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Abstract

Many people with depression recognize their symptoms as depression, but fail to seek treatment for a number of years. We aimed to explore the reasons for this. Thirty primary care patients who screened positive for depression participated in semistructured, face-to-face interviews. Transcripts were analyzed using grounded thematic analysis. Patients who sought depression treatment emphasized their understanding of depression, their belief that treatment would work, and the negative consequences that would ensue if they did not seek treatment. Patients who did not seek treatment emphasized that treatment would not be effective, thought that depression would not last very long, and believed that depression did not affect their everyday lives. Patients' illness perceptions of depression were represented by and organized using the framework of the Self-Regulation Model of Illness Behavior. This model might be useful for planning patient activation intervention studies to increase the uptake of depression treatment in primary care.

Keywords

depression; health care, primary; health seeking; illness and disease, experiences; interviews, semistructured; qualitative analysis; research, qualitative

Depression is a highly prevalent and disabling disorder (New Freedom Commission on Mental Health, 2003; World Health Organization, 2001). Based on the U.S. Surgeon General's report on Mental Health, major depression alone ranks second only to ischemic heart disease in magnitude of disease burden (U.S. Department of Health and Human Services, 1998). Missed days of employment because of untreated depression and other psychological morbidity deplete the U.S. economy of \$66 billion in lost productive time each year, an excess of \$31 billion per year compared to peers without depression (Stewart, Ricci, Chee, Hahn, & Morganstein, 2003). However, depression is highly treatable (Arroll et al., 2009; Williams et al., 2007). Appropriate treatment in a primary care setting substantially improves patients' clinical, quality-of-life, and employment outcomes (Schoenbaum et al., 2002). For this reason, comprehensive, accurate, and timely detection of depressive disorders can have an enormous impact on the health and productivity of the population.

Most cases of depression are identified and treated by primary care physicians (PCPs; Olfson et al., 2009). In primary care, the availability of new medications, such as selective serotonin reuptake inhibitors, make it easier for PCPs to treat depression (Druss, 2010). Despite this, approximately 50% of depression cases go undetected in primary

care (Kessler et al., 2003). Screening for depression in U.S. primary care settings is recommended for all adults (O'Connor, Whitlock, Beil, & Gaynes, 2009), but estimates of national rates of screening and treatment for depression show that PCPs screen for depression 21% of the time, and of those screened, 30% of patients reported receiving treatment in primary care (Edlund, Unützer, & Wells, 2004). This lack of treatment might be because many U.S. primary care settings lack staff assistance with depression care (O'Connor et al.) and thus, patients might need to actively seek help for depressive symptoms to receive needed treatment.

To first seek help for depression, patients need to view depression as a serious, disabling condition, and they need to be ready to seek treatment (Von Korff, Gruman,

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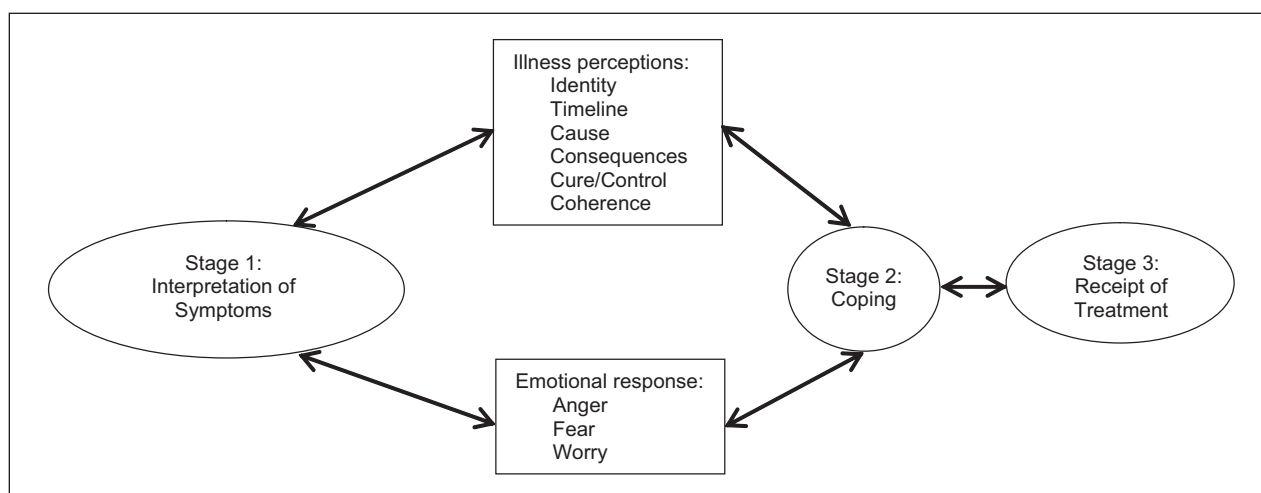


