

CHAPTER 7

Accessing the Patient's World: Patient–Physician Communication About Psychosocial Issues

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OBJECTIVES

- To become familiar with central elements of patient–physician communication
- To understand how these communication styles and behaviors contribute to the delivery of high-quality, patient-centered medical care
- To understand how various types of communication can influence patients' satisfaction, health behaviors, and health outcomes
- To learn about specific communication strategies, including non-verbal communication, shared decision making, and motivational interviewing, that enhance communication about psychosocial issues
- To understand the research evidence linking these communication strategies to better outcomes
- To recognize barriers to using patient-centered communication strategies in the current medical system and possible avenues for overcoming these barriers

Healthcare advocates have been aware for many years that good communication is the basis of an effective relationship between patients and their physicians. Patients consistently articulate their desire for a physician who they trust and who has their best interests in mind and who understands and takes into consideration their social context. Yet among

most medical institutions and providers, healthcare communication has not been emphasized as much as the biomedical aspects of care. This perspective is changing, largely because of an increasing body of research evidence over the past 30 years that has shown patient-provider communication to be an essential element of the delivery of high-quality, patient-centered care. In fact, The Institute of Medicine's 2001 proposal to improve the quality of healthcare for the 21st century is built on the premise that optimal healthcare can best be achieved in the context of a long-term, healing relationship between provider and patient (Institute of Medicine, 2001).

Although many definitions have been developed to describe the model of "patient-centered care," a common set of dimensions remains central to this concept (Mead & Bower, 2000). First, this model assumes that a strictly biomedical approach to addressing medical problems—that is, an approach limited to identifying physical signs and symptoms of disease, making a diagnosis, and treating the disease with appropriate therapy—is inadequate for delivering patient-centered care. The more comprehensive biopsychosocial approach is required as well (Mead & Bower, 2000). A *biopsychosocial approach* (Engel, 1977) recognizes that illness involves and is influenced by social and psychological factors in addition to biological factors. A patient's experience living with diabetes, for example, may include having uncontrolled blood glucose but also involves how that patient is affected by the disease: whether she has a supportive network of family and friends, whether she is depressed or anxious, and the extent to which she has access to care and medication. Thus, physicians who take a biopsychosocial approach recognize the need to attend to the "nonmedical" aspects of their patients' problems in order to diagnose and care for them effectively.

Second, patient-centered care requires both the patient and the provider to share responsibility for decision making about the patient's illness and its treatment (DiMatteo, Reiter, & Gambone, 1994; Mead & Bower, 2000). Patient-centered care emphasizes the development of a therapeutic alliance in which both parties have input. As a result, patient preferences are sought out and validated. Patients and physicians form a personal bond, and patients view their physicians as not only clinically competent but also as supportive and engaged (DiMatteo, 1998; Mead & Bower, 2000).

Finally, patient-centered care serves to put a human face on the practice of medicine. Providers approach the "patient-as-person" (rather than

patient-as-disease or organ), taking into account the meaning of the illness to the patient in his or her broader life context (Mead & Bower, 2000). To achieve patient-centered care, physicians must strive to understand patients' emotions, beliefs, and attitudes about illness and its impact on their lives. Patient-centered care also recognizes the physician-as-person. In other words, physicians are not interchangeable; their emotional reactions and behavior exert an influence on patient behavior and vice versa (Balint, Courtenay, Elder, Hull, & Julian, 1993; Mead & Bower, 2000). In this model, physicians and patients engage in a relationship that is reciprocal.

Based on this description, communication between physicians and patients is the process through which patient-centered medical care is achieved (Bensing, Verhaak, van Dulmen, & Visser, 2000). In the following sections, we describe specific aspects of patient-centered communication in more detail. We present evidence linking patient-centered communication to self-care behavior, patient satisfaction, health outcomes, and malpractice claims. We discuss ways in which creating more balance between biomedical and psychosocial communication can lead to improved outcomes. In the latter part of the chapter, we describe specific communication strategies that providers use to achieve greater balance between psychosocial and biomedical aspects of care and to facilitate more patient-centered interactions with patients. We end by discussing barriers that physicians face when attempting to adopt these communication strategies and ways in which these barriers can be overcome.

IMPORTANT COMPONENTS OF THE PATIENT–PROVIDER RELATIONSHIP

History of the Patient–Provider Relationship

Over the centuries, the patient–physician relationship has been recognized as a central aspect of medical care (Plato, 1961; Roter, 2000; Szasz & Hollender, 1956). With the rise of modern medical science, however, emphasis on communication between patients and providers greatly diminished (Shorter, 1985). For 30 years after the end of World War II, the purely biomedical perspective reigned supreme in the U.S. medical system (Mead & Bower, 2000), creating what anthropologist Edward T. Hall refers to as a “low-communication context,” in which communication is verbally explicit but lacks attention to nuanced aspects of emotive

communication (Roter, Frankel, Hall, & Sluyter, 2006). Furthermore, the biomedical model is characterized by paternalism, in the sense that the balance of power and control over decision making leans heavily in favor of the physician (Roter & Hall, 1992). In its most classic expression, as practiced in mid-century, physicians set the agenda for medical encounters, decided what course of action was in the patient's best interest, and determined what information and services to provide. Patients were expected to passively cooperate (Roter & Hall, 1992). In essence, the paternalistic model assumed the physician understood the patient's values and could act as her guardian (Roter, 2000). For example, under the paternalistic model, a physician recognizing symptoms of an anxiety disorder in a patient may decide unilaterally that anxiety is best treated with anti-anxiety medication and prescribe this medication, without any exploration of the context of the anxiety symptoms or the patient's preferences for other treatment options, such as psychotherapy.

Beginning in the 1960s with the rise of the consumer social movement and a growing emphasis on preventive health services, a consumer-based model for the patient-physician relationship began to gain ground (Reeder, 1972). When viewed through a *consumerist* framework, the medical care system is conceived as a marketplace where physician services are based on patient supply and demand. Patients direct the agenda for the medical visit as well as what information and services the physician provides (Roter, 2000; Roter & Hall, 1992). In this model, the physician acts primarily as technical consultant, and the patient's values remain unexamined (Roter, 2000). For example, under the consumerist model, a patient may inform her physician that she has been experiencing symptoms of anxiety and request a prescription for anti-anxiety medication. The physician, in turn, may comply with this request, again without exploring the context of the patients' symptoms or reasons for preferring treatment with medication versus psychotherapy.

Lying between the extremes of paternalism and consumerism is *mutuality*, in which control and decision-making responsibility are shared by patients and physicians. In mutuality, patients and physicians arrive at decisions about care together through informed, collaborative choice in the context of the patient's value system. Mutuality is currently advocated by healthcare communication researchers and experts because it is most congruent with the concept of patient-centered care (Roter, 2000). In fact, some experts in patient-provider relationship research have proposed substituting the term "relationship-centered care" for patient-centered care

because mutuality and negotiation lie at the heart of the concept (Beach & Inui, 2006; Roter, 2000). Under this model, the anxious patient and her physician may explore possible reasons for the patient's increase in anxiety symptoms, discuss all available treatment options, consider the patient's preferences for treatment, and arrive together at a decision about the best treatment plan given these circumstances.

