

Bar-us-sa'ah, Zakariya Razi's Approach to Emergency Management of Diseases: A Review

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ABSTRACT

Time period between seventh to twelfth centuries is considered as golden age for Arab-Islamic civilization. During this period Islamic world expanded most. Islamic rulers of that time not only conquered the land but also opened several learning centres for expansion of their knowledge. Extensive scholarly work had been done by Arab scholars in every discipline including medicine. Zakariya Razi was one of the eminent scholars of the golden age of Islamic world. He has written various books related to medicine, alchemy and philosophy. *Bar-us-sa'ah* is a medical text written by him on the direction of a minister. This book *Bar-us-sa'ah* is first of its kind. The book deals with the diseases that can be cured within an hour or very short time as he claimed. It includes diseases like headache, colic, tinnitus, ulcers and tooth extraction etc. This article is an attempt to review his approach to Emergency Management of Diseases in his book *Bar-us-sa'ah*.

Keywords: Emergency management, *Bar-us-sa'ah*, Zakariya Razi, Greco-Arab Medicine.

INTRODUCTION

Bar-us-sa'ah is one of the books of Razi the great physician of Greco-Arab Medicine. ^(1,2) He wrote this book on the direction of honourable minister Abul Qasim bin Abdullah as Razi himself mentioned in preface of the book. This book is first of its kind in Greco-Arab medicine.

About the Author:

Greco-Arab medicine has its roots in Europe, however, this system of medicine developed most during the golden age of Arab-Islamic civilisation. During this age extensive translation of the previous books of medicine along with incorporation of new knowledge had been done. Various Arab scholars played a significant role in enriching this system of medicine and Razi was one of them. His name was Abu Bakr Mohammed Ibn Zakariya Razi. ⁽¹⁾ He is known as Rhazes in the western world. He was born in the year 865 AD in Ray, a town near modern day Tehran of Iran. ⁽³⁻⁵⁾ In his early life he studied alchemy, Philosophy and music. ^(2,4) Before studying medicine he was a renowned alchemist. He gave details of many chemical processes such as distillation and filtration. ^(4,6) Many historians believe that he discovered sulphuric acid and ethanol. ⁽⁴⁾ He learned philosophy from Abu Zayd Ahmad Ibn Sahl Balkhi. He started studying medicine in his thirties. ⁽³⁾ His teacher for medicine was famous Persian physician and philosopher Ali Ibn Sahl Rabban Tabari, the author of '*Firdousul Hikmat*'. ⁽¹⁾ After studying medicine Razi started working as director of the hospital in Ray during the reign of Mansur Ibn Ishaq. He became very famous due to his expertise in medicine. Because of his clinical expertise Abbassid Caliph Al Muktafi called him to Baghdad and

appointed him as a director of city's main hospital. He also worked as a royal physician. He served his duties in Baghdad till the death of Caliph Al Muktafi i.e. 907 AD. After that he returned to his hometown and started practicing as a physician. ^(4,7) But there he dedicated most of his time in teaching to medical students. In last days of his life he became blind and died in 925 AD. ⁽³⁻⁵⁾

Razi is considered as most prominent physician of Islamic world. His fame is comparable to only that of another Persian physician Ibn Sina (Avicenna). While comparing him with Ibn Sina E.G. Browne has written that Avicenna was a better philosopher than physician, but Razi was a better physician than philosopher. ⁽⁸⁾ The thing that made him a great practitioner of medicine was that he combined his clinical observations with the medical teachings of Hippocrates and Galen. He developed his own opinions about the diseases wherever he had a doubt in teachings of previous physicians. He even wrote a book entitled 'Doubts about Galen' in which he documented the concepts of Galen he had a doubt on. ⁽⁴⁾

Razi made significant contributions to different branches of medicine. He wrote more than 200 books and essays on medicine, alchemy logic, philosophy, theology, mathematics and physics. ^(1,5)

Theme of book:

Theme of book is emergency management of diseases. Razi mentioned in preface of book that one day he was at some place with honourable minister Abul Qasim bin Abdullah where folks were debating on treatment of diseases. Everyone agreed that diseases resulting from prolong accumulation of abnormal matter need longer time to cure except Razi himself. Razi denied and claimed that many of such diseases can be cured immediately. His claim was very new as well as surprising for them including the dignitary. Therefore, dignitary directed him to compile emergency management of such diseases in a book.

Content of book:

In this book Razi compiled diseases from head to toe that can be cured within an hour or very short period of time. He listed a total of 27 diseases in this book. However, he accepted the fact that all the diseases cannot be treated immediately.

S.No.	Ailments	S.No.	Ailments
1.	Headache	15.	Stopping the pus discharge from chronic non healing ulcer
2.	Irritation of eyes	16.	Ulcers of large size
3.	Common cold	17.	Pain due to trauma
4.	Toothache	18.	Pain due to burn
5.	Extraction of tooth without instrumentation	19.	Rectal Prolapse
6.	Halitosis	20.	Colic
7.	Diphtheria	21.	Spasmodic gastric pain
8.	Removing Leech from throat	22.	Diarrhoea
9.	Migraine	23.	Dysentery in children
10.	Epilepsy	24.	Diarrhoea in children
11.	Diseases of ear –Tinnitus	25.	Sciatica
12.	Epistaxis	26.	Fatigue and toil
13.	Haemorrhoids	27.	Pruritus of extremities
14.	Fistula		

➤ He started with headache and described three types of headache; anterior/frontal, central and posterior. Anterior or frontal headache is caused by excess of blood. He advised one of these treatments for instant relief. (i) Venesection. (ii) Cupping. (iii) Inhalation and application of Egyptian opium over the nose and

temples. (iv) Lentil soup. (v) Syrup of Jujube. (vi) Chewing of dried coriander is also equally effective.

