interviews were audiotaped and transcribed verbatim. Data were analyzed using a constant comparative approach involving handwritten notes on transcripts and themes created using qualitative data analysis software.

MAIN FINDINGS Three themes related to diagnosis emerged. The first concerns use of checklists. Physicians said they needed an efficient but effective means of diagnosing depression and often used diagnostic aids, such as checklists. Some physicians, however, were reluctant to use such aids. The second theme, interpersonal processes, involved the investment of time needed for diagnosing depression and the importance of establishing rapport. The final theme, intuition, revealed how some physicians relied on "gut sense" and years of experience to make a diagnosis.

CONCLUSION Diagnosis of depression by primary care physicians involves a series of often complicated negotiations with patients. Such negotiations require expertise gained through experience, yet prior research has not recognized the intricacies of this diagnostic process. Our findings suggest that future research must recognize the complex and multidisciplinary nature of physicians' approaches to diagnosis of depression in order to better reflect how they practise.

EDITOR'S KEY POINTS

- Family physicians care for many patients with depressive disorders, but little is known about how they diagnose depression. Many studies indicate that depression is underdiagnosed in primary care, but family physicians' own perspectives on this have not been explored.
- This qualitative study in New Brunswick, with a purposive sample of 20 family physicians, explored how these physicians diagnosed depression. It is a complex process, not confined to criteria laid out in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).
- Some physicians used checklists to screen efficiently for depression, while others "just listened" and formed their opinions over time during negotiations with their patients. All agreed that spending time with patients and developing rapport was important.
- Intuition, based on experience and a knowledge of patients and their contexts, was often used, which emphasized the distinctive nature of diagnosing depression in primary care populations (as opposed to using strict DSM-IV criteria in a psychiatric practice). As the authors point out, "There is no blood test."

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Despite the fact that 90% of primary care physicians report treating depressed patients in their offices, little is known about these physicians' views on diagnosing depression.[1-4] Primary care physicians are often the first health care contact for patients with symptoms of depression.[5] With the expected increase in the number of patients with depression,[2] it is important to investigate physicians' perspectives on diagnosing depression.

Currently, there is little consensus on procedures for diagnosing depression in primary care.[6-9] Some research indicated that physicians were underdiagnosing depression. This led to educational initiatives and promotion of diagnostic aids.[10-12] Yet, some studies demonstrated little improvement in patient outcomes despite such initiatives.[13-20] There are important differences between depressed patients seen in psychiatric settings and those seen in primary care. Primary care physicians do not generally use specific diagnostic criteria,[15,19] so there is much uncertainty about whether such criteria are useful in primary care.[1,2,14-16,20-22] Researchers have suggested that a focus on diagnostic aids alone oversimplifies the diagnostic process and that extrapolating findings from studies done in psychiatric settings to primary care is inappropriate.[14,19]

Research on screening devices covers only one facet of clinical expertise. There appear to be discrepancies between existing knowledge about depression, what physicians learn about depression during training, and the clinical acumen that primary care physicians develop through experience, perhaps because few studies have drawn on physicians' direct accounts of their experiences.[4,23-25]

A few qualitative studies have been published.[4,24,25] One study indicated that diagnosis might be difficult and require negotiation, but the sample included only six rural practitioners.[24] Another study compared patients from inner-city and less deprived populations, but did not explore how diagnosis of depression occurs as a matter of daily practice nor examine the resources used by physicians.[4] A third study emphasized formal training.[25] The aim of our study was to explore how physicians in both rural and urban settings diagnose and treat depression.

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METHODS

This multidisciplinary project[26-29] was completed by a research team consisting of a primary care physician, a psychologist, and two sociologists. After ethics approval was granted by review committees at the University of New Brunswick and the Dr Everett Chalmers Regional Hospital in Fredericton, NB, all family physicians (N = 100) practising in a hospital region in New Brunswick were mailed invitations to participate in the study. This hospital region is one of seven in the province; it serves a population of 170 000 evenly divided among urban and rural areas and generally considered to be ethnically homogeneous. The main urban centre of the region provides a full, but not complete, range of medical services.

Thirty-nine physicians indicated an interest in participating in the study. To ensure that diverse perspectives would be represented, we used a purposive sampling technique with sex, location of practice, and year of graduation from medical school as criteria. We chose a final sample of 20 participants. All participants received an honorarium ($150) to cover their overhead costs during participation.

