Why the disease-based model of medicine fails our patients

Medicine faces several critical and conflicting challenges. The tremendous and changing cultural diversity of our population requires physicians to develop new skills in communication and negotiation with their patients. But managed care constraints, litigation, and growing regulatory pressures have compromised communication and trust between physicians and patients. This, along with the surge in technologic development, has driven the medical system even further toward a "disease-based" approach to health care that views individuals as "cases" and undervalues the sociocultural and humanistic aspects of patient care. The results are a diminishing faith in the medical establishment and the rise of alternative medical philosophies and practices. A medical system that allows physicians to refocus on the patient-centered, personal, and unique experience of "illness" is an imperative for our time.

A FOCUS ON DISEASE

The following fictional case illustrates how a focus on disease can fail our patients.

Mr N is a 42-year-old previously healthy and active man from Singapore who immigrated to the United States 3 years ago. He had never visited an American physician. After strong encouragement by his wife, he presents to the emergency department complaining of several months of dull, intermittent, exertional chest pain that had recently worsened. The initial workup in the emergency department is negative for myocardial infarction.

The patient is admitted to the hospital for observation. His cardiac enzyme levels are

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normal, electrocardiograms remain nonspecific, and he has no recurrence of his symptoms. Before discharge, his physician convinces him to have a stress-imaging test of his heart, which reveals large areas of ischemia. The physician advises Mr N to have a cardiac catheterization to determine the extent of his coronary artery disease. But Mr N repeatedly refuses, stating that he needs more time to decide about the test and that he wishes to go home. He is discharged against medical advice on an anti-ischemic medical regimen with a cardiology appointment in 1 week, but is lost to follow-up.

The patient was offered standard medical care. His diagnosis was pursued systematically following clinical guidelines. The physicians focused on the *disease* (coronary artery disease) and used an understanding of the science of medicine to formulate a plan. Medicine, however, is both the art and science of *healing*. The science is clearly manifest in all medical school curricula and graduate medical training. The art, however, is subtle and receives far less emphasis. It is characterized, in part, by the ability to apply the science of medicine to individual patients' unique illness, with particular attention to the nuances of social circumstance and culture.

DISEASE VERSUS ILLNESS

The distinction between disease and illness has been well described. Whereas disease defines a pathophysiologic process, illness is defined by the complete person—physical, psychological, social, and cultural.[1,2] Illness represents an individual's unique and personal experience of being unwell. Many questions about Mr N's illness experience emerged:

- What are the patient's reasons for refusing the catheterization?
- Is Mr N afraid?
- Does he have reason not to trust these physicians?
- Does he understand or even believe in the notion of coronary artery disease?
- What does the patient think is causing his symptoms, and how does he think it should be treated?
- What is at stake for him?

These are crucial issues that require attention and discussion if we are to see through the veils of culturally defined meaning and socially constructed reality to treat Mr N, not just his coronary artery disease.

A PATIENT-ORIENTED APPROACH

How can a patient-oriented approach lead to a different outcome?

Mr N was asked what he thought could be causing the pain in his chest. With encouragement, he revealed that he thought the pain was due to "bad winds" entering his body, a belief adopted from his family. He said that initially his mother had performed coining on him, a technique in which oil is put on the body and rubbed with a coin to help release the winds. He preferred these traditional remedies to western medicine, which he perceived as too strong. What he was most concerned about was missing work as a result of being hospitalized.

On careful negotiation, Mr N agreed to a stress-imaging test and was found to have coronary artery disease. He seemed hesitant to accept this medical explanation and the severity of his condition. The physician acknowledged Mr N's illness beliefs and explained what coronary artery disease is and how the disease could affect Mr N's life. The physician used language that was nontechnical and that incorporated the notion of winds. Although he continued to refuse cardiac catheterization, with further negotiation Mr N agreed to medical management. He asked about continuing the use of coining. This was accepted as long as he did not use coining in place of his medications. The patient adhered to the medical regimen and returned for regular medical review. It was agreed that he would reconsider the cardiac catheterization if his chest pain worsened.

PATIENTS' EXPLANATORY MODELS

People rationalize their illness experience through a complex web of personal experiences and belief systems ingrained in their cultural and social world. Individuals develop a personal (or adopt an existing) "explanatory model" that represents their personal conceptualization of the cause, course, and consequences of their illness. These explanatory models may be as commonplace as the belief that cold drafts cause upper respiratory tract infections or as extraordinary as the role of winds in causing chest pain, as in Mr N's case. Work by medical anthropologists, sociologists, and others has paved the way for physicians to effectively explore patients' explanatory models—or the "meaning" of their illness.[3,4] With Mr N, the standard questions about chest pain neglect the deeper issues of meaning that are crucial to his care. Communicating and exploring beyond the standard medical approach can help build trust, avoid stereotypic thinking and frustration, and lead to an effective and honest negotiation process.[5-7]

Good communication skills on the part of a physician and patients' trust in their physician are associated with improved health outcomes.[8-10]

SOCIAL CONTEXT

Delving into the patient's social context is also essential to understanding the patient's illness.[11-13] Mr N is most concerned about missing work, an important social issue. A vast literature outlines the effect of social factors on health outcomes and how the physical and social environment exerts a strong influence on the course of a disease.[14-16] With coronary artery disease, for example, access to care, the ability to read and comprehend directions, and the leisure time and resources needed to prepare proper meals and exercise will shape the long-term outcome for Mr N and probably countless others.

CONCLUSION

In a time when maintaining the integrity of the art of medicine is of critical importance, we are instead witnessing its devaluation due to the current counterpoising forces in health care. Will physicians have the time, desire, and ability to learn about Mr N as a person with a unique understanding of his illness and set of personal concerns?

Disease has become the focus of the technologic and market-driven medical system while illness and the sociocultural aspects of medicine have blurred into the background. Yet, the healing tools and instruments of science are blunt and ineffective when used blindly in ignorance of the meaning and context of a patient's illness. We need to foster attitudes, values, and communication skills that focus on illness, not just disease, to prepare ourselves for the challenges ahead.

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