A model of nonverbal exchange in physican-patient expectations of patient involvement

Article *in* Journal of Nonverbal Behavior · January 1995

DOI: 10.1007/BF02173081

CITATIONS
27

READS
57

3 authors, including:

Leslie R Martin
La Sierra University
54 PUBLICATIONS **2,660** CITATIONS

SEE PROFILE

A MODEL OF NONVERBAL EXCHANGE IN PHYSICIAN-PATIENT EXPECTATIONS FOR PATIENT INVOLVEMENT

Heidi S. Lepper, Leslie R. Martin, and M. Robin DiMatteo

ABSTRACT: This paper reviews the literature on the nonverbal aspects of physician-patient interaction, focusing on how expectations about patient involvement are conveyed and negotiated by physicians and patients. Important outcomes of this process, such as satisfaction, adherence, and patient health, are examined. A model of physician-patient negotiation involving four interaction styles is presented to examine the negotiation process and the effects of patient involvement on outcomes.

As patients approach the medical encounter, they are entering into a social situation that is different from any other. Patients often must present themselves while dressed only in paper gowns and they may feel both ill and anxious. Furthermore, they may be required to disclose intimate details of their lives to someone they do not know well and who interacts with them only in a medical setting. They are expected to answer all questions asked of them and are often given little information in return about such important issues as etiology and diagnosis of their condition and options for its treatment. Many patients want to receive more information than they generally receive from their physicians (Blanchard, Labrecque, Ruckdeschel, & Blanchard, 1988; Faden, Becker, Lewis, Freeman, & Faden, 1981), and a large percentage want to be active participants in the medical decision-making process (Fisher, 1983; Strull, Lo, & Charles, 1984).

The goal of this paper is to develop a framework for the role of nonverbal communication in both the expression of expectations for patient involvement and the negotiation of that involvement. After a review of the

We would like to thank Valerian Derlega and the two reviewers, Debra L. Roter and Richard L. Street, for their helpful comments.

Please address correspondence and requests for reprints to Robin DiMatteo, Department of Psychology, University of California, Riverside, CA 92521.

literature, we present a model of four patterns of nonverbal exchange that may occur when a physician and a patient are either in agreement or disagreement about the optimal level of patient involvement. We also suggest various patient outcomes that may result from each pattern. The model may be useful in examining patients' evolving expectations for their own involvement and the subsequent negotiation processes that take place within one or across several physician-patient encounters. The model may also be useful for studying both new and continuing physician-patient relationships in terms of the changing patterns of nonverbal communication that occur as a function of physician and patient expectations about patient involvement.

Previous research has focused primarily on the nonverbal behavior of *either* the physician or the patient, but has yet to attempt a systematic exploration of the dyadic exchange (Roter, Hall, & Katz, 1988). We argue that it is through the dynamic nonverbal interchange that the physician and patient are likely to convey their expectations for patient involvement and to negotiate for an optimal level of patient involvement. As a result of these expectancies and negotiation processes, patients may leave the encounter with differing levels of satisfaction and adherence which may subsequently influence patient health status (Kaplan, Greenfield, & Ware, 1989).

Patient Involvement

Street and Wiemann (1987) have stated that many patients desire "egalitarian interactions with physicians with both parties committed to contributing and responding to a partner's contributions rather than having the physician dominate the content and direction of the encounter" (p. 607). "Patient involvement" can be defined in terms of two dimensions, based on the behavior enacted by the physician and the patient in the encounter. Physician contribution to patient involvement includes such behaviors as giving information, asking questions, building a partnership, and engaging in active listening as well as refraining from interrupting the patient, dominating the conversation, and ignoring patients' queries and concerns. Patient contribution to patient involvement includes asking questions, giving complete information, expressing opinions and concerns, listening to the physician, and, if desired, participating in decision making. Patient involvement is highest in a medical visit when the physician actively listens to the patient, allows the patient to discuss his or her concerns and expectations about the visit, asks the patient for his or her opinion, and inquires about the patient's ability to adhere to treatment recommendations. This

type of medical visit is also characterized by a patient who provides complete answers to any questions, relates concerns about the presenting medical condition, requests clarification when confused, and asks questions about the diagnosis and treatment options, each without interruption by the physician.

Many patients value receiving as much information from their physicians as possible, yet patients' desire for this information often goes unfulfilled (Faden et al., 1981). Patients often want information about the severity of their illness, their prognosis, and the various treatment options available to them (Kincey, Bradshaw, & Ley, 1975). An important benefit of patient involvement is that patients are more likely to comply with treatment recommendations when given information about the treatment than when they are not given information (Stiles, Putnam, Wolf, & James, 1979). Furthermore, patients who are allowed to discuss their experiences and concerns during the prescriptive phase of the interaction (i.e., when the physician provides a treatment regimen) may be more satisfied with the interaction (Winefield & Murrell, 1991).

