



Muslim Science Thought from The Perspective of Abu Bakr Muhammad Zakariya ar-Razi

Unzilaton Nikmah

Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia

Email: ghozilla2000@gmail.com

Mawaddatul Jannah

Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia

Email: mawaddahtuljannah@gmail.com

Muhammad Fadli Ramadhan

Universitas Muhammadiyah Malang, Indonesia

muhammadfadliramadhan@umm.ac.id

Abstract

Al-Razi as one of the Islamic scholars, had a great influence in the world of science with his book Al-Hawi fi al-Tibb . Although he adhered to the theocentric and anthropocentric paradigms, he rejected the "prophetic understanding", which caused great problems and accusations of being al-mulhid (atheist). This study aims to fulfill the author's desire to know and investigate the origins of the idea, al-Razi's perspective on the integration of religion and science, especially in the field of medicine, and its influence on the progress of science today, especially in the field of health and medicine. Data were taken from reference books and scientific journals. The data collection method used reading, note-taking, and document analysis. Data analysis was conducted through three stages: data reduction, data presentation, and conclusion. The results of the research on his thoughts on prophethood and revelation are problematic but do not eliminate the divine nuances in his work in the field of medicine, the tendency towards communication and integration, where science and religion have the same goal, that Ar-Razi's work and treatment techniques contribute to modern society.

Keywords: Ar Razi, Science, Muslim Philosophers

Abstrak

Al-Razi merupakan salah satu ulama Islam yang mempunyai pengaruh yang besar dalam dunia ilmu pengetahuan terutama dengan bukunya

Al-Hawi fi al-Ṭibb. Meski menganut paradigma teosentris dan antroposentris, namun ia menolak “pemahaman profetik” yang menimbulkan permasalahan besar dan tuduhan sebagai al-mulhid (ateis). Kajian ini bertujuan untuk memenuhi keinginan penulis untuk mengetahui dan menyelidiki asal usul gagasan, cara pandang al-Razi terhadap integrasi agama dan ilmu pengetahuan khususnya dalam bidang kedokteran, serta pengaruhnya terhadap kemajuan ilmu pengetahuan saat ini khususnya di bidang kedokteran, bidang kesehatan dan kedokteran. Data diambil dari buku referensi dan jurnal ilmiah. Metode pengumpulan data menggunakan membaca, mencatat, dan analisis dokumen. Analisis data dilakukan melalui tiga tahap yaitu reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian terhadap pemikirannya tentang kenabian dan wahyu memang problematis namun tidak menghilangkan nuansa ketuhanan dalam kiprahnya di bidang kedokteran, kecenderungan ke arah komunikasi dan integrasi, dimana ilmu pengetahuan dan agama mempunyai tujuan yang sama, yaitu Ar-Razi. teknik kerja dan pengobatan berkontribusi pada masyarakat modern.

Kata kunci: Ar-Razi, sains, filsuf

A. Introduction

The relationship between science and religion is an interesting topic for discussion in both the Islamic and Western worlds. Debates and differences in views continue to emerge on both sides, both from those who consider them the same and those who maintain the view that science and religion have different characteristics (Azizah, 2018).

It can be observed that Western culture in general strictly separates science and religion in the process of secularization (a life not based on religion). Western scientists do not always agree with such a relationship. When religion and science are separated, major problems arise because principles such as truth, sanctity, and wisdom are no longer associated with science. In the 1990s the topic of the relationship between religion and science was much discussed, which always idealized the option of integration in the relationship between religion and science under such circumstances. In this case, there is one of the leading scientists integrating science and religion, namely Abu Bakr Ar-Razi as a thinker in the field of philosophy and science (Taqiyudin, 2021).

Ar-Razi's thoughts on religion and philosophy have a specific difference

from the thoughts of other philosophers, namely harmonizing theology and philosophy. He argued that reason is the only source of knowledge and that through reason we can know god (the creator). To help integrate and harmonize religion and philosophy, most of the works of classical Islamic philosophers still exist and are used in the world of philosophy (Zaki dan Yusri, 2020).

On the other hand, there is controversy over Ar-Razi's thoughts on philosophy that prioritizes reason, criticizing prophethood in historical terms. Ar-Razi's opinion regarding prophethood comes from several quotations written by the Ismailiyah Shia sect (opponents of Ar-Razi), In addition, Abu Hatim al-Razi and Abu Bakr Muhammad ibn Zakaria disagreed (Harnedi, 2015).

