BOOK REVIEWS

"Avicenna’s Tract on Cardiac Drugs and Essays on Arab Cardiotherapy".

EDITED BY HAKEEM ABDUL HAMEED. (NEW DELHI AND KARACHI) 1983, pp. 216.

This is an English translation of the Risāla fi al-Adwiyat al-Qalbiyah, a treatise on drugs for heart diseases written by Abū ‘Alī al-Ḥusayn ibn ‘Abdillāh bin Ḥasan bin ‘Alī commonly called Ibn Sinā in the East and known as Avicenna in the West (370/980 to 428/1037) along with twelve papers on Arab Cardiotherapy and other related subjects.

Among the treatises written by Avicenna the "Prince of Physicians", on particular disease and their treatment, the one on drugs for cardiac disease is important. Its correct title is Kitāb or Risāla fi al-Adwiyat al-Qalbiyah. Written evidences are available to prove that it is a genuine work of Avicenna. Both Ibn al-Qīṭī and Ibn Abī Uṣaybi‘a mention it among his works. But the most reliable and unimpeachable evidence is that it has been mentioned by Avicenna himself in the 3rd Book of the Qānūn and that it was written at Hamadan before the latter was completed. Numerous MSS of this Risāla are found in the libraries and private collections all over the world which means that it was a popular and widely circulated treatise.

Correct Title

Ibn al-Qīṭī (d. 646/1248) and Ibn Abī Uṣaybi‘a (d. 668/1270) record the title as Kitāb al-Adwiyat al-Qalbiyah and their statements are corroborated by the title found in the majority of its MSS. In some of them the word Risāla takes the place of Kitāb. This is also the title recorded in the 3rd Book of the al-Qānūn of Ibn Sinā. However, C. Brockelmann has recorded its title as Fi Akhām al-Adwiyat al-Qalbiyah. Any how, it was written at the request of his patron Abu’l-Ḥusayn ‘Alī bin al-Ḥusayn al-Ḥusaynī for his library. It has been stated that there is another treatise Risālat al-Qalbiyah written by Avicenna.

The Printed Text Editions

This book does not give any information about the text from which it has been translated. There seems to be three printed texts of this treatise of which one is incomplete. Its first part, excluding the discussion on drugs was printed in the monthly al-’Irfaq of Sa’īda (Syria) in the Rabi ‘al-Awwal issue of 1345 A.H. The full edition of this text was published by Kilisli Rifat Bilge at Istanbul in 1937. The Leningrad MS of the al-Adwiyah was published in facsimile at Tashkent in 1966 by the Uzbek Academy of Sciences along with an Uzbek translation by Hīkmatullayev,
**It's Translations**

It was translated into Latin in the early 14th century by Arnaldo de Villanova (died 1310 or 1313 A.D.) under the title *Medicinus Cardialibus* and for the second time by Andreas Alpagos in 1520 A.D. Its Turkish translation was published by Kilisli Rifat Bilge with its Arabic text at Istanbul in 1937.

It was at the suggestion of Dr. Zakir Husain, the late President of India, that Hakeem Abdul Latif, Principal, Tibbia College, Aligarh Muslim University, translated this treatise of Avicenna into Urdu and published it in 1956. In the same year, he also published his comments on this tract in a volume published at Calcutta. It was entitled "Introduction to Heart Drugs" which ran into ten pages. He stated "Avicenna's researches on Heart Drugs are most original and are still capable of revolutionizing our ideas on Heart Therapy".

Its Persian translation by Hakim 'Abdullah entitled *Tafrih al-Quľb* has not yet been published but its MSS are found in the Libraries of Hyderabad.

After 1956, this treatise was forgotten. This reviewer had presented a detailed study of this tract entitled "Ibn Sinā's Treatise on Cardiac Diseases and Their Treatment" at the International Seminar on Ibn Sinā held at Kuala Lumpur, Malaysia from 29th June to 1st July, 1981. At the International Seminar on Ibn Sinā's Millenary celebrations held by the CSIR from the 2nd to 5th November, 1981 at New Delhi, the paper presented by this reviewer was entitled "The Section on Cardiac Diseases and their Treatment" in the *Qānūn* of Ibn Sinā which will be published in one of the forthcoming issues of this *Journal*.

