

History of Medicine

Abul- Hasan al-Tabari: A Review of his Views and Works

Farzaneh Ghaffari PhD¹, Mohsen Naseri MD PhD², Majid Asghari MD PhD³, Vahedeh Naseri MD⁴**Abstract**

Abul-Hasan al-Tabari was a 10th century Persian physician born in *Tabaristan*. He was a creative and innovative physician who avoided emulating treatments without investigating and examining them. Tabari was an encyclopedist and had a holistic view to medicine. Investigation of the views of this great Persian scholar indicated that his scientific and moral characteristics contain: paying adequate attention to philosophy and medical ethics, citing other scholars' works, attention to the necessity of clinical and hospital training, emphasizing indigenous therapy and scientific and responsible treatment with medical faults and discovery of *Sarcoptes scabiei*. Tabari has written valuable articles on different medical sciences; however, he is especially famous for authoring the *al-Mu'alajat al-Buqratiya* (Hippocratic Treatments) - an important medical encyclopedia. Several of Al-Tabari's succeeding scholars and physician have referred to the *al-Mu'alajat al-Buqratiya* in their medical articles. The aim of this study is further introduction of this great physician and assessment of his theories and key works.

Keywords: Al-Mu'alajat al-Buqratiya, clinical training, medical ethics Tabari, *Sarcoptes scabiei*,

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Introduction

Abul Hasan Ahmad ibn Muhammad Tabari was a 10th century Persian physician born in Toranja of Tabaristan (located in northern Iran).^{1,2} Al-Birūni^{3,4} (973–1048 C.E.) and Hakim Jorjāni^{5,6} (1042–1137 C.E.) named him Toranji in their works. He is supposed to have died between 985–995 C.E.⁷ Najm Abadi states that his birth and death were between 916–986 AD.⁸ For the most part, no detailed biography of Abul-Hasan al-Tabari is found in history books.⁹ His biography can be found to some extent from his treatises, particularly the book *al-Mu'alajat al-Buqratiya*.

In his youth, Tabari served al-Baridi (an Abbasid ruler 928–949 C.E.) together with his teacher Abū Māhir Shirāzi.¹⁰ When Baridi passed away, Tabari served Rukn al-Dawla (a Buyid ruler 932–976 C.E.).¹¹

Despite learning from teachers like Ibrahim ibn Bakus (a great physician who taught at 'Azodi Hospital in Baghdad),¹² Tabari only mention Abū Māhir Shirāzi as his teacher, whom he respected highly. In fact, it can be said that Tabari's clinical medicine education was specifically learned from Abū Māhir (a 3rd and 4th AH century Persian physician, well versed in surgery and treatment of fevers).¹⁰

The respect and trust between the teacher and student were mutual, and Abū Māhir occasionally referred to his student Tabari for a second opinion in treatment and diagnosis of his patients. Because of the trust and respect Abū Māhir held for his student's medical ability, he referred to Tabari for treatment of his severe

Sal'a (a type of cyst) behind his knee.¹³ On another occasion, he sought treatment and care from Tabari for the treatment of his own eye disease.¹⁴ Tabari also treated Mu'izz al-Dawla (the first of the Buyid emirs 945–967).¹⁴

Some of Tabari's succeeding great scholars and physician have referred to *al-Mu'alajat* in their medical authorships such as Ibn Abi al-Mahāsen in *al-Kafi Fi al-Kohl*,¹¹ Ibn Ibrahim Shāzli in *al-Omdah*,¹¹ Najib al-Din Samarqandi in *al-Asbāb Va al-Alāmāt*,¹⁵ Tunekāboni in *Tuhfa al-Mu'menin*,¹⁶ and 'Emād al-Din Shirāzi in *Bikhe Chini*.¹⁷

In new references by Hirschberg in 1905, he spoke of Tabari as an eminent clinician with much medical expertise and novel thoughts who has not been adequately honored and celebrated for his contribution to medicine.¹⁸

In 1927, Muhammad Rihab translated an important portion of the seventh article of *al-Mu'alajat*, on cutaneous diseases, into German.¹⁹

In the chapter of Jarab (a kind of skin disease), Tabari explains four types of disease including *scabiei*. He observed small worms and insects in the seabies' Lesions.¹³ It was the first clinical observation of scabies. Consequently, in 1938, Friedman declared in his article that Tabari was the true discoverer of *Sarcoptes scabiei*.²⁰