That is why researcher chose Ar-Razi because Ar-Razi's thought is not limited to the study of science but also integrates with religion. In addition, Ar-Razi's philosophical thoughts on prophethood are disputed, where there are many thoughts on prophethood. In addition, Ar-razi's works are also implemented as a reference for health scientists in the manufacture of drugs. Therefore, the purpose of the study was to find out and observe the background of integrating religion and science in Ar-Razi's thought, especially in the field of medicine, and the contribution of Ar-Razi's thought to the development of medical science. It is used as a knife of analysis.

B. Method

This study uses a qualitative research method of literature study type, with descriptive analysis as the analytical knife. The data sources for this study consist of literature, books, journals, previous studies relevant to the research topic, and writings related to the research topic.

In this research, the data collection method consists of three stages: reading, note-taking, and document study. In the reading stage, researchers read research relevant to Abu Bakr Ar-razi's biography. In the note-taking stage, the researcher recorded information about the prophetic conflict, the integration of science and religion, and the contribution of medical science. Researchers used this document study method to obtain information and knowledge about Abu Bakr Zakaria Ar-Razi.

This research focuses on the interactive model of data analysis, which includes very simple data analysis techniques, such as reducing data, presenting data, and generating conclusions. This research will investigate the life and thoughts of Abu Bakr Zakaria Ar-razi, a Muslim scientist.

C. Result and Discussion

1. Biography of Abu Bakr Ar-Razi (Ar-Razi)

Ar Razi is a popular name in the community, while his full name is Abu Bakr Muhammad Zakariyya Ar-Razi. Ar Razi was born on August 28, 286 AD in the city of Ray located in Iran, and died on October 9, 925 AD in Baghdad. Ar-Razi has a brilliant personality that can master and learn various sciences and insights of predecessor experts (India, Arabia, Greece). The science of music became the beginning of Ar Razi's interest in the field of science, which realized the encyclopedia of music and then began to study other fields (chemistry, mathematics, astronomy, chemistry, philosophy, medicine). Ar Razi discovered that alcohol and sulfuric acid were in the field of chemistry which helped develop chemical drugs, but at the age of 30 Ar- Razi stopped experimenting in chemistry because chemical compounds at the time of the experiment hit his eyes and experienced eye irritation (Tabatabaei et.al, 2011).

In medical history, Ar-Razi was known as the most popular figure in the world of medicine until the 17th century. Ar-Razi studied with Ali Ibn Rabban Tabari who was a doctor and philosopher, although he did not meet directly, Ar-Razi studied Tabari's medical texts and spiritual philosophy. Ar-Razi in his book "Al-Hawi" opened the horizons of science in the field of medicine that applies to this day. Ar-Razi's intelligence, which quickly surpassed his teacher, led him to become a popular doctor, who was later appointed as the director of the hospital in the city of Ray Iran during the time of Caliph Abbas (Zarr, 2007).

In addition to being a pioneer in the field of medicine, Ar Razi made major innovations in the field of urology, including the pathophysiology of the urinary tract, venereal diseases, and the kidneys, as well as the bladder, which were important issues for him in this field. On the other hand, Ar-Razi was an important figure in medical history who contributed to the development of kidney stone diagnosis techniques; his writings became a reference for medical schools across Europe (Amir et. al, 2007).

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Ar-razi's contributions to the field of medicine and pharmacy are referenced in more than 224 medical books written by Ar-razi, but the best known is the medical encyclopedia *al-Hawi fi al-Tibb*. Based on clinical observations, case studies, and personal medical practice, the book summarizes the works and discourses of predecessors in the medical field and discusses various physical ailments and their treatments. After Ar Razi's death, *al-hawi* was translated into Latin by Faraj Ibn Salim in 1279. In medieval times this book was considered a significant medical book. In addition, this book is equipped with a discussion of various physical diseases and their methods of cure obtained from summarizing the research and statements of predecessors in the medical field (Razi, 2017).

Some of the books of Ar-Razi are as follows: (1) *Al-ibb al-Ruhini*: twenty chapters dealing with psychiatric therapy in psychiatry; (2) *In-na li al-'Insān Khāliqan, Al-madkhal ila al-Manthiq* (logic), *Hai'ah al-'Ālam* (chemistry); and (3) *Book Bur' al-Sa'ah*: a short essay of al-Razi stating that diseases can be cured in one hour. such as headaches, teeth, ears, colic, itching, death in the legs, and muscle pain (Lesmana dkk, 2018).