Features of Patient-Centered Communication

Patient-centered communication is characterized by high levels of physician *informativeness*, *interpersonal sensitivity*, and *partnership building* (Wissow et al., 1998). Informativeness consists of providing information, both biomedical and psychosocial in nature, to patients spontaneously and in response to their concerns. Interpersonal sensitivity involves eliciting information from patients about social and emotional topics and then responding appropriately. Finally, in partnership building, the physician seeks out the patient's perspective and verifies that he or she understands the patient's thoughts and opinions accurately (e.g., using strategies such as reflective listening and shared decision making, discussed in more detail later). Although these physician behaviors are key aspects in determining the patient centeredness of healthcare communication, patients also play a role. Accordingly, Roter (2000) defined patient-centered communication as that which:

1. Fulfills medical management functions or facilitates the accomplishment of basic medical tasks such as the physical examination, diagnosis, and treatment.
2. Facilitates the elicitation of the patient's agenda for the visit and concerns he or she wishes to address, including psychosocial and quality-of-life issues.
3. Is responsive to the patient's emotional state and concerns.
4. Provides information and behavioral recommendations in an understandable, useful, and motivating way.
5. Encourages patients to participate in decision making.

Table 7.1 provides an additional description of these five components (Roter, 2000), along with specific examples of language that reflects these elements.

Table 7.1 Examples of Patient-Centered Communication Behaviors

<i>Elements of Patient-Centered Communication</i>	<i>Examples</i>
Supports fulfillment of basic medical tasks Orients patient to flow of visit Gives instructions Makes transitional statements	Well, let's take a look, and then we'll talk more about it. Breathe normally while I listen to your heart. Let's get started with the exam.
Facilitative Asks about patients goals and concerns they wish to address Elicits discussion about psychosocial issues	What concerns would you like to discuss today? How has your mood been since we last talked?
Responsive Looks for clues and probes about feelings and emotions Expresses support and empathy	You made a face when I suggested that. How are you feeling about this? I bet this has been hard for you.
Informative Gives biomedical information Gives psychosocial information	The medication might cause your appetite to increase. Some people find that having a lot of healthy, low-calorie snacks around helps them deal with this side effect without gaining a lot of weight. Let me give you some information about a local support group for people with your illness. It can really help to talk with others who are dealing with the same issues.
Participatory Asks about patients' expectations, understanding, and concerns Asks about impact of the problem on functioning and quality of life Encourages patient question asking Provides opportunities for patients to share in decision making	How do you think this medication plan will work for you? What are your concerns about it? How has this affected your relationship with your family? Do you have any questions about the medication? Which option do you think might work better for you?

Links Between Patient-Centered Care and Important Outcomes

Research has consistently shown that patient-centered communication is associated with a variety of improved outcomes. First, patients are more satisfied with their medical care when they experience higher levels of

psychosocial talk, encouragement, displays of empathy, biomedical question asking, discussion of treatment effects, and when physicians relinquish control in the latter part of the medical visit (Beck, Daughtridge, & Sloane, 2002). On the other hand, patients tend to be less satisfied when their physicians verbally dominate medical encounters (Bertakis, Roter, & Putnam, 1991). In a recent conference focused on patient advocacy, one participant, a divorced mother of two children, one of whom had suffered from a brain tumor followed by neurologic disorders, articulated how important communication within the doctor–patient relationship is to patients: “Communication isn’t just a nice ‘extra.’ If my doctor is ‘nice’ or ‘polite’ to me, that’s an extra. What’s really important, though, is that he or she takes seriously my knowledge of having lived with the disease, both in terms of symptoms, and in terms of my day-to-day life. Knowing whether or not I have a car, for example, makes a difference in how care is given.”

Second, two recent reviews (Roter, 2000; Stewart, 1995) reported that physician informativeness, partnership building, and responsiveness to patients’ emotions are consistently linked to better psychological and physiologic outcomes. Specifically, when physicians were more informative, their patients had reduced levels of psychological distress, higher rates of symptom resolution, and improved blood pressure when compared with patients of physicians who were less informative. Also, physicians’ attempts to build partnerships and elicit patient participation were associated with improved symptom resolution, lower levels of anxiety and depression, and reduced role and physical limitations among patients. Perhaps most compelling in this line of research was one study using random assignment, which found that patients trained to participate more in medical decision making had improved health outcomes (i.e., improved blood glucose control and functioning) compared with controls (Greenfield, Kaplan, & Ware, 1985; Greenfield, Kaplan, Ware, Yano, & Frank, 1988). Furthermore, these reviews also revealed that physicians’ responsiveness to patients’ emotional states was related to reduced levels of patient distress and improved symptom resolution, and patients who were encouraged to express psychosocial concerns had improved physical and social functioning, health status, and blood pressure.

Third, several specific patient-centered communication practices have also been linked to improved health behaviors in patients. When physicians explain, provide feedback, share medical data, and demonstrate

solidarity with the patient, patients tend to have higher levels of treatment adherence (Beck et al., 2002), defined as the extent to which patients carry out behavioral recommendations they have agreed on with physicians (World Health Organization, 2003).

Finally, patients whose doctors use a patient-centered approach may also be less likely to bring malpractice claims. In one study, physicians who showed higher levels of facilitative behavior (i.e., asking patients to express their opinions, checking their understanding and generally encouraging them to talk more) and who used humor more often were less likely to experience a malpractice claim (Levinson, Roter, Mullooly, Dull, & Frankel, 1997). In summary, this body of research strongly suggests that patient-centered communication leads to a wide range of positive outcomes for both patients and physicians.

The Importance of Psychosocial Communication

One aspect of patient-centered communication that may have a particularly strong influence on patients' satisfaction with their care is the extent to which psychosocial communication occurs during primary care visits. Psychosocial communication elicits information about the social and psychological issues that patients face and provides the physician with an opportunity to offer information and counsel about these issues. For example, an older widow with diabetes may have no way to get to the store to purchase her supplies for glucose testing. Communication about her transportation needs will be a vital component in ensuring that she is able to follow her doctor's recommendations.

Several studies have demonstrated that the balance struck by physicians between psychosocial and biomedical communication in office visits, a distinguishing characteristic of the three models of the patient-physician relationship introduced previously, may influence patients' satisfaction with their medical care. Roter et al. (1997) analyzed primary care visits with adults with ongoing medical problems and identified five distinct patterns of communication: (1) *narrowly biomedical*, characterized by very little talk about psychosocial topics, a large amount of physician information giving about biomedical topics, and extensive question asking by the physician; (2) *expanded biomedical*, characterized by high levels of physician question asking but slightly less imbalance between

psychosocial and biomedical issues; (3) *biopsychosocial*, characterized by a greater balance between biomedical and psychosocial exchange, a lower level of question asking by the physician, and a higher level of social talk; (4) *psychosocial*, characterized by an equal balance between psychosocial and biomedical talk by the physician and a higher level of patient psychosocial than biomedical talk, as well as low levels of physician question asking; and (5) *consumerist*, characterized by high levels of patient question asking, low levels of physician question asking, high levels of physician information giving, and low levels of psychosocial and social exchange. The first two styles were the most commonly used, accounting for 32% and 33% of visits, respectively, whereas the biopsychosocial, psychosocial, and consumerist patterns occurred less frequently (20%, 7%, and 8% of visits, respectively). Patient satisfaction was highest in the psychosocial pattern, followed by the biopsychosocial and consumerist patterns, and lowest in the narrowly biomedical and expanded biomedical patterns, suggesting that patients are most satisfied when given ample opportunity to talk about psychosocial issues in addition to biomedical issues.

Mechanisms by Which Psychosocial Communication Affects Patient Outcomes

Why might psychosocial communication have such a significant influence on patient satisfaction, as well as on their psychological, behavioral, and physiologic outcomes? Several possible reasons exist, including enhanced physician understanding of barriers and facilitators to illness management, shared decision making, and perceptions of physician support, trust, and rapport.