**English Translation**

Translating this Medico-Psychological treatise into English was not an easy task to perform. It cannot be claimed that the Urdu translation was perfect nor can this English translation be perfect in every respect. It is not easy to find the exactly equivalent English words for all the medical and psychological terms used in a work of Greco-Arab medicine written in the eleventh century. Take the word *Rūḥ* which will mean spirit, brain, psyche and soul according to the context as used by Avicenna. In the *Kulliyāt* of the *Qānūn*, he explains that there are three kinds of pneuma; *ar-Rūḥ al-Tabī‘i* or natural pneuma—spirit in the liver; *ar-Rūḥ al Hayawāni* the animal pneuma in the heart and the *ar-Rūḥ an-Nafsāni* or psycheical pneuma in the brain. Such examples can be multiplied. In most cases only approximate words can be found out and in several cases it would not be possible to find out the exact English word. To find out whether the translation is accurate or not, one has to compare it with the Arabic text published at Istanbul, but it would be a time-consuming and painstaking task. Moreover, a question may be asked as to how far the Turkish edition of this treatise itself is correct and reliable, because several manuscripts of this work of Avicenna have come to light after the publication of this edition. But, by and large, the translation
seems to be accurate because it was made by an expert team under the direct supervision of Hakeem Abdul Hameed. For a correct translation of this treatise not only a deep knowledge of Greco-Arab system of medicine was necessary but also expert knowledge of English and Arabic languages was also essential. Some knowledge of Greek would have been helpful. The best part of this work deals with drugs prescribed for cardiac diseases and an experienced Hakim could only give their correct Latin and English names and discuss their properties.

Other Papers

Part II of this book covers pp. 79-216 in which there are twelve papers discussing several aspects of cardio-therapy in the Greco-Arab system of medicine. There are three papers in this part which are directly concerned with heart diseases and drugs for their treatment. One of them is Abdul Hai Farooqui's study of the cardiovascular diseases as described by Avicenna in his al-Qānūn fī t-Tibb (pp. 130-163) and the drugs prescribed by him for their treatment. The writer does not inform his readers but it is a translation of the section on cardiac diseases in the Qānūn, divided into two discourses or Maqāla. They are sub-divided into seven and five chapters respectively. In all, they cover eighteen long and closely printed pages of the Cairo edition. (Amira Press, Vol. II, pp. 262-279). For a study of this section by this reviewer see above.

Two critical appreciations of this treatise of Avicenna included in this book are: one by Dr. H. H. Siddiqui and the late Dr. M. Abdul Aziz entitled "A note on Ibn Sinā's Tract on Cardiac Drugs" (pp. 79-85) and the other by Dr. M. Sardar Yar Khan captioned "Al-Adwiyat al-Qalbiyah, a Scientific Appraisal" (pp. 173-185). Siddiqui and Aziz's paper does not discuss the drugs prescribed in the second part of this tract but they confine their comments to the 1st part only which is medico-philosophical in character but original and important in which the relationship between the pneuma, the heart and medicine is explained. The heart is not only an organ of the human body, it also performs psychological and supra-biological functions. It is the seat of emotions and regulates the animal heat.

In his paper, M. Sardar Yar Khan has studied the second part of the tract which attempts to assess the value of 63 drugs prescribed by Avicenna for the treatment of cardiac diseases. Of these drugs 25 cardiotonics have been studied recently after a careful pharmacological and clinical tests and evaluation in the light of modern method of scientific investigation and in the majority of cases the results are found to be satisfactory. Some of these drugs were given to rats and dogs and useful results were obtained. An important question with regard to the traditional medicines may be asked as to whether at present they can be used or not in some form or the other for effective treatment of different diseases. Hakim Arshadullah prepared a well-known compound called Khomira Abresham whose basic ingredient is the Abresham, silk worm cocoon, recommended by Avicenna. It has yielded good result for the treatment of antihypercholesterolamic and antiarrythmic complaints. Saratikov stated after
thorough research that *Kafur* or camphor has cardiovascular activity which confirms the claims of Avicenna. Recent research has established that *Lisân ath-Thawr* or Bugloss recommended by him is a diuretic agent and it is useful in the treatment of cardiac oedema and pulmonary congestion.8

Hakim Mohammad Said’s paper “Fight against Heart Diseases in Ancient and Medieval Times” (pp. 86-96) is not only interesting but also informative, but it is sketchy and lacks documentation. He starts from 3000 B.C. and covers a long period coming right up to the time of Ibn an-Nafis—end of the 13th century (d. 1288 or 1296 A.D.) who is rightly credited to have first given the details of the pulmonary or lesser circulation of blood and stated clearly that blood was filtered through the pores of the septum.

