

Review article:

Resources of *IlmulAmraz* during early Abbasid caliph (7th-9th C.E) up to the work of Al-Razi

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Abstract:

Aim and Objective:The literature of *Ilmul Amraz* occupies a pedestal position in Unani medicine. The literature, however, is scattered among many manuscripts and requires being collected and compiled for better understanding and comprehension of disease concepts of Unani medicine. The material has been collected from the original resources of early Abbasid caliph (from 7th-9thC.E) till the period of Al-Razi and briefly introduced in this article. ***Material and Methodology:*** The proposed literary research is conducted through 'input-processing-output' approach. The literature has been collected from different classical texts, reference books and various digitalized mode. ***Conclusion:*** The present review article underlines the contributions of Arab physicians, their original works, innovations, and practical experiences. The impact of theoretical contribution of Al Razi manifests in ancient Greco-Roman theory of diseases.

Keywords: *Ilmulamraz*, literature, scattered, compilation, understanding

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Introduction: Abbasid caliphate (750-1517C.E) was the golden age of Arab medicine in Arabic history. The literary enlightenment did not bog down with the annihilation of Baghdad in 1258 C.E, but continued to flourish in Damascus, Cairo and Cordoba (H.A Hajra Albinali.2013). The early Abbasid caliphate was the period dedicated to translation aimed for the search of Greco-Arabic medicine¹. The translation took place in three phases. The first phase (754AD-809AD) started from the reign of Khalifah Abu Ja'far al-Mansur, and continued up to the end of Khalifah Harun al-Rashid's reign. The second phase of the translation movement of Abbasid era began in the reign of Khalifah al-Ma'mun from the year 814AD till the year 913AD. The third phase began early in the 10th Century up to the middle of the 11th Century². The second caliph Al-Mansur had encouraged the Nestorian physician for the translation of early Greek, Syriac and Persian works into Arabic in Bayt-ul-Hikmat (House of wisdom)³ The translation took place under

the guidance of Yuhanna-bin-Masawayh (d.857C.E) and later by his pupil Hunayn-Ibn-Ishaq (Johannitus) (d.873A.D.)³. The other translators during the translation movements were Lusuf al-khari-al-Qass, Thabit- bin-Qurra (826-901AD) Qusta-bin Luqa (C. 912-913AD)⁴. After the intense effort in translation and analysis of the works of Hippocrates, Aristotle, Theophrastus, Euclid, Ptolemy, Rufus of Ephesus, Dioscorides and Galen, Arab scholars systematized and elaborated the gathered ancient knowledge⁵. The great generation of Muslim physicians started to appear in the fourth century of Hijri. There was one of the most renowned Muslim Persian physician and an encyclopaedic scientist AbūBakr Muhammad Ibn `Abdu Allāh Ibn Muhammad al-Rāzī. (854-925CE.⁶ He was one of the disciples of Abul Hasan Ali bin Sahl Rabn-ul-Tabri (783-858), who examined both Islamic and Greek ideas in rational manner.⁷ His work on *Al-Judriwa'l-Hasbais* considered as a masterpiece in clinical medicine⁸ Razi was among the first who

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clearly described the clinical difference between the two contagious diseases (small pox and measles) on the basis of humorism^{8,9}. This is an evident proof that he was not just a translator in Abbasid caliph but also contributed a lot in development of medicine¹⁰. The works of those scholars are mostly preserved in the form of encyclopaedia or compendium. Some

of the resources encompassing the knowledge of Ilmu Amraz translated by Yuhanna-bin Masawayh, Hunayn-Ibn-Ishaq, Thabit- bin-Qurra, Qusta-bin Luqa, Rabban-al-Tabri and al-Rāzī are briefly introduced in this paper. The Table 1 highlights the brief information of the resources, its condition along with their corresponding author.