Improved Understanding of Barriers and Facilitators to Illness Management

Across a variety of conditions, only about half of all patients adhere to behavioral recommendations made by their healthcare providers (World Health Organization, 2003). Such low rates of adherence can lead directly to poor clinical outcomes (World Health Organization, 2003), particularly when illnesses are chronic (DiMatteo, Giordani, Lepper, & Croghan,

2002). A vast body of research has demonstrated that a variety of psychosocial factors influence the degree to which patients follow medical recommendations. These issues include patients' beliefs about their illness, motivation, intentions, confidence, social relationships, financial resources, literacy levels, culture, emotions, and mental health status (Bosworth & Voils, 2006; World Health Organization, 2003). It follows that physicians willing to devote time to identifying and addressing these types of issues will improve the psychological, behavioral, and even physiologic outcomes of their patients.

Research suggests that through psychosocial communication, physicians become aware of issues affecting their patients' abilities to cope with their health problems. For example, one recent study (Wissow et al., 2002) suggested that when physicians avoided patients' disclosure of social and emotional issues, patients reduced their subsequent disclosures to their physicians, both later in the visit and in subsequent visits (Wissow et al., 2002). In contrast, when physicians asked open-ended questions and demonstrated higher levels of patient-centered communication overall, patients disclosed social and emotional issues more frequently.

Shared Decision Making

Discussion of psychosocial issues also facilitates shared decision making about health problems, another method for enhancing patient-centered care. Although shared decision making is a relatively new concept (Kaplan, 2004), evidence indicates that it improves patient satisfaction (Frosch & Kaplan, 1999; Gattellari, Butow, & Tattersall, 2001). One important feature of shared decision making is discussing patients' values and concerns regarding specific biomedical options, many of which may be psychosocial in nature (O'Connor et al., 1999a). For example, a woman diagnosed with early-stage breast cancer may be an appropriate candidate, from a biomedical perspective, for either mastectomy or breast-conserving therapy with chemotherapy and radiation. Discussion of psychosocial issues, such as her concerns about body image versus fears about breast cancer recurrence, are necessary in order to develop a treatment plan that takes into account her values and preferences.

Enhanced Perceptions of Physician Support, Trust, and Rapport

Psychosocial communication in medical office visits may improve patient outcomes by enhancing patients' trust in their physicians. A patient–provider relationship in which patients perceive high levels of trust, rapport, and physician support is known as a therapeutic alliance and has been linked to improved patient satisfaction (Leach, 2005) and treatment adherence (Kyngas & Rissanen, 2001; Leach, 2005; Stanton, 1987; World Health Organization, 2003). Encouraging discussion about psychosocial topics in office visits may communicate to the patient that the physician is committed to understanding him or her as a person, not just a medical case, thus improving patient trust and rapport. Indeed, research has demonstrated a link between more discussion about psychosocial issues in office visits and higher patient perceptions of emotional support from physicians (Bertakis et al., 1991).

Use of Patient-Centered Communication in Office Visits

Despite what is known about the benefits of patient-centered communication, including psychosocial communication, research suggests that they are underused in patient–physician encounters. Several reports have found that between 35% and 65% of primary care office visits consist of communication that is primarily biomedical in nature (Bensing, Roter, & Hulsman, 2003; Flocke, Miller, & Crabtree, 2002; Roter et al., 1997). A recent study (Levinson, Gorawara-Bhat, & Lamb, 2000) also found that primary care physicians and surgeons often failed to appropriately respond to patients' clues about social and emotional issues they wished to discuss with their doctors. Only 38% of such clues presented to surgeons and 21% of clues presented to primary care physicians elicited a positive response from physicians (i.e., acknowledgment, encouragement, praise, reassurance, or a show of support). The remainder elicited inadequate acknowledgment, inappropriate use of humor, denial of the patient's concerns, or termination of talk about the issue.

In the next sections, we present several specific strategies that physicians can use to facilitate patient-centered communication with their patients. We also examine a number of barriers to engaging in patient-centered and psychosocial communication in office visits and a variety of promising strategies for overcoming these barriers.

COMMUNICATION STRATEGIES FOR BUILDING BETTER RELATIONSHIPS WITH PATIENTS

Nonverbal Strategies

Nonverbal communication skills include nonverbal sensitivity and nonverbal behavior (Roter et al., 2006). Nonverbal sensitivity involves the ability to both encode (convey emotional messages accurately) and decode (read emotions of others accurately) based on nonverbal cues. In cross-sectional studies, physicians with greater nonverbal skill (i.e., those who were better able to decode body movements and more skilled at emotional encoding) received higher patient satisfaction ratings than those without these abilities (DiMatteo, Hays, & Prince, 1986; DiMatteo, Taranta, Friedman, & Prince, 1980; Friedman, DiMatteo, & Taranta, 1980; Harrigan & Rosenthal, 1986). These skills have been associated with improved treatment adherence as well (DiMatteo et al., 1986).

Nonverbal behavior involves a range of communication activities that do not have linguistic content, including eye contact, facial expressions, head movements (such as nodding), hand gestures, and postural positions (Roter et al., 2006). Paralinguistic behaviors are also nonverbal, such as the rate, volume, and pitch of speech, pauses, and interruptions (Harrigan & Rosenthal, 1986; Roter et al., 2006; Smith & Larsen, 1984; Zuckerman, Larrance, Hall, DeFrank, & Rosenthal, 1979). Nonverbal behaviors communicate emotional information, such as joy, sadness, or anxiety, as well as agreement or turn taking in a conversation (Knapp & Hall, 2005). In general, physicians who are more emotionally expressive receive higher ratings in terms of patient satisfaction. Specific physician behaviors viewed favorably by patients include increased eye contact, less time looking at medical charts, forward leaning, open body posture, head nodding, use of hand gestures, maintenance of a closer interpersonal distance, and specific voice tones (Griffith, Wilson, Langer, & Haist, 2003; Hall, Roter, & Rand, 1981; Hall, Harrigan, & Rosenthal, 1995; Roter et al., 2006). In one study, nonverbal behaviors explained more variance in patient satisfaction than did verbal content, regardless of the type or severity of medical condition being discussed (Griffith et al., 2003).

Research evaluating nonverbal communication does not always show expected results. For example, although reduced interpersonal distance

is usually associated with increased interpersonal satisfaction, *less* touch by a physician has been shown to be associated with greater patient satisfaction (Hall et al., 1995; Roter et al., 2006), possibly because touch may communicate power and dominance (Hall et al., 1995; Roter et al., 2006). Voice tone has also been associated with patient satisfaction in intriguing ways. Hall et al. (1981) found that patients were more satisfied with physicians who expressed a more anxious and irritated voice tone when this tone was coupled with sympathetic verbal content. The authors speculate that an anxious voice tone may express care and concern in this context.

Few studies have provided evidence that directly links nonverbal communication to health outcomes other than patient satisfaction, with two notable exceptions. In a prospective study (Ambady, Koo, Rosenthal, & Winograd, 2002), nonverbal behavior of physical therapists predicted patients' psychological and cognitive functioning at follow-up. In particular, poor eye contact and physical distancing were associated with worsened functioning, and greater facial expressiveness (e.g., smiling, nodding, and frowning) was associated with improved functioning. DiMatteo et al. (1986) also found that physicians who were rated as more nonverbally sensitive experienced fewer appointment cancellations that were not rescheduled by patients.

These findings highlight the potentially significant influence that nonverbal communication can have on outcomes. Specific nonverbal skills and behaviors that may influence outcomes are summarized in Table 7.2. Furthermore, studies show that although physicians do exhibit a broad range of nonverbal communication abilities, many physicians misread emotional distress cues and rate patients' emotional states more negatively than do their patients (Hall, Stein, Roter, & Rieser, 1999), suggesting that there is room for improvement. Although the findings in this section suggest ways in which nonverbal communication behavior can be improved, little work has been done to evaluate the effects of physician training on improving nonverbal communication skills. Such skills are typically absorbed at the individual level through one-on-one mentoring during clinical training rather than being included as part of the medical school curriculum. In the future, teaching and research should consider the important role that nonverbal communication plays in the development of a healing patient–physician interaction.

