

The Expression of Emotion Through Nonverbal Behavior in Medical Visits

Mechanisms and Outcomes

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Relationship-centered care reflects both knowing and feeling; the knowledge that physician and patient bring from their respective domains of expertise, and the physician's and patient's experience, expression, and perception of emotions during the medical encounter. These processes are conveyed and reciprocated in the care process through verbal and nonverbal communication. We suggest that the emotional context of care is especially related to nonverbal communication and that emotion-related communication skills, including sending and receiving nonverbal messages and emotional self-awareness, are critical elements of high-quality care. Although nonverbal behavior has received far less study than other care processes, the current review argues that it holds significance for the therapeutic relationship and influences important outcomes including satisfaction, adherence, and clinical outcomes of care.

KEYWORDS: nonverbal communication; nonverbal sensitivity; physician and patient behavior; relationship-centered care.

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As the molecular and chemistry-oriented sciences became the predominant 20th-century medical paradigm, historians of modern medicine have tracked an undeniable decline in the centrality of face-to-face communication in the care process. Not only were unstructured medical histories replaced by narrow system reviews, but it can be argued that physicians lost confidence in the significance of any but the most explicit hypothesis-driven exchanges and quantified findings.¹

Using the terms of high- and low-context culture coined by cultural anthropologist Edward T. Hall,² medicine can be seen as having undergone a shift in the nature of its culture from a high- to low-communication-context endeavor. High-context communication depends on sensitivity to nonverbal behaviors and environmental cues to decipher meaning, while low-context exchanges are more verbally explicit, with little reliance on the unstated or nuanced. One manifestation of this shift in medicine is diminished attention to emotion and its

role in the care process. It is our thesis that the doctor-patient relationship is an intrinsically high-context phenomenon within which the communication of expert knowledge and emotion is central. Both the physician and patient are experts, although the domains of their expertise are typically very different. Physicians are expert in the technical and cognitive ways that are emphasized in their training. Patients are expert in their history and experience of illness, personality, lifestyle, life setting, values, and expectations. As defined by Beach et al., relationship-centered care is founded on several core principles: (a) relationships in health care ought to include the personhood of the participants, (b) affect and emotion are important components of relationships, and (c) all health care relationships occur in the context of reciprocal influence.³

Considering medical care as based on interpersonal interaction—albeit a very special kind of interaction—means that all the processes that characterize interaction in general are applicable. These include emotional as well as cognitive processes. And because emotions and related phenomena such as desires, moods, and feelings can be revealed through nonverbal behavior, as well as talked about with words, nonverbal behavior has a significant role in medical care.

We define nonverbal behavior to include a variety of communicative behaviors that do not carry linguistic content.⁴ Briefly, these include (among others) facial expressivity, smiling, eye contact, head nodding, hand gestures, postural positions (open or closed body posture and forward to backward body lean); paralinguistic speech characteristics such as speech rate, loudness, pitch, pauses, and speech dysfluencies; and dialogic behaviors such as interruptions. Nonverbal behavior is widely recognized as conveying affective and emotional information, although it has other functions as well (such as regulating turn-taking in conversation).⁴ As examples, a frown may convey disapproval or a smile may convey approval or agreement. A blank expression may also convey an affective message to a perceiver, such as aloofness, boredom, or dismissal. Nonverbal behaviors often (although not always) accompany words and thereby give words meaning in context (e.g., by amplifying or contradicting the verbal message). So, the interpretation of a verbal message of agreement (“Sure, that’s fine”) may be interpreted differently depending on whether the statement is accompanied by a frown or a smile or a blank expression.

Considering its centrality to the care process, nonverbal behavior has received surprisingly little attention in the medical communication literature.^{5,6} In an attempt to contribute work to this area, we have focused our review on the expression of emotion through nonverbal behavior.

