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AN ANALYSIS OF ABU RAYHAN AL-BIRUNI'S WORKS PERTAINING TO MEDICINE

Annotation: Abu Rayhan al-Biruni introduced new medical terminologies in his scientific works. Through his scientific approaches and medical research, he significantly influenced the development of modern medicine. The medical terminologies and concepts found in his works represented significant scientific innovations for his time, playing an essential role in the advancement of medical methodology. This article examines Biruni's medical works, the terminologies he used, and his scientific approach to medicine.

Key words: Abu Rayhan al-Biruni, medical terminology, works, hygiene, diagnostics, prevention, medicinal plants, methodology, pharmacology.

Abu Rayhan al-Biruni (973–1048) was one of the greatest scholars who conducted extensive research across multiple fields. While his works contain valuable information on mathematics, astronomy, and geography, they also feature significant contributions to the field of medicine. In particular, the medical terminologies and concepts presented in his works reflected the advanced scientific knowledge of his time. His scientific perspectives are still widely applied in modern medicine. This article analyzes the medical terminologies found in Biruni's works, examining their relevance and significance in contemporary medicine.

Analysis of His Works; Kitab al-Saydanah (The Book of Medicinal Plants). In his work "Kitab al-Saydanah," Biruni elaborated on the medicinal significance of plants, detailing their role and properties in medicine. This work established one of the earliest scientific approaches to studying plant chemistry and their effects on the human body. Biruni developed specific methodologies for the use of medicinal plants in medicine. He described the mechanisms of plant use and their impacts on the human organism. Biruni's book on medicinal plants provided a scientific foundation for folk medicine at the time and introduced new approaches for assessing their effects. The terminologies related to plants and their properties described in this work are still regarded as an important resource in modern medicine. Biruni provided clear recommendations on how to apply plants for medical purposes and conducted in-depth scientific studies on their effects. The book contains valuable information on the use of medicinal plants in medicine that remains relevant today. In several chapters of "Saydana", Beruni discusses medicinal substances that he personally encountered in the countries he visited, as well as those he learned about from other sources. All of this testifies to the fact that Beruni's interest in medicinal plants and similar substances was sparked during his youth and persisted throughout his life.¹ However, despite this long-standing interest, the scholar did not engage

¹ Hakim Mohammed Said, Kitab Al Saydanah Fi Al Tibb. Hamdard National Foundation press, Karachi-1973. 5-8,pp.

directly with pharmacology until the later years of his life. It was only towards the end of his life that he decided to organize the information he had collected over the years and write a specialized treatise on pharmacology.

In the introduction to "Saydana", Beruni complains about the deterioration of his vision and hearing due to old age, which made it difficult for him to complete the book. To finish writing it, he sought the assistance of the Ghaznavid physician Abu Hamid Ahmad ibn Muhammad an-Nahshai, who helped gather information from the works of other scholars and also collected a variety of medicinal plants and substances for Beruni to examine directly. Beruni also wrote a substantial introduction to his book, consisting of five chapters. In the opening section of this introduction, the meanings of the terms "saydana" (pharmacology) and "saydanoni" (pharmacologist) are discussed. The introduction further explores the objectives of the science of pharmacology and its relationship to the field of medicine. It lists synonyms for drug names in Syriac, Persian, Greek, Baluchi, Afghan, Kurdish, and some Indian languages.²

In "Kitab al-Tafhim," Biruni presented numerous scientific concepts and terminologies. Through this work, the scholar explained the science of his time in a distinctive manner. Biruni aimed to simplify complex medical terminologies, making them more accessible and understandable to the general public. His scientific analyses of words, their definitions, and the scientific meaning behind them were of great importance. Some of the complex medical terms found in the work are discussed in a distinctive manner. The work pays particular attention to terminologies related to hygiene, diagnostics, and prevention. It also includes detailed explanations of the necessary medical care and methods used to maintain patient health. Biruni provided valuable information on various diseases and preventive measures, which were considered innovative for his time. His approach to implementing preventive and hygienic measures in medicine represented a significant advancement.³

The formation of medical terminology in Biruni's works and his approach to medicine have had a lasting impact on the development of medical science. Biruni contributed not only to the theoretical aspects of medicine but also to practical research. His work mainly contributed to the advancement of medical technology, including knowledge about medicinal plants and their medical significance, methods of treating patients, and approaches to disease prevention.

Biruni's works contain a wealth of scientific information on medicinal plants and their effects on the human body. Additionally, he provided detailed descriptions of methods used for diagnosing diseases, prevention, and treatment. His scientific approach remains relevant in modern medicine. Biruni's theoretical and practical scientific research has laid the foundation for modern folk medicine.

Biruni also emphasized the importance of hygiene and public health. He proposed scientific recommendations for disease prevention and hygienic practices, which were considered innovative approaches in the field of medicine at the time.⁴ Biruni's contribution to medicine is reflected in his scientific research. He developed not only the theoretical aspects of medicine but also aimed to advance its practical application. In his works, he conducted extensive research on disease prevention, the development of hygiene practices, and the identification of medicinal plants and their pharmacological properties. His approach to pharmacology and the methodology used to analyze the

² Levey, Martin (1973). *Early Arabic Pharmacology: An Introduction Based on Ancient and Medieval Sources*. Brill Archive. 145-p.

³ Biruni, A. R. *Kitab al-Tafhim (The Book of Explanation)* Persian, Kashmir university press, Allama Iqbal library pp. 87–102.

⁴ Abdullayev, J. (2020). "Biruni's Contribution to Medicine," **Journal of Medicine and Science**, 12(1), 15–30.

effects of plants on the human body created new prospects for the field of medicine. Biruni provided scientifically grounded recommendations on how medical tools and medicinal plants should be used in the treatment of patients. He paid particular attention to the diagnosis and prevention of diseases and emphasized the need to make medical knowledge accessible to the public.⁵

In conclusion, The medical terminology in Biruni's works and his contributions to medicine are of great scientific significance. His works remain valuable resources for the study of science and medicine to this day. Biruni's approach to medicine and his methodology opened new horizons in the field of medicine during his time. Furthermore, his research continues to have practical applications in modern medicine, and the scientific analysis of his work contributes to the advancement of today's medical practices.

REFERENCES:

1. Hakim Mohammed Said, (1973) *Kitab Al Saydanah Fi Al Tibb*. Hamdard National Foundation press, Karachi-Pakistan.
2. Biruni, A. R. *Kitab al-Tafhim (The Book of Explanation)* Persian, Kashmir university press, Allama Iqbal library.
3. Levey, Martin (1973). *Early Arabic Pharmacology: An Introduction Based on Ancient and Medieval Sources*. Brill Archive.
4. Karimov, S. (2018). "New Directions in Uzbek Literature," *Journal of Literary Studies*, 5(2).
5. Abdullayev, J. (2020). "Biruni's Contribution to Medicine," **Journal of Medicine and Science**, 12(1), 15–30.

⁵ Karimov, S. (2018). "New Directions in Uzbek Literature," **Journal of Literary Studies**, 5(2), 34–40.