

# A SURVEY OF THE VIEWS OF IBN HINDU BASED ON RESEARCH ABOUT THE PROGRAMS OF MEDICAL INSTRUCTION

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## INTRODUCTION

Who is Ibn Hindu? Ibn Hindu, Abul-Faraj Ali Hinduji Qumi Razi Tabaristani Gorgani Baghdadi, was a professor, physician, philosopher, poet, calligrapher and secretary to the court of Azadud-Dowla in Shiraz, the court of Lady Matron in Ray and to the organization of Ebad Taleghani. He was a well-known learned man of the 2nd half of the 4th and of the early years of the 5th century A.H. He is said to have died in the years 410-420 A.H.<sup>5</sup> and is buried in his own house in Gorgan.<sup>3</sup> Ibn Hindu was a disciple of Abul-Hassan Ali Ameri Waeli in philosophy and primary sciences and a disciple of Abul-khair Ibn Al-khammar in medicine.<sup>1,2</sup> He is surnamed Ibn Hindu because he was originally from Hindujaan, Qum.<sup>4</sup>

Ibn Hindu was an able instructor. Students from different lands came to attend his classes. He taught them poetry, letters, philosophy, and medicine.

Of all the books Ibn Hindu has written, the one titled "The Key to Medicine" or "Meftah Al-Tebb" enjoys a much wider reputation. This is due to the fact that few books so terse yet thorough have been written on medicine and the attitudes of medical students. In this connection Zahiruddin Beihaghi has written in his book, "The History of Muslim Philosophers:" I have not seen as good a book as "The Key to Medicine" written on the usefulness and the exalted position of medicine.<sup>6</sup>

As a matter of fact, Ibn Hindu wrote this book at the request of his own students who wanted him to write an "easy" reference book about medicine. He wrote "The Key to Medicine" in ten chapters as follows:

Chapter 1- On promoting learning, in general, and

medical science, in particular.

Chapter 2- On proving (the Validity of) medicine.

Chapter 3- Definition of medicine.

Chapter 4- The nobility of medicine.

Chapter 5- Categories of medicine.

Chapter 6- On the various "Schools" in medicine.

Chapter 7- On ways and methods by which medicine is understood.

Chapter 8- Other sciences that a medical student must know in order to fully develop in his own field.

Chapter 9- On the gradual progress of medical students and the significance of the books in medicine.

Chapter 10- On the definitions, interpretations, and terminology used in medical sciences.

In this paper, we intend to elaborate on the programs and methods used in teaching medicine during the time of Ibn Hindu and especially the ways and means initiated and employed by Ibn Hindu himself and by others after him.

As a rule the ancients regarded medicine as a whole science. In his introduction to his book titled "Al tuhafel Saadiah," Allama Ghutbaddin Shirazi has considered medicine as enjoying honor, nobility, and excellence.<sup>7</sup> He has declared medicine to be the most cherished and exalted science. Since in ancient times medicine has been taught along with religion, the prophetic habit (tradition) which states: "knowledge is of two kinds-the science of bodies and the science of religions," points to this aspect of learning. One reads in Arabic texts on the duties of the physicians that the alphabetic letter "t" in the word "tebb" (medicine) in Arabic indicates the letter "t" in the word "taharat" (cleanliness), and the letter "b" at the end of the word "tebb" refers to the Arabic word "baten" meaning

heart, mind, conscience, or innermost reality of a human being, indicating that a physician must be in contact with God for effectiveness of his art, and to do this he must purge his heart and mind of all unworthy things which emanate from mammonism and love of this world. This is necessary so that "the light of faith may diagnose an illness and the physician's treatment and cure become effective and his patient recover by God's command bringing much good to his doctor for his act worship."

In general, in old times physicians did not use their vocation by which to earn their livelihood.