Figure 1. Self-Regulation Model of Illness Behavior

Schaefer, Curry, & Wagner, 1997). In past studies researchers have identified rates of help seeking for depression (Bristow & Patten, 2002), but few researchers have examined how patients with depression describe their own help-seeking behavior. We employed semistructured interviews with primary care patients with depression to identify the reasons why these patients had either sought or not sought treatment for their depression. Our findings are represented by and organized under the Self-Regulation Model of Illness Behavior (Leventhal, Leventhal, & Contrada, 1998), which illustrates the relationship between patients' perceived barriers to depression treatment and their decisions to seek or not seek help for depression (see Figure 1). By examining primary care patients' illness perceptions of depression, we show how patients' understanding of depression and its treatment coalesces with constructs inherent in the Self-Regulation Model of Illness Behavior among those who have and who have not sought treatment for their depression (Leventhal et al., 1998). Additionally, we use this information to propose recommendations for patient activation and physician communication interventions in primary care, to increase recognition of depression and uptake of its treatment.

The Self-Regulation Model of Illness Behavior as a Model of Help Seeking

The Self-Regulation Model of Illness Behavior is one model of help seeking researchers use to explain how perceptions of illness affect coping strategies (Cameron, Leventhal, & Leventhal, 1995), including the decision to seek treatment or not. The first stage in this model, the

recognition and interpretation of symptoms, is a key concept in managing depression (Von Korff et al., 1997). Once a person is confronted with depression through symptom interpretation, the depressive symptoms are given meaning based on a person's perception of depression. These illness perceptions involve the constructs of identity (commonly experienced symptoms such as fatigue, sleeplessness, weight change); cause (e.g., stress or worry); consequences (e.g., "depression has a big effect on my life"); timeline (e.g., "depression will pass quickly"); coherence (e.g., how well one understands depression), and cure/control (e.g., "there is little that can be done about depression").

According to the model, the interpretation of the symptoms and the perception of depression will result in a change in a person's emotional response. For example, sleeplessness and irritability might be perceived by the person as depression or another illness, and this might result in anxiety. Fear or embarrassment might also occur based on perceived stigma of experiencing depressive symptoms. The timeline construct often consists of perceptions of the acute, chronic, or cyclical nature of an illness, and the cure/control construct consists of beliefs that are specific to one's own ability to control illness symptoms, called personal control, or the ability of any treatment to be effective, referred to as treatment control (Moss-Morris et al., 2002).

These illness perceptions determine whether or not a person views his or her symptoms as a health threat that needs medical or professional attention. Therefore, coping strategies that a person develops (Stage 2 of the model) are related to one's symptoms, perceptions, and emotional responses. One possible coping strategy is to seek treatment from a primary care physician, whereas another coping strategy might be avoidance of the problem. In Stage 3 of the model, the individual evaluates the effectiveness of the coping strategy and either continues on the same course

(e.g., continues with treatment for depression) or opts for an alternative course (e.g., seeks treatment if previously avoiding treatment, or seeks help from another provider). People ready to seek help and treatment for depression might choose an active coping method; people not ready to seek help might deny their symptoms. The barriers listed by patients as reasons for not seeking treatment, as described above, can be mapped to specific illness perception constructs in the self-regulation model. For example, not understanding the biological basis of depression is part of the coherence construct; not believing that any treatment can help depression is a cure/control construct.

Why Seeking Help for Depression is Difficult for Patients

Even the most depressed patients often do not believe that they need treatment (Van Voorhees et al., 2006). Estimated rates for individuals seeking help for a major depressive episode or disorder vary between 27.6% and 60.7%, and between 17.6% and 60.6% for help seeking for minor depression (Bristow & Patten, 2002). In addition, pervasive delays in initial treatment seeking among people with major depression are common, with the median duration of delay being 8 years (Wang et al., 2005). Many people with depression do not seek help for their condition (Hahn & Segal, 2005; Roness, Mykletun, & Dahl, 2005), despite the fact that they are able to correctly identify depressive symptoms 97% of the time (Lees-Haley & Dunn, 1994). Some of the most common reasons for people not seeking treatment include lack of knowledge regarding where to go for treatment, perceptions that the treatment is either too expensive or that insurance will not cover it, and lack of awareness of one's symptoms as requiring medical care (Magruder, 1998). Patient attitudes regarding the appropriateness of requesting help from primary care physicians has been cited as a potential barrier to appropriate recognition and treatment of depressive symptoms in primary care. In one study examining primary care patients' attitudes towards depression care, researchers found that patients' perceptions about medication, counseling, and their understanding of depression, as well as physicians' interpersonal skills, such as listening to, supporting, encouraging, and understanding the patient, were all important in helping patients to decide whether or not to seek care (Cooper et al., 2000).