Table 7.2 Favorable and Unfavorable Nonverbal Communication Skills and Behaviors

<i>Domain</i>	<i>Favorable</i>	<i>Unfavorable</i>
Nonverbal Skills	Greater ability to decode nonverbal behaviors of others and to recognize their emotions accurately Greater ability to transmit the intended emotional messages	Poor ability to decode (recognize) accurately the emotions of others Poor ability to encode emotional messages nonverbally
Nonverbal Behaviors	<p>Eye Contact</p> <p>Make direct eye contact Spend more time gazing at patient</p> <p>Body Posture</p> <p>Forward leaning Open posture (arms open)</p> <p>Facial Expressivity</p> <p>Smiling Very expressive</p> <p>Gestures</p> <p>Frequent head nodding Frequent hand gestures</p> <p>Interpersonal distance</p> <p>Closer distance Less touch</p> <p>Voice Tone</p> <p>Emotionally expressive More anxious</p>	<p>Make little eye contact Look at the medical chart</p> <p>Backward leaning Closed arms and body</p> <p>Frowning Blank expression</p> <p>Lack of head nodding Lack of hand gestures</p> <p>Greater distance More touch</p> <p>Monotone Less anxious/unconcerned</p>

Verbal Strategies

Specific verbal behaviors can enhance patient-centered care and thereby potentially improve psychosocial communication (Roter et al., 1997). One study identified three physician communication behaviors that explained nearly 30% of the variance in patient satisfaction. These included use of more silence following patients' utterances, use of words similar to patients', and use of reflective interruptions or interruptions that

were on topic with what patients were discussing. The fact that these three specific techniques accounted for nearly a third of the variance in satisfaction is impressive and suggests that their use is warranted (Rowland-Morin & Carroll, 1990). Later we describe in detail two more general approaches that a practitioner can use to facilitate patient-centered care.

Shared Decision Making

Shared decision making in the medical visit has evolved as a means to involve patients in decisions about their health and well-being. Medical encounters entail making decisions regarding diagnostic and screening tests, medication, and procedural treatments, as well as varied disease management strategies. Although for some medical conditions the most appropriate medical treatment is clear, for others, uncertainty prevails, and the incorporation of patients' values and preferences plays a salient role in the decision-making process. As noted previously, discussion of these values and preferences requires patients and physicians to communicate about psychosocial issues that influence patients' health.

Although researchers for the most part agree on why patients should participate in medical decision making, how best to involve them is less clear. In general, shared decision making is recommended because it helps patients to understand their condition, potential treatment options, and risks and benefits associated with each option. The shared decision-making process involves weighing patients' personal values and encouraging them to participate in making the final treatment decision (Sheridan, Harris, & Woolf, 2004). The textbox shows nine essential elements of shared decision making, as defined in a recent review (Makoul & Clayman, 2005) of published definitions of the concept.

Several methods have been developed to help patients explicitly clarify their values as they relate to available medical choices. For example, one method, social matching, presents patients with sample testimonials and asks them to align themselves with the options selected by other people they perceive as similar to themselves (Ubel, Jepson, & Baron, 2001). Rating, a second method, typically asks patients to rate the value they place on potential health states compared with the best and worst health states imaginable (Ryan et al., 2001). Rank ordering requires patients to rank a finite number of options from most to least favorable (Phillips, Johnson, & Maddala, 2002). For example, one clinic-based study examined how men

decide whether to have a screening test for prostate cancer by combining the rating and ranking methods (Golin et al., 2006). Men watched an informational video about the test and were given five cards representing five aspects of the test: degree of accuracy of the PSA test, degree of certainty of treatment outcomes, need for knowing about having cancer, worry about side effects of treatment, and the magnitude of prostate cancer as a problem. For each of these characteristics, men were given two statements: one representing a value consistent with not wanting the test and the other a value consistent with wanting the test. Men were then asked to choose which one of the two statements best represented how they felt. For example, for the characteristic "*accuracy of PSA*," men could choose either "I would only want to have the PSA test if it could tell me for sure if I do or don't have cancer," or "The fact that the PSA test doesn't give me a definite answer about whether I do or don't have cancer does not bother me; nothing in life is 100%." The cards were intended to make it easier for the men to discuss this potentially sensitive topic. After choosing a card for each of the five characteristics of the test, men were asked to rank the characteristics as most to least important regarding their decision to have a PSA test. Men receiving the intervention showed a greater increase in their desire to participate in medical decisions and were more likely to have a change in their intentions to get screened compared with men in the control group (Golin et al., 2006).

A variety of other values-clarification methods have been presented in the literature (Ryan et al., 2001; Schwartz & Bilsky, 1987), but additional studies would help determine which approaches are most helpful in aligning personal values with treatment choices. How best to understand and incorporate patients' values into medical decision making is indeed an emerging and understudied area (O'Connor et al., 2003); however, recent evidence suggests that although value clarification exercises do not necessarily increase perceived clarity of values, they tend to better align patients' medical choices with their personal values (O'Connor et al., 1999a, 1999b).

One barrier to implementing shared decision making in clinical settings is that it can be a time-consuming process, particularly when the decision involves complex tradeoffs; therefore, decision aids have been developed to facilitate the shared decision-making process. Such tools can provide information about the seriousness of a condition, treatment options, potential outcomes, and the pros and cons associated with each course of action (O'Connor et al., 2003) as well as helping patients to clarify their

Textbox 7.1 Nine Essential Elements of Shared Decision Making

Shared decision making occurs when:

1. The physician and patient define together the problem that needs to be addressed.
2. The physician and patient review together the options available to address the problem.
3. The physician and patient discuss the pros and cons of each option.
4. The physician provides knowledge and recommendations.
5. The physician helps the patient to discover his or her preferences through a process of values clarification.
6. The physician assesses the patient's understanding of the information reviewed.
7. The physician and patient discuss the patient's confidence to carry out what is required to implement the choice.
8. If a decision is to be deferred, the physician and patient make an explicit plan to defer.
9. The physician devises a plan to follow-up with the patient to assess the outcome of choices made.

Source: Data from Makoul, G. & Clayman M. L. (2005). An integrative model of shared decision-making in medical encounters. *Patient Education and Counseling*, 60(3), 301–312.

values. Decision aids come in many forms, including written materials, decision boards, videos, interactive computer tools, and interactive sessions with a health educator. Two recent reviews (O'Connor et al., 1999a, 2003) also noted that some decision aid programs teach patients how to communicate with their doctors about their preferences and struggles. The use of decision aids can save the physician time and has been shown to improve patient knowledge, enhance patient satisfaction, reduce decisional conflict, and stimulate patients to play an active role in decision making about their healthcare (O'Connor et al., 1999a, 2003).

Motivational Interviewing

Motivational interviewing is another way that providers can learn about their patients' psychosocial situations and build long-term trust and rapport.

Originally developed to facilitate behavior change among problem drinkers, motivational interviewing has been adapted, often in abbreviated forms, to address a wide range of health behaviors including smoking cessation, diabetes management, intake of healthy fruits and vegetables, reduction of risky sexual behavior, and adherence to medication taking (Butler et al., 1999; Colby et al., 1998; Harding, Dockrell, Dockrell, & Corrigan, 2001; Kemp, Hayward, Applewhaite, Everitt, & David, 1996; Picciano, Roffman, Kalichman, Rutledge, & Burghuis, 2001; Resnikow et al., 2002; Rollnick, Butler, & Stott, 1997; Smith, Heckemeyer, Kratt, & Mason, 1997). Motivational interviewing is a style of counseling (Miller, 1996) based on the work of Carl Rogers (1987) and includes five key principles: (1) expressing empathy, (2) highlighting discrepancies between a patient's life goals and his or her current behavior, (3) avoiding argumentation, (4) accepting and dealing with resistance, and (5) supporting self-efficacy (Emmons & Rollnick, 2001; Kjellgren, Ahlner, & Saljo, 1995; Miller, 1996; Miller & Rollnick, 1991). One primary role of the provider using motivational interviewing techniques is to help patients recognize and resolve feelings of ambivalence about changing unhealthy behaviors (DiIorio et al., 2003; Emmons & Rollnick, 2001; Miller, 1996; Miller & Rollnick, 1991).