Recently, George Sarton revealed that it is incorrect to credit the discovery of *Sarcoptes scabiei* to Ibn Zuhr (the Spanish physician 1094–1162 C.E.) but that Tabari should be credited for the discovery of this disease, its cause and diagnosis.²¹

Tabari and his Works

Tabari has authored several valuable books that are reviewed below:

1- Al-Mu'alajat al-Buqratiya (Hippocratic Treatments)

The book is composed of 10 parts and 474 chapters. It is extant only in Arabic. Three versions of the book are in Oxford.⁸ Tabari achieved prominence and distinction after writing this book. Ibn abi Osayba'a writes, "The book is among the best and most useful ones mentioning diseases and their treatments completely and in-

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cluding many chapters.”²² The book is a guide for physicians and an aid in diagnosis and treatment of diseases, citing the dialog of preceding renowned physicians and analyzing their theories, explanations and evaluations, citing his holistic and hospital experiences regarding the treatment, and the various medicinal methods he used in the different cities where he had traveled, reflecting on his debates. He was able to formulate a balance between theory and experience in medicine.¹⁴

2- *Risala fi Zikr al-Qārura (A book on urology)*

In his time, Tabari found no other book on urology, except two *al-Tafsira* and *al-Bayan* by Ayūb Rahavi. According to Tabari, since the two had many shortcomings, he was motivated to author the detailed book *al-Qārura*.²³

3- *Kitāb ‘Alāj al-‘Atfāl (The book of children’s diseases)*

He had novel views on the specialization of pediatric diseases. In the introduction of *‘Alāj al-‘Atfāl*, he writes, “I decided to write in particular about treating children and this is what has not been done so far completely and technically by any of my ancestors”. Discusses children’s diseases in detail and sixty terms including pediatric hematuria, pediatric convulsions, pediatric gastro-intestinal cancer, kidney/bladder stones and much more.²⁴

4- *Maqāla fi Tib al-‘Ain (A paper on Ophthalmology)*

A copy of Tabari’s text *Maqāla fi Tib al-‘Ain* exists in Aleppo library in Syria.⁷

5- *Kitāb al-‘Ain fi al-Mu’ālatat (The book on Ophthalmology treatments)*

Tabari has authored an enormous treatise on ophthalmology alone, declaring, “I have authored a distinct book completely and exclusively on ophthalmology in which I have mentioned all ocular diseases including important and unimportant, each for each temper”. Unfortunately, this book is lost.¹⁴

6- *Al-Kitāb al-Kabir (The complete book on medicine)*

In *al-Mu’ālatat* Tabari declares that he has written the book after his *al-Kitāb al-Kabir*.¹⁴

7- *Al-Qarabādīn (The book on pharmaceuticals)*

This book is specific to pharmaceuticals and compound medicines, which is lost unfortunately, and only some portions cited in *al-Mu’ālatat* are available.¹⁴

8- *Kitāb al-Fasd (The book on phlebotomy)*

Phlebotomy is one of the methods used in treating diseases in Iranian traditional medicine alongside the major therapeutic techniques like food-therapy. Observing Jorjān physicians’ inaccurate method and their phlebotomies which they carry out without any understanding and knowledge, Tabari was moved to author an exclusive paper as *Kitāb al-Fasd*.²⁵

Tabari’s Views on the Development of Medical Science

1- *The Necessity of Learning Philosophy for Understanding Medicine*

Although Tabari does not have a separate book on philosophy, he expands on this subject in fifty chapters, the topic of which is the physician’s familiarity with philosophy. Tabari believed that a selective knowledge of philosophy is necessary for a physician to

grasp medical discussions accurately.¹⁴

2- *Extensive Studies and Referring to other Scholars’ Works*

Tabari referred to many books and scholars and explained their theories with an approving or criticizing trend, such as Jurjis [the chief of Gondishapur Hospital (death 765 C.E.)], Hunayn ibn Ishāq (a famous physician, and scientist 809–873 C.E.), and Dioscoridus (a Roman physician pharmacologist and botanist 40-90 C.E.) and a number of books like *al-‘Ain* by Āmedi, Plato’s book *al-Kayy*, Rofs’ book *al-Fasd*, Hippocrates’s book *Epidemia*, abu Māhir’s *Tadbir al-Musafir*^{13, 14} and Galen’s book *fi Elm al-Akhlāq* (which is lost, though fortunately some parts of it have been maintained in *al-Mu’ālatat*)¹⁴. In 1956, Stern extracted those parts from *al-Mu’ālatat* and printed them in a distinct book²⁶.