In this article we expand on previous work in three ways. First, few investigators have sought to conceptualize a model of help seeking for depression among a clinical population that might guide future interventional research with a range of patients who have depression. The Self-Regulation Model of Illness Behavior has been utilized by researchers extensively in areas as diverse as asthma, diabetes, chronic pain, HIV, ischemic heart disease, and multiple sclerosis (Moss-Morris et al., 2002), and only

recently in the context of depression (Brown et al., 2007; Ward, Clark, & Heidrich, 2009) and other mental health disorders (Spoont et al., 2009). Although others have identified illness perceptions in patient narratives, often these studies were designed precisely to elicit those perceptions. What is unique in our study is that, given an open question about help seeking, patients' generated narratives corresponded to the Self-Regulation Model constructs. Second, real-world, urban, inner city, racially and ethnically diverse primary care patients with and without diagnosed and treated depression formed the population for study. Researchers who have used the Self-Regulation Model to explore beliefs about depression have focused exclusively on mostly White (Brown et al., 2007) or exclusively African American women (Ward et al.). This article provides evidence that White, African American, and Latino men and women who sought or did not seek treatment for depression shared similar illness perceptions of depression. Third, we describe how uncovering patients' illness perceptions of depression is a first step in identifying individuals for whom appropriate patient activation interventions can be implemented. Researchers who have examined help seeking by patients with depression and anxiety (Reness et al., 2005) and actions taken by patients to cope with depression (Addis & Mahalik, 2003), and researchers who have conducted systematic reviews of patients' treatment seeking for depression, have provided descriptive information on the barriers patients experience in the medical consultation (Bristow & Patten, 2002). In this article, we provide empirical information on patients' own views of their depression, and their reasons for seeking or not seeking help for depression from their primary care physician.

Methods

Participants and Procedures

Patients were recruited in the waiting room of a large primary care practice situated within an academic, inner city hospital. We aimed to recruit similar numbers of White, African American, and Latino/a patients, and men and women, which corresponded to the primary care population of the hospital. Patients were approached by the research assistant (RA) and asked if they would be willing to participate in a research interview to learn more about patients' understandings of depression. Patients were eligible if they reported being between 18 and 65 years of age, could speak English, did not appear to have any cognitive impairments, and scored positive (11 or higher) on the nine-item Patient Health Questionnaire-9 (PHQ-9) depression screening test (Spitzer, Kroenke, Williams, & the Patient Health Questionnaire Primary Care Study Group, 1999), which was administered by the RA for purposes of this study and not as part of a routine clinic

screening procedure. A score of 11 or higher on the PHQ-9 indicates a probable depression diagnosis. Patients provided verbal consent for the PHQ-9 screen, and if they scored 11 or higher, were informed that they were eligible for the interview study. To preserve patient confidentiality, patients were informed through the consent process that PHQ-9 scores would not be shared with their physician unless they scored in the severe range (scores of 21 to 27), or if the RA considered that the person was at risk of harming him- or herself or others. In either of these cases, patients were informed that the medical director of the primary care clinic would be notified immediately of this emergency. The medical director would then contact either the patient's PCP or the clinic's psychologist to ensure that timely appointments and/or treatment were available to the patient.

Fifty-two patients were screened by the RA in the waiting room, and 30 were eligible for the study based on their screening results. One patient was excluded from the study by the RA because she appeared to have cognitive impairments and was thought not to be capable of informed consent. No patients refused the PHQ-9 screening test, and no patients who were eligible refused to take part in the interview. Interviews were transcribed and discussed within 1 week by the first two authors (Elwy and Yeh), and these comparisons of themes and categories indicated that thematic saturation was reached after interviewing 30 patients. At this point, no new attempts to recruit participants into the study were undertaken.

Once a patient was deemed eligible for the interview study, the RA placed a note in the front of the patient's paper medical file, informing the primary care physician that the patient would be participating in a research interview following the patient's appointment with the physician. The note indicated the room number of the clinic exam room where the interview would take place. All interviews took place following the patient's primary care clinic appointment. After the patient's appointment, the physician escorted the patient to the exam room where the interview would take place. All interviews were digitally audiorecorded with the permission of the patient. The RA obtained written informed consent and asked patients to provide written HIPAA¹ authorization for the study prior to conducting the interview. Interviews took place between March and October, 2007. Patients received \$20 as compensation for their time immediately after the interview. All procedures were approved by the institutional review board of a large, private university in the northeastern United States.

Interviews

The interview protocol was designed to elicit patients' understanding of depression in their own words. Our interview guide was kept intentionally broad so as to let patients' stories about depression and its treatment arise naturally.

