

Hippocratic Medicine and Philosophy at the End of the 20th Century (1)

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The genius of Hippocrates has been analyzed by so many historians that no much is left for me to emphasize. I have decided, on reflection, that the best course was to expose in a few words the medical science of the great Eastern Mediterranean civilizations, and then to present Hippocrates in a few of his prophetic messages. I think this contrast is enough to bring out Hippocrates and his contribution at the end of the 20th century. For Hippocrates was not only a medical genius, he was one of those personalities who in their passage through the world have shed a light that has shone through history. For this reason he was not well studied by his contemporaries and only those who came after have worked and still work on his great figure. It is not by chance that we have scarcely any direct knowledge of Homer, Pythagoras, Socrates, and many other monumental figures of the history of science and of civilization.

During the prehistoric period attempts by primitive man to cure disease and relieve suffering were based on instinct and experience. It seems that primitive man discovered by the process of trial and error natural substances and plants with some medicinal value. Folk or empirical, or magic, or domestic medicine originated in this fashion, and it played a part in primitive man's medicine. But it was only a part. Man at that time did not regard death and disease as a natural phenomenon. Serious and disabling diseases were considered to be of supernatural origin, the work of a malevolent demon

or an offended god. Thus it is not surprising that magic and religion played a large part in the medicine of prehistoric man, and that magico-religious medicine was the step prior to the triumphant Hippocratic science and the prelude for the development of Western rational medicine.

Progress in medicine during its long historical evolution has always dependent on the stage of development of society as a whole, politically, socio-economically, scientifically, technologically and culturally. In order to understand how progress has been achieved in medicine, we should study medical history in association with the development of human societies. Several questions can then be raised. Are the philosophical and scientific theories, rationalism and empiricism, determinism and indeterminism, laws of nature, or laws created to cover the needs of development in a certain period? What is the role of chance in medical discoveries? How important is the role of genius, those prepared scientific minds listening to the whispers of nature? Who are the leaders, who with imagination and the ability to formulate ideas make clinical observations, scientific theories, medical doctrines, diagnostic discoveries and therapeutic inventions, and accelerate medical progress?

I. Pre-Hippocratic (or Homeric Medicine)

Ancient Greek medicine derived knowledge from many older sources. Medicine may have reached a high level in the Minoan civilization of Crete (2nd Millennium BC). Greeks, because of their geographical location, were exposed to the influence of Egyptian, Babylonian, Mesopotamian, Phoenician and other civilizations.

The Pre-Hippocratic medicine is connected with the Greek mythology and the temples of Asclepius: the God of medicine. Asclepius was the patriarch of a large family, who had health and medical functions: His wife, Epione, soothed pain; his daughter, Panacea, had a cure for everything; Hygeia, another daughter, whose domain was public health and the prevention of disease, fed

the temple serpents; Telesphorus, cared for convalescents; Podalirius was army surgeon and psychiatrist; and lastly Machaon was the surgeon of whom Homer writes in a famous line of the Iliad (II.XI: 514) "A doctor is a man worth many others", or according to a free translation of the Homeric verse "A wise physician skilled our wounds to heal is more than armies to the public weal."

It must be emphasized that:

- (a) Homeric medicine was not magical in spite of some demoniac references, and
- (b) The greatest epic poem in any European language "The Iliad" contains realistic descriptions of 140 wounds and injuries.

II. Hippocratic Medical School

The mythological period of Greek medicine was followed by a long, sacerdotal period with priest-physicians. Asclepius left numerous successors, the Asclepiades, who continued his work. Their activities were mainly of a psycho-therapeutic character, practised in health centers situated near the sea or near springs in several regions by the Mediterranean Sea.

Along with sacerdotal medicine, a kind of secular medicine also developed and under the influence of naturalist philosophers—often named "physiologists"—medicine progressively lost its religious character. It was not until the period 600-400 BC that philosophers in Greece started to question the supernatural explanation of the world and began creating a body of knowledge based on logic. Consequently, the Asclepian Medicine, of the Ionian School in Asia Minor, the Pythagorean School of Croton in Magna Graecia (now southern Italy), the Empiricism and the medical Schools of Cnidos and Kos have been the precursors of the Hippocratic period.

The main difference between the medical School of the island of Kos and that of the opposite peninsula of Cnidos is that the Medical School of Cnidos gives special emphasis upon the static minutiae of

the disease(s), in contrast to the Medical School of Kos which gives special emphasis upon the natural course and the prognosis of the disease(s). The Island of Kos was the intellectual centre of medical supreme.

Hippocrates and his school created the first rational and scientific system. It is thus stated that medicine originated in ancient Greece. This is only partially true. The transition of medicine from magic to science was a gradual process that lasted for centuries, and ancient Greece inherited much from Babylon and Egypt and other civilizations.