Table 1: The important available manuscripts of IlmuAmraz during the period of Abbasid caliph as is mentioned below;

Sr.	Resources		Availability of resources	Author
	Arabic or Urdu title	Latin/English title		
1.	Kitab-ul-Mushajjar	First book in tabular form ¹¹	Manuscript in Khudabakhshlibrary,Raza library and in national museum Karachi ¹²	Abu-Zakriya-Yuhanna-bin Masawayh (d.857C.E)
2.	Kitab-ul-Masail fi al Tibb	Isagogue ¹³ or introduction to the healing art or questions on medicine for beginners ¹⁴	Manuscript in Raza library, published from Bundiqa in 1486, Leipzig in 1497 ¹²	Hunayn-Ibn-Ishaq (Johannitus) (d.873A.D.)
3.	Zakheera-Thabit-bin-Qurra	-----	Manuscript in Darul-uloomdeob and, urdu traslpubl in 1967,1970 ¹⁵	Thabit- bin-Qurra (826-901AD)
4.	Kitabfil-Waba'h-Wa-Asbabihi	-----	Manuscript in Khudabakhsh library with publ-1053H	Qusta-bin Luqa,/Masihi (820-910AD)
5.	Firdaus-ul-Hikmat	Paradise of wisdom	Urdu trasl-publs.1991,Hamdard F Press-Karachi ¹⁶	Abul Hasan Ali bin Sahl Rabban-ul-Tabri (783-858)
6.	Kitab Al-Hāwi fit-Tibb	Liber continens or comprehensive book ¹⁰	Published CCRUM ¹⁷	AbūBakr Mohammad Ibn `AbdullāhIbn Muhammad al-Rāzī. (854-925CE)
7.	Kitab Al-Mansoori	Liber ad Monsorisor the book on medicine for Mansur ¹⁹	Published 1990 CCRUM ¹⁸	
8.	Kitab Al-Judriwa'l-Hasba	On small pox and measles	Manuscript in Leiden university library in Netherland ¹⁰	
9.	Kitab Al-Murshid	The Guide. ¹⁹	Published CCRUM ²⁰	

The available information covered by the resources is of the IlmuAmraz with discussion of the following topics:

- i. State of the body/diseases state, its definition, types and basic classification of the diseases.
- ii. Essential, non-essential, general, and specific causes for diseases.
- iii. Periods of diseases including fever, crisis and the nomenclature for the diseases.
- iv. Attributes and sign-symptoms.
- v. Indicators of diseases i.e. pulse, urine, stool, sweat and sputum examination.

Materials and Method:

The methodology frame work used for present research, is through ‘input-processing-output’

approach. The whole research is conducted into three steps-

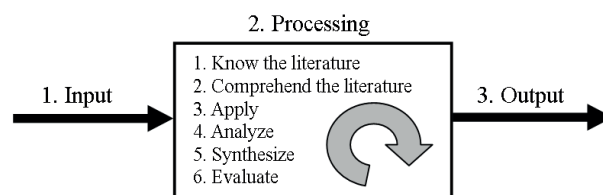


Figure 1: The three stages of effective literature review process ^[21]

Step-1 (Input):This is the step of gathering and screening the literature. The material for the present study is collected from primary and secondary sources i.e. original books, their available Arabic,

Latin, Urdu and English translations, previous research works, libraries catalogues, journals, article from the libraries of NIUM-Bangalore, AMU-Aligarh and the literary research Dept. Institute of History of Medicine Jamia-Hamdard-New Delhi and computerized searches of various website like PubMed etc.

Step-2 (Processing):In this step all the collected material was analysed and then systematically arranged.

Step-3 (Output):The postulates and concepts relevant to *Ilmul-Amrad* from some of the arranged ancient literature are written first then brief introduction of the resources are given in a systemic and chronological order.