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EMOTIONS AND THE MEDICAL CARE PROCESS

There are 3 interrelated ways in which emotions play a part in the process of medical care. First, *both physicians and patients have emotions*. They are influenced by emotions they have experienced in the past, emotions they experience in the present interaction with each other, and emotions they anticipate having in the future. Emotions exert a profound influence on the experiencer's cognition and behavior, including prosocial acts, recall, decision making, persuasion, information processing, and interpersonal attitudes.⁷ Although most of the research that has been conducted in this domain has been in nonclinical settings, a study of third-year medical students showed that their affective state influenced medical decision making as well as how much effort and concern were invested in the patient's care.⁸

We often think of patients as the ones having emotions. For example, they may have anxiety or depression, and they are likely to have positive or negative feelings about their physicians. Physicians' emotions receive less study, although physicians inevitably bring their emotional lives into medical visits and have emotional responses to patients. An antagonistic, frustrating, or demanding patient may anger or exasperate a physician,⁹ while a pleasant, healthy, or cooperative patient may be liked more than others.^{10,11} A physician may be unaware of his or her emotional responses or may try to suppress them. Alternatively, a physician may try to orchestrate the visit so that emotionally demanding or arousing situations do not occur.

Also relevant to the discussion of patient and physician emotion are the concepts of transference and countertransference. Well described in the psychiatric literature, transference is a phenomenon in which patients displace or "transfer" to the doctor strong emotional feelings that are engendered by others with whom they have intense relationships, e.g., a parent, spouse, or child. When this occurs, the patient may experience an emotional response to a clinical situation that seems out of proportion with the situational context. Countertransference works in a similar way but refers to the physician's "transfer" of strong emotions based on his or her own personal relationships to the patient. The experience of transference and countertransference goes beyond a sentiment like "you remind me of my daughter" to intense feelings, both positive or negative, including protectiveness, love, or manipulation.¹²

It is difficult to pinpoint the origin of intense emotional reaction and this is particularly true within the context of transference and countertransference. Personal awareness training, clinical supervision, and individual therapy may be useful in helping physicians more accurately identify transference in their patients and better understand their own motivations and tendencies in this regard.^{12,13}

Second, *both physicians and patients show emotions*, sometimes in spite of efforts at suppression or masking. As examples, both physicians and patients reveal their liking of each other, at least enough so that they can each pick up on it at greater than chance levels.¹¹ Some of the emotional cues that are conveyed by patients reflect their illness state. These include cues relating to physical pain^{14,15} and to physical and psychological distress.¹⁶ Coronary disease is associated with distinctive vocal and facial expressions.¹⁷ Among patients with coronary illness, episodes of ischemia correspond with facial movements associated with anger, suggesting that anger can

trigger coronary events.¹⁸ Some of the cues expressed by patients are inadvertently conveyed, while others are part of deliberate efforts to convey the experience of symptoms and suffering to the physician—experiences that are difficult to express in words.¹⁹

Third, the evidence that emotions are shown in the medical visit implies that *both physicians and patients judge each other's emotions*. They do this to gain insight into how the other feels about them (the example of physicians' and patients' accuracy in judging each other's liking for one another illustrates this). Physicians also use patients' affective cues in the diagnostic process, as well as in evaluating clinical progress and overall well-being. For example, physicians may elicit emotions to help make a diagnosis such as expressive aphasia, or may look for certain nonverbal cues when concerned about a patient's possible depression or when estimating how much pain the patient is experiencing.

The judgments that physicians and patients make of each other's emotional cues may be right or wrong. Recent research using stimulated videotape review reveals that doctors and patients often feel differently than they look on videotape.²⁰

THE MEASUREMENT, DYNAMICS, AND EFFECTS OF NONVERBAL SENSITIVITY AND NONVERBAL BEHAVIOR

The Measurement of Nonverbal Sensitivity

There is a large research literature and a number of well-established tools for measuring nonverbal sensitivity.²¹ Also, the ability to judge another's emotional expressions is one of the defining facets of the emotional intelligence concept.²² Most measures of nonverbal sensitivity assess accuracy in the recognition of emotions as expressed by others, known broadly as decoding skill. While less often measured because of its cost and complexity, an assessment of an individual's ability to convey emotional messages as intended is also an important nonverbal communication skill. Even less frequently studied is emotional self-awareness, although this is recognized as an attribute of the reflective practitioner, with some authors asserting that awareness of one's own feelings is a prerequisite for insights into the feelings of others and an indication of empathic ability.^{12,13,23}

People can accurately judge others' emotions at above chance levels based on surprisingly small amounts of behavioral information, often called "thin slices" of behavior.^{21,24} Sometimes, the "thin slices" that are investigated are less than 1 second in duration, but more often they are several seconds to several minutes long.