Research evidence is accumulating to suggest that effective collaboration in decision making leads to better health-care decisions (Roter & Hall, 1992). When they participate fully in the medical encounter (i.e., receive information, give opinions, and relate concerns), patients exhibit more responsibility for their care (Wagener & Taylor, 1986), report higher levels of medical satisfaction (Stewart, 1984), show greater improvement in their overall health (Kaplan et al., 1989), have greater commitment to the medical decisions (Brody, 1980), and exhibit higher levels of adherence to the treatments jointly decided upon (Speedling & Rose, 1985).

Expectations for Patient Involvement

Psychological and social expectations have long been recognized as being influential in the physician-patient relationship (Shapiro, 1960). Kasl (1975) proposed that more crucial than the exchange of information in the medical visit is the nature of expectations that physicians and patients have regarding their roles, and the congruence and mutuality of these role expectations. These expectations are likely based on prior experiences. Roter and Hall (1992) stated, "While the patient role is learned throughout life, the doctor role is learned in medical school" (p. 17). Since these expectation-generating experiences are individually unique, it is often the case that a particular patient's view of physician and patient roles differs widely from

that of his or her physician, and this likewise may be true for a physician's view of physician and patient roles.

Friedman (1979) suggested that patients identify their physician's expectations from nonverbal cues and that these cues will give the patient information about whether or not he or she is liked and cared for, how serious his or her condition is, and how treatable the condition is. A physician's positive expectations for a patient may tend to influence how the physician treats the patient, and in turn, the patient's level of involvement in the medical interaction (Eisenberg, 1979). For example, if a physician expects the patient to be competent, attentive, and conscientious, he or she is likely to provide the patient with adequate information. Similarly, if a physician expects the patient to be incompetent and irresponsible, he or she will likely provide little, if any, information and not allow the patient to share in the medical care process (DiMatteo, 1993).

While patient and physician expectations may differ widely, it is of special importance to understand the ways in which expectations, or preferences, for involvement are communicated and understood in the absence of direct discussion. The talk between physician and patient in the medical encounter consists primarily of asking questions and giving information, and little, if any, consists of the direct expression of expectations and feelings such as fear, embarrassment, and uneasiness about the encounter (Roter & Hall, 1992). For example, it is very unlikely that the physician will take the time to ask the patient how he or she feels about the way in which the visit is being conducted or whether expectations for the visit are being met. Since it is known that other types of feelings and emotions are conveyed by means of nonverbal cues such as voice tone and quality, touch, gaze, posture, and facial expressions (Siegman & Feldstein, 1987), it may be that expectations regarding the optimal level of patient involvement are also transmitted and understood nonverbally.

Nonverbal Cues Transmitted from Patient to Physician

A patient can assert his or her expectations for involvement via the transmission of nonverbal cues to the physician. For instance, if the physician prescribes a treatment that the patient does not feel comfortable with or does not believe he or she can adhere to, nonverbal cues expressing the discomfort associated with this realization may be emitted. The patient may look confused, try to interrupt the physician to ask more questions, or nonverbally disengage from the encounter by withholding eye contact or

keeping the head downturned (cf. Patterson, 1983), in order to convey to the physician that more discussion of the treatment plan is necessary.

Heath (1984) observed patients attempting to engage their physician in more communication by behaving in ways that captured the physician's attention. Patients often stopped talking until the physician looked at them, rather than continuing to talk while the physician wrote in the chart. Patients also used their body alignment and movement to gain the attention of their physician, for instance, by repeatedly kicking their leg(s) out from the examining table. It is possible that if the physician does not respond to the patient's nonverbal cues for further participation, non-compliance with the treatment will follow (Stone, 1979) and the patient's health may fail to improve (Kaplan et al., 1989; Schulman, 1979). However, if the physician is attuned to these cues and recognizes that the patient is expressing a desire for more information or needs more opportunity to voice concerns, then more discussion of the treatment and strategies for patient adherence may follow. Due to the status difference between patient and physician, most patients are unlikely to express verbally their desire for involvement (Beisecker, 1990) or attempt to verbally affect the content and structure of the interaction (Haug & Lavin, 1983).

Nonverbal Cues Transmitted from Physician to Patient

Empirical evidence suggests that physicians tend to exert dominance and control over patients by employing more pauses during speaking, using more social touch, and taking longer speaking turns than do patients (Harrigan & Rosenthal, 1983; Street & Buller, 1987). Street and Buller (1987) also found that physicians and patients reciprocate their mutual engagement in the topic of interaction through the use of gaze, body orientation, and gestures. Patient perceptions of physician dominance are also influenced by a physician's indirect body orientation in relation to the patient and a direct, mutual gaze which may not be conducive to patient involvement (Buller & Street, 1992; Harrigan, Oxman, & Rosenthal, 1985). For instance, a physician can express to the patient that involvement is allowed and expected by holding a direct facial and body orientation, smiling, head nodding, and expressing affect.