An important underlying principle of motivational interviewing (and a key component of patient-centered care) is that the provider must exhibit a genuine desire to understand the patient. Because this type of counseling takes the patient's perspective into account when making care plans, motivational interviewing can influence important patient outcomes. Specifically, motivational interviewing interventions have been shown to improve the following health outcomes: medication adherence among patients with psychosis (Kemp et al., 1996; Picciano et al., 2001) and HIV (Adamian et al., in press; DiIorio et al., 2003; Picciano et al., 2001), vegetable intake (Resnikow et al., 2001), weight loss among older women with diabetes (Smith et al., 1997), smoking cessation (Butler et al., 1999; Rollnick et al., 1997), and safe sexual practices (Kamb et al., 1998; Kelly & Kalichman, 2002; National Institute of Mental Health, 1998; Picciano et al., 2001; Rollnick et al., 1997). Furthermore, the motivational interviewing style allows patients to set the agenda for the session; in doing so, they become active participants in their care.

Although motivational interviewing is patient centered, it does allow providers to offer nonjudgmental, objective feedback to patients. To do so, however, providers must first listen deeply to their patients' concerns and the meaning that issues hold for patients. By reflecting back their own per-

ceptions, the practitioner raises patients' awareness of discrepancies between their life goals and their current actions. By enhancing patients' self-efficacy, practitioners can provide support while moving patients toward change (Miller & Rollnick, 2002). For example, Textbox 7.2 presents the use of motivational interviewing in the case study of Ms. Bashford, a young woman living with HIV.

Several specific communication behaviors are present in high-quality motivational interviewing. These include using more statements (e.g., reflections) than questions and asking more open-ended than closed-ended

Textbox 7.2 Motivational Interviewing Case Study

Composite Case Study: Ms. Bashford, a 39-year-old African American woman who works as a real estate secretary, was diagnosed with HIV three years ago. A year ago, her doctor, Dr. Schaffer, recommended that Ms. Bashford begin taking medication to prevent disease progression; however, medication regimens for HIV are relatively costly, complex, and have significant side effects, yet patients must adhere very closely to the regimen to maintain its effect.

When she started the medication, the level of the HIV virus in Ms. Bashford's blood quickly became undetectable, indicating that the medication was working well; however, recently, the level of virus in Ms. Bashford's blood increased. Dr. Schaffer suspected that Ms. Bashford might not be taking her medication as directed and chose to use motivational interviewing techniques to address the issue. She knew that understanding Ms. Bashford's perspective and life challenges could help them develop strategies to improve her medication adherence. Dr. Schaffer also knew that if she were confrontational and prescriptive, Ms. Bashford might become resistant to taking her medication.

In discussions with Ms. Bashford, Dr. Schaffer assessed what it was like for her to take her medications in a typical day, how important taking the medication was to her, and how confident she felt that she could follow the recommendations. Through this process, they learned that although taking medication was very important to Ms. Bashford, side effects and the medication schedule made it difficult for her to stick with the regimen. In addition, she was afraid that taking the medication at work would reveal her HIV status to coworkers. By using motivational interviewing techniques, Dr. Schaffer helped Ms. Bashford raise her awareness of the importance that taking the medication had for Ms. Bashford and identify several strategies that would address her concerns and make it easier to stick with her regimen. Three months later, Ms. Bashford's virus level was undetectable, and she felt more satisfied with her decision and her relationship with her physician.

questions. Few studies have attempted to validate the specific communication behaviors most likely to affect outcomes and improve care. One exception is a study of a motivational interviewing program administered to HIV-infected patients (Thrasher et al., 2005) in which antiretroviral therapy adherence was positively associated with a greater ratio of reflections to questions and a greater number of affirming statements and negatively associated with closed-ended questions. More studies are needed that attempt to understand the mechanisms by which motivational interviewing can help physicians comprehend their patients' perspectives, build trust and rapport, and ultimately enhance health and healthy behaviors (Emmons & Rollnick, 2001).

NEXT STEPS: IDENTIFYING BARRIERS TO AND INTERVENTIONS FOR IMPROVING PROVIDER–PATIENT PSYCHOSOCIAL COMMUNICATION

Barriers to Psychosocial Communication Between Doctors and Patients

Although data exist indicating effective ways that physicians can communicate with patients, too often these practices are not carried out (Roter et al., 1997). Several studies have evaluated the barriers that physicians face in attempting to communicate about psychosocial issues. Some of the main impediments include lack of physician time, knowledge and training, physician discomfort, and sociodemographic characteristics of patient–physician dyads.

In one qualitative study of psychosocial communication with Latino patients (Shapiro, Hollingshead, & Morrison, 2002), physicians identified three major obstacles to engaging in culturally competent communication with patients about psychosocial issues: insufficient time, language barriers, and patient characteristics. Providers also felt that because many of their patients came from lower socioeconomic status backgrounds, they had greater problems maintaining continuity of care, making consistent communication a challenge. In contemplating solutions to cross-cultural communication barriers, doctors and patients both recommended changes in provider behavior, including developing language skills, learning to work with interpreters, acquiring personal knowledge of patients, maintaining an attitude of interest and respect, and improving general communication skills.

A study of patient–pediatrician interactions (Wissow et al., 2002) provides further evidence of how physician discomfort can serve as a barrier to psychosocial communication. In an analysis of 167 audio-taped interactions, physician utterances that discouraged patients from discussing psychosocial issues occurred in 77% of discussions that involved talking with parents about the use of corporal punishment as a parenting technique and in 34% of discussions that involved other psychosocial topics. These discouraging responses were related more to the type and acuity of the psychosocial topics than to doctor or patient characteristics.

In another study of audio-taped doctor–patient interactions, race served as barriers to disclosure of psychosocial information early in the parent–pediatrician relationship (Wissow et al., 2002). During initial visits, African American mothers made 26% fewer psychosocial statements than did white mothers; however, the physician’s degree of patient centeredness was an important factor promoting psychosocial information giving for mothers, regardless of patient race or physician gender. Other studies have suggested physician gender to be an important factor related to patient-centered communication, finding that female physicians spend more time with their patients, are more likely to engage their patients in discussions of psychosocial issues, deal more often with feelings and emotions, and facilitate partnership and patient participation more effectively than do male physicians (Hall & Roter, 1998; Roter & Hall, 2001; Roter, Hall, & Aoki, 2002).

Taken together, these findings suggest that a variety of factors may impede physicians’ use of patient-centered communication strategies and that many physicians may require extra support or training in order to discuss psychosocial issues with patients. Fortunately, several promising strategies for overcoming these barriers exist.

Overcoming Barriers to Psychosocial Communication: Training, Curriculum, and Organizational Strategies

Mounting evidence suggests that physicians can be trained to provide medical care that is more patient centered and takes into account the psychosocial and cultural context of patients’ lives (Betancourt, Green, Carrillo, & Park, 2005; Brach & Fraser, 2000; Stewart et al., 2000). Curricular changes can enhance physicians’ abilities to discuss psychosocial issues with a range of patients and improve the quality of patient care.