There are several correlates of nonverbal sensitivity that are potentially relevant to the medical care process. The 2 most ubiquitous findings relate to gender and better social and personal adjustment (defined in many ways).^{25,26} Females are better at judging nonverbal cues and are more skilled in conveying emotions via nonverbal cues. It is very likely, then, that female physicians will exhibit higher levels of nonverbal sensitivity than male physicians, and that nonverbally sensitive physicians are less likely to suffer professional burnout.

Nonverbal Sensitivity of Physicians

Research on physicians' nonverbal sensitivity is sparse; little is known about how aware physicians are of their own emotions,

or how accurate they are in judging patients' emotional responses to them. Nevertheless, there are a few studies that do provide some insight into this domain.

An unusual study of emotional self-awareness in medical students was undertaken as part of a communication skills training program.²⁷ Prior to training, male and female medical students scored equally on the study's measure of emotional self-awareness. Both male and female students showed improvement as a result of the training program; however, female students were able to describe their emotional reactions to videotape clips of patients with greater awareness of complex and ambivalent feelings than their male counterparts. The authors suggest that increased communication proficiency in the verbal domain (stressed in the training curriculum) enhanced female students' empathic abilities and consequently awareness of their patients' as well as their own emotions.

Several studies have focused on physicians' accuracy in judging patients' emotional states or visit experience. In 1 study, patients were asked after their visits to rate their emotions on 6 scales (pleased, cheerful, relieved, worried, angry, and disappointed), and physicians were asked to rate the patients' emotions on the same scales.²⁸ In addition, patients rated their overall satisfaction with the visit and its communication quality, and physicians were asked to estimate their patients' ratings in a parallel manner. Physicians judged their patients to experience more negative emotion, and less positive emotion, than the patients themselves reported. Further, physicians predicted patients' visit satisfaction and ratings of communication quality to be substantially lower than they actually were.

Several interpretations can be offered for the findings that physicians thought patients were more negative than the patients reported. It is possible that physicians may be selectively attentive to indicators of patient distress and criticism, and/or patients may believe that their role requires them to act distressed (or at least serious), and express a higher level of negativity than they actually feel. It is also possible that patients may give more positive ratings on paper than their feelings actually warrant, or that physicians are unreasonably self-critical. Finally, it may be that physicians simply use a different metric or set of criteria in their judgments than patients. Regardless of interpretation, the gaps in physician-patient agreement on what the patient is feeling suggest that there is much room for improvement.

In another study, physicians and patients were asked to rate their liking of one another, defined as feelings of warmth and friendliness, and enthusiasm for seeing someone.¹¹ Some degree of accuracy in judging their liking of each other was evident, and while it was significantly greater than chance, it was still quite modest. Of interest, the patients and physicians in these studies demonstrated about equal accuracy in predicting how much they were liked by one another, and liking tended to be mutual (i.e., positively correlated between physician and patient). Although individuals may make explicit reference to the quality of their relationship in words, this is rare. We believe it is much more common for feelings of liking, warmth, and enthusiasm to be conveyed, and reciprocated, through nonverbal behavior such as voice tone, facial expressions, or body posture.²⁹

While not explicitly concerned with nonverbal sensitivity, there is research suggesting that primary care physicians generally do poorly at recognizing patients' emotional distress,

perhaps because they fail to attend to emotional cues fully. The work of Bensing et al.²⁹ supports this contention; the researchers found that physicians who gazed frequently at the patient were more successful in recognizing psychological distress as measured by a standard screening instrument. The implication of the study is that greater eye contact results in more effective reading of emotional cues, leading to better recognition of psychosocial distress. It is also possible that eye contact enhances listening skills and thus the ability to synthesize and interpret verbal and nonverbal cues of distress more accurately.

The Relationship of Physicians' Nonverbal Sensitivity with Patient Outcomes

Physicians' nonverbal skills in terms of encoding (the ability to convey emotional messages accurately as intended) and decoding (the ability to recognize emotions of others accurately) have been investigated in several studies.³¹⁻³³ Physicians who were more skilled on the expressive task of emotional encoding had patients who rated them as listening more and being more caring and sensitive than other doctors. Also, patients of physicians who were more accurate at decoding body movements received higher satisfaction ratings from their patients, and patients of physicians who were better able to decode voice tone cues were less likely to cancel medical appointments.

Whether physicians' nonverbal skill had a causal impact on these outcomes (as opposed to other, unmeasured variables) cannot be determined from correlational studies. However, if a causal relation is established it is important to consider the mechanisms through which physicians' nonverbal skill may be translated into higher satisfaction and appointment keeping. We can speculate that nonverbally skilled physicians engage in more appropriate nonverbal behaviors, are more sensitive to patient nonverbal cues of distress or confusion, and are more effective in conveying emotional messages of caring and sincerity to their patients.