Research suggests that physicians may adjust aspects of their behavior according to certain patient characteristics. One study found that patients over the age of 30 received a less domineering and more responsive nonverbal style of communication than did younger patients (Street & Buller, 1988). Perhaps these older patients were allowed to become more active

participants in their medical care and did not need to negotiate nonverbally for this involvement as much as did younger patients. Other research indicates that females tend to be more facially expressive, smile more, use more gestures, and align their body with whom they are interacting (Roter & Hall, 1992), and it is very likely that females behave in this manner in the medical interaction. This behavior might allow females to obtain the desired level of involvement because their nonverbal cues are more immediate than those of males, and physicians might react to these cues more readily. In fact, research indicates that female patients get more comprehensible information (i.e., technical information is explained or provided in simpler terms) from physicians (Waitzkin, 1985) and are more likely to be asked for their opinions and concerns (Stewart, 1983).

One physician characteristic that might influence both the nonverbal cues they transmit to their patients and their understanding of patient nonverbal cues is physician gender. Females are generally better able to understand the meaning of nonverbal cues and more accurately express emotions through nonverbal channels than males (Hall, 1984). Female physicians tend to be more nonverbally "immediate" than male physicians in that they smile and nod more often to patients (Hall, Irish, Roter, Ehrlich, & Miller, 1994). Female physicians also spend more time taking a history, building a partnership, asking questions, and relating information (Cypress, 1980; Hall et al., 1994; Roter, Lipkin, & Korsgaard, 1991). This tendency on the part of female physicians to be more verbally and nonverbally open to patient involvement might allow patients to express expectations more freely. In fact, one study found that in the presence of female physicians, patients provided more medical information and made more partnership building statements (Hall et al., 1994).

Negotiation and Conflict

During the medical visit physician and patient negotiate what, when, and how things will be said and done during the medical visit (Roter & Hall, 1992). The negotiation process is a means through which physician and patient build an understanding of the other's viewpoint and attempt to resolve conflicts by specifying areas of contention (Benarde & Mayerson, 1978). Negotiation also involves the recognition of areas of agreement so that the encounter can proceed smoothly. Although negotiation processes are most often viewed in terms of verbal communications, nonverbal communications are vitally important, especially within the medical encounter

where physicians and patients tend to speak directly only about medically relevant issues (such as symptoms, diagnosis, prognosis).

Nonverbal channels are likely utilized in the expression and negotiation of expectations for patient involvement. For instance, a physician who behaves in a hurried manner, as if time is being wasted, is likely conveying an expectation that patient involvement is not desired (Svarstad, 1974), whereas a physician who matches a patient's affiliative behaviors, such as warmth, interest, concern, and rapport, is likely conveying an expectation for patient involvement (Buller & Street, 1992). In addition, a patient who behaves in a submissive manner is likely conveying an expectation that involvement in the encounter is not desired, whereas one who seeks out information and attempts to speak as often as the physician (Kaplan et al., 1989) is likely conveying an expectation that involvement is desired.

Conflict in the relationship can arise when the patient's expectations for involvement differ from those held by the physician. The patient may expect the physician to divulge known information about the diagnosis (Blanchard et al., 1988), to convey all the possible treatment options (Faden et al., 1981), or may even expect the physician to behave in an interested and warm manner (Street, 1990). Conflict due to disagreement about expectations can be expressed either verbally or nonverbally. A verbal expression of conflict may include an outright statement of dissatisfaction or a demand by the patient for more information. However, due to time pressures (Feller, 1979) and the inherent power difference in this exchange (Beisecker, 1990), conflict over disagreement in expectations may be expressed more readily through nonverbal channels.

Exchanges in the Physician-Patient Interaction

Generally, physicians and patients enter the medical interaction with the expectation that the physician possesses the knowledge to remedy the patient's presenting condition and holds control over the course and content of the interaction (Beisecker, 1990). However, expectations do vary across patients and physicians (Ditto & Hilton, 1990), particularly in terms of the level of patient involvement considered acceptable by both participants. It is predicted that the congruency or incongruency of expectations for patient involvement will affect how the patient and physician nonverbally negotiate this involvement and subsequent patient outcomes (Rost, Carter, & Inui, 1989). Given that the patient and physician may each have high or low expectations for patient involvement, it is proposed that four types of physician-patient interactions may proceed from the following four combi-

nations of expectations: 1) both expect involvement, 2) neither expects involvement, 3) physician expects but patient does not expect involvement, and 4) patient expects but physician does not expect involvement.

A model of the mutual expectations for patient involvement is displayed in Figure 1. This model includes the ensuing nonverbal exchange and negotiation between patient and physician as well as possible patient outcomes. The four variables identified in the model include the following: 1) "Expectations for Patient Involvement" which describes the agreement or disagreement of patient and physician expectations, 2) "Nonverbal Exchange and Negotiation" involving the nonverbal cues expressed and the degree of conflict between physician and patient in the negotiation of patient involvement, 3) "Short-term Outcomes" which describes the immediate outcomes of the nonverbal exchange in terms of whether the patient obtains the level of involvement he or she desires, and 4) "Long-term Outcomes" which describes the predicted outcomes including patient satisfaction, adherence to prescribed treatments, and subsequent health improvements.

