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Preparing Physicians for the 21st Century: Targeting Communication Skills and the Promotion of Health Behavior Change

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Abstract

The prevalence of behavior-related diseases is a predominant concern in the health care profession. Further complicating matters, the biomedical disease model has demonstrated limited effectiveness in treating the consequential array of chronic health conditions. Medical educators have been tasked with developing curricula to better prepare physicians to address the complex health issues of the 21st century. A review of empirically supported educational endeavors is essential in planning for future interventions. Prior efforts specific to physician-patient communication and the promotion of health behavior change will be reviewed. Opportunities to enhance medical education by targeting patient-centered care, attitudinal measures, individualized training, and an empirically supported, theoretically based model of change will be presented.

Keywords

medical education; competency-based training; patient-centered care; communication skills assessment; physician-patient communication

The Health Care Dilemma

Behaviors such as tobacco use, physical inactivity, poor diet, and alcohol consumption contribute to over 50% of the morbidity and mortality in the United States.^{1,2} The evidence for the need for improved lifestyles is overwhelming. In 2003, the estimated obesity-related national medical expenditure was \$75 billion.³ Despite the vast amount of resources and time that are spent annually providing products and services to promote health behavior change, the prevalence of behavior-related diseases and their health-related consequences continues to increase. Making matters worse, the biomedical disease model has demonstrated limited effectiveness in treating these 21st century health concerns.^{1,4}

The Institute of Medicine has developed a number of recommendations to “reinvent” the health care system and enhance medical training by improving the integration of behavioral and social sciences into the four-year curriculum with a particular focus on key areas including physician-patient communication and principles of behavior change.^{5,6} A review

of the literature assessing empirically based medical education endeavors is essential in planning future interventions in order to propel the “new revolution” that is needed in medical education.⁷ The purpose of this paper is to provide a brief overview of prior educational efforts and identify opportunities to enhance training in the areas of physician-patient communication and the promotion of health behavior change.

Prior Educational Efforts

“The art of medicine is intricately tied to the art of communication” (p. 1118).⁸ Communication is a complex process involving a multitude of variables that affect physician-patient interactions. It is well recognized that the dialogue between an individual and his or her physician can significantly affect health care outcomes.⁶ An essential component of quality medical care is the physician-patient relationship.⁹ Improving physician-patient communication has been identified as an important priority for all of medical education. In order to bring about curriculum change, previous educational efforts need to be evaluated.

Practicing Physicians

A wide array of educational interventions has been developed over the years to improve physician communication skills including formats such as didactic, experiential, skills-building, and process groups. A number of studies have reviewed the effectiveness of communication skills training in a CME format with practicing physicians.^{14, 16, 17} Results suggest that increased length of training and the provision of feedback and reinforcement are necessary components in promoting acquisition of the targeted behaviors and skills.^{14,17} However, the results of longitudinal studies following communication skills training are not encouraging.

In a study completing a comparison of findings from a study 12 years prior, there were no significant improvements noted in premature physician redirection/agenda setting and allowing time for the patient to express their concerns.¹⁸ Similarly, in a cross-sectional observational study of physician-patient interactions comparing findings from 1986 to those obtained in 2002, patients were less interactive and involved in the medical encounter, physicians were more biomedically focused and task-oriented, there was a decrease in process-oriented interchanges, fewer concerns were expressed, and increased periods of silence were noted (explained as possibly the result of the addition of the computer into the clinic room).¹⁹

In regard to practicing physicians, the time required for skill acquisition is often prohibitive and the typical CME structure is not conducive to long-term skill maintenance. Once in clinical practice, physicians would likely attend and benefit from “refresher” courses to reinforce previously obtained skills. However, in order for communication-related practice changes to occur, targeting skill development during other periods of the medical education continuum is warranted.