Interviews were completed by one of the sociologists. She pilot-tested the interview guide with a practising family physician (who was a member of the research team). Interviews lasted approximately 1 hour, were audiotaped, and were conducted in person. All but two interviews were conducted in physicians' offices. Interviews followed a semi-structured format, using both formal (ie, previously

constructed) and informal (eg, asking for specific examples) probes. We purposely avoided the term "Major Depressive Disorder" because it is associated with the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), and we did not want to influence physicians to talk about DSM-IV criteria. Rather, we were interested in physicians' own diagnostic criteria. Saturation was reached within 15 interviews. Five additional interviews were conducted to ensure the diversity of the sample.

Interviews were transcribed verbatim and analyzed thematically, constantly comparing the notes written on the transcripts to generate initial codes. These codes and their contents, discussed during meetings of the research team, provided guidance for formation of subsequent themes generated with the aid of software (N4 and NVivo).[30-32] Comparisons were made both within and across transcripts, which further contributed to development of thematic categories, as did extensive discussion of emerging themes. This fine level of coding resulted in more than 125 themes. Related themes were then compared and collapsed into major substantive themes. Following the computer-assisted analysis, team discussions once again provided verification of emerging themes, and consensus was reached on theme saturation. The presence of a family physician on our research team ensured that interpretations were credible and reliable; she functioned as a "peer debriefer," or "devil's advocate."[33]

FINDINGS

Of the 20 participants, nine were men and 11 were women (**Table 1**). The sample was ethnically homogenous, reflecting the provincial population. Eleven physicians practised in urban areas; nine in rural areas. All the physicians worked full time and in solo practices. Eight participants graduated from medical school before 1980, five in the 1980s and seven in the 1990s. All participants indicated that they were actively involved in diagnosing and treating depression.

Table 1. Profile of participants

CHARACTERISTICS	NO. OF PARTICIPANTS
Sex	
• Male	9
• Female	11
Location of practice	
• Urban	11
• Rural	9
Year of graduation	
• Before 1980	8
• 1981-1990	5
• After 1990	7

Physicians described diverse procedures used to diagnose depression and to convey the diagnosis to their patients. Diagnosing depression was portrayed as a process of negotiation involving discussion, repeated visits, and distribution of educational material. Negotiation did not always follow scientific paradigms. Physicians' accounts reflected three broad themes: use of checklists, interpersonal processes, and intuition.

Use of checklists

This theme included three subthemes: rapid but efficient diagnosis of depression, sensitivity of the diagnosis and fear of missing something, and reluctance to use checklists.

Efficiency. Physicians expressed the desire for a rapid but effective means of diagnosing depression. One physician said that seeing depressed patients "takes a lot of energy" and three physicians described diagnosing depression as "draining." Others stated that their training had not provided them with an easy method of diagnosis. As one physician said: "In medical school, [diagnosis consisted of] a 1-hour interview.... If I saw somebody coming through the door with a long face, I knew I was in for an hour of work and I hated it." This same physician reported switching to a "quick screen," which, he said, "seems to be effective and takes a few minutes."

Because the process of diagnosing depression can be time-consuming, most of the physicians

believed that using a checklist was necessary: nine indicated that they use some sort of checklist or set of questions when diagnosing depression. Many of these questions involved DSM-IV criteria. For instance, one physician said she used the mnemonic SIGECAPS (Sleep disturbance, Interest decreased, Guilt, Energy decreased, Concentration difficulties, Appetite disturbance, Psychomotor retardation or agitation, Suicidal thoughts) to remind her of questions to ask patients. Another physician had used the same symptom inventory for the past 20 years.

Sensitivity of diagnosis. A second subtheme was the idea that physicians might miss a diagnosis of depression, suicidal symptoms, or a medical condition in patients who presented with somatic complaints. A checklist might help mitigate the uncertainties that arise in the process of diagnosing depression. As one physician noted, "there isn't a blood test" for depression. While familiar with checklists as an aid to diagnosis, these physicians suggested that use of checklists alone might be inadequate.