The first type of interaction occurs when both patient and physician expect involvement by the patient and is the most positive in terms of patient outcomes and the least conflictual in terms of nonverbal negotiation of expectations. The patient prefers to become involved by providing opinions, concerns, and information about the significance of his or her symptoms. In addition, the patient expects the physician to share the diagnostic findings and treatment recommendations (Leigh & Reiser, 1980). The patient might nonverbally express a desire for involvement by leaning toward the physician, maintaining eye contact, smiling and nodding in response to the physician's communications, and being facially and vocally expressive (cf. Coker & Burgoon, 1987).

The physician will likely elicit information from the patient and convey interest in the patient's condition by gazing toward the patient, sitting or standing close to the patient with a forward lean, head nodding in response to the patient, being facially expressive (Patterson, 1983), and refraining from writing in the patient's chart while the patient is speaking (Heath, 1984). The patient will likely maintain his or her nonverbal "immediacy" cues, in essence matching the physician's affiliative behaviors (Buller & Street, 1992) and responding with more information and questions. The nonverbal negotiation is non-conflictual since there is a congruency in expectations. The patient is likely to leave the interaction satisfied with the information received and with the knowledge and motivation to comply with any prescribed treatments (Kaplan et al., 1989). This patient should subsequently experience improved health.

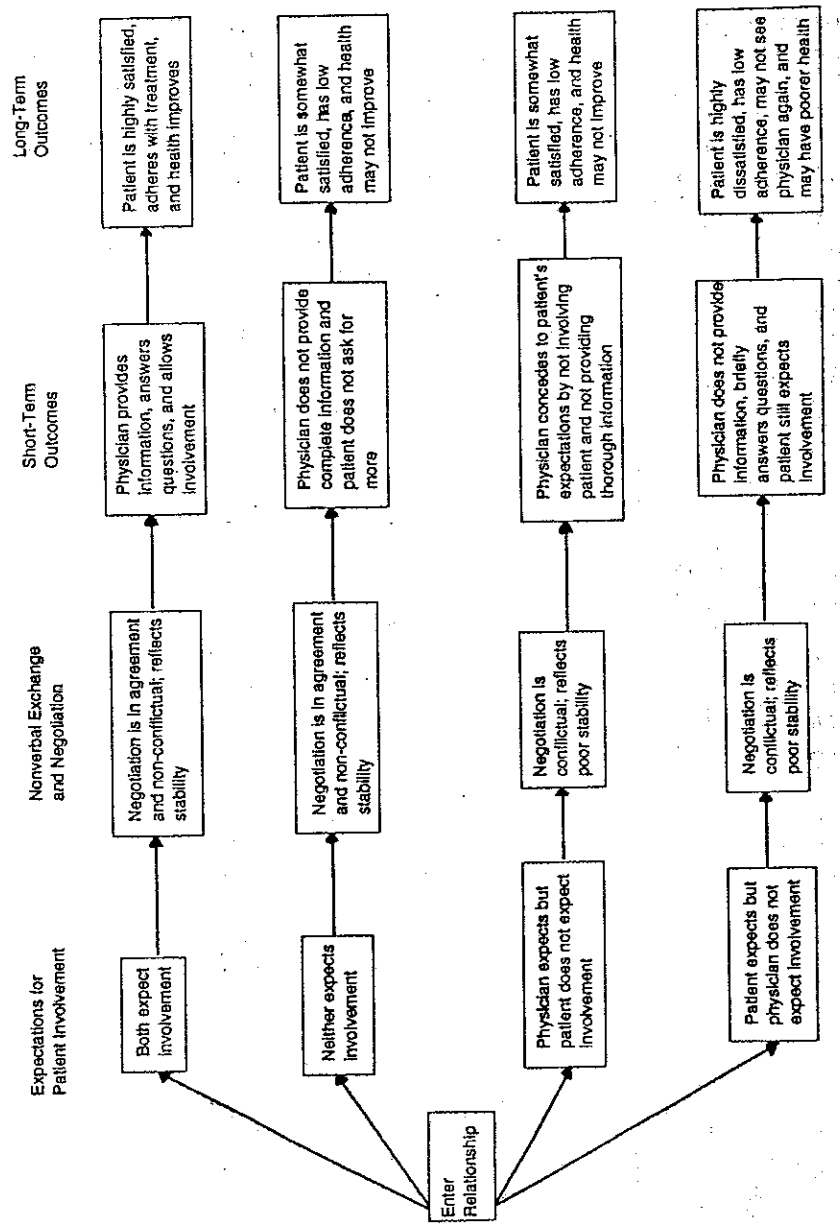

Figure 1. Impact of expectations for patient involvement on the nonverbal exchange between the patient and physician.

The second type of interaction is the traditional physician-patient interaction in which both physician and patient expect the physician to take control of the encounter, to provide little feedback to the patient, and to make the decisions. That is, neither expects patient involvement. The patient is likely to express nonverbally that involvement is not desired and that the physician should take the sole lead in the medical care process. The patient might answer only those questions asked; withhold eye contact in the attempt to defer to the physician's authority, sit with closed arms and legs, and speak in a passive tone of voice (Patterson, 1983). The physician will likely express that the patient should not attempt to become involved by exhibiting a strong demeanor including taking longer speaking turns and more pauses during speaking, sitting or standing with a backward lean, and interrupting the patient while he or she attempts to answer questions (Fisher, 1983; Street & Buller, 1987, 1988; West, 1984).