2. History of Religion and Science

Thinkers in the Western world and Islam focus on religion and science. The Islamic world also experienced advances in science during the period of success. It has reached countries in North Africa (Morocco, Libya, Tunisia, Iraq, Egypt, etc.) and the Iberian Peninsula (Espanyol dan Portugal). At that time, there was a small group in the West trying to reconcile religion and science. Most people believe that religion and science are different disciplines and that they have different territories and logical structures. In the West, religion, and science collapse, and each one holds firmly to its age (Komarudin, 2022).

The process of conventional interaction with Islamic civilization in territories administered by Islamic governments does not always get a positive response; there is also rejection and acceptance. One example of the acceptance of intellectual culture from other countries was the translation of scientific works from the Syrian and Greek languages in the fields of medicine,

astronomy, mathematics, philosophy, physics, chemistry, and Philosophy into Arabic during the reign of Bani Umayyah under the Bayt al-Hikmah institution (Lubis dan Syahuri, 2022). This translation process was initiated by Khalifah al-Ma'mun: 1) the meeting of Islam and science with the translators of the time, such as Yahya ibn 'Adi, and Abu Bisr Matta Ibnu Yunus; 2) Adoption, or acceptance, marked by the birth of scientists such as Jabir Ibnu Hayyan, al-Kindi and Abu Ma'shar. 3) The assimilation and naturalization of Muslim scholars have unique expressions and characteristics in this regard, like Al-Khawarizmi, Abu Bakar Zakariyya Al Razi, Ibn Sina, and Ibn al-Haytham (Kuria dan Tasminah, 2022).

3. Religion and Science Ar-Razi Perspective

Ar Razi believes that a doctor must have religious and scientific aspects, not only science that he has but also religious insights such as morality and morality, which are the main things in treating the patient. In general, attitude and nobleness must be instilled in a doctor to the sick, and the ruler to the people. It's gonna get connected so you can play your part wel (Istianah, 2020).

Examples of the doctor's attitude towards the patient: the patient must be fully open to his doctor in the case of the pain felt but must remain in a respectful and obedient attitude, besides, the doctor must have insight to keep the patient's illness secret, sincerity in treatment, humility in behavior with the patient does not distinguish social status, guard from shame, joke, take time to meet the patient, speak as necessary at the time of service, and pray and rely on Allah when treating the patient (Istianah, 2020).

This attitude demonstrates the firmness of the Islamic doctrine described in the Quran, as explained in Q.S. aN-Nur / 24: 30-31 about preventing a doctor from seeing something contrary to the law of God, Q. S. QS. Ali 'Imran/3: 122, Q.s. al-Syu'ara/ 26: 80, and QS. al-Taubah / 9: 51, the attitude of temporary over the healing of the patient and advising about death is not something to be feared (Istianah, 2020).

Though religious concepts become the foundation for a doctor, the doctor plays a major role in the process of healing, but in this case not only comes from the insight of the doctor who can heal the patient there is an element of belief in the creator (Allah), so in the modern era, the relationship between science and religion must be conceived in the form of "integration", which will change

human life because Ar Razi integrates the context of ḥaḍārah 'ilm, ḥaḍāra al-naṣṣ, and philosophy as the framework of thought. This applies in the fields of education, religion, law, and other fields. In the field of law, for example, the decision of the Constitutional Court (MK) of February 17, 2012, on the 1974 Marriage Act Article 43 paragraph 1 on the status of unmarried children. One example in the field of health science and medicine is a patient suffering from a disease tempted by God. There are two patterns of integration: kauniyah (patients realizing that this is God's destiny) and humanity (The patient tries to treat and believes that he can cure his illness through a doctor.). For example, there is a relationship between the integration of religion and science (Istianah, 2020).

There was controversy about the ar-razi view of the concept of prophecy, Ar Razi was better known as a doctor than a philosopher, which caused many doubts, opposition, and hostility to Ar Razi both while alive even after his death. The main factor that triggered or caused Ar-Razi to be underestimated by philosophers was leading to Aristotle's understanding, of the thought of prophecy using logic (Harnedi, 2015).

Discussions of racial thinking about prophecy are often discussed in the Khazanah of Islamic Philosophy of Thought. One of them is the statement by Abdurrahman Badawi that races contradict prophecy, revelation, and rational character. Abdurrahman summarizes the trees of thought related to the denial of al-Razi against the Prophet: 1). By reason one can already know God and regulate life correctly, 2). One is born with the same intelligence, but there is a difference between development and education. Thawil Akhyar Dasoeki writes in his book *Compilation of Islamic Philosophy* that ar-Razi is someone who believes but he does not believe in revelations and prophecies (Harnedi, 2015).