It is a well-known fact that Abu Maher Musa Bin Yusuf Sayyar Shirazi, physician and famous Iranian scholar of the late 3rd and early 4th centuries A.H., had the opportunity to cure the illness of Azadud-Dowla Dailami when he was the crown prince. To appreciate this service the Amir sent him gift which the hakim (= the doctor) declined stating (as excuse for rejection) that he must set example for physicians of all times adding: "It is incumbent on all proficient physicians whenever they see any signs of apparent or latent illness to take humanitarian action to relieve such sick persons from pain and discomfort of illness."<sup>8</sup>

With regard to the honorable status of medical sciences, Ibn Hindu believes that the superiority and excellence of any science depends on the superiority and distinction of the subject matter and objective of that knowledge or science. With respect to medicine, Ibn Hindu says that as its subject is human body and as man is the noblest being, being composed of soul and body both of which are the noblest things, therefore not only the body which is the subject of medicine, but the end which is bringing health to the body is also noble.<sup>9</sup>

In promoting the learning of sciences, Ibn Hindu quotes Galen. "Health and soundness are things that have no equal. Health is something that all seek, and man's efforts in life and livelihood are aimed at its retention. It follows that medicine which insures health is the superior industry and anyone who denies this fact challenges the Lord and mars this divine expediency." Ibn Hindu then says that: "this honor or exalted position is inherent in the science of medicine. If we take a look at the adventitious or accidental dignity that render various sciences superior and distinctive, things such as position, status, reputation and name; also if we consider the aspect that please the Lord such as attainment of good, nearness to God in doing good, we shall see that medicine or the practice of medical sciences rank the highest."<sup>9</sup>

With regard to the genesis of medicine, Ibn Hindu believes that medical sciences come about by reason or intellect by the initial adoption of certain principles based on the following circumstances:

1- Mere accidental occurrence of events.

2- Affairs that stood purposeful testing.

3- Things arrived at through dreams.

4- Conditions observed through animal inspirations.

Above principles are then strengthened by intellectual stimulation and prevalence of deductive reasoning and they develop accidental points and issues. With regard to the learning of sciences, the knowledge of which enhances the efficacy of a physician, Ibn Hindu believes, by adducting to Galen's arguments, that, it is better that philosophers be physicians, and not vice versa, because the physician returns the health to man's bodies while philosopher masters the truths about things and does what is cheritable.<sup>10</sup> Thus, it becomes clear that this professor holds to the view that knowing philosophy (theoretical or applied) is a prelude to knowing medicine.

With this in view, Ibn Hindu states the need of a physician for other sciences in the following terms:

"A physician, does not, as a physician, have need to know a great deal about the universe, the galaxies, and so forth. He needs to know only such parts or aspects of the nature as relates to health or illness of the body and this includes knowledge of the elements, the humours, limbs, energies and actions related to energies. Also he needs to know reasons and causes of health and illness."

With regard to mathematics, a physician needs to know something about astrology, for it is useful to medical industry. This is true because the crises and critical times are related to this science. The crises of acute diseases are related to the moon, and the chronic diseases are related to the sun. Also, recognition of changes and variances in time, the influence of climates in temperaments, and the situation of towns in relation to the sky or firmament are contingent upon the physician having ample knowledge of astrology and astronomy, and because the study of astronomy requires some knowledge of geometry, physician must have some knowledge of geometry. A physician must know this much but he has little need for arithmetic.

As for music, in some ways it is within the science of medicine. Tavan Iskandarani has quoted Hippocrates as saying that ancients have cured patients with the help of melodies. To this end, the physicians made use of minstrel.<sup>11</sup> In this connection Ali Bin Abbas Majoosi (Majoosi = Majian) has said: "The physician must be familiar with musical tunes so that his fingers acquire practice for taking a patient's pulse and thus to locate the veins."<sup>12</sup>

The story is said that there were physicians in Andolesia who were acquainted with music. They would take a patient's pulse and play a tune to his liking thus relieving the patient of much of his pains.<sup>13</sup>

With regard to applied philosophy, there is no doubt that a physician needs not know politics. Rather, he

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should have some knowledge of ethics because the ancients have said: it is necessary that a physician have a clean soul and be not polluted by corruption so that the facts of medical sciences settle in his heart, and purging of the soul is obtainable only through ethics.

Continuing the discussion concerning the extent of a physician's need for both parts of philosophy (theoretical and applied) Ibn Hindu adds: "knowing logic is most essential of a physician, for it is the art of deduction and proof. A true physician, as is already mentioned, is deductive (an apostle of deductive reasoning). Neither theoretical nor applied medicine can be realized except by the use of the art of logic, for it is by this art that true and false in words, thoughts, and deeds can be recognized."<sup>14</sup>

In regard to the quality of gradual learning of medical sciences and the order of studying medical textbooks, Ibn Hindu has considered the following three methods:

1- Subjects that are inherently antecedent to be studies first. In view of this the subject of elements is to be taken up first, to be followed by science of humours, mucus, and limbs respectively.