In this circumstance, the patient likely receives little information, or may not fully understand the information that is provided, and is given little encouragement to express concerns. However, the patient is also likely to express nonverbally that he or she has no further questions by shifting around on the examining table, turning away from the physician, or by avoiding eye contact (Patterson, 1984). The physician is likely to remain dominant by asking if there are any questions while he or she is stepping toward the door or by displaying nonverbal cues of responding to time pressures by hurrying through the encounter, such as repeatedly glancing at the clock (Svarstad, 1974). The patient is likely to leave the encounter having fulfilled expectations for little involvement. Despite these expectations, however, satisfaction with the encounter might not be high since physician-domineering behaviors may be viewed as dehumanizing (Hall et al., 1988; Street & Wiemann, 1987). The patient is also given little information on how to follow through with any prescribed treatments. Subsequently, the patient will likely have difficulty with compliance and his or her health may not improve as quickly as that of patients in the first type of interaction described (Schulman, 1979).

The third type of interaction is one which is not likely to occur in many physician-patient relationships. Its display of incongruency in expectations for involvement is, however, instructive to examine. This interaction is defined by a patient who expects the physician to take the dominant role, while the physician expects the patient to be an active participant in the interaction (i.e., the physician expects but the patient does not expect involvement). The patient might emit nonverbal cues that express an expectation of non-involvement, such as leaning away from the physician, smiling and nodding little in response to the physician's communications,

being facially inexpressive (Coker & Burgoon, 1987), and exhibiting self-touching, such as pulling at hair strands, scratching, or rubbing hands together, which often signals patient anxiety (Shreve, Harrigan, Kues, & Kagas, 1988). Concurrently, the physician may emit cues that attempt to engage the patient in the encounter by not speaking until the patient looks up, not continuing until a question is satisfactorily answered, sitting closer to the patient (Heath, 1984), as well as being vocally expressive and engaging in more animated gestures (Coker & Burgoon, 1987).

Although the nonverbal negotiation process is likely to be conflictual due to the attempt of the two to influence each other through nonverbal means, the physician will likely concede to the patient's wish for passive patienthood. The physician might sense that the patient is resistant to participation and eventually may simply provide a diagnosis and treatment plan with little explanation and few requests for questions or concerns. A patient who does not want to be an active participant in the medical encounter, yet whose physician believes that active participation is beneficial, will likely leave the visit dissatisfied. The patient will also not receive the needed information to adhere to any recommendations, or if this information is provided it is not likely to be remembered or used (Ley, 1986), which may subsequently jeopardize health.

The fourth type of interaction, in which the patient expects but the physician does not expect involvement, is likely the most prevalent in medical encounters and is the most conflictual in terms of the nonverbal negotiation process. The patient enters into the encounter with the expectation of involvement and he or she emits nonverbal cues to communicate this expectation to the physician. The physician in this interaction is somewhat resistant to allowing equal partnership in the medical care process and the patient is able to understand this expectation by decoding the nonverbal cues of the physician (Friedman, 1979).

The patient might verbally express an expectation for active participation by asking numerous questions and by offering additional information. The patient's nonverbal behaviors, such as sitting with open arms and legs, leaning forward, maintaining eye contact, head nodding, interrupting the physician (Patterson, 1983), and pausing during speaking until the physician is paying attention (Heath, 1984), will also express a desire for involvement. The physician, on the other hand, might convey to the patient that active participation is not acceptable by refraining from nodding his or her head in response to a verbal question or answer, looking in the medical chart during times of questioning, interrupting the patient, speaking for longer periods of time with more pauses, and using more social touch (Harrigan & Rosenthal, 1983; Street & Buller, 1987).

If the patient is not satisfied with the level of involvement permitted by the physician, the patient may seek the desired involvement through various avenues, short of verbal request, which many patients may find difficult (Haug & Lavin, 1983). First, the patient may try to engage the physician in cooperative medical care by responding to non-cooperative behaviors with a body orientation (such as leaning toward the physician as he or she moves about the room) that gets the physician's attention or by stopping in the middle of a speaking turn until the physician is being attentive (Heath, 1984). Second, the patient may gesture to the physician, exhibit an encouraging facial expression, or hold a forward body alignment when satisfied with a particular communication (Street & Buller, 1987). Third, the patient may interrupt the physician in an attempt to assert some power and to obtain information (Beisecker, 1990). Lastly, the patient may not look at the physician as he or she heads for the door upon conclusion of the encounter, in an attempt to keep the physician bound to the encounter (Patterson, 1983). In response to the patient's nonverbal cues, the physician may respond with more dominance by not verbally responding to the patient, by changing the topic of conversation, or by refusing to make eye contact (West, 1984).

The deleterious effects of this type of interaction include: (1) doctor shopping in which medical resources are needlessly spent while the patient attempts to find a physician who meets his or her needs (Trilling & Jaber, 1993), (2) dissatisfaction with both the encounter and physician (Stewart, 1984), (3) poor adherence to recommendations (DiMatteo & DiNicola, 1982), and even (4) poor health outcomes (Kaplan et al., 1989).