Resources:

1. Kitabul-Mushajjar كتاب المشجر - One of the ancient book (of third century A.H/Ninth century C.E) on *Kulliyat* and *Moalajat*, written in the form of table so the name Kitabul-Mushajjar.^[1] This book is based on two parts, the first part discusses about the *kulliyat* (Principles of *Tibb*). In the beginning of the first part the author classified the *Tibb* in two categories- theoretical and practical. According to him the theoretical part is divided into two basic types. First part deals with the things related to the *Tabi'at* and the knowledge of the disease. Second part (practical aspect) deals with the diseases from head to toe with their different causes, semiology and treatments¹²

2. Kiatab-ul-Masayil (Isagogue) كتاب المسائل - This book contains all the basic principles including the theoretical and practical knowledge of medicine. He has given a detailed description of *Sawda* and its *Kaifiyat-e-Haddat-ul-Muhlakataha* that was not pointed by the scholars later him.¹¹ He has discussed about the diseases and their types in detail. He mentioned four kinds of diseases of compound organs (structure, quantity, number and position). He further mentioned five sub types of structural diseases (forms, cavities, canals, roughness and smoothness). IbnSina has included the diseases related to roughness and smoothness of the surface of the organs in one category under the head diseases of *satooh*¹¹

3. Zakhirah Thabit bin Qurrah ذخيرة ثابت بن قرّة - It contains thirty one chapters on diseases. In each chapter author has elaborated the clinical aspect. Topics of *Ilum-ul-Amrad* are discussed in some of

the chapters. For example, Chapter-two contains detailed description of diagnosis of concealed diseases in *A'da-Mutashabiha* and *A'da-Murakkaba*. Chapter-twenty-two deals with the detailed description of all kind of tumours e.g. *Awram-Harrah*, *Awram-Baridah*, *Awram-Ratbah*, *Awram-Yabisah*, *Sala'a* and *Dubaila* etc. Chapter-twenty-six contains description of all kinds of fever, causes, sign-symptoms and their treatments, brief compendium about the crises and its indicators. In the description of pulse, he has the opinion that pulse movement are because of systolic and diastolic translatory movement of the heart (*Harkat-Makani*); diagnosis of various diseases of organs is described with reference to *Kitabul-a'da- Almah* of Galen. He further mentioned *Judri-wa-al-Hasbah* and *Hummiyat-e-Ghashiyah*. *Ghashi* is referred as one of the complication of fever with several causes. Chapter-twenty-seven discusses the detailed description of air, cities, season and water. Genesis of Epidemics in different time periods and seasons also exemplified along with suitable treatments and hazards¹⁵

4. Kitabfil-Waba'h-wa-Asbabih كتاب في الوباء واسبابه - The author has divided the whole discussion into four discourses. First chapter contains the importance of air as one of the important causes for health and disease, as it is essential for the synthesis of *Ruh* in heart. It is one of the important constituent of the body therefore the body easily accepts it. Any unnatural alteration harms the body and its improvement treats the body. Chapter second deals with different kinds of adverse effects on account of season, due to the different localities and the associated diseases e.g. *Amrad Baldiya*. Types of epidemic air are described along with details of adverse causes with reference to ancient scholars like Hippocrates, Rufus Georges etc. Chapter third deals with the knowledge of causes due to which the air pollution is more harmful than the food and drink contamination. Air pollution affects the larger population while the food and drink contamination remains confined to certain locality. Chapter four provides information about the preventive measures in general and varieties of epidemics in particular by discussing the alarming signs and preventive measures for healthy and treatment modalities for diseased person²²