We did not ask specific questions that related to the Self-Regulation Model. The interviewer began by asking the patient if he or she had ever sought help for depression from his or her primary care provider or mental health professional. If the patient responded in the affirmative, the interviewer probed for whether the patient initiated the conversation or not, how difficult or easy the conversation was for the patient, what kind of information he or she learned from this discussion, and explored the patient's views of depression treatment and his or her reasoning about why he or she started, did not start, or stopped treatment for depression. If the patient responded that he or she had never discussed depression with his or her primary care physician or a mental health professional, the interviewer probed for information on why this conversation was difficult to have, what the patient's reasons were for not discussing depression, other people with whom the patient discussed depression, what the patient was currently doing to cope with his or her depression, and the patient's ideas about what would make it easier to discuss depression with his or her doctor.

Analysis

Interviews were transcribed verbatim by a professional transcription company and analyzed using grounded thematic analysis (Miles & Huberman, 1994), a procedure informed by grounded theory methodology (Charmaz, 2006). We sought to identify themes related to help seeking for depression in patient interviews. All codes were emergent from the data and were not predetermined by the investigators. Through a series of open and axial coding and constant comparison processes, we built a theory about patients' help-seeking behavior for depression. For the first five interviews, the first two authors coded each transcript independently. The coding was discussed for each transcript, and any disagreements on coding were discussed until a consensual decision was made. The two authors then coded an additional five transcripts independently, and again jointly discussed the coding, including new codes that emerged. This constant comparison process continued until all 30 transcripts were coded. The coding scheme was revised as needed throughout this process. All data were entered into NVIVO 7.0 qualitative computer software program for data coding, sorting, and analysis (QSR International, 1999).

Through our coding process, qualitative differences began to emerge across what appeared to be specific perceptions about depression and its treatment held by participants in the study, such as views of what they considered depression to be, what caused depression, how long depression lasts, whether depression can be controlled by a person or by treatment, whether doctors are capable of helping patients with depression, and feelings patients experienced because of their depressive symptoms. These

perceptions determined whether or not a patient had sought or was considering seeking treatment for depression. As a result, we chose to represent these findings using the Self-Regulation Model of Illness Behavior, a model of help-seeking behavior (Leventhal et al., 1998). Following Leventhal and colleagues' model, we organized our findings related to the identity, cause, timeline, consequences, coherence, cure/control, and emotions participants in the study experienced as a result of depressive symptoms, and how these findings related to participants' coping and treatment-seeking behaviors.

Results

Participants

Thirty patients (16 men, 14 women) participated in the interviews. Six (20%) were Latino/a, 14 (47%) were African American, and 10 (33%) were White. The mean age was 44 years (range 20 to 61), and 10 (33%) were currently employed. Twenty-three participants (77%) reported annual incomes of less than \$25,000. Seventeen participants were currently receiving depression treatment (57%), and 19 (63%) had ever received treatment.

Illness Perceptions of Depression

All primary care patients expressed a range of illness perceptions of depression and its treatment. This was true whether or not patients had discussed depression with their primary care physicians, mental health professionals, friends, or family, and whether or not they were currently in treatment for depression. Below we present verbatim examples of patients' responses, grouped under each component of the Self-Regulation Model of Illness Behavior. We intermittently changed pronouns from "he" to "she" throughout to preserve patient confidentiality. Dysfluency in these examples is retained because this reflects actual speech patterns and the ways in which people have difficulty constructing their illness perceptions.

Identity

Identity of a health problem includes its label (e.g., depression) and its symptoms (Nerenz, Leventhal, & Love, 1982). Experiencing symptoms initiates a person's active cognition search process that results in an illness perception (Baumann, Cameron, Zimmerman & Leventhal, 1989), which then initiates the decision process of seeking or not seeking care (Cameron et al., 1995). Identity plays an important role throughout one's illness as a target for coping, and as a point of reference during the patient's appraisal process (Cameron et al.). A patient currently

receiving depression treatment discussed how he recognized his depressive symptoms but was not ready to give it a label until speaking with his doctor about it. Thus, it appeared that during the conversation with the doctor, the patient learned to identify his symptoms:

I knew it, but I mean, I didn't really admit it, I guess, until I sort of felt like I had to admit it. You know, I mean, he [the doctor] made me realize that having the anxiety that I have was not normal.
(Patient on treatment [OT])

In the exchange presented below, the patient recognized that he had depressive symptoms, and had initiated coping mechanisms that were ineffective in dealing with these symptoms. After an appraisal process, the patient recognized that the depressive symptoms remained even after he changed his coping methods. Knowing the symptoms were still present, he decided to seek help for them:

Question (Q): What kind of symptoms were you feeling that you thought you were depressed?
Answer (A): Just, you know, basically feeling down. Trouble sleeping, all that. And I knew that, you know, I was self-medicating and drinking a lot back then. I knew I had to stop that. So when I did, it was kind of after I stopped drinking, I still had the feelings—that's when I, you know, looked for medical help for the problem. (OT)

In the examples below, two patients who eventually received treatment for depression did not recognize or label their symptoms as depression for many years, until their doctor explained these symptoms to them. These exchanges illustrate the importance of physicians in initiating the discussion about depression with patients:

Q: So you were actually diagnosed by the doctor?
A: I didn't know anything about depression until they told me and explained to me what depression is.
Q: And at the time what were you feeling?
A: I'm just, uh, you know—I wasn't in a good mood. Feeling bad about myself. No energy at all. Like, uh, you know, I was alive but inside I was dead. (OT)

Q: So you thought your doctor was a good source of help in terms of depression?
A: Yeah. Because, uh, after all these years growing up with it, uh, I didn't know what it was. Nobody else knew what it was. And I was finally diagnosed. The reason I feel like this way. So it was a good thing that it was finally presented to me that I have a mental problem. (OT)

In contrast, a patient can believe that she is depressed but that the symptoms she is experiencing are not related to depression, not because of any specific cause, and are not labeled as a health threat. When this happens, help is not sought for depression:

Yeah, I think it's just issues that are going on now that caused me to be depressed. You know, I don't think I'm like in a state of depression. You know? . . . I just thought this was day-to-day life. Like, aw, this happened. Or you know, I didn't recognize that there was a problem, so nothing to tell anybody. (Not on treatment [NOT])

Moreover, if the symptoms that one is feeling are experienced by so many, then these symptoms are not labeled as depression by patients, and therefore treatment is not sought:

Q: But you felt maybe you didn't want to ask [for help] because you thought maybe—
A: Right. Because everyone's depressed. You know, I just felt like it wasn't like a medical—you know, a medical concern where I should have made an appointment. (NOT)

Cause

Patients' perceptions of the cause of their symptoms represent their beliefs about factors contributing to the development of an illness (Leventhal, Meyer, & Gutmann, 1980). Researchers have stated that people use their symptoms and labels to generate imagery of prior illnesses, and these images might or might not fit with their beliefs of what causes a particular disorder (Meyer, Leventhal, & Gutmann, 1985). The patients quoted below expressed some belief that age was inversely related to depression, and for one patient, it helped that his doctor was able to explain that the etiology of depression did not involve age:

At one time I never thought I would be a candidate per se, uh, for this type of situation. Whether it's age related or a combination of things. Maybe I should have admitted it to myself earlier that I had some problems with depression. It's only within the past couple of years that I've actually admitted it to myself. (OT)

A: I'm too old to be suffering from this.
Q: You feel like you're too old to be suffering from depression?
A: Well, he [the doctor] told me once that it wasn't my age. That I could be young or old, to suffer depression. (OT)

Some patients believed that their symptoms were caused by problems not related to depression, but rather to life events. In the example below, a patient perceived that his financial problems were the cause of his depression, and these financial problems were unlikely to last a long time. Patients often talked about depression in a way that normalized it, such as the patient quoted below. For this patient, cause and timeline perceptions of depression interacted, and the patient indicated that he thought both the cause and the timeline were short, and that no treatment was warranted:

Q: You said you didn't ask your doctor for help. Is there any reason why you didn't seek help for depression?
A: Because, I mean, I understand that we go through certain things in our life. It's not always going to be like that; it's going to change. For example, right now I'm going through financial problems, so I know that's going to change, hopefully, soon. So at the moment I'm a little bit depressed, so many things to worry about, but I know it's going to change. So I'm not looking for—I don't seek providers or nothing to help me with that situation. (NOT)

Timeline

The timeline construct refers to patients' beliefs about the course of their illness, how long it will last, and whether their symptoms are acute or chronic (Leventhal, Meyer, & Gutmann, 1980), or cyclical in nature (Moss-Morris et al., 2002). Patients' beliefs about how long their symptoms will last might impact their decisions to seek or not seek help. Evidence suggests that those who believe symptoms are acute will not seek help, whereas those who believe that symptoms are chronic or cyclical—and therefore are perceived as more threatening—will seek help (Brown et al., 2007). One patient identified her symptoms as being cyclical in nature, and was currently receiving treatment:

Q: How do you feel about depression?
A: It's just something that happens to us, I guess. You know, there's reasons why it happens, you know. It comes, it goes. Some days are better than others, you know. I do my best to deal with it, you know. (OT)

Patients with depression who believed in the acuteness of their symptoms were not currently receiving treatment for their depression, such as the patient who said, "It's just a bad spell that I'll go through":

Q: Was there any particular reason why you never asked for help with depression?