Regarding ar-Razi, Hasyimsah Nasution also wrote the same thing about Kenabian. Since all people are equal and the wisdom and justice of God do not distinguish them, the prophets do not have the right to claim that they are individuals who have certain spiritual and spiritual characteristics. However, the stream preacher Ismail'iliyyah Abu Hatim al-Razi was one of the few who opposed the idea of ar-Razzi. He also played in politics in the region of Tabaristan, Azerbaijan, Isfahan, and al-Rayy. In his book *Aqwal aDzahbiyah*, Abu Hatim al-Razi talked to Abu Bakar Muhammad bin Zakaria al-Razi, and in his book *A'lam an-Nubuwwah*, he disagreed with the views of Muhammad bin Zacariaal-Razi in the Rayy Council (Harnedi, 2015).

In the debate, it cannot be proved whether Abu Zakaria Ar-Razi was a prophecy or not. Paul Kraus, an Islamic philosopher, argued that Mulhid could not be associated with al-Razi because the book *A'lam an-Nubuwwah* on his first page did not tell who Mulhid was, who at the time was not found. In fact, according to Isma'il ibn Abdi al-Rasul al-Ajini, or al-Majdu', who died in 1183H, Abu Hatim al-Razi states in *A'lam a Nubuwwah* that there has been a dispute about Mulhid between him and Abu Zakaia Ar-Rasi (Stroumsa, 2013).

This reinforces the conclusion that Abu Bakr Zakaria Ar-Razi does not have sufficient evidence to deny the prophet and religion. The author concluded that it was impossible to accuse Abu Bakr Zakaria Ar-Razi of being mulhed, but this is not true because it contradicts the writings of Ar-Razzi. Arrazi wrote a chapter on the priority and glory of reason in his book *al-Tibb al-Ruhani*. For discussing the priority of reason, he is known as a rational philosopher. Although he prevailed over reason, he never criticized or rejected religion (Putra dan Hasim, 2019).

In fact, al-Razi's rejection stems from a long-standing debate about "reason versus revelation" and the very strong political situation at the time. Reason is "the greatest pleasure of God and the most beneficial thing" for man, according to al-Razi, a pure rationalist who is also a man who believes in the existence of God.

وإنه أعظم نعم هلا عندنا، و أنفع الأشياء لنا، و أجداها علينا نفعا

Ar-Razi is regarded as a rational philosopher because of the primacy of reason. However, he never opposed religion. Some of the priorities of reason according to Ar Razi: reason helps understand knowledge and technology, distinguishes man from animal, and teaches good in life. However, ar Razi does not mention the function of reason to know God, only associates reason with material things (Istianah, 2021).

If we talk about revelation, the ar Razi view of revelation requires a prophetic concept, where the prophets are the chosen ones. He believed that the Wise God should give knowledge to all his creatures of what is good for man and what is evil for man. Instead, He must choose those who are chosen to lead the nation. "If a man has developed his rationality perfectly, he no longer needs prophecy," says Ar-Razi (Kertanegara, 2007).

On the contrary, he rejects the concept of prophecies in religion for two reasons: 1) that the role of reason in distinguishing between good and evil has been fulfilled, and one can know God with the help of human reason; 2) that

there is no strong reason to consider a person as the guide of the people because all those born on the track have the same intelligence. The differences between human beings are more due to differences in development and education than to innate talents. (natural) (Istianah, 2021).

Indeed, in *al-Tibb al-Ruhain*, al-Razi says that people must respect and follow the doctrine of religion for happiness in the Hereafter, Paradise, and the delight of God. Furthermore, Al-Razi demands respect for the Prophets based on their personality and character. In this regard, 'Abd al-Latif Muhammad al-'Abd largely contradicts the majority opinion that considers al-Razi to be *al-mulhid*, as shown in the *taḥqīq al-Razi of Al-ibb el-Ruhain*. As has been said to this day, al-Razi does not prohibit prophecy and prophets. The charges are strange and politically charged because they come from Abu Hatim al-Razi, an opponent of the Ismailiyah debate who lives in the city and at the same time as al-Razi (Muhammad,tt).

Ar-Razi's criticism of the revelation religion was more related to the fanatic attitude of his followers, who feared that this criticism would lead to rejection and doubt of the rational research of their teachings and customs. So if someone does not agree or contradict the tradition he has inherited, he is considered a disbeliever (Istianah, 2021).