5. Firdaus-al-Hikmat **فردوس الحکمت** Edward Granville Brown (1862-1926) discovered the importance of this book in the development of medicine ²³It is one of the seven famous books of *Tibb* translated and written in Arabic language during Abbasid period (²⁴ Author in this book not only elaborated the basics of neonatology but also highlighted the congenital anomalies of organs in detail. It contains a total of seven *Naw'*(sections), thirty *Maqalah* (parts) and three hundred sixty *Bab* (chapters). Fourth section contains twelve parts with one hundred fifty two chapters that deals with general and specific pathology and diseases of whole body from head to toe with their treatments. Anatomy of muscles, nerve and vessels is described along with evidences inferred from pulse, urine and stool⁵. In the beginning of the first part of the fourth section, Tabari mentioned that he had written nine chapters dealing with diseases, their definition including all categories and causes responsible for tumult of *Taba'*, temperament and the symptoms occurring in different ages, season including the basic principles for the treatments. If anyone apprehends the concept mentioned in these chapters, he may be able to understand the further implications²⁴ According to Tabari, anything that damages the organ and alters its functions is called a disease.²⁴ There are three types of functional disturbances described i.e. loss, change and weakness of functions. He also described three types of somatic causes i.e. *Asbab-e-Qadeem* (due to accumulation of the waste matter in the body), *Asbab-e-Hadeth* (impinging accidentally from outside) and the combination of both. As per the constitution of body he illustrated three categories of diseases and three categories of *Fasad-e-Mizaj* that occur in simple organ or in compound organ or in both. Moreover he mentioned different types of diseases i.e. acute, chronic, generalised, specific, external, internal and untreatable diseases such as *Sartan*, *Niqris*, and *Ilawus*. *Amrad-e-Masharik* (composite diseases) are described with the example of the headache follows by stomach pain, uterine pain and the neck pain. He mentioned some hereditary diseases like *Juzam*, *Sil*, *Bars*, and *Sara'*. Transformation of one disease into another is mentioned in the text with examples of *Waja'-ul-Junub* and *Waja'-ul-Riya* converted into wound, *Zaheer* converted into *Ishal-e-Ghaliz* and *Waram-e Kabid* converted into *Istisqua*. *Humma Nafida* produces heat and irritability in the body²⁴ He

has mentioned seven aggravating causes of disease condition i.e. alteration and disturbances of air, excess or deficiency of diets and drinks, disturbances of sleep, excessive rest, fatigue, mental disturbances and wound. The four causes mentioned for internal diseases are excess accumulation of matter in any organ, *Taiz-lada'Madda*, *Riyah-e-Ghaliza*, and the disturbance of any one *khilt*²⁴. With reference to Hippocrates, he mentioned five symptoms of swelling of internal organs as (1) disorder of speech and shivering of the body in *Waram-e-Dimagh*, (2) *Khunaque in Waram-e Riyah*, (3) nausea in *Waram-e-fam-e-Me'da*, (4) asthma in *Waram-e-Tihal*, (5) difficulty in micturition in *Waram-e-Gurdah*. About the tumour, he writes that the matter moves to the organ and produces *Waram* except *Waram-e-Har* as it is not produced due to the matter. *Rarique-dam mail ba Safrah* (dilute blood with bile), if accumulates at any place, produces *Hamrah* (*Surkh Badah*), similarly, *Ghaleez-Harr* (viscous-hot) blood produces *Chechak*, accumulation of dilute phlegm in any organ produces *Waram-e-Mustafikh*; viscous phlegm produces viscous pus, deposition of *Sawda* in an organ produces *Sartan* and similar *Awram* (swellings). *Safrah* does not produce *Waram* as it is dilute in consistency. Tumours of lung, liver and throat are mentioned as most disastrous and dreadful as compared to the tumours of intestine or bladder ²⁴

6. Kitab Al-Hawi **كتاب الحاوی** - It is the largest medical textbook edited in Arabic language, as it consists of twenty four volumes. Some of the literature regarding the general description on diseases and the causes is mentioned in fourteenth volume. The author has given detailed description of excretions like sweats, faeces, vomiting etc. In context of sweats, author has given emphasis on types, its indicator, and occurrence in different diseases, causes of diaphoresis and constriction of pores etc. Similarly, physical examination of stool its colour, consistency, quantity, time of defecation etc. are described in detail. The diagnostic importance and evidences inferred from vomiting is described with amazing thoroughness. Volume-fifteenth contains discussion about fever based on various aetiology i.e. tumours or injuries, internal tumours and *Humma-e-Warmia*. The description regarding air and localities is given separately. Sixteenth volume focuses on *Nudj* in various *Maddi* diseases. Volume-seventeenth

provides detailed description on pulse, its examinations and different types of pulse in relation to diseases. Volume-nineteenth contains urine examination in detail¹⁷