A: Um, 'cause, I mean, it—it didn't—it did not last. I mean, the days I would be depressed would be because of the, you know, the day itself. And, you know, once the day passed by, you know, the next day is not the same. You know? It's not a—something that sticks with me like that, you know? (NOT)

Consequences

Patients' perceived consequences as a result of their symptoms and perceived health threat reflect their judgment of the severity of the illness (Cameron et al., 1995). These consequences might be immediate or long term (Leventhal et al., 1980). Studies have illustrated that the more severe one perceives the consequences of the symptoms and health threat, the more likely that he or she will seek treatment for the illness (Brown et al., 2007). Patients receiving treatment in the current study explained how they were coping with their symptoms and how the consequences of this coping impacted their personal lives: "I didn't want to do nothing. I don't want to go nowhere. Stay home. Don't want to see nobody. You know? So it was like surrounding myself" (OT). Patients' perceived consequences of their symptoms were often rooted in the perceived stigma of depression and its treatment. Yet the consequences of depressive symptoms were often dire enough that treatment still ensued:

I knew I was depressed but one want to shield yourself . . . But I wasn't trying to agree to it. Because in my culture if you are taking any medication concerning mental medication, they refer to it as you are crazy. So even though I may have work—but when they said, "Oh, you've got to go see this psychiatrist," that stigma just come to me, that, "Oh, if people know I'm taking this medication it means I'm crazy." So that's why I was like in denial. (OT)

Depression led one patient to remain away from his family. His perceived worry of how his grown children would view him in his depressive state led him to receive treatment, yet until treatment resolved his depression, it was clear this man would continue to isolate himself:

I got kids. I don't want them to see me sad or trying to isolate myself. And they be asking questions in their mind, "Why my dad is doing this? Why my dad is doing this?" So I don't want them—that's why I try to visit them the less possible. When I wasn't suffering this, when I wasn't depressed, I used to go

every week to see my children, my grandchildren. Now I go months. And they call me. They ask me, "Why you gone?" I say, "I don't feel good" . . . I want them to live their life, you know, happy. Not thinking or worrying about me. (OT)

Some patients who isolated themselves did not seek treatment. The patient quoted below explained that she attempted to socialize, but the consequences of her depressive symptoms were so great that she could not follow through with social plans. Although these consequences appear severe, this patient was not receiving treatment:

You know what, I want to be by myself. I plan outings with friends, back out at the last minute. I don't want to be around nobody. I don't like nobody right now. I crave when I get off work to get the bus. When I get off [the bus] it's like the finish line. It's like I'm in a race to get home, to go in the house and shut the door, and don't want to come out. (NOT)

When asked how he would feel if a friend had depression, a patient's remarks reflected the stigmatizing nature of depression. His response reveals a belief that people can have personal control over depression (see control construct, below). His reflections on a hypothetical friend with depression might indicate why he was not receiving treatment for depression:

It's better to keep it personal, but . . . if you're my friend and you're seeing this psychologist, I'm not going to, you know, I'm not going to reject you because you're seeing a psychologist. I'm just going to think inside of me that, okay, you made your problem because you're asking psychology for help. I won't treat you differently, but I'll see you a little different. (NOT)

Cure/Control

People hold perceptions, based on how they identify their symptoms, about the extent to which an illness is amenable to personal control or control by treatment (Leventhal et al., 1980). Some patients specifically mentioned personal control of depressive symptoms in their interviews, whereas others commented on whether treatment could be helpful in treating depression. Evidence suggests that patients who believe that their illness can be controlled by treatment are more likely to seek help, whereas those who believe more strongly in personal control are less likely to seek help (Brown et al., 2007). The patient quoted below commented that fear of treatment initially kept him from seeking treatment, but when he noticed that his

symptoms improved after taking medication, he was willing to remain on treatment:

At first I was kind of scared because I've never been on depression. I mean, on medication for depression. And I was kind of afraid that those medication feel bad and worse. I thought I'd lose my mind completely. End up in a crazy hospital for the rest of my life. . . . And so I was surprised because it makes me better, you know what I mean. Like I say, some people don't like to be on medication, but, you know, there's some other ways, you know what I mean. (OT)

Medication treatment does not always work for all patients. The patient quoted below was receiving psychotherapy treatment, which was explored after her failed attempts to take medication. She explained how she would refuse to take her depression medication:

I would go in, they would give me a prescription and I would never take it. And I'd go back. They'd think it wasn't working, so they'd start me on something else. But it was really just, I wasn't being honest, and I wasn't taking it. (OT)

Perceived treatment control in one patient appeared to be related to his understanding of depression and its treatment (e.g., his coherence). This suggests that understanding more about how depression medication works and that there is no one right medicine might increase a patient's perception of treatment control, and hence, adherence:

The problem in that field is there's so many medications for depression. And they're all pretty much experimental at this stage. And there's no one pill. They can't just say, "Yeah, I think you need this one." Or you need Prozac, or you need Paxil, or you need—you kind of begin experimenting with them. And that's what I ended up doing. I went through like five different medications. That's the only tricky part. They can't just nail it down and say this is what you need to take. (OT)

Patients who believed that depression cannot be treated were less likely to seek or adhere to treatment:

Q: Did you have any concerns to talk to your doctor about your depression?