Reluctance to use checklists. Resistance to using checklists was expressed by a few physicians. One stated that he does not "follow an algorithm," but instead, diagnoses depression by "listening to" and "spending time with" patients. For this physician, a diagnosis of depression was made only with the patient's agreement. He did not "force it on them." Another physician expressed reluctance to diagnose depression according to the diagnostic criteria contained in the DSM-IV, saying "I'm not real thrilled about putting people into these strict little categories." He felt pressured to do this by insurance companies, because they want "nice, neat little packages."

Regardless of whether physicians used checklists, they expressed the view that a diagnosis of depression often cannot be made in a single visit. Most of the physicians indicated that diagnosing depression involves negotiating with patients.

Interpersonal processes

This theme had two components: spending time with patients and developing rapport.

Spending time. Managing time within a busy practice is a major challenge when diagnosing depression. Diagnosis can involve several visits lasting as long as an hour. Three physicians stated that they try to schedule at the end of the day patients who they suspect are depressed, which allows for more time with those patients and avoids a patient "backlog." Even when physicians used aids to save time, they emphasized that diagnosis often involves more than one office visit. Five physicians spoke of "spending time" with patients when describing how they diagnosed depression. One physician said: "If you talk with [patients] for a while … spend some time dealing with patients, it [making a diagnosis of depression] is a lot easier. Again, it's a lot easier when you know these families and their background."

Developing rapport. Physicians can establish rapport with patients when they talk to patients about the possibility that they are depressed. In describing his approach, one physician said that he "listens" to his patients, and another physician used the words "talking" and "negotiating." Five physicians reported that patient education materials, such as handouts or posters, assist in broaching the topic of depression and further help in establishing rapport. One physician noted that she uses "a great handout. It makes it a lot easier to explain to people, [and] they're a lot more likely to accept the diagnosis." Rapport also involved learning about a patient's life circumstances. As another physician stated repeatedly, "It all depends on the person." One physician described a detailed process of asking her patients about their lives, with questions focused on work, family, and intimacy.

Finding out about the everyday realities of patients' lives was important for some physicians who described the diagnostic process as akin to detective work. For example, one physician's discussions with a depressed patient eventually revealed that a stressful work situation (retail sales work during the Christmas season) was linked to the patient's becoming depressed at the same time each year. For some physicians, the purpose of talking with patients was to develop rapport, while for others the purpose was to assess patients' "functionality."

Intuition

Physicians indicated that intuition was involved with diagnosis even before patients arrived at their offices. One physician said, "Well, if I sense that's [depression] what is going on, then I schedule in a different mode," meaning that he allotted more time at the end of the day for patients he thought might be depressed. Another physician said she relied on the impressions of her office assistant about whether a patient was depressed: "She [receptionist] now has gotten to know the patients pretty well and if she has a concern—just something she picks up—she'll try and slot them into one of the longer appointment times."

Beyond scheduling, intuition also played a role in diagnosing depression. One physician described asking his patients about sleep patterns and appetite, but later stated that he "look[s] them in the eye" to determine if they are depressed. This same physician used the word "eyeballing" to refer to the way in which he diagnoses depression, while also cautioning that he would not arrive at a diagnosis on a patient's first visit.

Another physician said, "I probably have a very subjective method of deciding how severe someone's depression is," while another said that he "might have a feeling about [a] person" that would lead him to believe the patient might be depressed. This physician also said: "There's a lot of intuition involved in this [diagnosing depression] and there's a lot of mistakes." Another physician described the process of diagnosis as being easier "if you have your antenna up."

An intuitive aspect of the diagnostic process was also acknowledged by one physician when he explained that he relied on his "gut feeling" when diagnosing depression. He said that he explores what his "gut" is telling him and that clues to depression can be revealed through the way patients share information. Likewise, another physician spoke of having "a strong gut sense when someone is dealing with depression or mental illness."

DISCUSSION

This study's findings illustrate the importance of bringing a qualitative approach to understanding how primary care physicians diagnose depression. Physicians did not limit themselves to the use of diagnostic aids, but used a variety of strategies. These physicians' experiences suggest, therefore, that existing research might not accurately convey the realities of clinical practice in primary care. One conclusion drawn from the literature on diagnosis of depression in primary care is that physicians underdiagnose depression and do not possess adequate knowledge about depression.[10-12] More in keeping with our findings, however, is the fact that other research suggests that such a conclusion does not adequately recognize the complexity of the diagnostic process in primary care.[4,7,10-16,19] The physicians who participated in our study drew upon a variety of strategies for diagnosing depression and pointed to the time-consuming and complex nature of their decision making.