7. Kitab Al-Mansoori کتاب المنصوری - This book comprises ten parts with detailed description of theoretical and practical knowledge of medicine with the rapeutics and managements of diseases. As far as the pathology is concerned, the second part deals with the identification of the temperament of the whole body, the variety of personality, a brief discussion on *Imtila be-Hasbil Auwiyya* and *Imtila be-Hasbil Quwa*, dominance of each *Khilt* with their sign and symptoms, and the importance of *Rutubatwa Fudlat-e- Badan*. Third part of this book deals with the diet and drugs and their effects as one of the cause for health and disease. Part ten of this book is based on fever, its different types and their treatment. This section also discusses the acute diseases with their *Alamat-e-Jayyadawa Raddiya*, crisis, its signs and symptoms and days of crisis. Examination of urine and faeces, description of pulse, different types and its examination in different diseases are mentioned in this section of the book¹⁸

8. Kitab Al-Judriwa Al-Hasba کتاب الجدریوالحصبه - This book consists of fourteen chapters. The book begins with a short introduction on objective of writing the book which underlines the absence of any satisfactory work done earlier on this topic. First chapter deals with the causes causing a disease in some and sparing others. Second chapter discusses the bodies, more susceptible to get smallpox and its relationship with season, where the disease is more common. From third to fourteen chapter, various aspects of *Juderi wa'l-Hasba* i.e. the season, time, course, prevention, dietary recommendations and prognosis are described in detail.^{25,2610}

9. Kitabul-Murshid دشرملا باتک - This book of Al-Razi (865-925 C.E.) deals predominantly with the theoretical aspect of *Tibb*. The intent behind writing this comprehensive book was unsystematic and incoherent presentation of fundamentals of Unani Tibb

in *Kitabul-Fusul* of Buqrat. According to Prof. Sayyed Zillurehman, *Kitabul Murshid* of Razi is actually the commentary on *Kitabul- Fusul* of Buqrat²⁰ There is no other book of Razi containing comprehensive theoretical aspect of *Tibb*. It consists the complete knowledge of *kulliyat* up to his time. In description of *Sabab, Mardand 'Ard*, he describes diseases as the state of the body in which organ ceases its functions completely or is affected up to some extent or there is pain only. Further he mentioned only two types of causes responsible for this state: *Taghayyure Mizaj* and *Shakal* (alteration in temperament and structure). He doesn't include *Qata/Tafarruq* as separate entity but a type of 'change in structure'. *Asbab-e Sitta Darooriyah* i.e. air, its different types, water, rest and movement, bath, exercise, sleep, wakefulness, diet, drinks, coitus are discussed along with their practical aspects. In section of diagnosis, he mentioned *Imtila*, its different types, their sign-symptoms, *Radayat-e-khilt*, its sign and symptoms, treatment, sweat, urine examination, respiration, crisis, day of crisis and the periods of diseases.¹⁷

Conclusion

It may be concluded from the excerpts collected from various sources of original contributions of eminent Unani physicians that they translated the primitive medical literature gathered from Greco-Roman civilizations, comprehended it and further developed by their own empirical observations. They classified the *amrad* on the basis of changes in structure and altered temperament of the diseased organs. They established the interrelationship of *Sabab, Ard* and *Marz*, cogently explained the related sign and symptoms of diseased organs and formulated the treatment guidelines. The collective efforts of Unani physicians catapulted the medical science to the apotheosis of accomplishment and thereof, the whole distillate of medical knowledge contained in *Canon of Medicine* of Ibn Sina reigned supreme in the medical curriculum of the west till the mid of seventeenth century.

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