Conclusions and Future Directions

Characteristics of both patient and physician can play an important role in the four interaction types and the corresponding nonverbal patterns of negotiation. Previous research has indicated that patients higher in education tend to receive more time, information, and detailed explanations from their physicians than less educated patients (Pendleton & Bochner, 1980), and higher-status patients tend to talk more and ask more questions than lower status patients (Mathews, 1983). It may be the case that in attempting to gain the desired level of involvement, educated patients rely less heavily on nonverbal cues than patients with less education, and rely instead on a reciprocal verbal relationship in the negotiation process (Street & Buller, 1988).

Other patient characteristics which may influence the direction of the negotiation process include: the patient's gender (Waitzkin, 1985), age

(Greene, Adelman, Charon, & Hoffman, 1986), ethnicity (Hooper, Comstock, Goodwin, & Goodwin, 1982), and presenting condition (Stewart, 1983; Waitzkin, 1985). Physician characteristics, such as gender (Hall et al., 1994), may also play a pivotal role in the negotiation process as discussed earlier. Future research should focus on the ways in which combinations of physician and patient characteristics influence the nonverbal negotiation of expectations for patient involvement.

Future studies might also focus on developing intervention procedures which aim at teaching physicians to understand the importance of nonverbal communication in the medical setting and to interpret patients' nonverbal cues. For instance, research conducted by DiMatteo and Hall (1979) suggests that individuals can become more sensitive to certain nonverbal communications if they attend to the channel in which the communication is expressed (i.e., the face or the body). Training health care professionals to attend to certain nonverbal channels might increase their ability to decode accurately the messages being sent through those nonverbal channels, therefore increasing their sensitivity to what patients might be feeling. Likewise, interventions may be developed to teach patients ways in which they might better use their ability to request verbally that the medical visit fulfill various expectations. Ways in which patients can be taught or assisted include: 1) the PREPARED format (DiMatteo, Reiter, & Gambone, 1994; Gambone & Reiter, 1991), which assists patients and physicians in making appropriate decisions based on the information gained during the medical visit, and 2) patient co-authoring of the medical record (Fischbach, Sionelo-Bayog, Needle, & DelBanco, 1980), which helps patients to become involved in the medical care process by having them co-author their medical record with their physician.

The application of scientific research to the medical interaction promises advances both in understanding of the social processes inherent in the interaction and in the processes that guide effective care. Nonverbal negotiation of patient involvement is clearly an important feature of the physician-patient relationship and potentially has a great deal of influence on patient outcomes. Research evidence consistently demonstrates the importance of nonverbal communication in the medical setting, and attention to nonverbal negotiation deserves a key place in future endeavors.

References

Beisecker, A. E. (1990). Patient power in doctor-patient communication: What do we know? *Health Communication, 2,* 105-122.

Benarde, M. A., & Mayerson, E. W. (1978). Patient-physician negotiation. *Journal of the American Medical Association, 239,* 1413-1415.

Blanchard, C. G., Labrecque, M. S., Ruckdeschel, J. C., & Blanchard, E. B. (1988). Information and decision-making preferences of hospitalized adult cancer patients. *Social Science & Medicine, 27,* 1139-1145.

Brody, D. S. (1980). The patient's role in clinical decision making. *Annals of Internal Medicine, 93,* 718-722.

Buller, D. B., & Street, R. L. (1992). Physician-patient relationships. In R. S. Feldman (Ed.), *Applications of nonverbal behavioral theories and research* (pp. 119-141). Hillsdale, NJ: Erlbaum.

Coker, D. A., & Burgoon, J. K. (1987). The nature of conversational involvement and nonverbal encoding patterns. *Human Communication Research, 13,* 463-494.

Cypress, B. K. (1980). *Characteristics of visits to female and male physicians.* Vital and Health Statistics, series 13, no. 49. Hyattsville, MD: U.S. Department of Health and Human Services.

DiMatteo, M. R. (1993). Expectations in the physician-patient relationship: Implications for patient adherence to medical treatment recommendations. In P. D. Blank (Ed.), *Interpersonal expectations: Theory, research, and applications* (pp. 296-315). New York: Cambridge University Press.

DiMatteo. M. R., & DiNicola, D. D. (1982). *Achieving patient compliance.* New York: Pergamon.

DiMatteo, M. R., & Hall, J. A. (1979). Nonverbal decoding skill and attention to nonverbal cues: A research note. *Environmental Psychology and Nonverbal Behavior, 3,* 188-192.

DiMatteo, M. R., Reiter, R. R., & Gambone, J. C. (1994). Enhancing medication adherence through communication and informed collaborative choice. *Health Communication, 6,* 253-265.

Ditto, P. H., & Hilton, J. L. (1990). Expectancy processes in the health care interaction sequence. *Journal of Social Issues, 46*(2), 97-124.

Eisenberg, J. M. (1979). Sociologic influences on decision-making by clinicians. *Annals of Internal Medicine, 90,* 957-964.

