



# Scientific Approach toward Hadith: A Study of Zaghlūl al-Najjār's Work

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Received: 2020-07-29; Accepted: 2020-09-16; Published: 2020-09-30

**Abstract:** This paper discusses the concept of science in hadith. In appropriation with the spirit of integration-interconnection, although it is not a very new issue appearing nowadays, the encounters between sciences and scriptural texts always invite such curiosity in hadith studies. One of the famous works dealing with sciences in hadith is "al-I'jāz al-'Ilmī fī al-Sunnah al-Nabawiyah," written by an Egyptian geologist, Zaghlūl al-Najjār. This paper examines the topic using analytical-descriptive to the data gathered. This article focuses on answering the question of who, what, and how sciences dialogues with hadith in this book, which must be influenced social and intellectual background. It also pervades scientific concepts and natural phenomena, which is recorded in hadith. Therefore, this mini-research is written to perceive how the author explains Sunnah, which presents his knowledge of natural sciences. Besides, this study also deals to uncover the implications of the author's scientific approach to the hadith's status and validity in his work. This study shows that al-Najjār explains a hadith using the thematic method and directly includes the hadith text to be explained. He also supported his explanation with the Qur'anic verses. He explains the hadith using various forms of scientific data using research reference sources from East and West. **Keywords:** I'jāz; sunnah; science; modern-contemporary; Zaghlūl al-Najjār

**Abstrak:** Tulisan ini membahas konsep sains dalam hadis. Sesuai dengan semangat integrasi-interkoneksi, meskipun ini bukan masalah yang sangat baru muncul saat ini, pertemuan antara ilmu pengetahuan dan teks-teks tulisan suci selalu mengundang keingintahuan seperti itu dalam studi hadits. Salah satu karya populer yang berurusan dengan sains dalam hadis adalah *al-I'jāz al-'Ilmī fī al-Sunnah al-Nabawiyah*, yang ditulis oleh seorang ahli geologi Mesir, Zaghlūl al-Najjār. Ditulis dengan gaya deskriptif-analitik dan fokus menganalisis dan mendeskripsikan siapa, apa, dan bagaimana ilmu-ilmu berdialog dengan hadis dalam buku tersebut, yang secara pasti tidak dapat dilepaskan dari cakrawala penulis. Ini juga meliputi konsep ilmiah dan fenomena alam yang dicatat dalam hadis. Oleh karena itu, penelitian kecil ini ditulis untuk memahami bagaimana penulis menjelaskan hadis yang hadir bersama dengan pengetahuannya tentang ilmu alam. Penelitian ini juga bermaksud mengkaji implikasi pendekatan ilmiah penulis terhadap status dan validitas hadits yang dipergunakannya. Untuk mencapai tujuan itu, penulis menggunakan metode deskriptif-analitik. Hasil penelitian ini menunjukkan bahwa al-Najjār menjelaskan hadisnya secara tematik. Terkadang menambah penjelasan dari al-Qur'an. Kemudian ia menjelaskan hadis tersebut dengan menunjukkan fakta-fakta ilmiah yang ia rujuk baik dari sumber-sumber Islam maupun Barat.

**Kata kunci:** I'jāz; Hadis; sains; modern-kontemporer; Zaghlūl al-Najjār

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## 1. Introduction

The development of hadith studies in the modern-contemporary era is generally divided into four trends. At first, the study of hadith was dominated by manuscript studies (Mesallem & Redin, 2017). Around the late nineteenth century, many Western scholars were obsessed with deepening hadith through the manuscripts. After that period experienced a saturation point, there emerged a new tendency in the form of polemic studies (Muna, 2011, p. 239).

The third tendency is the study of scientific miracles contained in the traditions and futuristic miracles in the traditions of the Holy Prophet (Azamatovich, 2019). At this point, this research focuses on this third tendency. The fourth trend is the development of *takhrīj al-ḥadīth* in the form of *rujū'* movement to *manhāj al-mutaqaddimīn* (Muna, 2011, p. 243). There are several studies related to the fourth category analyzing and criticizing the system of both sanad and matan, and even a certain hadith book. Meanwhile, the study of scientific miracles to the hadith is still scrimpy. This is considered reasonable, because the works that contain scientific miracles in the hadith or sunnah are still always clashed with the theory of the relationship between religion and science. Besides, the character of Islamic classic books that tend to present simple things would be the reason why the escape of this part occurs. Also, during the tendency of this model developed, inferior-complex phenomena (Muna, 2011, p. 243) arose in the body of Muslims' civilization, so that the existing studies were more apologetic than the scientific side (Sayska & Arni, 2016; Supriyadi, 2018).

