Evidence-Based Patient-Centered Interviewing

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Interest in the medical interview has increased dramatically over the past 2 decades as researchers have come to better understand the relationship between communication and health. Until the early 1970s, the clinical perspective of illness was almost entirely biomedical, and disease was defined as "deviations from the norm of measurable biological (somatic) variables" [1]. Data gathered for diagnosis and treatment almost exclusively consisted of information concerning possible disease symptoms, biomedical history, and diagnostic tests. In 1977, George Engel advocated expanding the medical paradigm [1]. He argued that to fully account for health or disease, the social and psychological dimensions of human existence had to be considered along with biomedical data. This requires not only gathering personal or psychosocial data from patients but also competency in interviewing techniques that elicit this information as well as relationship-building skills that nurture confidence and human understanding [2–4].

The application of these skills in practice is called *patient-centered interviewing* [2–6]. In *doctor-centered interviewing*, the doctor takes the lead to obtain symptom details and other data to make a disease diagnosis [2,4]. A problem in medical practice has been the use of doctor-centered skills in isolation, an approach that excludes the personal and emotional components of patient health [2,4]. However, when the patient-centered interview is integrated with the doctor-centered interview, patients have an opportunity to be heard before disease data are collected. During the patient-centered interview, the patient is encouraged to take the conversational lead [7], initiating topics in the areas of their experience and expertise: symptoms, worries, preferences, and values [2]. The physician does not insert new ideas into conversation but instead allows and facilitates the patient to direct the conversation [7]. The approach is aptly labeled patient-centered because the physician acknowledges and meets the patient's need to express problems, emotions, and concerns, obtain information, and help determine the agenda for the medical appointment. When well performed, the patient-centered interview operationalizes the biopsychosocial model and, as such, is associated with numerous positive outcomes for both patients and physicians.

In this article, we give a brief overview of the positive outcomes associated with patient-centered interviewing and describe an evidence-based method for conducting a patient-centered interview.

The Benefits of Patient-Centered Interviewing

Research on the impact of communication patterns between physicians and patients has reinforced the importance of patient-centered interviewing. Patient-centered interviewing skills have proved to be advantageous in a number of areas, including patient health, patient and physician satisfaction, and general practice management.

Clinical Outcomes

Research has linked effective patient-centered interviewing with improved health outcomes. Among patients with chronic diseases, reduced physician information-giving and low levels of patient control in the doctor-patient dialogue have been directly associated with poorer health outcomes [8]. Kaplan, Greenfield, and Ware found that patients who were encouraged to participate in their care by asking questions during medical appointments had greater improvement in blood pressure and glucose levels and functional status compared with patients whose doctors were more authoritarian [8]. These researchers posit that the physician's act of giving information at the patient's request affects the outcomes of patients with chronic disease by "shaping how patients feel about disease, their sense of commitment to the treatment process, and their ability to control or contain its impact on their lives" [8]. This work demonstrated that patients benefit from relationships in which control of the medical interview is shared and in which their information needs are met. Such relationships are consistent with a patient-centered interviewing approach.

Additional research has linked effective patient-centered interviews with improved health outcomes. In Stewart's comprehensive review of 21 studies in which the relationship between effective doctor-patient communication and various aspects of physical and mental health were explored, 16 reported positive results [9]. The data from those studies indicated that reduction in psychological distress and symptom

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resolution were associated with physicians' checking on patients' concerns, expectations, and understanding of the problem; asking about feelings; and showing support and empathy [9]. Several other studies in Stewart's review reported that patients' expressions of feelings, opinions, and information and their perception that their problem had been fully discussed led to reduced role and physical limitations, improved health or functional status, blood pressure reduction, or symptom resolution. Similar findings were associated with effective discussion of the management plan in which patient-centered approaches (eg, eliciting patient questions, giving clear information and emotional support, sharing decision-making) were used [9]. A more recent summary of research involving relationship-centered care focusing on support of patients' autonomy corroborated and complemented previous findings: relationship-centered care was more likely to increase compliance with medications, weight loss, smoking cessation, and the maintenance of these effects [10].

Patient Satisfaction and Quality of Life

Among the positive outcomes of patient-centered interviewing is the satisfaction that it brings to both patients [11,12] and physicians [13–16]. Patient satisfaction is important because it influences patients' compliance with medical treatment, which in turn impacts health [13,14,17]. There is a body of literature that relates patients' dissatisfaction with physicians' communication skills (eg, lack of warmth, poor explanations, failure to address patient concerns) to noncompliance with medical treatment [18–21], breaking appointments, and seeking other medical providers [18]. On quantitative measures, patient-centered interviewing has been associated with both higher general satisfaction and greater confidence in the physician [12].