Medical Students

Patient interviewing and interpersonal communication skills has a long history in medical school curricula.²⁰ There are a number of appealing factors that can mediate communication skills training during medical school, including the education-oriented environment, consistent access to students, and the opportunity to intervene at various points over a four-year period. A review of the research assessing the effectiveness of communication skills training with medical students indicates that educational interventions have resulted in improvements in communication behaviors, confidence, and comfort specific to the clinical topics addressed.²¹⁻²⁵

However, curriculum overload, time constraints, and limited clinical experience are factors that can inhibit the comprehensive communication skill development needed for clinical practice. Moreover, despite efforts to improve communication skills in medical education, a shift toward doctor-centered attitudes and behaviors as students approach the conclusion of medical school has been well-documented.^{26, 27} As a result of these studies, communication training is thought to be of particular importance once students transition into residency. Residency is when socialization into the practicing medical community occurs, and the influences of the “hidden curriculum” (contradictions between what is taught and what is modeled in the environment) often derail the positive communication skills developed in medical school.^{28, 29}

Medical Residents

The residency period is uniquely positioned to offer the longitudinal focus (minimum three years) in which communication skills can be well integrated over an extended period. Studies demonstrate that residents have benefited from a range of communication-related interventions.^{30–32} Moreover, communication related educational efforts are fully supported and required by the Accreditation Council of Graduate Medical Education (ACGME). Six general competencies were identified by the ACGME in 1999 as essential qualities for professional practice: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and system-based practice.³³ Residents are expected to demonstrate the “knowledge, skills, and attitudes” specific to these six competencies in which communication skills are an essential component.

Targets for Enhancing Graduate Medical Education

Medical educators have been able to identify, measure, and address a significant number of variables that contribute to the physician-patient relationship.¹² Identifying key educational targets in which to enhance educational efforts is essential. Four areas warranting further consideration include patient-centered care, assessment of attitudes and beliefs, individualized training, and promoting behavior change skills.

Patient-Centered Care

Recognized as patient-centered care, patient-centered communication,⁷ patient-centered medicine,³⁴ patient-centered skills, patient-focused care,³³ and/or patient-centeredness,³⁵ a *patient-centered* focus in the delivery of health care services is quickly becoming the new “standard of care.” Based on the concept that the patient’s viewpoint needs to be incorporated into all aspects of the health care experience, the term “patient-centered” has been integrated into all aspects of medical care, medical law, medical education, and the assessment of the quality of medical services.³⁴ Although preferring the term relationship-centered over patient-centered, Williams, Frankel, Campbell, and Deci note “studies converge to show that when primary care physicians are more relationship-centered (versus physician-centered) patients are likely to display higher satisfaction, better adherence to prescriptions, more maintained behavior change, better physical and psychological health, and to initiate less malpractice litigation” (p.79).¹³

Haidet and colleagues explain that “patient-centered care is one aspect of the doctor-patient relationship that takes into account patients’ preferences, concerns, and emotions; it has been proposed as a mechanism through which favorable patient outcomes are achieved” (p. S42).³⁶ Key factors of patient-centered care include physicians “ascertaining” the reasons for the appointment and addressing presenting concerns;³⁷ the patient and physician finding “common ground;”³⁸ and patients receiving information and participating in decision

making.³⁹ A number of studies have demonstrated clinical support for patient-centered care.^{38, 40} Relationships between attitudes about patient-centered care and patient trust, patient satisfaction, and physician satisfaction have also been demonstrated.^{10,41}

Practicing from a patient-centered orientation is correlated with a decrease in malpractice litigation.^{42,43} In a review of audiotaped encounters, Levinson and colleagues found that the communication behavior of primary care physicians without litigation claims differed from those of primary care physicians who had prior malpractice claims.¹¹ The physicians without claims spent longer in routine visits (3.3-minute difference), provided orientation information (what to expect), facilitated patient involvement, and used humor. Essentially, biomedical approaches to physician-patient communication are associated with more patient and physician dissatisfaction, resource inefficiency, poor health outcomes, and legal liability.