3- *The Necessity of Clinical and Hospital Training*

Al-Tabari has conducted clinical trials with his teacher *Abū Māhir Shirazi* at *Basra* Hospital and gained extensive clinical experiences.^{13, 14} In *Al-Mu’ālatat* Tabari writes: “I frequently observed that *Abū Māhir* treated like this about the so-and-so disease or treated the ailments that are diagnosed difficultly by others.”¹⁴ He believed that a good physician must be a resident of the hospital, where patients come for treatment, and pursue their needs and conditions closely with a well-grounded professional, in their medical affairs and the physician must remember the subjects that he has studied before regarding these conditions and then his treatments will be right and useful for the patients.

4- *Scientific and Responsible Treatment with Colleagues and Physicians’ Performances*

Periodically, Tabari studied other physicians’ views and theories and criticized them.²⁷ Sometimes, he rebuked his ignorant and non-expert contemporaries, yet approved and appreciated the proficient ones, such as a woman physician from Rāmhormoz (city in southern Iran) named *Bint Israel* – who had collaborated with Tabari and completed the *Mu’izz al-Daula* treatment. Tabari had debates with *Bint Israel* and acknowledged her experience and skills in treatment.¹⁴ He also criticizes the physicians and people who misdiagnosis their patients; for example, he implies that a physician’s misdiagnosis of different kinds of inflammations and ordering inappropriate prescriptions may lead to the patient’s death. Also, in this same regard, he spoke of a pregnant woman who suffered from headaches, was misdiagnosed by her physician, and consequently aborted her baby, was complicated with a stroke and died.¹⁴

5- *Emphasizing Native Medications*

Despite having adequate knowledge and understanding of treatments methods of other renowned physicians, he was also interested in the conventional native holistic treatments and the application of people’s experiences after ensuring their validity through clinical experiences. Tabari refers to many cases regarding this matter in his book.¹⁴

Tabari and his Innovations

Tabari was a creative and innovative physician and avoided imitating his colleague’s treatments without examination and exploration. For example, he criticizes past physicians’ diagnosis of the diseases *Bahaq* (a kind of skin disease) and *Baras* (Vitiligo) and

explains that physicians in the past made no distinction between the treatment of these two diseases and medicated them in the same way.¹⁴

In 1938, Freidman affirmed in an article that Tabari is the true discoverer of scabies; Tabari was the first to recognize the insect in the lesions and to discover the effective medicines, prior to the discovery recorded by two Italian scholars Bonomo and Cestoni in 1687.¹⁷

Tabari's additional research and innovations were ocular treatments. Abul Hasan had been highly skillful in treating ocular diseases and he devoted the fourth article of *Mu'ālajat* "on ocular diseases and their categories, benefits, creation, and treatments" to these problems in 54 chapters. In this part of his text, he describes two types of *Ramad* (Conjunctivitis), none of which has been mentioned by his preceding physicians. Additionally, regarding a number of physicians' misdiagnosis and carelessness in their distinctive diagnosis, he states, "some physicians have mistakenly considered the eye ache from food not reaching the retina, vitreous humor, and lens as a type of brain disease."¹⁴

Tabari and Medical Ethics

Tabari made extensive studies on vocational morality and medical morality. In chapter 35 of the first article of *al-Mu'ālajat*, he begins with, "Principles with which a physician is required to comply in religion, morality, courtesy etc." There are approximately ninety moral points on the interaction between the physician and patient mentioned in this chapter.²⁵