The Relationship of Physicians' Nonverbal Behavior with Patient Outcomes

Aside from measuring communication skill per se, a number of studies have related physician nonverbal behaviors to patient outcomes, the most frequently studied being patient satisfaction. Findings in the area have been generally consistent and positive; physicians who are more emotionally expressive in their nonverbal behavior are viewed more favorably by patients. A review of the literature in this area found that greater patient satisfaction was associated with nonverbal indicators of physician interest including less time reading the patient's chart (probably associated with more eye contact), more physician immediacy (e.g., forward lean), more head nods and gestures, and closer interpersonal distance.⁶ Interestingly, the review also found that less touch by the physician was associated with greater satisfaction, perhaps suggesting that touch may be seen as dominating or controlling. The amount of time (both actual time and time as a proportion of the visit) that the physician spends gazing at the patient has also been found to predict patient satisfaction.^{34,35} Not all study results are consistent with these findings, however, and some studies show moderating effects of other variables

such as physician and patient gender on these relationships.^{36,37}

Several investigators have suggested that the nature of the medical problem or the general verbal communication skills and quality of care provided to patients might affect the relationship between nonverbal behavior and satisfaction. Griffith et al.³⁸ addressed this question in a recent study. Fifty-nine residents were assigned to 1 of 3 standardized encounters: a primarily medical problem of chest pain, a primarily psychosocial problem of depression with a history of sexual abuse, or a counseling problem involving risk reduction for an HIV patient. The standardized patients rated the residents using a multi-item checklist on: (1) general verbal communication skills (including use of open-ended questions and summarization), (2) case-specific information gathered and information counseled, (3) a 7-element nonverbal index (facial expressivity ranging from unexpressive, blank to very expressive, emotional; frequency of smiling; eye contact and nodding, both ranging from infrequent to very frequent; body lean ranging from backward to forward; body posture ranging from closed to open; and tone of voice ranging from unexpressive, monotone to very expressive, emotional), and (4) a 5-item general satisfaction measure.

The findings revealed that patient satisfaction was strongly associated with more emotionally expressive nonverbal behavior scores of physicians. This relationship was equally evident in the biomedical chest pain scenario as well as the psychosocial and behavioral scenarios of depression and HIV compliance, suggesting that the nature of the medical problem does not moderate the effect of the physicians' nonverbal behavior on patient satisfaction. Moreover, the correlation between general satisfaction and the nonverbal score was substantially stronger than the correlations between satisfaction and general verbal communication skills or information scores. Nonverbal communication explained more patient satisfaction variance than the verbal performance of the study residents.

Several studies of electronically filtered speech (speech that is altered so that the words cannot be understood) have found that physicians' feelings toward patients, reflected in how they talked about them in interviews when the patient was not present, were highly related to the physicians' tone of voice during medical visits.³⁹ An interesting study of alcoholic patients showed the effect of voice tone on patient utilization behavior. Milmoie et al.⁴⁰ asked physicians to talk about their feelings toward alcoholic patients seen in an emergency room. Measures of hostility in the physician's tone of voice during these interviews predicted the physician's subsequent failure to have patients follow through on referrals to alcoholic treatment centers. Presumably, the patient noticed the physician's hostile and rejecting voice tone during the medical visit and responded by rejecting the physician's suggestion for further treatment, even although that treatment was with other doctors in a different facility.

In our own studies, a combination of the physician's words and voice tone predicted patient satisfaction in a counterintuitive way; negative affect (irritation and anxiety) conveyed through the physician's voice when coupled with positive words (sympathetic and calming) was associated with more patient satisfaction and better appointment keeping over a 6-month period.⁴¹ We speculate that anxiety (and even irritation) in the physician's voice tone may be heard as conveying

seriousness and concern for the patient's well-being and future health. The presence of positive verbal messages may help moderate the negativity of the voice tone and reinforce the attribution of physician sincerity. This may be especially true when the patient and physician have a longstanding relationship, or may act to encourage the continuation of the relationship.