Other papers included in the second part are “Psychosomatic Aspects of Cardiovascular Diseases” by Dr. ‘Abdul ‘Azîz (pp. 97-104) which discusses hypertension, structural heart diseases and their psychotherapeutic and psychosocial aspects. O. Cameron Gruner’s translation of Avicenna’s discussions of the “Four Emotions” and “Four Temperaments” have been published in it (pp. 105-123). They are based on the *Qânûn*.9 Abdul Hai Farooqui’s second paper is entitled “Importance of Aromatics in Greco-Arab Cardiotherapy” (pp. 164-171) which discusses briefly the medicinal therapy, dietotherapy, hydropathy, musicotherapy and aromatic drugs useful for heart diseases. Dr. R. B. Arora’s paper entitled “Cardiovascular pharmacotherapeutics of some Indigenous Medicinal Plants” is a useful paper covering 186-196 pages. It is based on plants with cardiovascular activities found in a screening programme at the Central Drug Research Institute at Lucknow. A short paper entitled “Human Constitution in Clinical Medicine” by G. P. Dubey and R. H. Singh (pp. 124-129) deals with the question of the relation between body weight and heart diseases. The last paper by Dr. S. B. Vohora deals with a subject on which not much has been written i.e. Elements and Cardiovascular Diseases (pp. 197-216). It throws light on a special aspect of the diseases of the heart and their treatment.

The simple drugs prescribed by Avicenna for different cardiac diseases are also discussed in the *Qânûn* (Cairo ed. Vol. I, Second Book, pp. 222 ff.) They are some of those drugs prescribed by the physicians who preceded him such as ‘Ali bin Rabbân at-Tabârî, *Firdaws al-Ḥikmah* (edited by M. Z. Siddiqi, Berlin, 1928, pp. 226-228), Abû Bakr Muḥammad bin Zkariyâh ar-Râzî (d. 923/24), *Kitâb al-Ḥawâr fi’t-Tibb*, Vol. IV, (Hyderabad, 1376/1957, pp. 225); Vol. VII (1378/1958, pp. 321). Some of these drugs are also discussed by al-Bîrûnî, the well-known contemporary of Avicenna, in his *Kitâb al-Sayyadanah* edited with an English translation by Hakim Mohammad Sa’îd (Karachi, 1973; 430 columns of Arabic text; English translation pp. 376).

Hakim Mohammad Said has edited and published a sister volume entitled *Greco-Arab Concepts on Cardiovascular Diseases* (Karachi, 1983, pp. 201). This book also discusses Avicenna’s Tract on Cardiac Drugs and their therapeutic action. In the last part of
this book a full chapter mentions the drugs used in cardiovascular diseases since ancient
times (pp. 161-190).

A critical appreciation of this treatise may be offered in this review. E. G. Browne and
Hakim Abdul Latif speak highly of its originality value and importance while
L. Leclerc and Sami K. Hamarnah express adverse opinion about it.

Both views, one in favour of this treatise and the other against it are exaggerated. A
thorough and critical study of this treatise will lead to the conclusion that it has both
merits and demerits. It is not correct to state that it provides “no new information, no
new drugs and no new line of treatment.” There is no doubt that its discussion of the
relation between the pneumonia, heart and medicine is original and in a way it
anticipates psychosomatic concept in the modern sense. Had this treatise been so
worthless and unreliable as stated by Hamarnah, it could not have acquired such
reputation in the Middle Ages. An attempt has been made in it to prove that moral
qualities are based on the functioning of the heart in combination with the pneumonia.
It contains a few personal clinical notes of Avicenna and in so far as compound
drugs are concerned, most of the twelve prescriptions—one of them contains 38
different drugs—seem to be based on his personal experience which certainly
enhances the value and importance of this treatise. Further, Avicenna explains,
inter alia, the methods of pharmaceutical propertise, forms, dosages, strength of each
drug and technique of application, preservation and therapeutics. The clarity of
thought and expression is characteristic of the writings of Avicenna and the whole
discussion is in a high key.