There is also evidence that patient-centered approaches improve patients' well-being in ways not always captured in quantitative research. In a recent study, patients were asked about symptom reduction and activity levels [22]. Qualitative methods corroborated the quantitative findings, and also provided significant additional information. During follow-up interviews, patients talked about quality of life issues, such as coping better with their symptoms between treatments, having more hope, and feeling supported [22]. Patients credited their relationship with their providers for improvements in their attitudes toward their health problems [22]. That these benefits were attained illustrates a primary tenet of the biopsychosocial model: therapeutic treatment for patients does not require curing all symptoms or disease. As Frank has pointed out, simply being with a patient in a supportive way is therapeutic in itself, even under the worst of medical circumstances [23]. Patient-centered skills ensure that we always have something to offer.

Physician Satisfaction

Using patient-centered skills effectively teaches that valuable lesson to physicians as well. There is research that suggests that residents trained extensively in patient-centered interviewing experience increased professional and personal satisfaction [13–16]. Lyles found that residents who were interviewed 2 or more years following intensive interviewing training indicated that they were better able to help their patients, regardless of diagnosis, by using patient-centered techniques [16]. Some also reported that the rewards of patient-centered interactions were instrumental in their decision to continue in primary care. The training not only increased their understanding of the biopsychosocial model, but also bolstered their confidence in treating the whole patient, addressing and seeking patient emotions, and trusting in the therapeutic value of the doctor-patient relationship [16]. The rewards derived from effectively deploying patient-centered skills also may have implications for a recent study exploring physician satisfaction. Researchers found that physicians who are satisfied with their work are more likely to have patients who are satisfied with their health care [24]. Although the authors suggested that satisfied physicians may communicate better or more empathically with their patients [24], it is equally possible that patient-centered communication is the source of the satisfaction for both the physicians and the patients.

Pragmatic Benefits for Medical Practice

Perceived lack of physician empathy has practical ramifications for medical practice as well. It can lead to increased litigation and poor time management. There is a long history of research associating poor communication with malpractice litigation. Researchers have noted that less than 3% of hospitalized patients who have negligence-related injuries actually initiate lawsuits [25]; the critical differentiating factor between those who sue and those who do not appears to be the quality of the physician-patient interaction [26,27]. More than 30 years ago, Blum reported that patients' malpractice suits and failure to pay doctors' bills were related to problems with doctor-patient communication [28]. Later, Valente et al corroborated this link, noting specifically that lack of physician empathy, lack of information, and perceived lack of physician remorse for negative outcomes often led to medical liability claims [29]. More recently, it has been estimated that over 70% of all claims [26] and 75% of the malpractice suits lost by physicians reflect poor communication [30]. The recommended remedy calls for physicians to convey understanding and support of the patient's perspective and provide the information that patients and their families want [26]. This strongly suggests the need for communication training to improve physicians' skills in gathering data, handling

Table 1. Basic Skills for Patient-Centered Interviewing

Nonfocusing open-ended skills
Silence
Nonverbal encouragement (head nodding, leaning forward)
Neutral utterances, continuers ("um-hmm")
Focusing open-ended skills
Reflection, echoing (eg, patient says: "I'm worried;" physician echoes, "Worried?")
Open-ended requests ("Can you say more about that?")
Summary, paraphrasing
Emotion-seeking skills
Direct ("How did that make you feel?")
Indirect: self-disclosure, impact on life, impact on others, and belief about problem
Emotion-handling skills (**N U R S**)
Naming, labeling (eg, "You sound sad.")
Understanding, legitimation (eg,"I can sure understand why . . .")
Respecting, praising (eg, "You have been through a lot.")
Supporting, partnership (eg, "I am here to help you any way I can.")

Adapted with permission from Smith RC. The patient's story: integrated patient-doctor interviewing. Boston: Little, Brown; 1996:4.

emotions, and ascertaining patients' needs—key elements of a patient-centered interview [31].

In addition to mitigating the factors that precipitate litigation, another practical element of patient-centered interviewing is better time management for physicians. Patient-centered interviewing includes 2 elements that are crucial to conducting efficient office visits: agenda-setting and focusing. Agenda-setting entails eliciting a complete list of the patient's concerns followed by negotiating what can be accomplished in the allotted time. By summarizing what the physician needs to accomplish during the visit (eg, medical history, physical examination) and which patient concerns will be discussed, expectations are clear [2,4]. The prevalence of new patient concerns arising at the end of the appointment and missed opportunities for data gathering diminish considerably with use of agenda-setting techniques [2,4,32–34]. Focusing, which keeps the patient on track during a medical interview (discussed in more detail below), complements agenda-setting by functioning to ensure that appointment time is used to meet both the patients' and physicians' specified needs [2,4,16]. Although there is often resistance to learning patient-centered interviewing techniques because "they take too much time," recent research indicates that soliciting the patient's agenda can take as little as 6 seconds [32]. Other researchers have also shown that patient-centered interviewing takes no additional time [35].