In another study of filtered speech using simulated patients, additional intriguing relationships were found between nonverbal communication and role-playing subjects' satisfaction ratings.⁴² Physicians who were more informative and less social in their interactions were judged to have more interested and anxious vocal qualities than other physicians. These visits were also rated by role-playing subjects as being more satisfying than the more social visits. From these studies, it appears that medical encounters with some degree of negative affect (especially anxiety in the physician's voice) when coupled with comforting words may be viewed by patients as positive for the relationship, probably reflecting perceived sincerity, dedication, and competence.

Some researchers have speculated that physicians who get sued for medical malpractice may communicate differently, both verbally and nonverbally, from those who do not. Voice analysis of a sample of routine surgical visits—half with physicians who had had at least 2 previous malpractice claims against them and half with no malpractice claim history—found that the emotional tone of the physician's voice distinguished these 2 groups.⁴³ The physicians judged by raters to convey higher levels of dominance and lower levels of concern or anxiety in their voice tones were much more likely to have been sued than other physicians in the sample. This result has interesting parallels to the findings mentioned above in which affect in the physician's voice was linked to greater patient satisfaction.⁴¹

In another study, physicians' ratings of liking patients were inversely related to the patient's consideration of changing doctors a year later; the greater the liking, the less likely the patient contemplated switching physicians.¹¹ It is possible that warmth and liking transmitted through voice tone reinforced patients' commitment to not switching doctors. However, direct evidence linking physicians' nonverbal communication and health consequences is sparse. Especially noteworthy in this regard is a study by Ambady et al.⁴⁴ that links physical therapists' patterns of nonverbal communication and their therapeutic efficacy. Independent raters' judgments of "thin slices" of videotaped samples of therapists' nonverbal behavior were correlated with clients' physical, cognitive, and psychological functioning at admission, discharge, and at 3-month follow-up. Therapists' distancing behaviors, defined as not smiling and looking away from the client, were strongly correlated with short- and long-term decreases in physical and cognitive functioning. In contrast, facial expressiveness reflected in smiling, nodding, and frowning was associated with short- and long-term improvements in functioning.

In summary, the role of emotions in the medical visit, reflected in nonverbal sensitivity and behaviors, is significant. The few studies noted in our review reflect wide variation in physicians' ability to judge patients' emotions accurately. In general, physicians appear to misread cues of patient distress and tend to rate patients' emotional state and visit satisfaction more negatively than patients. Physicians do seem to be able to discern with a moderate degree of success how much their

patients like them. Perhaps related to nonverbal sensitivity, physicians who appear to exhibit more emotionally expressive nonverbal behaviors—including facial expressiveness, eye contact, head nods, body posture, and voice tone—are generally viewed more favorably by patients. These behaviors, in turn, are linked to a variety of patient outcomes, including patient satisfaction, health services utilization and appointment keeping, and functional status.

FUTURE RESEARCH ON EMOTIONS AND THE MEDICAL CARE PROCESS

Focusing on the role of emotions in the medical care process, and particularly the dynamics and consequences of nonverbal behavior, brings the excitement of a newly emerging sphere of inquiry. With this excitement are challenges in every domain—theoretical, methodological, and pedagogical.

Theoretical Challenges

We acknowledge that there is currently no overarching theory of emotion, and it is unlikely that one will emerge to explain why things happen as they do between doctors and patients. The field would move forward more rapidly and persuasively with more explicit theorizing with regard to the framing of hypotheses and interpretation of findings.⁴⁵ Among the areas of promising theoretical inquiry are several issues related to the interactive dynamics of emotional perception, expression, and reciprocity. How can we better understand variation in the accuracy with which one can judge another's emotional experience? How can individuals become more accurate in the reading and sending of emotional cues? How can a spiral of negative emotional reciprocity be stopped or neutralized?

A second important area of research is the role of emotion and nonverbal behavior in both patient and physician decision making. It seems possible, and even likely, that physicians' nonverbal behavior significantly influences patients' likelihood of deciding for or against recommended treatment options. Moreover, a physician's own emotional state may influence treatment decisions. Certainly human beings are exquisitely sensitive to others' emotional cues, even when they are not aware of them. Even subliminally presented facial expressions can influence another viewer's emotional state, attitudes, and subsequent behavior.^{46,47}

There is also a great deal of interest in the effect of emotions on a wide variety of outcomes, with implications ranging from quality of care and health consequences to issues of health care financing, resource allocation, and utilization to patient and physician satisfaction, malpractice litigation, and physician burnout. The pathways and moderators of these outcomes, including confounding effects of gender, culture, ethnicity, race, literacy, social class, age, health status, trust, continuity of care, and physician specialty (to name only the most obvious), are infrequently studied and rarely well understood.