Educators have developed programs to enhance the communication of physicians in practice and have begun to incorporate such training into medical schools and residency programs. One innovative program at UCLA, called "Doctoring," trains medical students to give compassionate, humanistic, high-quality, and evidence-based care. Training occurs through a longitudinal, interdisciplinary curriculum that integrates traditional and experiential learning about psychosocial communication and uses interviews with simulated patients (Wilkes, Usatine, Slavin, & Hoffman, 1998). Findings of a recent review (Beach et al., 2005) also suggest that training providers in psychosocial communication can improve the knowledge, attitudes, and skills of healthcare professionals and the satisfaction of their patients; however, the impact on other patient outcomes, such as adherence and health, is less well established.

Kern et al. (2005) conducted an iterative evaluation as part of a national faculty development program. In this program, both experts and generalists taught psychosocial medicine while precepting medical students and residents in clinical settings. Using scientific evidence, educational theory, and experience, the authors developed consensus-based recommendations on the implementation of communication skills instruction for medical trainees, presented them in workshops, and revised them based on feedback from other experts and teachers. First, they identified evidence-based practices for addressing important common psychosocial situations including substance abuse, depression, anxiety, disorder, physical and sexual abuse, and posttraumatic stress disorder. Second, they developed a list of general steps that clinician educators could use to help educate trainees and improve their psychosocial care.

Evaluating physicians' and trainees' psychosocial communication skills and providing individually tailored feedback may also be an efficient and effective method for improving communication skills. Studies (Maynard & Heritage, 2005) have suggested that conversation analysis of audiotaped visits should be used by medical trainees to assess and improve (through feedback and teaching) their psychosocial communication skills. Conversation analysis takes a co-constructive and collaborative analytic approach, putting equal emphasis on the interactive communication behaviors of both physician and patient (Maynard & Heritage, 2005). In addition, Roter et al. (2004) found that the use of an innovative video-feedback technique combining evaluation and training significantly improved residents' patient-centered communication skills.

Although studied less often, efforts are also being made to train patients to be more active participants in their care and to assess the effects of such training on the therapeutic relationship and patient outcomes. In one study (Greenfield et al., 1985, 1988), mentioned previously, patients participated in a 20-minute session before their regularly scheduled visits, during which they were taught to read their medical record, ask questions, and negotiate medical decisions with their physicians. In a randomized controlled trial, researchers compared this intervention with a standard educational session of equal length. At follow-up, patients in the experimental group reported fewer physical limitations, preferred a more active role in medical decision making, and were as satisfied with their care as the control group. Those with diabetes also had greater control of their blood glucose. In O'Connor et al.'s (1999a, 2003) reviews of decision aids, a small proportion of tools studied included a coaching component that taught patients to communicate with their doctor. In a study among cancer outpatients who suffered from uncontrolled pain, those who underwent coaching for pain management skills and skills in communicating with doctors had greater improvement in their pain than did a control group (Oliver, Kravitz, Kaplan, & Meyers, 2001). More studies are needed to understand the combined effect of training both doctors and patients to communicate better with each other. In addition, systems level factors, such as duration of doctor visits, need to be addressed.

SUMMARY AND CONCLUSIONS

High-quality communication between health professionals and their patients is essential to the delivery of effective medical care. "Patient-centered care" has been identified as central to a variety of important outcomes including patient satisfaction, treatment adherence, and improved physiologic and health status outcomes. Patient-centered care requires that physicians communicate clearly and effectively with their patients and strive to understand their patients' beliefs, attitudes, emotions, cultural experiences, and the impact of illness on patients' lives. To achieve true patient-centered care, shared decision making about all aspects of disease management is needed, with a reciprocal communication process that involves shared input and responsibility. Patient-centered care also calls for a continued emphasis on "psychosocial communication," emphasizing awareness of and empathy with patients' emotional experiences. Research

has shown that shared decision making and motivational interviewing are particularly valuable in facilitating patient-centered care. Shared decision making helps to assess and incorporate the patient's value system and to encourage the patient to participate in the decision-making process. Motivational interviewing helps providers learn about their patients' psychosocial situations and build long-term trust and rapport. Mounting evidence suggests that physicians can be trained in these and other approaches to better provide patient-centered care and that patients can be assisted to be more active participants in the medical care process. Although more research is needed, patient-centered communication strategies are beginning to show measurable improvements in patients' healthcare outcomes and quality of life.

REFERENCES

- Adamian, M. S., Golin, C. E., Shain, L. S., & DeVellis B. (2004). Brief motivational interviewing to improve adherence to antiretroviral therapy: Development and qualitative pilot assessment of an intervention. *AIDS Patient Care and STDs*, 18(4), 229–238.
- Ambady, N., Koo, J., Rosenthal, R., & Winograd, C. H. (2002). Physical therapists' non-verbal communication predicts geriatric patients' health outcomes. *Psychology and Aging*, 17, 443–452.
- Balint, E., Courtenay, M., Elder, A., Hull, S., & Julian, P. (1993). *The doctor, the patient, and the group: Balint revisited*. London: Routledge.
- Beach, M. C., & Inui, T. (2006). Relationship-centered care: A constructive reframing. *Journal of General Internal Medicine*, 21(Suppl 1), S3–S8.
- Beach, M. C., Price, E. G., Gary, T. L., Robinson, K. A., Gozu, A., Palacio, A., et al. (2005). Cultural competence: A systematic review of health care provider educational interventions. *Medical Care*, 43, 356–373.
- Beck, R. S., Daughtridge, R., & Sloane, P. D. (2002). Physician–patient communication in the primary care office: A systematic review. *Journal of the American Board of Family Practitioners*, 15, 25–38.
- Bensing, J. M., Roter, D. L., & Hulsman, R. L. (2003). Communication patterns of primary care physicians in the United States and the Netherlands. *Journal of General Internal Medicine*, 18, 335–342.
- Bensing, J. M., Verhaak, P. F. M., van Dulmen, A. M., & Visser, A. P. (2000). Communication: The royal pathway to patient-centered medicine. *Patient Education and Counseling*, 39, 1–3.
- Bertakis, K. D., Roter, D., & Putnam, S. M. (1991). The relationship of physician medical interview style to patient satisfaction. *The Journal of Family Practice*, 32, 175–181.
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Park, E. R. (2005). Cultural competence and health care disparities: Key perspectives and trends. *Health Affairs*, 24, 499–505.