Basic Skills for Patient-Centered Interviewing

Over time, a core of experienced patient-centered educators and researchers have reached a consensus on the essential interviewing and relationship skills that should be included in a patient-centered interviewing curriculum [2,3,4,6,7,36–41] (**Table 1**). Open-ended skills, both nonfocusing (eg, silence, neutral utterances, nonverbal encouragement) and focusing (eg, echoing, requests, and summary statements) elicit patient talk. As mentioned above, focusing skills respectfully keep the patient on track during a medical interview [2,4]. When a patient initiates a topic, focusing questions are used to develop the topic further. When a patient begins to introduce side topics that may compromise what can be accomplished in a finite appointment time, focusing skills redirect patients so that they continue to discuss topics that enhance understanding of their primary concerns. By learning when and how to use nonfocusing and focusing open-ended skills to elicit patient talk, providers are more likely to gather accurate and reliable information about the patient [2,4]. Becoming proficient in these skills requires that providers learn to resist shifting topics and interrupting the patient to introduce new ideas not initiated by the patient.

Mastery of relationship skills [2,4] are equally critical to effective patient-centered interviewing. Emotion-seeking skills (eg, "How did that make you feel?") and emotion-handling skills (ie, naming, understanding, respecting and supporting emotions) are the building blocks of the doctor-patient relationship; the patient's feelings provide access to underlying concerns and, consequently, to the psychological aspects of the patient's story. By addressing emotion using the skills outlined in Table 1 (and easily remembered by the mnemonic N U R S), the physician has an enhanced opportunity to make the patient feel better [2,4,6,7].

Table 2 shows how the basic patient-centered skills may be applied during an interview. The basic patient-centered interviewing method [2,4,7] is a 5-step approach that synthesizes recommendations embraced by scholars in the medical education and patient-centered research literature. This method was the centerpiece of a randomized controlled study that examined the effectiveness of patient-centered interviewing training. Residents trained using this method showed significant improvement in their knowledge, attitudes, self-confidence, skills in interviewing patients (both real and simulated), and dealing with relationships [7,36].

Putting it All Together: The Vignette of Mrs. Jones

The following interview, excerpted from *The Patient's Story* [2], illustrates many of the elements of the 5-step patient-centered interviewing process. Medical student Mr. White conducts the interview with his patient, Mrs. Jones.

Step 1: Setting the Stage

Dr: (*enters examining room and shakes hands*) Welcome to the clinic, Mrs. Jones. I'm Mr. White, the medical student who will be working with you along with

Dr. Black. I'll be getting much of the information about you and will be in close contact with you about our findings and your subsequent care.

Pt: Hi. I wasn't sure whom I was going to see. This is my first time here.

Dr: If it is okay with you, I'll close the door so we can hear each other better and have some privacy.

Pt: Sure, that's fine.

Dr: Is there anything I can help with before we get started?

Step 2: Setting the Agenda

Dr: . . . Well, we've got about an hour today, and I know I've got a lot of questions to ask and that we need to do a physical exam. Before we get started, though, it's most important to find out what you want to cover today.

Pt: It's these headaches. They start behind my eye . . . My boss is really getting upset with me. He thinks that I don't have anything really wrong with me and says he's going to report me . . .

Dr: That sounds difficult and really important. Before we get into the details, though, I'd like to find out if there are any other problems you'd like to look into today so we can cover everything that you want to. We'll get back to your headaches and your boss after that—that's 2 things (*holding up 2 fingers*). Is there anything else?

Pt: Well, I did want to find out about this cold that doesn't seem to go away. I've been coughing for 3 weeks.

Dr: (*holding up 3 fingers now*) Anything else you want to look at today?

Pt: . . . No. The headache is the main thing.

Dr: So, we want to cover the headaches and the problem they cause at work . . . the cough . . . Is that right?

Step 3: Nonfocused Interviewing

Dr: . . . So, that's a lot going on, how are you doing with it?

Pt: Oh, okay I guess.

Dr: (*silence*)

Pt: At least now.

Dr: (*sits forward slightly*) Uh-huh.

Pt: Things weren't so good last week, though, when I made the appointment.