Hippocrates applied the power of observation and logical reasoning. He viewed disease with the eye of a naturalist, studied the patient in his environment and developed a rigid method of medical examination. His oath is in an ethical code and an ideal, which has guided the practice of medicine for more than 2000 years.

It must be pointed out that:

- (a) Greeks absorbed much of the culture and outlook of the Mediterranean basin civilizations.
- (b) The philosopher-physicians of pre-hippocratic period are the bridge connecting the medicine of the Homeric age with Hippocratic medicine, and that
- (c) Hippocratic corpus (collection) is free from magic or supernatural intervention.

III. Hippocratic Diagnosis and the Importance of Prognosis

Hippocratic medicine emphasized the necessity for maintaining a high standard of professional conduct, the need in medicine for a much greater accuracy in the observation of the symptoms and the recording of the physical signs of the disease. Physicians encouraged for the first time to strive to discover the physical causes of the illness and it is this last fact which is of such paramount importance in Hippocratic medicine that a disease is regarded as a phenomenon with a natural and not a supernatural explanation.

Hippocrates viewed the physician as a man of science (instead of a priest) and disease as a natural process (instead of a supernatural phenomenon). He practised in accordance with the laws of science and felt himself bound by ethical and moral precepts of his profession.

Hippocrates knew little of anatomy or physiology, and he possessed neither clinical thermometer nor stethoscope. It is true that he employed auscultation, placing his ear to the chest of the patient and describing, for example, the friction sound of pleurisy, which he aptly likened to the creaking of leather. But although he had no scientific apparatus, he had scientific method, and his writings are full of sound observation and logical reasoning. For example, Hippocrates knew that the course of any disease was determined, to some extent by the patient's environment and way of life. He knew, further, that a "discordant" organ could upset the whole person. "To heal even an eye," he contended, "one must heal the head, and indeed, the whole body!" He also observed the critical signs and stages of diseases. He established rules by which the doctor would know what to expect, and what to do at the right moment.

Believing in the "healing power of nature" Hippocrates emphasized that the physician must know the disease, its course and possible outcome. To obtain a clear picture of the disease he must examine his patient's urine, listen to his lungs, and check his breathing, color and other outward signs.

It is interesting that one of the most important and prophetic work of Hippocrates is entitled "Prognostic". "I hold—notes the Father of the Rational Medicine—that is an excellent thing for the physician to practise forecasting. . . . he will carry out treatment best, if he knows beforehand from the present symptoms what will take place later".

The best physician—according to Hippocrates' opinion—"is the one who can predict; i.e., the one who is able to foretell and forestall the patients' past, his present and his future."

IV. Hippocratic Treatment

The general or Hippocratic constitutional treatment consists in the correction of the environment of the patient and in the improvement of his nutrition—in other words, in raising the physical forces—and in the raising of his mental forces. It is based on a correct diagnosis and treatment.

- (a) The Hippocratic physician, after considering the patient in his environment, endeavors to correct, as far as possible, this environment. The correction of dietetic habits is extremely important. It is not thoroughly understood that even small mistakes in hygiene play a great role in the genesis of the most intractable chronic diseases. His great therapeutical success is based on the fact that he studied carefully the hygienic conditions of his patients and gave enormous attention to detail.
- (b) For the metabolic treatment, which consists in the raising of the physical forces of the patient, the Hippocratic physician used dietetic, physical and medicinal agents. The dietetic and physical agents were the most important, and we must remember that for Hippocrates the word “diet” signified diet and physical agents. The great development of physical medicine shows the importance of this part of constitutional treatment.
- (c) Believing in the concept “benefit or do not harm the patients,” Hippocratic drugs were neither numerous nor complex. Some of them, however, were very efficient, and their judicious use—according to his principle “*primum non nocere*”—at the right moment saved many patients.

In the Hippocratic collection the physician attended cases of every type, and did not refuse to do his best for a case because the use of an instrument was demanded. He was thus no specialist. But the mass of his practice lay with cases to which instrumental treatment was inapplicable. In cases in which surgical intervention was not justified the Hippocratic physician adopted what is called an “expectant” line of treatment. The relative

Hippocratic aphorism is demonstrative: "What drugs will not cure, the knife will; what the knife will not cure, the cautery will; what the cautery will not cure must be considered incurable".

- (d) Local lesions are related to disturbances of psycho-neuro-endocrine equilibrium, which ultimately result in modification of the body humours according to the Hippocratic terminology. This could easily be deduced from what we know of biology. Through the psycho-neuro-endocrine system the organism adapts itself to its environment. Disease is a struggle of adaptation to a changed environment, and thus the first manifestation must be psycho-neuro-endocrine, that is, general constitutional, metabolic, or "humoral" according to the Hippocratic theory. It may have local manifestations in cells, tissues and organs, but it is never strictly local. Even when local manifestations predominate they do not constitute a local disease but are manifestations of a preceding general disturbance of the whole body-mind entity (unity). (To be continued)