This is why al-Razi opposed the prophet as the leader of the nation. On the other hand, considering the context of that time, as a doctor who abandoned his medical science, Ar Razi had to deal with people who did not fully accept it and even be skeptical of it. This happened when the Muslims followed the Prophet's orders of hygiene, nutrition, and cure, and al-Haris ibn Kaladah became the first Arab doctor in the days of Muhammad SAW and brought medicine from Jundisapur (Istianah, 2021). Therefore, as a physician who prioritized science over medicine, he quickly pursued the authority of the Prophet, who was considered to have limits as the leader of the people and had no authority in the field of medicine.

Besides, he contributed to the development of medical science. Ar-Razi, the early pioneer of medicine For his achievements, dedication, and genius in the field of medicine, the Western Council recognizes and honors him by calling him the greatest pioneer in medicine in the Islamic world as well as the best doctor in history in medicine, chemistry, and pharmacy. Ar Razi has a great mastery of the various medical sciences taken from Arab, Greek, and even Indian medicine like other Muslim scientists. Besides, in addition to his

expertise in chemistry, Ar-Razi has specialized expertise in medicine that other scientists do not possess. His work in medicine, chemistry, and pharmacy is included in about 200 scientific books, which have contributed to the advancement of medical science, namely (Sudewi dan Nugraha, 2018):

- a. Ar-Razi's Encyclopedia of Medicine "The Book of Al-Hawi" contains all the medical sciences in Arabic, Greek, and Hindi. The book consists of 20 volumes which are recognized as the core books in the field of medicine. The book summarizes the results of experiments, research, and medical experience. What is written in this book is a medical summary that has been read, recorded, and then tested experimentally for its validity.
- b. The Book of Al-Hawi is the greatest and most complete of his works. It is believed that Ar-Razi complements the classification of Ibn Hayyan and distinguishes between natural substances and substances created through research. Besides, ar Razi established the importance of proof by conducting experiments. It further improves the process of purification, evaporation, and filtering of raw materials, and affects the growth of pharmacies. Ar-Razi carefully found the chemicals. These substances are then mixed up as medicinal substances, and these scientists even introduce the use of chemicals in making medicines.
- c. The book entitled Al-Judari wa Al-Hasbah (Cacar and Campak) provides the most detailed explanation of varicose veins and measles, as well as methods for the mediagnosis of individuals diagnosed suffering from both. Ar-Razi told me about a little wheat. He makes a distinction between variola and red varicella. Al-Tibb Al-Ruhaini's famous book of psychiatry, which in my book of 20 chapters deals with psychotherapy.
- d. Book al-Murshid, or Guide, is a brief explanation of the basic principles of health intended to be taught to students.
- e. Al-Razi's short essay, the Book of Bur' al-Sā'ah, discusses diseases that he believes can be cured in an hour. They include muscle pain, headache, tooth pain, ear pain, abdominal pain, itching, and loss of flavor in the legs. ears, stomach pain, itching, and loss of flavor in the legs.

Some of the medical techniques developed by Ar-Razi are still in use or have an influence on medical practice today, among others:

- a. Observation and diagnosis: Ar Razi attaches great attention to the importance of monitoring symptoms and signs of disease carefully and

making accurate diagnoses. The use of observation and diagnostic techniques is implemented in modern medical practice.

- b. Pharmacology: Ar-Razi is known as a professional pharmacist and pharmacologist, who collects and identifies many medicinal substances from many sources including plants, minerals, and chemicals. Many of the traditional remedies he developed are still in use today, such as essential oils, herbal syrups, and medicines to alleviate symptoms of certain diseases.
- c. Dietary therapy by regulating and dining diet and exercise
- d. Cleansing or sterilization methods, is used as a prevention of the spread of disease, this is the basis of modern medical practice. (Khaerunnisa dan Indriatmoko, 2023).

Some Ar-Razi medical techniques will continue to evolve as science develops, so modern medical practice is based on the latest research, clinical studies, and new medical standards (Maryam, 2021).

D. Conclusion

Ar-Razi is a wise and brave physician who is fully aware of the existence of his Lord and has very critical thinking about prophecy and revelation. In situations like this, thinking tends to use dialogic and integrative communication models. Integrative models allow science and religion to open up and respect each other, understanding that scope and purpose are the same. However, if one considers his thoughts about prophecy and revelation, one can say that integration is not going well and there are still a lot of problems. Based on the theory and thought of ancient Greek philosophers such as Aristotle, many Muslim philosophers criticized him and opposed some of his views on Aristoteles, who advocated logic in all respects. As a result, he was accused of being a philosopher who opposed the Prophet. (Mulhid). However, the above studies show that it is only an unfounded accusation, which leads to the rejection of doctrinal and rational research, which punishes people who violate the tradition as unbelievers. Ar Razi claims this view so that people do not deny each other.

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