Dr: Mmmm.

Pt: That's when my boss really got on me. Well, he's kind of uptight anyway, but he was saying how I was upsetting the whole office operation because I was off so much . . .

Dr: I see.

Pt: These headaches are right here (*points at right temple*) and just throb and throb. And I get sick to my stomach and just don't feel good. All I want to do is go home and go to bed . . .

Table 2. Basic Patient-Centered Interviewing Method

- Step 1. Setting the stage
  - Welcome the patient
  - Use the patient's name
  - Introduce self and identify specific role
  - Ensure patient readiness and privacy
  - Remove barriers to communication
  - Ensure comfort and put the patient at ease
- Step 2. Chief complaint/agenda setting
  - Indicate time available
  - Indicate own needs
  - Obtain list of all issues patient wants to discuss (eg, specific symptoms, requests, expectations, understanding)
  - Summarize and finalize the agenda; negotiate specifics if too many agenda items
- Step 3. Nonfocused interviewing
  - Open-ended beginning question
  - Attentive listening (nonfocusing open-ended skills)
  - Obtain additional data from nonverbal sources: nonverbal cues, physical characteristics, autonomic changes, accoutrements, environment
- Step 4. Focused interviewing
  - Obtain description of the physical symptoms (focusing open-ended skills)
  - Develop the more general personal/psychosocial context of the physical symptoms (focusing open-ended skills)
  - Develop an emotional focus (emotion-seeking skills)
  - Address the emotion(s) (emotion-handling skills)
  - Expand the story to new chapters (focusing open-ended skills, emotion-seeking and -handling skills)
- Step 5. Transition to the doctor-centered process
  - Brief summary
  - Check accuracy
  - Indicate that both content and style of inquiry will change if the patient is ready

Adapted with permission from Smith RC. The patient's story: integrated patient-doctor interviewing. Boston: Little, Brown; 1996.

Step 4: Focused Interviewing

This step is the most complex and requires the integration of focusing open-ended skills with emotion-seeking and emotion-handling skills. First, develop the patient's personal description of the symptoms, *the physical symptom story*:

Dr: Say more about the headaches.

Pt: Well, I never had any trouble until I got here.

Dr: How long's that been?

Pt: Only 4 months. The headache started about 3 months ago.

Dr: You mentioned your boss.

Pt: It seems like every time I see him any more I get one of these headaches. I sometimes just get a little nauseated but, if he's around much, there's the headache.

Dr: Keep going . . .

Continue to develop *the personal/psychosocial story:*

Pt: . . . I'm on the road a lot. No trouble then, either. Except one time when he called me.
Dr: Tell me more about your boss.
Pt: Well, he's been there a long time and I've replaced him in every way there is, except he is still in charge, at least in his title. He yells at everybody. Nobody likes him and he doesn't do much. That's why they got me in there, the Board, so something would get done. These headaches have all come since I got this job—right here. They throb behind my eye and . . .
Dr: Wait a second, you're getting ahead of me. You say he's in charge, but you are the lead attorney?
Pt: Yeah, they are phasing him out but he's still there in the meantime. Who knows how long it'll take. I hope I last . . . Sounds kinda bad, huh?

Establish an emotional focus by using emotion-seeking skills, *the patient's emotional story*:

Dr: How do you feel about that?
Pt: Oh, I don't know. The headache is what bothers.
Dr: But how'd you feel, you know, personally, your emotions . . .
Pt: . . . Well, I just want to throw something at him. He makes me so mad . . .

Address the emotion (**N U R S**):

Dr: . . . So you get mad when he gets on you? [**N**]
Pt: Yeah, he really gets me mad. I just get so furious I could scream sometimes (*clenches fist and strikes table firmly*).
Dr: . . . It sure makes sense. [**U**] It seems like you've done so much there to help and all you get is grief from him. [**R**] I appreciate the way you're able to talk about it. [**R**] He sure gets you mad . . . [**N**]
Pt: He sure does. Just talking about it gets me upset and gives me a headache right now.
Dr: I can imagine. [**U**] You've put up with a lot. [**R**] Let's work on this together. [**S**]

Expand the story to new chapters:

Pt: . . . You know the head of the Board even told me my boss is a good guy who was looking forward to me coming so he could retire!
Dr: The head of the Board?
Pt: She's the one who recruited me . . . she convinced me it was such a good chance for me.
Dr: Sounds like you didn't get a full picture of this place?
Pt: Yeah, it's not really fair.
Dr: How's that make you feel?
Pt: Well, I am upset . . .
Dr: (*uses* **N U R S** *again*)

Step 5: Transition to the Doctor-Centered Process

Dr: . . . So, you're in a new job that hasn't worked out quite like you were led to believe and that has caused you some upset with at least a couple people and quite bad headaches. Do you want to add anything?
Pt: No. I think you've pretty much got it.
Dr: If it's okay then, I'd like to shift gears and ask you some different types of questions about your headaches. . . . I'll be asking a lot more questions about specifics.
Pt: Sure, that's what I came in for.

