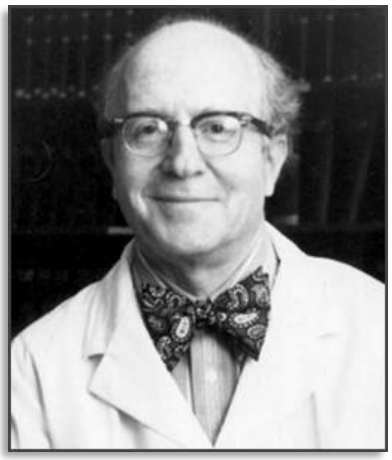
PHILOSOPHY OF MEDICINE AT THE UNIVERSITY OF ROCHESTER
Dr. George Engel's Legacy



George L. Engel, M.D. circa 1969

Physicians' core concepts, beliefs, and attitudes determine how they care for patients. Most doctors acquire these attributes - their philosophy of medicine - early in their medical education. In some teaching institutions, this is an implicit process.

At Rochester, the biopsychosocial philosophy of medicine is taught explicitly in classroom and clinical settings throughout students' education. To me, its core premise is the wholeness of the individual. It encompasses the mind as well as the body.

This is quite different from the more common biomedical model which restricts its attention to the body. Biomedicine investigates atoms to organ systems and modifies biochemical, physiologic, and anatomic phenomena. It has produced extraordinary scientific and technological advances in diagnostic and treatment methods.

The main limitation of biomedicine is that it doesn't take into account patients' subjective experiences or social circumstances. Yet they affect diagnosis, treatment, prognosis, and prevention in the real world of clinical patient care.

The biomedical model considers only objective material phenomena to be subject to scientific inquiry. Dr. Engel maintained that psychosocial phenomena are also real and belong in the domain of empirical medical science. We all know from our own experience that the mind is real. So, why should not the mind be able to be explored scientifically, as Dr. Engel believed?

Dr. Engel wrote that the biomedical model was based on an outdated philosophy of science. Since Einstein, matter could no longer be taken as the irreducible conceptual basis of physics. And with the introduction of quantum mechanics, our understanding of reality could no longer ignore the essential involvement of the observer. Dr. Engel's argument for a new paradigm was basically philosophical in nature. But it was also practical; biopsychosocial medicine leads to better patient care.

The basic question of clinical medicine, I believe, is: "What is best for the patient?" To answer this question, you need to know the patient - in mind as well as in body.

The great physicians since antiquity have advocated treating the *patient*. In more recent times, William Osler's words best express it: *"A good physician treats the disease; a great physician treats the patient who has the disease."*

Biopsychosocial medicine concerns itself not just with disease, but with illness which includes the patient's subjective experience. The focus is on the patient. It is a more complete and effective model than biomedicine for clinical patient care. But if this is so, why has the biomedical paradigm remained dominant?

As medical knowledge expands exponentially, increasing specialization is required to be proficient in any specific area. Specialists have less contact, and in some cases no personal interaction at all, with patients. It is undoubtedly easier to concentrate on laboratory and imaging studies to guide diagnosis and treatment than to factor in psychosocial issues.

Some have argued that biopsychosocial medicine is not a true model or theory; that it is too vague to be empirically tested; or that it is not pragmatically useful. Others have given lip service to the biopsychosocial approach while the biomedical approach is what is actually practiced.

The biomedical model treats the patient as an object. Objectifying the patient leads to a detached, unemotional approach. *"Efficient and unemotional; coldly detached"* is one definition of "clinical" in the Oxford dictionary. This is the opposite of its original meaning of "caring".

Viewing the patient as an object often leads to patient dissatisfaction with the impersonal nature of medical care. In extreme cases it can lead to violations of medical ethics in the name of science, such as the US Public Health Service's infamous Tuskegee study.

A century ago, Dr. Francis Peabody gave a series of talks to Harvard medical students about the care of the patient. His words remain valid today.

"When one considers the amazing progress of science in its relation to medicine during the last thirty years, and the enormous mass of scientific material which must be made available to the modern physician, it is not surprising that the schools have tended to concern themselves more and more with this phase of the educational problem. And while they have been absorbed in the difficult task of digesting and correlating new knowledge, it has been easy to overlook the fact that the application of the principles of science to the diagnosis and treatment of disease is only one limited aspect of medical practice. The practice of medicine in its broadest sense includes the whole relationship of the physician with his patient...

Disease in man is never exactly the same as disease in an experimental animal, for in man the disease at once affects and is affected by what we call the emotional life. Thus, the physician who attempts to take care of a patient while he neglects this factor is as unscientific as the investigator who neglects to control all the conditions that may affect his experiment... One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient."

One of Peabody's early residents was Dr. Soma Weiss who later became a mentor to Dr. Engel. He brought Dr. Engel and Dr. John Romano together. Dr. Romano was instrumental in shaping Dr. Engel's understanding of the psychosocial realm and the significance of the interpersonal relationship between doctor and patient.

The relationship with the patient is established through the medical interview. Dr. Engel considered the medical interview to be the most powerful of all the clinician's tools. He taught about it both in theory and practice; by example; and by observing students as they interviewed patients.

Few medical schools at the time taught students how to perform this essential function. Dr. Engel visited over 70 medical schools in the US and Canada to study their curricula. During his visits, he asked students if they ever had even one interview of a patient critiqued by an instructor present during the interview or through reviewing audio or video recordings. Rarely

did he get affirmative responses. He said that more often than not he got *"stares of misbelief, with students appearing incredulous that such a teaching arrangement could even exist."*

Dr. Engel maintained that learning how to interview a patient was as basic to medicine as learning how to play an instrument is to music.

"What if music students were taught to play their instruments as medical students are taught to interview patients?", he asked. *"If musicians learned to play their instruments as physicians learn to interview patients, the procedure would consist of presenting in lectures or maybe in a demonstration or two the theory and mechanisms of the music-producing ability of the instrument, then handing the student an unfamiliar instrument and telling him to produce a melody. The instructor, of course, would not be present to observe or listen to the student's efforts but would be satisfied with the student's subsequent verbal report of what came out of the instrument."*

This analogy is about obtaining the medical history. But the medical interview has therapeutic power as well. The role of the mind in affecting treatment outcomes is indisputable. Even if attributed only to the placebo effect, it still accounts for about 1/3rd of positive results in clinical studies. Astute clinicians utilize the strength of their relationship with patients to promote positive outcomes. Dr. Engel taught us how to do this.

Graduates of medicine at Rochester are known for academic and research contributions. But the most distinguishing characteristic, I believe, is their clinical approach to the patient. The philosophy of medicine taught at Rochester provides a solid foundation for students to be capable of becoming, in Osler's words, "great physicians".

Gary S Berger, MD
Class of 1969

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