Departing from that perspective, this study analyses the scientific approach to the hadith. Through descriptive-analytical model of the data, this article attempts to dismantle—specifically—the methodological level of the book, *al-I'jāz al-'Ilmī fi al-Sunnah al-Nabawiyyah*. There is a scholar named Ṣāliḥ bin Aḥmad Riḍā' who also wrote the book with the same title. The difference between the both is that al-Najjār is a professor in the field of geology who tries to uncover scientific facts in the hadith, while Ṣāliḥ bin Aḥmad Riḍā' is a professor in hadith studies who tries to explain the hadith in terms of scientific miracles. In this research, Zaghlūl al-Najjār will be put forward as a scientist who seriously approaches the hadith with scientific findings, which he thinks are indisputable.

There several studies have been undertaken about the work of Zaghlūl al-Najjār. Suliaman et al., (2011) analysed the method of al-Najjar in studying hadith through a scientific approach, this research is quite the same with differences in analyzing the influence of his thinking. The opinion of Zaghlūl al-Najjār also cited by several researchers when discussing hadith related to scientific findings such as the efficacy of olives (Amin et al., 2017; Safarsyah, 2018). on medical science and Islamic tradition. This research will try to decipher some questions about how the intellectual background of Zaghlūl al-Najjār? What is the methodology of the book *al-I'jāz al-'Ilmī fi al-Sunnah al-Nabawiyyah*? And how is the critical review from other scholars toward al-Najjār's work?

## 2. Scientific Approach Toward Hadith

### *Intellectual Biography of Zaghlūl al-Najjār*

Zaghlūl al-Najjār who has full name Zaghlūl Ragīb Muḥammad al-Najjār is a Geologist born in Thanta, Egypt, November 17, 1933. He comes from a devout Muslim family. His grandfather became a permanent imam at his village's mosque. His father was a memorizer of the Qur'an. Al-Najjār had memorized the Qur'an before he was even 9 years old. At that age, al-Najjār followed his father emigrating to Cairo and entered elementary school in the nation's capital of the Prophets (Al-Najjar., 2013, p. 9).

As he grew up, he studied at the Faculty of Science, Department of Geology of Cairo University, and graduated in 1955 with the "Summa Cumlaude" designation. As the best graduate, he won the "Baraka Award" (Al-Najjar., 2008a, p. 171). in the Geology category from the Walles University of England in 1963. In 1972, he was confirmed as a professor of Geology. In 2000-2001, he was elected as Chancellor of the Markfield Institute of Higher Education in England, and since 2001 he has been Chair of the Al-Qur'an Science Commission and the Sunnah at the Supreme Council of Islamic Affairs, Egypt.

With his expertise in the science-based interpretation of the Qur'an, he routinely writes regular articles in the rubric "Min Asrār al-Qur'ān" (Secrets of the Qur'an) every Monday and "al-Ahram Daily"

Egypt which has 3 million copies every day. To date, more than 250 articles have been published about the miracles of science in the Qur'an (Al-Najjar., 2013, p. 10).

Through the depth and discipline of his knowledge, al-Najjār revealed cosmological and scientific cues which being hidden in the Qur'an and hadith clearly and straightforwardly. His works are not only works that have received the greatest appreciation in the Islamic world but are also able to astonish Westerners and orientalist who heralded scientific discoveries through their scientific research (Al-Najjar., 2013).