Methodological Challenges

While we have reviewed a variety of methods and measures used to assess nonverbal behavior and sensitivity, these are often difficult to administer, resource intensive, and logistically difficult. An especially daunting, but necessary, challenge is the development of innovative research designs and practical measures of nonverbal sensitivity.

Although it is difficult to argue with the value of authentic settings for experimental and observational studies of emotion, the contribution of simulation is worthy of consideration. This is especially evident when patients and physicians are under extreme stress and when observational techniques designed to capture the intense dynamics of the situation may risk disruption of care. In these circumstances, we might worry about manipulating or interfering with the care of actual patients in a manner that may have unintentional or unanticipated negative impact—particularly in terms of psychological distress and burden. There are also important, but rare, circumstances worthy of investigation that may simply be logistically impossible to investigate in natural settings. The study of physician communication detailing a medical mistake to his or her patient, for instance, may be an example of an infrequent occurrence with critical significance. Finally, it may be impossible to disentangle predictor variables that often covary with one another such as patient race, socioeconomic status, and gender when trying to examine their separate effects, even with large databases and sophisticated statistical techniques, unless factorial simulations are used.⁴⁸

For these reasons, some circumstances may demand the creative use of simulations, including the use of standardized and analog subjects in addition to, or instead of, actual patients and physicians.⁴⁵ While standardized patients, actors trained to portray a scripted patient case, are now common to medical training programs, analog patients are not. Analog patients are usually untrained subjects recruited to imagine (through role-play) that they are the patient depicted in some medical circumstance, often with provider or communication attributes experimentally manipulated. The circumstance may be portrayed simply through the use of written vignettes or complexly through the use of actual or simulated videotapes of medical encounters. In this way, the analog patients provide researchers with a proxy for actual patient perceptions or judgments. Physicians may also be recruited in a parallel manner to act as analog physicians imagining (through role-play) that they are the physician depicted in the medical circumstance to provide a proxy for clinical judgments and professional behaviors under experimentally manipulated conditions.^{48,49}

Many of the studies reviewed earlier, and others, provide evidence that standardized patient encounters are realistic and that analog subjects are sensitive to variation even when they are observing short vignettes, computer simulations, or actual patient and physician encounters.⁴⁵

Pedagogical Challenges

In the pedagogical domain, the development, testing, and implementation of effective approaches to the teaching of nonverbal communication skills have been largely outside of the traditional medical school curriculum. We found few studies that have investigated the role of emotional self-awareness in communication skill acquisition and the delivery of care despite many intriguing questions. Will greater insight into one's own emotional responses facilitate nonverbal skill acquisition? Is self-awareness related to higher levels of nonverbal sensitivity and emotional intelligence? How might the sensitive and highly emotional issues of transference and countertransference be best addressed within the training context? How might we best encourage and facilitate emotional self-awareness without breaching boundaries of privacy and confidentiality?

Can an atmosphere of trust and safety be established in our very competitive and demanding medical school culture to allow for exploration of emotional vulnerabilities?

Even the broader relationship between skill acquisition in the verbal and nonverbal domain presents interesting teaching challenges. While studies to date have tended to treat verbal and nonverbal behavior as separate and distinct, in reality, both occur and influence one another in the same communication context. Do the same students who benefit from communication skills training in the verbal domain also show improvements in nonverbal skill, or do some students tend to excel in either verbal or nonverbal skill? What is the role of student characteristics in learning—are male students at a disadvantage in terms of communication skill acquisition?⁵⁰ Does a humanities or social science background, compared with a basic science major, provide any difference in verbal and nonverbal skill acquisition? Can students with especially poor skills be remediated or should these students consider refraining from careers calling for direct patient care?

CONCLUSION

It is not enough to conduct research; the relevance of our inquiry is in its applicability to the everyday world of patients and physicians. We believe that this work matters because it has the potential to improve both the processes and outcomes of medical care for both patients and physicians. The conference devoted to articulating the nature of relationship-centered care to which this journal issue is devoted suggests that it is the largely untapped healing power of the emotional connection between patients and physicians that can provide meaning and strength to the therapeutic relationship. Perhaps the most significant of future challenges is in effectively translating what is learned about optimizing the relationships of care to the daily and routine practice of medicine.

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