A: Well, actually I wasn't too worried, like, talking to her about it. I just—I know that, like, I just knew that I wasn't going to find a medicine that would help me. I've tried medicines before and I—I'll be honest, I haven't followed through with them totally, because I had just gotten—I'll

get fed up and just stop taking them, or you know—so I just didn't think that it would do any good really. (NOT)

A belief in high personal control over one's illness often results in less treatment-seeking behavior and a lack of adherence to treatment. The patients in the current study expressed beliefs that they had control over their own depression, and were not currently on any treatment for depression:

Q: Was there any particular reason why you didn't feel [asking for help] was necessary?

A: I don't know. I just didn't feel it was necessary. It wasn't so bad that I needed help, you know. I could overcome it, I think. (NOT)

I think she did prescribe a medication. I just didn't take it because I think I—if I thought I'd have got worse than what I was feeling, I was going to take them. (NOT)

After we talked about it, and he [the doctor] put me on some medication, and I took it for a while. But then, I seen that it was me, not really that I needed the meds [medications]. So I stopped taking them and I started, like, just taking it easy. You know what I'm saying? Because I still—like, nobody's going to be perfect. You get old, but I'm dealing with it. (NOT)

Coherence

The coherence construct reflects how patients make sense of their illness, and this relates to how patients adjust to and respond to their symptoms (Moss-Morris et al., 2002). Some patients' coherence regarding depression reflects an understanding that might have come from a primary care physician or mental health provider, and for one patient, helped him to seek treatment:

Q: Was it difficult for you to ask for help?

A: No. I realized that it's a chemical imbalance and I'm not embarrassed about it at all. (OT)

Other patients' coherence regarding depression came from knowledge they gained as they pursued treatment, which might reflect the appraisal process of the self-regulatory model: "I went through here [the program]. I'll think about it as my days go on. I mean, when rainy days come, I'll understand it, you know?" (OT).

Coherence expressed by patients that reflected negativity about depression might correspond to not seeking treatment for depression:

Like to me, when I think of somebody being depressed, I think they want to kill their self. So I wouldn't want them to be thinking that, because that's not what depression is all about. And then, if you have children, and you're a single parent, you don't want people to say, "Well, if she's depressed she doesn't need to be having kids," or whatever. (NOT)

This patient's coherence of depression reflects an understanding of illness in general as something one should be able to control. Similar to those with a strong belief of personal control, the patient was not receiving treatment: "I was brought up to believe you don't go to a hospital unless you're basically on your deathbed, you know? So when you just can't do anything else on your own, then you go to a hospital or doctor" (NOT).

Emotional Responses

According to the Self-Regulation Model, people develop parallel cognitive and emotional representations, which in turn will give rise to problem-based and emotion-focused coping procedures, respectively (Leventhal, Leventhal, & Cameron, 2001; Moss-Morris et al., 2002). Patients' emotional responses to their specific symptoms, separate from their general mood, were explored during the interview process. Anger was expressed when discussing what it was like trying to explain depression to others: "I just get angry when other people who don't know about it and don't understand—or won't even attempt to understand" (OT).

Anger was discussed again in the context of the emotions that a patient can be left with as a result of not asking for help. In one patient's eyes, the perceived consequences of depression were either anger (something that he could feel) or weakness (something that others would perceive in him):

Q: Was there any particular reason why you didn't ask for help?

A: Yeah. Because I would have been weak. And that would be a bad thing. That would be a very bad thing. It's better to hate and be angry and miserable. (NOT)

Emotions reflecting guilt and shame were discussed by a long-term sufferer of depression in the context of the personal control she believed she had over depression. Coherence also played a role in these emotions and beliefs:

When I was younger I didn't have a clue. I always thought it was me. And I always thought I was bad. And I was always feeling guilty and always ashamed.

You know, I couldn't measure up. And I just didn't understand. Now I understand. (NOT)

Discussion

Primary care patients with depression express a range of perceptions about the identity, cause, timeline, cure/control, coherence, and emotional responses to depression and its treatment. Patients who sought depression treatment emphasized their understanding of depression, their belief that treatment would work, and the negative consequences that would ensue if they did not seek treatment. Patients who did not seek treatment did not express a clear understanding of depression. They emphasized that treatment would not be effective, felt that depression would not last very long, and believed that depression did not affect their everyday lives. Identifying a label for one's symptoms; thoughts about how long symptoms might last; the consequences, controllability, and understanding of the symptoms; and patients' emotional responses to these symptoms played a significant role in their discussion about seeking or not seeking depression treatment.

An interesting finding is that patients' beliefs about depression and its treatment did not fall into self-regulation model of illness behavior constructs in a mutually exclusive fashion. When patients talked about consequences, there was often discussion about timeline as well as emotional responses. Discussions about identity often included beliefs about personal control as well as the cause of depression and its symptoms. A quantitative-based measure, the Illness Perception Questionnaire (IPQ), that purposefully explores these self-regulation illness perception constructs, was first developed in 1996 (Weinman, Petrie, Moss-Morris, & Horne, 1996) and then revised in 2002 (Moss-Morris et al., 2002). The IPQ has very strong reliability and validity, and has been adapted for use in patients with depression (Brown et al., 2001). However, our qualitative findings suggest that patients do not always make distinctions between these illness perception constructs in the context of depression. Further work is needed to explore the utility of a quantitative measure of illness perception in patients with depression.