In an effort to develop consensus on the meaning of “patient-centered care,” Mead and Bower reviewed the conceptual and empirical literature to develop a model of “patient-centeredness” to further empirical and theoretical efforts.⁴⁵ The authors identify five separate dimensions that differentiate patient-centered care from physician-dominated, illness-focused, biomedical care. These five dimensions (and summarized descriptions) are: 1) *biopsychosocial perspective* (integration of biological, psychological, and social perspectives); 2) *the “patient-as-person”* (understanding the unique illness-related experience of the individual); 3) *sharing power and responsibility* (respect for patient’s perspective, provision of information, mutual decision making); 4) *the therapeutic alliance* (qualities of the relationship that promote rapport and the perception of genuine caring); and 5) *the ‘doctor-as-person’* (the affective reciprocal experience that contributes to or detracts from the interpersonal relationship) (p.1088–91).⁴⁵

In summary, patient-centered care has become recognized as a functionally defined and empirically supported model for communication in health care settings. A “patient-centered” or “patient-focused” communication style is considered a training priority by the IOM, USMLE,⁴⁴ and the ACGME. Finally, constructs of patient-centered care provide a cohesive and consistent framework for formative/summative assessments and educational interventions.

Attitudes and Beliefs

Attitudes and beliefs form the foundation of action. The importance of assessing attitudes and beliefs as they relate to patient care has been recognized by the ACGME as an important component in resident education.³³ A number of studies have looked at the relationship between physicians’ attitudes regarding patient-centered and psychosocial care to physician behavior and patient/physician satisfaction.^{10,41} Three studies of particular relevance will be briefly reviewed.

Levinson and Roter studied the relationship between physicians’ beliefs about psychosocial aspects of care and communication behavior with patients.⁴⁶ Measures included the Physician Belief Scale, a validated measure that assesses physician attitudes toward psychosocial aspects of care and the Roter Interactional Analysis System (RIAS), which was used to evaluate the audio taped clinic visits for communication content and affect of both physician and patient.⁴⁷ Results reflected a positive association between physician beliefs/attitudes and patient visit communication behaviors. Positive attitudes toward psychosocial aspects of care were associated with interactions that were more expressive of emotion and open-ended questions, increased patient interaction, and no significant difference in visit length.⁴⁶ The study provides data supporting the relationship between physician attitudes and communication-related behaviors.

Another study evaluated the relationship between patient-centered attitudes/beliefs and patient experiences.²⁷ In this study, medical students completed a self-report measure of patient-centered orientation, the Patient-Practitioner Orientation Scale (PPOS), and five standardized patients completed a rating of humanism based on each medical student's communication-related behaviors. Results reflected a significant association between patient-centered scores on the PPOS and positive communication behaviors as assessed by standardized patients.²⁷ This study provided further evidence of the link between attitudes and behavior as assessed from the patient's perspective.

Third, Jenkins and Fallowfield evaluated changes in beliefs resulting from communication skills training.¹⁵ Their study involved a prospective five-year randomized design assessing the effects of multidimensional communication skills training (incorporating behavioral, cognitive, and affective components) on psychosocial beliefs and patient-centered skills. Measures included the clinic recordings (analyzed by the Medical Interaction Process System), the Physician Psychosocial Belief Scale (PPBS), and a self-report questionnaire assessing perception of practice changes. Results demonstrated that the physicians who participated in the communication course had significantly improved psychosocial attitudes and beliefs compared to those in the control group. Improvement was also noted in the intervention group's self-report of changes in practice and self-awareness. Outcomes improved related to dose (3-day compared to 1.5-day pilot study). One of the strengths of the design was that clinic sessions were actual patient presentations. Even though participants were limited to oncology physicians, results provide further support of the importance of identifying and addressing strongly held beliefs that might inhibit communication skill acquisition and/or integration into clinical practice.

A relationship between physician psychosocial/patient-centered attitudes and beliefs and communication-related behaviors is supported. Attitudes, beliefs, and behavior can change with communication skills training. Assessing and targeting communication-related attitudes and beliefs is an important component in improving physician communication behaviors. Finally, if physicians are expected to incorporate communication skills into their interchanges with patients, identifying and targeting underlying attitudes and beliefs related to patient communication is essential.