Faden, R. R., Becker, C., Lewis, C., Freeman, J., & Faden, A. I. (1981). Disclosure of information to patients in medical care. *Medical Care, 19,* 718-733.

Feller, B. A. (1979). *Characteristics of general internists and the content of care of their patients* (HRA-79-652). Washington, DC: U.S. Department of Health, Education, and Welfare.

Fischbach, R. L., Sionelo-Bayog, A., Needle, A., & DelBanco, T. L. (1980). The patient and practitioner as co-authors of the medical record. *Patient Counseling and Health Education, 1,* 1-5.

Fisher, S. (1983). Doctor talk/patient talk: How treatment decisions are negotiated in doctor/patient communication. In S. Fisher & A. Todd (Eds.), *The social organization of doctor-communication* (pp. 135-157). Washington, DC: Center for Applied Linguistics.

Friedman, H. S. (1979). Nonverbal communication between patients and medical practitioners. *Journal of Social Issues, 35*(1), 82-99.

Gambone, J. C., & Reiter, R. R. (1991). Quality improvement in health care. *Current Problems in Obstetrics, Gynecology, & Fertility, 14,* 151-175.

Greene, M. G., Adelman, R. D., Charon, R. & Hoffman, S. (1986). Ageism in the medical encounter: An exploratory study of the language and behavior of doctors with their old and young patients. *Language and Communication, 6,* 113-124.

Hall, J. A. (1984). *Nonverbal sex differences: Communication accuracy and expressive style.* Baltimore: Johns Hopkins University Press.

Hall, J. A., Irish, J. T., Roter, D. L., Ehrlich, C. M., & Miller, L. H. (1994). Gender in medical encounters: An analysis of physician and patient communication in a primary care setting. *Health Psychology, 13,* 384-392.

Hall, J. A., Roter, D. L., & Katz, N. R. (1988). Meta-analysis of correlates of provider behavior in medical encounters. *Medical Care, 26,* 657-675.

Harrigan, J. A., & Rosenthal, R. (1983). Physicians' head and body positions as determinants of perceived rapport. *Journal of Applied Social Psychology, 13,* 496-509.

Harrigan, J. A., Oxman, T. E., & Rosenthal, R. (1985). Rapport expressed through nonverbal behavior. *Journal of Nonverbal Behavior, 9,* 95-110.

Haug, M., & Lavin, B. (1983). *Consumerism in medicine: Challenging physician authority.* Beverly Hills, CA: Sage.

Heath, C. (1984). Participation in the medical consultation: The co-ordination of verbal and nonverbal behaviour between the doctor and patient. *Sociology of Health & Illness, 6,* 311-338.

Hooper, E. M., Comstock, L. M., Goodwin, J. M., & Goodwin, J. S. (1982). Patient characteristics that influence physician behavior. *Medical Care, 20,* 630-638.

Kaplan, S. H., Greenfield, S., & Ware, J. E., Jr. (1989). Assessing the effects of physician-patient interactions on the outcomes of chronic disease. *Medical Care, 27,* S110-S127.

Kasl, S. V. (1975). Issues in patient adherence to health care regimens. *Journal of Human Stress, 1,* 5-17.

Kincey, J., Bradshaw, P., & Ley, P. (1975). Patient's satisfaction and reported acceptance of advice in general practice. *Journal of the Royal College of General Practitioners, 25,* 558-566.

Leigh, H., & Reiser, M. F. (1980). *The patient: Biological, psychological, and social dimensions of medical practice.* New York: Plenum Press.

Ley, P. (1986). Cognitive variables and non-compliance. *Journal of Compliance in Health Care, 1*(2), 171-188.

Mathews, J. J. (1983). The communication process in clinical settings. *Social Science & Medicine, 17,* 1371-1378.

Patterson, M. L. (1983). *Nonverbal behavior: A functional perspective.* New York: Springer-Verlag.

Patterson, M. L. (1984). Intimacy, social control, and nonverbal involvement: A functional approach. In V. J. Derlega (Ed.), *Communication, intimacy, and close relationships* (pp. 105-132). Orlando, FL: Academic Press.

Pendleton, D. A., & Bochner, S. (1980). The communication of medical information in general practice consultations as a function of patients' social class. *Social Science & Medicine, 14A,* 669-673.

Rost, K., Carter, W., & Inui, T. (1989). Introduction of information during the initial medical visit: Consequences for patient follow-through with physician recommendations for medication. *Social Science & Medicine, 28,* 315-321.

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., & Katz, N. R. (1988). Patient-physician communication: A descriptive summary of the literature. *Patient Education and Counseling, 12,* 99-119.

Roter, D., Lipkin, M., & Korsgaard, A. (1991). Sex differences in patients' and physicians' communication during primary care medical visits. *Medical Care, 29,* 1083-1093.

Schulman, B. A. (1979). Active patient orientation and outcomes in hypertensive treatment: Application of a socio-organizational perspective. *Medical Care, 17,* 267-280.

Shapiro, A. (1960). A contribution to a history of the placebo effect. *Behavioral Science, 5,* 109-135.