- Bosworth, H. B., & Voils, C. I. (2006). Theoretical models to understand treatment adherence. In H. B. Bosworth, E. Z. Oddone, & M. Weinberger (Eds.), *Patient treatment adherence: Concepts, interventions, and measurement* (pp. 13–46). Mahwah, NJ: Lawrence Erlbaum Associates.
- Brach, C., & Fraser, I. (2000). Can cultural competency reduce racial and ethnic health disparities? A review and conceptual model. *Medical Care Research and Review*, 57(Suppl 1), 181–217.
- Butler, C., Rollnick, S., Cohen, D., Bachman, M., Russell, I., & Stott, N. (1999). Motivational counseling versus brief advice for smokers in general practice: A randomized trial. *British Journal of General Practice*, 49, 611–616.
- Colby, S. M., Monti, P. M., Barnett, N. P., Rohsenow, D. J., Weissman, K., Spirito, A., et al. (1998). Brief motivational interviewing in a hospital setting for adolescent smoking: A preliminary study. *Journal of Consulting and Clinical Psychology*, 66(3), 574–578.
- DiIorio, C., Resnicow, K., McDonnell, M., Soet, J., McCarty, F., & Yeager, K. (2003). Using motivational interviewing to promote adherence to antiretroviral medications: A pilot study. *Journal of the Association of Nurses in AIDS Care*, 14(2), 52–62.
- DiMatteo, M. R. (1998). The role of the physician in the emerging health care environment. *Western Journal of Medicine*, 168(5), 328–333.
- DiMatteo, M. R., Giordani, P. J., Lepper, H. S., & Croghan, T. W. (2002). Patient adherence and medical treatment outcomes: A meta-analysis. *Medical Care*, 40, 794–811.
- DiMatteo, M. R., Hays, R. D., & Prince, L. M. (1986). Relationship of physicians' nonverbal communication skill to patient satisfaction, appointment noncompliance, and physician workload. *Health Psychology*, 5(6), 581–594.
- DiMatteo, M. R., Reiter, R. C., & Gambone, J. C. (1994). Enhancing medication adherence through communication and informed collaborative choice. *Health Communication*, 6, 253–265.
- DiMatteo, M. R., Taranta, A., Friedman, H. S., & Prince, L. M. (1980). Predicting patient satisfaction from physicians' nonverbal communication skills. *Medical Care*, 18, 376–387.
- Emmons, K., & Rollnick, S. (2001). Motivational interviewing in health care settings: opportunities and limitations. *American Journal of Preventive Medicine*, 20, 68–74.
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196, 129–136.
- Flocke, S. A., Miller, W. L., & Crabtree, B. F. (2002). Relationships between physician practice style, patient satisfaction, and attributes of primary care. *The Journal of Family Practice*, 51, 835–840.
- Friedman, H. S., DiMatteo, M. R., & Taranta, A. (1980). A study of the relationship between individual differences in nonverbal expressiveness and factors in personality and social interaction. *Journal of Research in Personality*, 14, 351–364.
- Frosch, D. L., & Kaplan, R. M. (1999). Shared decision-making in clinical medicine: Past research and future directions. *American Journal of Preventive Medicine*, 17, 285–295.
- Gattellari, M., Butow, P. N., & Tattersall, M. H. (2001). Sharing decisions in cancer care. *Social Science and Medicine*, 52, 1865–1878.
- Golin, C. E., Sheridan, S., Bunton, A., Schwartz, R., McCormack, L., Driscoll, D., et al. (2006, April). Evaluation of a prostate cancer screening shared decision-making (SDM)

- program that includes values clarification. Paper presented at the *Society of General Internal Medicine Annual Meeting*, Los Angeles.
- Greenfield, S., Kaplan, S., & Ware, J. E., Jr. (1985). Expanding patient involvement in care: Effects of patient outcomes. *Annals of Internal Medicine*, *102*, 520–528.
- Greenfield, S., Kaplan, S. H., Ware, J. E., Jr., Yano, E. M., & Frank, H. J. (1988). Patients' participation in medical care: Effects of blood sugar control and quality of life in diabetes. *Journal of General Internal Medicine*, *3*, 448–457.
- Griffith, C., Wilson, J. F., Langer, S., & Haist, S. A. (2003). House staff nonverbal communication skills and patient satisfaction. *Journal of General Internal Medicine*, *18*, 170–174.
- Hall, J. A., & Roter, D. L. (1998). Medical communication and gender: A summary of research. *Journal of Gender Specific Medicine*, *1*, 39–42.
- Hall, J. A., Harrigan, J. A., & Rosenthal, R. (1995). Nonverbal behavior in clinician-patient interaction. *Applied & Preventive Psychology*, *4*, 21–37.
- Hall, J. A., Roter, D. L., & Rand, C. S. (1981). Communication of affect between patient and physician. *Journal of Health and Social Behavior*, *22*, 18–30.
- Hall, J. A., Stein, T. S., Roter, D. L., & Rieser, N. (1999). Inaccuracies in physicians' perceptions of their patients. *Medical Care*, *37*, 1164–1168.
- Harding, R., Dockrell, M., Dockrell, J., & Corrigan, N. (2001). Motivational interviewing for HIV risk reduction among gay men in commercial and public sex settings. *AIDS Care*, *13*, 493–501.
- Harrigan, J. A., & Rosenthal, R. (1986). Nonverbal aspects of empathy and rapport in physician-patient interaction. In P. D. Blanck, R. W. Buck, & R. Rosenthal (Eds.), *Nonverbal communication in the clinical context* (pp. 36–73). University Park, PA: Pennsylvania State University Press.
- Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academies Press.
- Kamb, M., Fishbein, M., Douglas, J. M., Jr., Rhodes, F., Rogers, J., Bolan, G., et al. (1998). Efficacy of risk-reduction counseling to prevent human immunodeficiency virus and sexually transmitted diseases: A randomized controlled trial. *Journal of the American Medical Association*, *280*, 1161–1167.
- Kaplan, R. M. (2004). Shared medical decision making: A new tool for preventive medicine. *American Journal of Preventive Medicine*, *26*, 81–83.
- Kelly, J. A., & Kalichman, S. C. (2002). Behavioral research in HIV/AIDS primary and secondary prevention: Recent advances and future directions. *Journal of Consulting and Clinical Psychology*, *70*, 626–639.
- Kemp, R., Hayward, P., Applewhaite, G., Everitt, B., & David, A. (1996). Compliance therapy in psychotic patients: Randomised controlled trial. *British Medical Journal*, *312*, 345–349.
- Kern, D. E., Branch, W. T. J., Jackson, J. L., Brady, D. W., Feldman, M. D., Levinson, W., et al. (2005). Teaching the psychosocial aspects of care in the clinical setting: Practical recommendations, general internal medicine generalist educational leadership group. *Academic Medicine*, *80*, 8–20.
- Kjellgren, K. I., Ahlner, J., & Saljo, R. (1995). Taking antihypertensive medication: Controlling or co-operating with patients? *International Journal of Cardiology*, *47*, 257–268.

- Knapp, M. L., & Hall, J. A. (2005). *Nonverbal communication in human interaction* (6th ed.). Belmont, CA: Wadsworth.
- Kyngas, H., & Rissanen, M. (2001). Support as a crucial predictor of adolescents with a chronic disease. *Journal of Clinical Nursing, 10*, 767–774.
- Leach, M. J. (2005). Rapport: A key to treatment success. *Complementary Therapies in Clinical Practice, 11*, 262–265.
- Levinson, W., Gorawara-Bhat, R., & Lamb, J. (2000). A study of patient clues and physician responses in primary care and surgical settings. *Journal of the American Medical Association, 284*, 1021–1027.
- Levinson, W., Roter, D. L., Mullooly, J. P., Dull, V. T., & Frankel, R. M. (1997). Physician–patient communication: The relationship with malpractice claims among primary care physicians and surgeons. *Journal of the American Medical Association, 277*, 553–559.
- Makoul, G., & Clayman, M. L. (2005). An integrative model of shared decision-making in medical encounters. *Patient Education and Counseling, 60*, 301–312.
- Maynard, D. W., & Heritage, J. (2005). Conversation analysis, doctor–patient interaction and medical communication. *Medical Education, 39*, 428–435.
- Mead, N., & Bower, P. (2000). Patient-centeredness: A conceptual framework and review of the empirical literature. *Social Science and Medicine, 51*, 1087–1110.
- Miller, W. R. (1996). Motivational interviewing: Research, practice, and puzzles. *Addictive Behaviors, 21*, 835–842.
- Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York: Guilford Press.
- Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change*. (2nd ed.). New York: Guilford Press.
- National Institute of Mental Health Multisite HIV Prevention Trial Group. (1998). NIMH multisite HIV prevention trial: Reducing HIV sexual risk behavior. *Science, 280*, 1889–1894.
- O'Connor, A. M., Rostom, A., Fiset, V., Tetroe, J., Entwistle, V., Llewellyn-Thomas, H., et al. (1999a). Decision aids for patients facing health treatment or screening decisions: Systematic review. *British Medical Journal, 319*, 731–734.
- O'Connor, A. M., Stacey, D., Entwistle, V., Llewellyn-Thomas, H., Rovner, D., Holmes-Rovner, M., et al. (2003). Decision aids for people facing health treatment or screening decisions [electronic version]. *Cochrane Database of Systematic Reviews, 2*, CD001431.
- O'Connor, A. M., Wells, G. A., Tugwell, P., Laupacis, A., Elmslie, T., & Drake, E. (1999b). The effects of an “explicit” values clarification exercise in a woman’s decision aid regarding postmenopausal hormone therapy. *Health Expectations, 2*, 21–32.
- Oliver, J. W., Kravitz, R. L., Kaplan, S. H., & Meyers, F. J. (2001). Individualized patient education and coaching to improve pain control among cancer outpatients. *Journal of Clinical Oncology, 19*, 2206–2212.
- Phillips, K. A., Johnson, F. R., & Maddala, T. (2002). Measuring what people value: A comparison of “attitude” and “preference” surveys. *Health Services Research, 37*, 1659–1679.