Individualized Training

Graduate medical education programs are required to evaluate a resident's performance, provide feedback, and develop an individualized training plan to meet competence performance standards. Since level of functioning and educational needs differ, ACGME requires individual assessment of "knowledge, skills, and attitudes" in relation to the core competencies for each resident.³³ Providing residents with a score based on a range, level, stage, or scale can assist in tracking training progress, promote self-awareness, compare performance with targeted expectations, and provide a functional description of competence expectations. Examples of instruments providing a score based on a range or continuum are the Physician Belief Scale, the Levels of Involvement model, and the Patient-Practitioner Orientation Scale (PPOS).

The Physician Belief Scale is a self-report measure of physician beliefs about psychosocial aspects of care.⁴⁷ Low scores reflect a more psychosocial orientation. Based on a theoretical framework, beliefs are assessed and grouped into three categories: physician's role, patient wants, and physician reactions to patients. Scores range from 32 to 168 along a one-dimensional scale.⁴⁷

The Levels of Involvement model categorizes physician-patient interactions along a continuum of five developmental levels.⁴⁸ The model identifies Level 1 as Medical issues-

Physician Centered, Level 2 as Medical issues-Collaboration, Level 3 as Dealing with Affect, Level 4 as Basic Psychotherapeutic Intervention, and Level 5 as Individual Psychotherapy. For each level (except Level 1) there is a description of knowledge base, an example of a behavioral response for that level, a statement of personal development, and a list of necessary skills. The Levels of Involvement model has been developed for family, individual, and combined assessments.^{48–50}

The PPOS is a brief self-report measure using a six-point Likert scale that assesses attitudes and beliefs about a patient-centered approach with attention to physician sharing of information, power, and patient participation. Respondents complete 18 items, resulting in a total score that ranges from 1 (doctor-centered, disease-centered orientation, less attuned to psychosocial issues, biomedical focus, high doctor control, and more paternalistic in nature) to 6 (patient-centered, egalitarian in nature, control-sharing, whole person focus).^{10, 51}

Residents present with varying levels of knowledge, skills, and experience. Assessment measures based on a descriptive continuum offer a number of benefits.^{36, 48} Implementing empirically supported instruments evaluating communication related behaviors and attitudes would provide useful formative and summative information.

Promoting Behavior Change Skills

Training in “principles of behavior change” and the “promotion of health” has been designated as high priority by the Institute of Medicine (p. 10)⁶ and the ACGME.³³ The IOM noted that key areas of training should include understanding empirically supported and theoretically based behavior change models and the significance of physical, psychological, social, and environmental factors; and skills and techniques for increasing motivation and promoting behavior change. In regard to the ACGME, one of the six graduate medical competencies requires the provision of Patient Care that is “... compassionate, appropriate, and *effective for the treatment of health problems and the promotion of health*” (italics added).³³ Given the increased prevalence of behaviorally related medical health concerns, physician competence in the implementation of effective behavioral change strategies is quickly becoming an essential skill.

Creating and maintaining lifestyle-based behavior change is a difficult national challenge.⁵² Identifying effective health behavior change interventions has become a prominent research focus.^{1,53} Physicians have been recognized as “key” providers who have both the proximity to and the longitudinal relationships with patients in which to be most effective in promoting change.^{52, 56} However, a variety of factors contribute to the difficulties physicians experience including limited time, poor reimbursement, patient noncompliance, poor understanding of behavior change theory, and ineffective techniques.^{54, 55} Hence, physician education specific to promoting health behavior change is essential.