The Issue of Self-Awareness

Learning the basic patient-centered interviewing method is just the first step in conducting an effective interview. As Stewart and Roter note, expertise in communicating requires more than knowledge or ability to rotely perform skills; it involves attitudes, life skills, and experience [3]. Physicians' personal attitudes and feelings about pain, drugs, poverty, and death (for example) influence not only *how* they talk to patients about these issues, but also *if* they talk about them [42,43]. Patient-centered interviewing cannot be mastered without the development of physician self-awareness.

Fear of Feelings

Many physicians find dealing with patients' emotions more difficult than treating disease symptoms. As a result, when patients express an emotion, some physicians may unconsciously avoid feelings by interrupting or shifting topics; others may preclude emotional expressions by aggressively controlling the interview from the outset [42,44,45]. Reasons for avoidance are deep-seated and may entail fears of causing the patient harm (eg, that talking about death or emotions will upset the patient) or losing control of the interview and their own emotions [42,44,45]. Such actions can restrict the growth of the doctor-patient relationship—not only by denying patients an opportunity to communicate what is important to them, but also by denying physicians the opportunity to offer comfort and support.

Most patient-centered educators agree that patient-centered teaching should include helping new learners to recognize and understand the variety of behaviors, feelings, and attitudes that can become barriers to the development of sound doctor-patient relationships [3,37,42–46]. Smith and colleagues [42,46,47] have noted that once residents learn basic interviewing skills, the persistence of poor interviewing performance is often due to unrecognized feelings about aspects of the doctor-patient relationship. Until such feelings are acknowledged and addressed, both the interview and the doctor-patient relationship will suffer.

Improving Self-Awareness

In the absence of a structured patient-centered education program, there are some things physicians can do on their own to improve self-awareness.

Recognize the unrecognized. The first step toward self-awareness is simply to start paying attention to one's feelings (emotions), or to begin to "recognize the unrecognized." Lyles found that residents trained in patient-centered interviewing were mindful of situations that signal the need to focus inwardly and explore their feelings. According to the residents, it is particularly important to sit back and ask themselves if they have been listening to the patient when (1) they have a negative experience with a patient or the patient "pushes their buttons;" (2) their plan for the patient isn't working and the relationship is uncomfortable; and (3) they notice their attitude about a patient is changing [16]. The latter is worth noting because the need for self-reflection is often overlooked when feelings are positive, even though positive feelings require equal assessment. For example, if a patient reminds a physician of a favorite elderly relative, the physician may unconsciously attribute attitudes to the patient that belong to the relative and avoid or choose topics that do not meet the patient's needs. By acknowledging those feelings and the association, it is far more likely that the patient will be treated and listened to as an individual [2].

Explore personal reactions. Exploring attitudes and feelings about social behaviors that have medical consequences presents a second opportunity to work on self-awareness. Many physicians have strong personal feelings about AIDS, birth control, abortion, substance abuse, smoking, and alcohol use, to name a few. By acknowledging that certain behaviors evoke personal reactions, physicians can prevent those responses from interfering with patient communication and care.

Talk to other physicians. Finally, physicians can help improve self-awareness by talking about difficult physician-patient encounters with other physicians 1-on-1 or in groups designated for this purpose. Their discussions should mirror the patient-centered process, using open-ended focusing skills, emotion-seeking and emotion-handling skills to help elicit feelings, explore personal responses, and provide support. The American Academy on Physician and Patient (www.physicianpatient.org) offers courses in both self-awareness and interviewing and is an excellent resource for additional information about this topic.

Beyond Basic Interviewing

In this paper, we have focused on the essentials of patient-centered interviewing and acquiring basic patient-centered skills. Subsequent training requires reinforcement of these basic skills and gradual expansion into new patient-centered areas: working effectively with the reticent patient and the talkative patient, delivering bad news, educating patients, working effectively with difficult patients, learning negotiation skills, and managing psychosocial issues that present themselves in primary care (eg, depression, anxiety). Many of these advanced skills interface specifically with treatment and management. It is important to remember, however, that basic patient-centered interviewing is highly therapeutic in itself and is always valuable in the medical encounter [2,4,23].

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