2- Subjects that are noble and more basic to be studied first. For example, start with the anatomy, follow by sciences of humours and elements, in this order, because human body is noble, also principal limbs are nobler than non-principal limbs.

3- The "learning" method which means that subjects that are learned more readily be taught first. This is the method that the Iskandaranians used in learning medicine from studying the works of Galen. Ibn Hindu then, quoting his own teacher Abu Alkhayr, provides the following list of books of Galen that were used in the teaching of medicine at the universities (schools) of Alexandria:

1- "Ketaf-al Feragh" or "The Book of Sects." This book describes the three schools of medicine. In it Galen differentiates between the three "classes" or "schools" of medicine, describes their common as well as their conflicting features and points out the more credible school.

2- The book "Al-Sanaat-ul Saqhira (The Small or Minor Arts, or Industries). In this book Galen has presented a concise summary of the medical science to be reminder to teachers and to encourage to students. In fact this book is a source of income for the medical science.

3- The book "Al-Nabz" (The Pulse) better known as "The Little Book on Pulse."

4- Galen's book addressed to Ughloqin. In this book Galen has embodied two tracts. In one, he deals with fevers and in the other, he describes swellings and edemas that develop outside the natural processes.

5- "The Book on Elements" (Ostosqat) according to

Hippocrates. In his arguments in this book, Galen tries to establish that objects in this world including the human body are made up of the four elements, viz, fire, wind (air), water, and soil.

6- The book "Natural Energies" in three tracts.

7- The book "Mazaj" (temper, disposition, constitution, etc) in three treatises.

8- The book "Anatomy" which comprises five articles; they are, in the order they appear in the book: anatomy of bones, anatomy of muscles, nerve anatomy, vascular anatomy, and anatomy of the arteries.

9- "The Book on Diseases and Complications" that has six parts: the first is on types of disease, the second on the causes of disease, the third on types of complications, and the last three articles are on the causes of complications.

10- "The Large Book on the Pulse", four articles.

11- "The Book on Sore and Painful Arts," in six articles.

12- "The Book on Crises, in three articles.

13- "The Book on Critical Days," in three articles.

14- "The Book on Fevers." in two articles.

15- "The Book on Treatments and Cures," in 14 articles.

16- "The Book on Taking Care of One's Health," in six articles.

At the end of this book Ibn Hindu emphasizes that a student should learn logic in full before he takes up medicine, because logic is a tool by which medicine is learned and falsehood is screened from truth. The student should next learn some ethics so that he may cleanse his own soul from impurities and prepare it for admission and acceptance of excellences. The next thing an aspiring medical student should learn is a measure of geometry and astronomy as mentioned earlier. The small amount of geometry a medical student needs to know should be learned even before he takes to the study of logic, for the philosophers have rightly said: "geometry enhances the vision or intellectual insight; a one-eyed intellect is better than a thousand bodily-eyes. In the book: "Kamil Al-Sanaat" (vol.1, p.12) one reads that a physician should know geometry so as to recognize the size and shapes of wounds or injuries. A rounded wound is harder to heal than a square or triangular wound because these have angles from which fresh flesh begins to emerge.

Towards the very end of his book "The key to Medicine," Ibn Hindu says: "Anyone who wants to learn a trade or industry needs to learn the terminology developed for it and, since medicine has (much) in common with philosophy and even is a part of it, and as logic is the instrument for philosophy and for any other science, therefore it is proper that we first mention in our book logical and philosophic terms and expressions and then relate the terms that are strictly the business of

medical science." He then enumerates the following 12 chapters in the order shown:

- Chapter 1: On Logic Terms
- Chapter 2: On Philosophic Terms
- Chapter 3: On Terms That Exclusively Belong to the Principles of Medicine
- Chapter 4: On Anatomy
- Chapter 5: On Diseases
- Chapter 6: On The Pulse
- Chapter 7: On All that Emerge From the Body
- Chapter 8: On Drugs and Foods
- Chapter 9: On Compound-and Single-Ingredient Drugs
- Chapter 10: On Names of Foods
- Chapter 11: On the Strange Names of Some Diseases, Weights, Measures, and the Like.
- Chapter 12: Rare Points and Issues Not Dealt With in Previous Chapters.

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