Funding bodies have stressed the importance of identifying empirically-based models of care supported by sound theoretical constructs.^{57, 58} Several studies have assessed the utility of theory in predicting physician beliefs and behaviors;^{59–61} assessing the significance of communication interactions with health outcomes;¹³ and improving communication skills, confidence, and knowledge.²² However, the incorporation of theory in the development of empirically-based communication skills training has been minimally studied.^{52, 62}

A number of theories have contributed to our understanding of health behavior change. The top five theoretical models represented in projects funded by the NIH included social cognitive/learning theory, transtheoretical model, motivational interviewing, self-determination theory, and social ecological theory.⁵⁶ Of the various behavioral change models/theories developed, three of the most researched include the transtheoretical model,

motivational interviewing, and social learning theory.⁶³ Constructs within each of these three theories having direct applicability to promoting behavior change, have been implemented in medical settings, and have been published in the medical literature.^{55, 64}

Traditionally, communication related educational interventions have been taught as a “skill” with the expectation that by providing instruction on the correct techniques, application would follow. However, over fifty years of educational effort does not appear to support this assumption. Communication techniques can be conceptualized as a behavioral expression, not unlike other behavior related activities or skills such as those associated with learning a sports technique or adapting improved health patterns into one’s lifestyle. Perhaps, in order to create the “new revolution” that is needed in medical education,⁷ we will need to approach communication related skill acquisition differently. Approaching communication training as promoting a behavior change would require the development of different strategies.⁶² Educational efforts could be grounded in a theoretically-based behavior change model. The application of a theoretical model would offer the opportunity for a theory-driven individualized assessment, targeted interventions, a framework from which to assess progress, and the opportunity for residents to experience the “process of change.”

Conclusion

The significance of communication interchanges and the physician-patient relationship has been a predominant theme within medical education for many years. However, the prevalence of behavior-related health care issues has continued to increase and the limitations of biomedical interventions have become more evident. Obviously, something more is needed. Reflections by Wissow may offer some direction:

Those of us who work in the area of patient-provider communication often lament that it’s hard to interest many practitioners in what we offer, and that we are often, in our trainings, preaching to the converted. Maybe, to be more successful, and to emulate Schon’s master teachers, we need to learn more about what the non-participants are thinking, and address their needs in language that they understand. That is, after all, a large part of what being patient-centered is all about (p.2).⁶⁵

Propelling medical education into the 21st century requires that medical educators enhance current strategies and approaches. Four areas have been identified which may assist in these efforts: focusing on patient-centered care; assessing physicians’ attitudes and beliefs; targeting individualized training; and applying a theoretically based, empirically supported model to the instruction of communication skills and health behavior change.

Patient-centered care has gained prominence in medical publications, has become the “standard of care” in many health care settings, and has been identified by the IOM as one of the “six specific aims for improvement” (p. 3).⁵ Extensively researched from a number of perspectives, patient-centered care offers an evidence-based frame of reference from which to evaluate physician-patient interactions. With key constructs identified and operationalized, patient-centered care provides an excellent functional foundation on which to base communication skills educational efforts.

Improving our understanding of physicians’ attitudes and beliefs regarding patient-centered care will help us identify what needs to be taught while modeling concepts underlying “patient-centered” behavior.⁶⁵ There is a wide range of variability in the beliefs, attitudes, knowledge, skills, and abilities of physicians entering residency. The ACGME encourages individualized assessments and teaching interventions designed to meet residents educational needs.⁶⁶ Assessing attitudes and beliefs and developing individualized training plans will be necessary to meet competence-based expectations for professional practice.

Most importantly, in order for physicians to develop effective communication skills, a change in communication-related behavior will need to occur.

In the past, communication skills were taught with the perspective that, with the provision of knowledge and training, skill will follow. However, research has demonstrated otherwise. Analogous to poor patient compliance with medical recommendations, perhaps educational interventions would be more effective if they were more appropriately targeted. Additionally, learning about behavior change interventions through personal application offers a number of benefits. Implementing a theoretically based, empirically supported approach to residency training could be useful in meeting competence-based educational goals, improving physician understanding of behavior change, and promoting the integration of empirically supported behavior change interventions into patient care.

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