It would, however, be incorrect to suggest that this treatise does not suffer from
any demerit. In the Qanun as well as in this Risala he puts forward the traditional
statement about the anatomy and physiology of the heart and the circulation of
blood based mainly on the writings of Galen.

A serious defect of this treatise is that all heart diseases are not clearly
and specifically mentioned and several prescriptions recorded in it are not specially
for the treatment of cardiac diseases but for ailments of other parts of the body. Several
general diseases of the stomach are mixed up with heart diseases. Moreover, the seat
of psychic power is the brain and not the heart as stated by Avicenna. Unconsciousness
or ghasti is also not due to the heart as asserted by him but caused by lack of adequate
circulation of blood in the brain which supplies nutrition to the brain cells. Moreover,
the weakness of the heart is due to blood and not due to the heart. It is caused mostly
on account of the diseases of the coronary arteries which supply blood to the heart
muscles. It may also be due to the diseases of heart muscles and its valves. Avicenna
states that egg yolk works on the heart but it is not so as it works on the blood and
increases its cholesterol (fat content of blood). Modern physicians will not recommend
egg yolk for a heart patient,
Even considering the fact that there was no hard and fast distinction between philosophy and medicine at the time of Avicenna, his statement that the left cavity of the heart is the seat of the pneuma does not belong to the domain of medical science. This is a metaphysical notion grafted on a medical treatise. The concept of the pneuma (ar-Rūḥ) itself is imprecise since it indicates different things in different contexts.

This treatise has merits as well as demerits, but it cannot be judged from the point of view of the very advanced and scientific knowledge of heart diseases and their treatment available in modern times. Since they have reached fearful proportions and are the highest killer of human beings for people above forty, particularly in more developed countries, even more fatal than cancer, much attention has been paid to them by physicians all over the world. It is true that he had no idea of obstruction of arteries, atherosclerosis, elevated cholesterol levels, coronary thrombosis, myocardial infraction and high blood pressure. But it should be remembered that this treatise of Avicenna was written in the early eleventh century and it should be reviewed in the light of the state of knowledge concerning heart diseases and their treatment at that time. In this century of highly developed science and technology, many instruments and apparatuses such as electrocardiogram, echocardiogram and coronary angiography are available as aids to the treatment of heart diseases which were not available to Avicenna. That he wrote a treatise on specific heart diseases is enough to show that he considered them to be most fatal ones. If a history of heart diseases from the Greeks to the beginning of modern times is written, it would not be possible to ignore this treatise of Avicenna. Moreover, modern clinicians may study his heart therapy and may use it with good results.¹³

However, Hakeem Abdul Hameed and his team of experts in Greco-Arab medicine deserve thanks from medical practitioners, particularly those who are specialists in cardiac diseases, for making an important tract dealing with traditional drugs for their treatment available to the English-speaking world along with twelve other papers related to this subject. Its physical appearance—paper, quality printing, illustrations and binding—is also soothing to the eyes.

References


⁴This is a different work. A copy is preserved in the library of Millī Malik of Tehran. See Syed Sadiq Gauharin, Ḥujjat al-Haq Ibn Sīnā Pur-i Sīnā by Said Nafisy and Mahmood Najmabadi.


Similarly, the Ayurvedic medicine *svarpagandhâ* dry alkaloid is the central ingredient of the Sarpacil and purified Risarpin manufactured by Ciba. It is found quite useful for controlling high blood pressure.


*Hakim Abdul Latîf, Article cited, p. 246.*

*Sami K. Hamarnah Catalogue of Arabic MSS on Medicine and Pharmacy at the British Library* (Cairo, 1975) p. 98. He makes these adverse comments while describing a MS of the *al-Adviyat al-Qalbiyâh* no. Or. 5280 at London.


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*Wellesley Mansions, Flat No. 304*

*44A, Wellesley Street*

*Calcutta-700 016*

*M. S. KHAN*