➤ Razi wrote that pain in central part of head is caused by heat. For immediate relief he advised multiple treatments like (i) Placing a piece of linen cloth soaked in mixture of rose oil, vinegar and wine

- over the aching part of head. (ii) Massaging on the soles of feet by violet flower oil mixed with salt. (iii) Inhalation of water lily. (iv) Intake of pulp of cucumber seeds soaked in vinegar. (v) Intake of sour extracts.
- According to him cause of posterior headache is excess of phlegm. He advised to induce vomiting in such patients by *aab-e-muli* (radish water) and *sikanjabeen* (syrup made up of honey and vinegar). After vomiting lukewarm dill water should be given to the patient for complete evacuation of excess phlegm.
- In case of irritation of eyes caused by prolong exposure to sunlight he suggested smelling of Egyptian opium and its application over the eyes.
- For the treatment of common cold he advised douching with hot water or applying a piece of hot linen cloth over the vertex to get instant relief.
- To get instant relief from toothache he advised to apply 2-3 mountain raisins duly covered in cotton after crushing between two stones over the aching tooth.
- He advised to insufflate anhydrous alum into nostrils to stop epistaxis.
- Razi claimed that discharge of pus from fistula stops immediately after sprinkling powder of copper sulphate on it.
- He advised to apply a cotton wick dipped in two years aged ghee (purified butter) of cow on chronic non-healing ulcer. He claimed that this treatment stops pus discharge from ulcer immediately and its continuous application for three days can result in complete healing.
- To relieve pain in burn wounds he advised moistening of wound with rose oil followed by sprinkling of a powder made up of grinding litharge, lime, rose petals and henna in equal amount. He further added that this treatment can heal burn wounds in three days.
- For children suffering from diarrhoea he wrote that goat cheese with mother's milk is very effective.
- For treatment of sciatica he advised intake of pills made up of 3.5 *masha* (grams) of aloe vera, chebulic myrobalan, colchicum each. It relieves the pain after passage of 5-7 stools.
- Sometimes prolong unusual walking results in tiredness as well as stiffness of joints that causes difficulty in sitting and standing. It can be relieved either by simple massage of extremities and nails with any oil or by dipping of legs in hot water during winter and in cold water during summer.
- Razi wrote that use of cold water causes Pruritus of hands and feet during winters. It can be relieved by applying hot salty water on hands and feet in any way.

DISCUSSION

Razi's intension was to document emergency management of the diseases in this book. So he has taken full care of the theme of the book thus avoided unnecessary detail of diseases except wherever it is necessary. In some diseases, he highlighted the cause of disease e.g. headache. But, in most of the diseases he avoided to do so and mentioned only treatment part e.g. epilepsy. In some diseases he did not mention the doses e.g. dose of Jujubes syrup, coriander in treatment of headache. He has even advised multiple treatments of some diseases like headache, fatigue etc. He advised venesection and cupping in treatment of headache but he did not mention the site to perform these regimes. However, in his book *Kitabul Fakhir* he mentioned that venesection on cephalic vein and cupping below the nape of neck should be performed in headache caused by excess of blood. ⁽⁹⁾ The reason of not mentioning drug doses and sites of venesection and cupping in this book was that he wanted to keep the content of book very short. His clinical abilities were best exemplified in this book. Razi was not only a skilled

clinician he was expert in pharmacology too. He was aware about the changes (in effects) of drugs and food stuffs undergo with passage of time, as he advised use of two years aged ghee in treatment of chronic non healing ulcer. To prove the efficacy of the treatment of sciatica he even shared his experience of curing an old man with the same. Razi applied his knowledge of alchemy in medicine too. Use of copper sulphate, anhydrous alum etc. in treatment of fistula and epistaxis respectively are the proof in this regard.

CONCLUSION

The concept of emergency management of diseases was very new for people of his time. Even now scenario is not much different; folks give credit to modern medicine for emergency management of diseases. Undoubtedly, he was the best clinician of Islamic age. This book alone is sufficient to recognize Razi's expertise in medicine. This book provides an insight as well as a basis for the scholars of Greco-Arab medicine in the field of emergency medicine.

REFERENCES

1. Ibn Abi Usaiba. Uyunul Anba fi Tabqatil Atibba. Part I. New Delhi: CCRUM; 1990.p.576-593
2. Nayyer Wasti. Tibbul Arab. New Delhi: CCRUM; 2010.p.53-63
3. Tadjbakhsh H. The life of Muhammad Ibn Zakariya Razi and the discovery of Allergic Asthma. Iranian Journal of Allergy Asthma and Immunology. 2000;1(1).3-9
4. Amr SS, Tbakhi A. Abu Bakr Muhammad Ibn Zakariya Al Razi (Rhazes): Philosopher, Physician and Alchemist. Ann Saudi Med. 2007;27(4):305-307
5. Ritcher- Bernburg L. Abu Bakr Muhammad Al Razi's Medical Works. Journal of History of Medicine. 1994. 6:377-392
6. Zakariya Razi. Sirul Asrar fit Tib wal Kimia. Beirut: Darul kutubul ilmia; YNM.p.20
7. Jamaluddin Al Qitfi (Urdu translation by Dr. Gulam Jilani Barq). Tarikhul Hukma. New Delhi: CCRUM; 2012.p.378-380
8. E.G. Brown. Arabian Medicine. Cambridge: University Press; 1962. p.45
9. Zakariya Razi. Kitabul Fakhir fit Tibb Part I. New Delhi: CCRUM; 2008. Pp. 51

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