Shreve, E. G., Harrigan, J. A., Kues, J. R., & Kagas, D. K. (1988). Nonverbal expressions of anxiety in physician-patient interactions. *Psychiatry, 51,* 378-384.

Siegman, A. W. & Feldstein, S. (Eds.) (1987). *Nonverbal behavior and communication.* Hillsdale, NJ: Erlbaum.

Speedling, E. J., & Rose, D. N. (1985). Building an effective doctor-patient relationship: From patient satisfaction to patient participation. *Social Science & Medicine, 21,* 115-120.

Stewart, M. (1983). Patient characteristics which are related to the doctor-patient interaction. *Family Practice, 1,* 30-35.

Stewart, M. (1984). What is a successful doctor-patient interview? A study of interactions and outcomes. *Social Science & Medicine, 19,* 167-175.

Stiles, W. B., Putnam, S. M., Wolf, M. H., & James, S. A. (1979). Verbal response mode of

profiles of patients and physicians in medical screening interviews. *Journal of Medical Education, 54,* 81-89.

Stone, G. C. (1979). Patient compliance and the role of the expert. *Journal of Social Issues, 35*(1), 34-59.

Street, R. L. (1990). Communication in medical consultation: A review essay. *Quarterly Journal of Speech, 76,* 315-357.

Street, R. L., & Buller, D. B. (1987). Nonverbal response patterns in physician-patient interactions: A functional analysis. *Journal of Nonverbal Behavior, 11,* 234-253.

Street, R. L., & Buller, D. B. (1988). Patients' characteristics affecting physician-patient nonverbal communication. *Human Communication Research, 15,* 60-90.

Street, R. L., & Wiemann, J. M. (1987). Patient satisfaction with physician's interpersonal involvement, expressiveness, and dominance. In M. L. McLaughlin (Ed.), *Communication yearbook* (Vol. 10, pp. 591-612). Beverly Hills, CA: Sage.

Strull, W. M., Lo, B., & Charles, G. (1984). Do patients want to participate in medical decision making? *Journal of the American Medical Association, 252,* 2990-2994.

Svarstad, B. L. (1974). *The doctor-patient encounter: An observational study of communication and outcome.* Unpublished doctoral dissertation, University of Wisconsin, Madison.

Trilling, J. S., & Jaber, R. (1993). Formulation of the physician/patient impasse. *Family Systems Medicine, 11,* 281-286.

Wagener, J. J., & Taylor, S. E. (1986). What else could I have done? Patients' responses to failed treatment decisions. *Health Psychology, 5,* 481-496.

Waitzkin, H. (1985). Information giving in medical care. *Journal of Health and Social Behavior, 26,* 81-101.

West, C. (1984). *Routine complications: Troubles with talk between doctors and patients.* Bloomington, IN: Indiana University Press.

Winefield, H. R., & Murrell, T. G. (1991). Speech patterns and satisfaction in diagnostic and prescriptive stages of general practice consultations. *British Journal of Medical Psychology, 64,* 103-115.

PATIENT-DIRECTED GAZE AS A TOOL FOR DISCOVERING AND HANDLING PSYCHOSOCIAL PROBLEMS IN GENERAL PRACTICE

Jozien M. Bensing, Jan J. Kerssens, and Marja van der Pasch

ABSTRACT: In this study, one particular form of nonverbal behavior—patient-directed gaze—was examined in relation to the general practitioner's performance in psychosocial care. Data were available from a random sample of 337 videotaped consultations and accompanying questionnaires from both general practitioner and patient. The relevance of general practitioners' gaze in psychosocial care was demonstrated in several ways: (1) general practitioners' gaze was associated with affective verbal behavior and with instrumental behavior on psychosocial topics; (2) general practitioners' gaze was related to patients' share of talking and the number of health problems presented, especially as regards psychological and social health problems; (3) in consultations with a relatively high degree of patient-directed gaze, general practitioners were found to be more aware of patients' psychosocial history and were better at identifying patients suffering mental distress. Patient-directed gaze appears to be a useful technique, both for decoding people's mental problems and for showing interest in the patient's story. This may encourage the patient to talk about worries that would otherwise remain concealed. In medical education, nonverbal techniques should be taught as distinct from verbal communication strategies.

Discovering the true nature of the patient's health problem and translating it into a correct diagnosis are the first and perhaps most important tasks for the general practitioner. These tasks depend in part on the exchange of verbal information (i.e., information seeking and providing information) between general practitioner and patient (Hall, Roter, & Katz, 1988; Inui & Carter, 1985; Tuckett & Williams, 1985; Waitzkin, 1985; Waitzkin & Brit, 1988). However, there is a growing awareness of the importance of *nonverbal* behavior in the diagnostic process (Bensing, 1991a; Cassell, 1991;

Thanks are extended to Glynn Coates, John F. Dovidio, and Robin DiMatteo for their comments as reviewers on the manuscript.

Address correspondence to Jozien M. Bensing, Ph.D., Netherlands Institute of Primary Health Care (NIVEL), P.O. Box 1568, 3500 BN, Utrecht, the Netherlands.