References

- Hemavi Y. *Mujam al-Boldan*. 1st ed. Dubai: Dar Al Sada Press; 1906, Vol 1: 383 & Vol 6: 17.
- Tadjbakhsh H. *History of Veterinary Medicine and Medicine of Iran*. 3rd ed. Tehran: Tehran University Press; 2006, Vol 2: 191, 297.
- Al-Biruni AR. *Seydana*. Tehran: Public Stock Offset Co; 1979, Vol 1: 58, 93, 170, 348, 371 & vol 2: 644.
- Al-Biruni AR. *Al-Jamahir fi al-Marifa al-Javahir*. 1st ed. Haidar Abad Dakan: Jamia Daera al-Marif al-Ottomania Press; 1976: 202, 203, 259.
- Jorjani SI. *Al-Aqrad al-Tabia va al-Mabahith al Alaia*. 1st ed. Tehran: Tehran University Press; 1996, Vol 2: 745.
- Jorjani SI. *Kharazmshahi Reserves*. 1st ed. Corrected by Muhammad-riza Moharreri, IRI Medical Sciences Academy Press; 2003, Vol 2: 231, 233, 235.
- Sizgin F. *The History of Arabic Writings*. Endeavored by Khan-e Kitab, The Organization of Printing and Publishing, the Ministry of Culture and Islamic Guidance. 2001; Vol 3: 434, 436.
- Najmabadi M. *History of Medicine in Iran after Islam*. 3rd ed. Tehran: Publishing & Printing Institute of Tehran university; 1996, Vol 3: 656, 657.
- Gilispie CC. *Dictionary of Scientific Biography*. New York: Princeton University, Charle Scribne's Sons; 1980, Vol 13: 229.
- Musavi Bojnordi K. *Iran Encyclopedia*. Tehran: Great Islamic Encyclopedia Center; 2005, Vol 1: 728.
- Musavi Bojnordi K. *Great Islamic Encyclopedia*. Tehran: Great Islamic Encyclopedia Center; 1999, Vol 5: 344-45.
- Zonoz Tabrizi AH. *Matrah al-Anzar fi Tarajim al-Aasar va Falasifa al-Amsar*. Iran: Muhadith Huqūqi Press, by the endeavour of Mir Hashim; 2009: 62.
- Al-Tabari AH. *Al-Mualajat al-Buqratiyaa*. The introduction by Foad Sizgin, Mahad al-Tarikh al-Olum al-Arabia va al-Islamia; 1990, Vol 2: 42, 59, 95, 136, 270.
- Al-Tabari AH. *Al-Mualajat al-Buqratiya*. The introduction by Foad Sizgin, Ma'had al-Tarikh al-Olum al-Arabia va al-Islamia; 1990, Vol 1: 6, 12, 25, 31, 37, 42, 44,58,95,71,72, 85, 123,140,145,178, 195, 200,244, 250, 252.
- Samarqandi N. *Al-Asbab va al-Alamat*. Tehran: The Institute of Medical History Studies, Islamic and Complementary Medicine; 2009: 61, 97.
- Hosayni Tunekaboni SMM. *Tuhfa al-Mumenin*. Tehran: Mahmudi Bookstore Press; 1997: 4.
- Handwritten copy of Bikh Chini Paper*. Tehran: Medical History Studies Press, Islamic and Complementary Medicine: 106 – 107.
- Sizgin F. *The History of Arabic Writings*. Endeavored by Khan-e Kitab, The Organization of Printing and Publishing, the Ministry of Culture and Islamic Guidance; 2001; Vol 5: 344.
- Rihab M. Der Arabische Arzt At-Tabari. In: Archiv für Geschichte der Medizin. 1987; 19: 123 – 168.
- Friedman R. At Tabari: Discoverer of the "Acarus Scabiei". In: *Medical life*, New York. 1938; 45: 163-176.
- Sarton G. *Introduction to the History of Science*. 2nd ed, translated by Sadri afshar GH. Tehran: Cultural and Scientific Publishing Co; 2004, Vol 2: 815, 946, 1053.
- Ibn abi Osaybaa. *Oiun al-Anba fi Tabaqat al-Atebba*. Beirut: Dar al-Maktaba al-Haiat Press, explanation and exploration by Nazar Riza: 427.
- Danishpaju MT. The *Handwritten Copies lists of Tehran University Central Library*. Tehran: Tehran University Press; 1966, Vol 8: 105.
- Danishpaju MT. The *Handwritten Copies lists of Tehran University Central Library*. Tehran: Tehran University Press; 1966, Vol 15: 4158.
- Danishpaju MT. The *Handwritten Copies lists of Tehran University Central Library*. Tehran: Tehran University Press; 1966, Vol 8: 103-118.
- Stern S. M. Some Fragments of Galens on Dispositions in Arabic. *Classical Quarterly*. 1956; **50**: 91 – 101.
- Ghaffari F. A View of Medical Morality and Complying Patient's Rights in some Iranian and Islamic Traditional Medicine Texts. *The History of Medicine Scientific and Research Quarterly*. Medical Morality and Law Research Center, Shahid Beheshti University of Medical Sciences; 2010, **4**: 29 – 30.