Few studies have addressed diagnosis of depression directly from the standpoint of primary care physicians.[23-25] Findings of previous research based on physicians' accounts are congruent with ours. For instance, a study of diagnostic strategies among physicians in rural practices pointed to concerns about efficiency and negotiating a diagnosis of depression, which also emerged from our participants.[24] Our study, however, revealed additional information about how depression is diagnosed in the process of daily practice from the perspective of both urban and rural physicians within a fee-for-service system.

Further underscoring the importance of our project are the results of a second study in which researchers found that physicians tended to describe personal experience as more valuable than education and literature with regard to diagnosing depression.[25] Thus, our findings point to a need for further qualitative investigation of diagnosis as part of primary care physicians' routine practice. In particular, the finding that participants viewed depression as being a vague and not clearly definable condition warrants further exploration.

The findings of a third study are also congruent with our findings in revealing physicians' awareness of the socioeconomic context of depression.[4] Little previous research has investigated the clinical

acumen acquired through experience that our physicians described.

Our findings might help enhance understanding of the controversies surrounding diagnosis of depression in primary care by illuminating some of the challenges and resources unique to this setting.[15,19] For example, physicians' accounts reflected an incongruity between the search for a rapid and efficient way to facilitate diagnosis and physicians' recognition that diagnosing depression can be complicated by patients' social circumstances. Constraints on physicians' time make use of checklists understandable within the Canadian context of a fee-for-service system, shortages of physicians, and correspondingly heavy workloads.

Others have suggested, however, that diagnosing depression involves much more than simply recognizing symptoms.[15,19] Physicians reported that use of symptom checklists was not encouraged during their training, and this topic remains a source of debate in the medical literature.[2,7,15,16,19] Physicians' experiences suggest that simply incorporating further diagnostic aids into practice is unlikely to be effective because the procedures emphasized in physicians' training do not reflect the realities of clinical practice.

As others have noted, "The actual relationships that emerge within patient care reveal the uncertainty and particularity of clinical praxis and turn one toward storytelling, relationship, and interpretation,"[34] and "Trust, talking, and listening are crucial components of the clinical encounter; … they form the central premises of patient-centred medicine."[7] Consistent with these assertions, the physicians who participated in our study described diagnosis of depression as complicated, involving intuitive understanding of patients and their experiences. Physicians' experiences of diagnosing depression, however, also need to be considered within the fee-for-service system that constrains patient-centred practices.

Limitations

As with any qualitative study, the findings cannot be generalized to the entire population of primary care physicians. Nonetheless, the constant comparison involved in data analysis ensured that both confirming and disconfirming accounts were explored.

This study did not involve a process of "asking back" or follow-up interviews to confirm analytic findings with participants. Use of follow-up interviews might have resulted in greater detail, but might also have deterred physicians from participating. While no follow-up interviews occurred, participating physicians were mailed a report outlining the general themes arising from the interviews and were invited to provide feedback. Although no physicians contacted the researchers, the findings of this study have been presented to audiences that included practising physicians whose feedback indicates that the findings were consistent with their experiences.

Conclusion

This study shows that diagnosing depression can be a difficult, time-consuming task, filled with uncertainty, yet few studies have addressed the issue of diagnosis from the perspective of both urban and rural physicians.[4,6,7,24,25] While the roots of depression can be addressed by medicine, they might also "lie outside a traditional medical model of illness,"[7] because the process of diagnosis is not limited to a checklist approach, and physicians draw upon various dimensions of clinical acumen. Physicians' experiences in diagnosing depression provide an important contribution to knowledge about depression in primary care settings and the meaning of primary health care more generally.

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Contributors

Dr Thomas-MacLean *assisted with pilot-testing the interview guide and revising it and was responsible for data collection and some data analysis. She drafted the*

article, assisted with revision, and approved the final version to be published. **Dr Stoppard, Dr Miedema,** *and* **Dr Tatemichi** *conceived and designed the project, contributed substantially to revising the article, and approved the final version to be published.*

Competing interests

None declared

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