The modern scientific physician: 7. Theory of medicine

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Medicine was a “productive art” (Aristotle), and now it is an aggregate of such arts. It thus is supposed to have products, and indeed it does. Hippocrates’ empirico-rational medicine emphasized the cognitive products the concepts of which it introduced — diagnosis and prognosis. In this gnosis genre of medicine’s products, the diagnosis versus prognosis duality has been retained up to this day, except that just recently “etiognosis” has been posited as a gnostic entity separate from diagnosis.

Production of gnosis and that of health itself are matters of human action; and according to a pre-eminent leader in the theory of human action — praxeology — “action without thinking, practice without theory are unimaginable.” Aristotle presumably was of the same frame of mind, as he is said to have remarked, perhaps in a fleeting episode of a medical educator’s snobbery, that he considered a gentleman sufficiently educated if he knew the theory but not the practice of medicine. Yet today, while countless ladies and gentlemen know the practice of their own specialties of medicine, they do not really know the theory of medicine. Practice without solid theory actually is the reality even in modern ‘scientific’ medicine of the Flexner-codified sort. There does not even exist, at present, a codified body of theoretical tenets that ought to be adopted by practising physicians to guide their production of gnosis and health.

Perhaps the most fundamental tenet of praxeology bearing on scientific arts such as those of modern medicine is this: “science never tells a man how he should act; it merely tells how a man must act if he wants to attain definite ends,” as “ultimate decisions, the valuations and the choosing of ends, are beyond the scope of science.” So, an orientational concern in the theory of medicine is, Who is the decision-making “man”? We still hear about doctor’s orders, but is it not that at issue is the client’s health, that it is his/her valuations and ends that matter?

Physicians like the honorific “Doctor” but do not always know that the word etymologically refers to teacher. Might it not serve as a fundamental tenet of the theory of medicine that the clinician’s principal responsibility is to teach the client about his/her health — including, in modern medicine, how prospective intervention might change it for the better? If so, then analogously for the practitioner of community medicine.

This tenet obviously is, or would be, predicated on actually knowing about the individual’s or community’s — the client’s — health. The imperative of aiming at such knowing — and not merely at opining — indubitably is, or at least should be, a core tenet in the theory of medicine. Related to this, theory of medicine should define the nature of what this knowing is about. It should be understood for orientation that, in general, medical gnosis is about the hidden, the unknowable, questions subject to probabilistic answers only; and theory is to define what the correct probabilities are, in principle. Modern scientific physicians should be able to agree that the correct diagnostic probability is the proportion of instances like the one at hand (diagnostic profile) in general (in the abstract) such that the illness in question is present; that the correct etiognostic probability is the proportion of instances like the one at hand (illness, antecedent present; etiognostic profile) in general such that the antecedent was causal to the illness; and that the correct prognostic probability is the proportion of instances like the one at hand (prospective intervention; prognostic profile) in general such that the intervention effect, course or outcome in question actually will occur. In this framework, the practitioner’s gnostic knowing is principally — or most characteristically — about the relevant general (abstract) proportions, their magnitudes.

Where gnosis is scientific beyond the imperative of rationality, the presumed magnitude of the gnosis-relevant proportion derives from medical science; and more specifically, this aspect of scientific gnosis is a matter of deploying knowledge.

Emblematic of the state of the theory of medicine is its treatment in eminent textbooks of medicine. Osler’s The Principles and Practice of Medicine did not, despite its title, address the principles of medicine at all: the content was solely about particular illnesses. A current textbook entitled Principles of Internal Medicine has an early section entitled “Quantitative Aspects of Clinical Reasoning.” This section begins with quite a telling passage: “The process of clinical reasoning is poorly understood but is based on factors such as experience and learning, inductive and deductive reasoning, interpretation of evidence ... and intuition that often is difficult to define.” So, there indeed is said, implicitly, to be no established body of theory for setting gnostic probabilities and, what is more, no commitment to pursue it and the deployment of general knowledge in such a logically tenable framework. Instead, “clinical reasoning” is given an a priori status — as though it in itself were a domain of worthwhile descriptive inquiry (into the cognitive psychology of physicians) as opposed to it calling for normative development and adherence to cognitive norms.
Theory of gnosis-oriented medical research — of gnostic science — can be said to exist to the extent that there is agreement about its associated concepts and principles. For, to quote a pre-eminence, the fields of medical practice have reached a point where concepts are firm, clear and generally accepted, and the methods of reasoning and arriving at conclusions are agreed upon by many (as the majority of those who have anything to do with these matters). There and only there is it possible to construct a science, formal or empirical. If this is the case, then the science of medicine can be said to exist to the extent that there is agreement about its associated concepts and principles. The modern scientific physician, while still not having access to all the relevant substantive topics; is wise and modest enough to appreciate that the clinical doctor’s principal responsibility beyond knowing about the client’s health — gnosis — is to teach the client about his/her health — for the client’s own valuation and, insofar as the client desires, decision making; and, analogously for the community doctor.

All of these qualities, I believe, (s)he should have.

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References


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