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- Picciano, J. F., Roffman, R. A., Kalichman, S. C., Rutledge, S. E., & Burghuis, J. T. (2001). A telephone based brief intervention using motivational enhancement to facilitate HIV risk reduction among MSM: A pilot study. *AIDS and Behavior*, *5*, 251–262.
- Plato, & Emanuel, E. J. (Trans.). (1961). In E. Hamilton, & H. Cairns (Eds.), *Plato: The collected dialogues*. (pp. 720c–720e). Princeton, NJ: Princeton University Press.
- Reeder, L. G. (1972). The patient-client as a consumer: Some observations on the changing professional-client relationship. *Journal of Health and Social Behavior*, *13*, 406–412.
- Resnicow, K., DiIorio, C., Soet, J., Ernst, D., Borrelli, B., & Hecht, J. (2002). Motivational interviewing in health promotion: It sounds like something is changing. *Health Psychology*, *21*, 444–451.
- Resnicow, K., Jackson, A., Wang, T., De, A. K., McCarty, F., Dudley, W. N., et al. (2001). A motivational interviewing intervention to increase fruit and vegetable intake through black churches: Results of the eat for life trial. *American Journal of Public Health*, *91*, 1686–1693.
- Rogers, C. (1987). The underlying theory: Drawn from experience with individuals and groups. *Counseling and Values*, *32*, 38–46.
- Rollnick, S., Butler, C., & Stott, N. (1997). Helping smokers make decisions: The enhancement of brief intervention for general medical practice. *Patient Education and Counseling*, *31*, 191–203.
- Roter, D. (2000). The enduring and evolving nature of the patient-physician relationship. *Patient Education and Counseling*, *39*, 5–15.
- Roter, D. L., & Hall, J. A. (1992). *Doctors talking with patients/patients talking with doctors: Improving communication in medical visits*. Westport, CT: Auburn House.
- Roter, D. L., & Hall, J. A. (2001). How physician gender shapes the communication and evaluation of medical care. *Mayo Clinic Proceedings*, *76*, 673–676.
- Roter, D. L., Frankel, R. M., Hall, J. A., & Sluyter, D. (2006). The expression of emotions through nonverbal behavior in medical visits: Mechanisms and outcomes. *Journal of General Internal Medicine*, *21*(Suppl 1), S28–S34.
- Roter, D. L., Hall, J. A., & Aoki, Y. (2002). Physician gender effects in medical communication: A meta-analytic review. *Journal of the American Medical Association*, *288*, 756–764.
- Roter, D. L., Larson, S., Shinitzky, H., Chernoff, R., Serwint, J. R., Adamo, G., et al. (2004). Use of an innovative video feedback technique to enhance communication skills training. *Medical Education*, *38*, 145–157.
- Roter, D. L., Stewart, M., Putnam, S. M., Lipkin, M., Stiles, W., & Inui, T. S. (1997). Communication patterns of primary care physicians. *Journal of the American Medical Association*, *277*, 350–356.
- Rowland-Morin, P. A., & Carroll, J. G. (1990). Verbal communication skills and patient satisfaction: A study of doctor-patient interviews. *Evaluation & the Health Professions*, *13*, 168–185.
- Ryan, M., Scott, D. A., Reeves, C., Bate, A., van Teijlingen, E. R., Russell, E. M., et al. (2001). Eliciting public preferences for healthcare: A systematic review of techniques. *Health Technology Assessment*, *5*, 1–186.
- Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, *53*, 550–562.

- Shapiro, J., Hollingshead, J., & Morrison, E. H. (2002). Developing professional skills: Primary care resident, faculty, and patient views of barriers to cultural competence, and the skills needed to overcome them. *Medical Education, 36*, 749–759.
- Sheridan, S., Harris, R., & Woolf, S. (2004). Shared decision making about screening and chemoprevention: A suggested approach from the U.S. preventive services task force. *American Journal of Preventive Medicine, 26*, 56–66.
- Shorter, E. (1985). *Bedside manners*. New York: Simon & Schuster.
- Smith, C. K., & Larsen, K. M. (1984). Sequential nonverbal behavior in the patient–physician interview. *Family Practice, 18*, 257–261.
- Smith, D. E., Heckemeyer, C. M., Kratt, P. P., & Mason, D. A. (1997). Motivational interviewing to improve adherence to a behavioral weight-control program for older obese women with NIDDM: A pilot study. *Diabetes Care, 20*, 52–54.
- Stanton, A. L. (1987). Determinants of adherence to medical regimens by hypertensive patients. *Journal of Behavioral Medicine, 10*, 377–394.
- Stewart, M. (1995). Effective physician-patient communication and health outcomes: A review. *Canadian Medical Association Journal, 152*, 1423–1433.
- Stewart, M., Brown, J. B., Donner, A., McWhinney, I. R., Oates, J., Weston, W. W., et al. (2000). The impact of patient-centered care on outcomes. *Journal of Family Practice, 49*, 796–804.
- Szasz, P. S., & Hollender, M. H. (1956). A contribution to the philosophy of medicine: The basic models of the doctor-patient relationship. *AMA Archives of Internal Medicine, 97*, 585–592.
- Thrasher, A. D., Golin, C. E., Earp, J. A., Tien, H., Porter, C., & Howie, L. (2005). Motivational interviewing to support antiretroviral therapy adherence: The role of quality counseling. *Patient Education and Counseling, 62*, 64–71.
- Ubel, P. A., Jepson, C., & Baron, J. (2001). The inclusion of patient testimonials in decision aids: Effects on treatment choices. *Medical Decision-Making, 21*, 60–68.
- World Health Organization. (2003). *Adherence to long-term therapies: Evidence for action*. Geneva, Switzerland: WHO.
- Wilkes, M. S., Usatine, R., Slavin, S., & Hoffman, J. R. (1998). Doctoring: University of California, Los Angeles. *Academic Medicine, 73*, 32–40.
- Wissow, L. S., Roter, D., Bausman, L., Crain, E., Kercsmar, C., Weiss, K., et al. (1998). Patient–provider communication during the emergency department care of children with asthma. *Medical Care, 36*, 1439–1450.
- Wissow, L. S., Roter, D., Larson, S. M., Wang, M. C., Hwang, W. T., Johnson, R., et al. (2002). Mechanisms behind the failure of residents’ longitudinal primary care to promote disclosure and discussion of psychosocial issues. *Archives of Pediatric and Adolescent Medicine, 156*, 685–692.
- Zuckerman, M., Larrance, D. T., Hall, J. A., DeFrank, R. S., & Rosenthal, R. (1979). Posed and spontaneous communication of emotion via facial and vocal cues. *Journal of Personality, 47*, 712–733.