Researchers and clinicians have been addressing the issue of poor identification of depression in primary care and a lack of adherence to depression treatment for years. Several researchers have identified barriers to depression treatment that coalesce with the constructs of the Self-Regulation Model of Illness Behavior, although they have not identified this theoretical model as a potential guiding model for their research (Nutting et al., 2002). In a recent qualitative study, participants with major depressive disorder described how tiredness, fatigue, and exhaustion shaped their meaning of depression (Porr, Olson, & Hegadoren, 2010). These participants described how they

renegotiated social roles as a result of the fatigue and exhaustion emanating from depression, such as ignoring society obligations or withdrawing from society, which could be viewed as consequences of depression, and experiencing numbing emotions, similar to the emotional representations construct in the Self-Regulation Model of Illness Behavior. In another qualitative study, investigators used focus group methodology with patients to identify message areas that need to be targeted by health care providers when trying to motivate patients to initiate and adhere to depression treatment (Bell et al., 2010). These message areas include the misunderstanding of the nature of depression, which maps to the coherence and cause constructs; problems communicating with physicians about depression, which is similar to the personal control construct; and patients' low acceptability of treatment, which is related to the treatment control construct. Our findings add to the literature by conceptualizing patients' perceptions of depression in an empirically driven model of patient behavior, which illustrates ways in which specific illness perceptions facilitate their treatment-seeking behavior.

Many interventions have been put in place to address the problems of obtaining appropriate and timely depression treatment in primary care. Examples of these interventions include collaborative care interventions to ensure that patients who initiate depression treatment adhere to it, with the help of patient education and nurse case manager followup (Dobscha et al., 2006; Rubenstein et al., 2006); patient activation interventions to ensure that patients initiate their own discussions about depression if a provider is not willing or able to do so (Alegria et al., 2008); and educational interventions to inform patients of the symptoms of depression and the different methods of treating it (Gilbody, Whitty, Grimshaw, & Thomas, 2003). These interventions have been equivocal in their effectiveness, and none have been focused on how to increase the uptake of depression treatment once a patient is identified as depressed, but has not initiated treatment. Recently, researchers described the importance of help receiving, the experience of receiving help once it is accessed, in addition to the act of help seeking (Zack Ishikawa, Cardemil, & Joffe Falmagne, 2010). Future interventions to increase help seeking for depression should also investigate what makes patients ready to receive help in addition to seeking help.

One reason previous interventions might have been equivocal in their results is because men and women present both similarities and differences in their beliefs about depression and its treatment, and interventions are not designed to detect these differences. Researchers have found that in personal accounts of depression in media reports (Bengs, Johansson, Danielsson, Lehti, & Hammarström, 2008), interviews with people with depression, medical literature, and media portrayals (Johansson, Bengs, Danielsson, Lehti, & Hammarström, 2009), that

gendered differences in the recognition and understanding of and experiences with depression, exist. Indeed, these themes of recognition, understanding, and experience with depression are similar to the identity, cause, and coherence constructs in the Self-Regulation Model of Illness Behavior. This suggests that gendered differences in these illness perceptions of depression might also have been present among participants in the current study. Before planning future interventions to detect and potentially change primary care patients' illness perceptions of depression, it is necessary to understand how men and women might view perceptions of depression and its treatment similarly and differently. Further work in this area among a U.S. primary care population with depression is needed.

Few interventions have explicitly targeted patients' own understanding of depression and its treatment, and how these understandings, or perceptions, can create barriers to both discussing depression with primary care physicians and adhering to treatment recommendations. One reason for this lack of investigation might be a lack of theoretical models to guide intervention-based research (Michie & Prestwich, 2010). Our findings suggest that Leventhal's Self-Regulation Model of Illness Behavior (Leventhal et al., 1998) is a useful theoretical framework for guiding future research aimed at addressing patients' beliefs about and barriers to depression treatment that are prohibiting timely initiation of depression care. By presenting results from the current study to primary care physicians, and showing how the self-regulation model helps in identifying the different illness perceptions held by patients currently in treatment or not in treatment, physicians can use these illness perceptions to facilitate specific conversations about depression treatment that build on patients' own beliefs about care. Future research is needed to test the efficacy of targeted messages based on patients' identified illness perceptions to determine whether these specific messages result in greater initiation of depression treatment in primary care.

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1. Health Insurance Portability and Accountability Act. HIPAA is a public law enacted by the U.S. Congress in 1996 and includes provisions to address the security and privacy of health and health care data.

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