Academically, al-Najjār is relatively very productive. He has high intelligence and very sharp critical reasoning towards sciences, especially in the field of natural sciences. It evidenced that he has produced more than 150 articles and more than 50 books that include a variety of scientific studies such as Islamic scientific researches, al-Qur'an, and science in the hadith, *I'jāz al-'Ilmī*, and many more. However, his attempt has increased its authority as an expert in Islamic science in the modern age, which includes scientific discoveries in interpreting verses of the Qur'an (Sari, 2019). Most of the works that have succeeded are not only written in Arabic but also published in English and French. Among his works are: *Tafsīr al-Āyāt al-Kauniyyah Fī al-Qur'ān al-Karīm*, *I'jāz al-'Ilmī fī al-Sunnah al-Nabawiyyah*, *Nazarat fi 'Azmatiat-Ta'līm al-Mu'āshir wa Ḥululiha al-Islāmiyah*, *Ḥaqā'iq 'Ilmiyyah fī al-Qur'ān al-Karīm: Mājiz min Isyārati al-Qur'ān ilā 'Ulūmi al-Arḍ*, *Qaḍiyat al-I'jāz al-'Ilmī li al-Qur'ān al-Karīm wa Ḍawābiḥ al-Ta'ammul Ma'ahā*, *Min Āyāti al-I'jāz al-'Ilmī al-Hayawān fī al-Qur'ān al-Karīm*, *Min Āyāti al-I'jāz al-'Ilmī al-Samā' fī al-Qur'ān al-Karīm* (Bin Amir, Murshidi Mohd Noor, & Bazli Ahmad Hilmi, 2012; Nani, 2007, p. 47).

In addition to the above works, he also received several awards and titles, including: Chairman of the Institute of Science Miracles in the Qur'an and Sunnah (al-I'jāz al-'Ilm li al-Qur'an wa al-Sunnah), in the Higher Institutions of Islamic Affairs (al-Majlis al-A'lā li al-Shu'ūn al-Islāmiyah), Egypt. He is also Professor of Geology at several leading universities in Arab and Western countries., Advisory of the Robertson Britain Study Center (1963) and the Swiss Islamic Development Museum (2001), Expert in the Journal of Foraminiferal Research New York (1966) and Journal of African Earth Science (1981)., Counselor for Muslim Magazine in Washington (1970), Counselor for Islamic Science Magazine in India (1978), Counselor for al-Rayyan Qatar Magazine (1978), Among the initiators of Geology Position at University Malik Sa'ud (1959) and the University of Kuwait (1967)., Among the initiators of al-Ha'iah al-'Ālamiyyah li al-I'jāz al-'Ilmī fī al-Qur'ān al-Karīm and al-Sunah al-Muṭṭaharah in Makkah al-Mukarramah (1981), Director of the Higher Education community in Markfield Britain (2001), The administrator of *I'jāz Almi al-Qur'ān*, the supreme Assembly of Egyptian Islamic Happenings, Professor of Geology, King Fahd University of Petroleum and Minerals, Dhahan, Saudi Arabia (1979-1996), Professor of Geology and Chairman, Department of Geology, Qatar University, Dhoha, Qatar (1978-1979).

The results of his persistent efforts in interpreting the Qur'an and hadith through a scientific approach paid off so that he received the highest award from the Sudanese kingdom in 2005 and the award as an Islamic icon in Dubai in 2006. His preaching efforts were not only through writing but also actively became a seminar speaker on the miracles of the Qur'an throughout the world. It was finally encouraged the people who attended the seminar to choose Islam as their way of life. (International Qur'anic Conference, Universiti Malaya, & Pusat Penyelidikan al-Quran, 2012; Nani, 2007, pp. 171–173)

### ***Methodology of Compilation***

#### **Model in Presenting Topics**

The book of *al-I'jāz al-'Ilmī fī al-Sunnah al-Nabawiyyah* generally places the discussion topics in the thematic system, although in some editions, the translation seems random (not following the systematisation of the original book). Al-Najjār, in his book, after giving an introduction that alludes to the importance of scientific explanations contained in hadith to become a means of propagation towards the religion of Allah (Al-Najjar., 2008b, p. 8), directly discusses the theme of Creations and Universe (penciptaan dan alam semesta), Plants (botanical topics in hadith), human's Health

(kesehatan), and Arabian Peninsula (Jazirah Arab). Those are the big themes from chapter one to chapter four in volume I. While in volume II, there are also four chapters: The Universe, human's Creations, human's Health, and Food and Plants.

The subthemes in volume I describes in more detail in the table Table 1. This description aims to provide a more detailed description of the book's contents which are discussed in this study.

Table 1. Table of Contents Volume I

Numbers of Chapter	Name of Themes	Subtema Details [page]
One	Creation and The Universe	Seven (layers) of the earth [19-23] The sky's rolling on the Day of Judgment [24-27] Star as the sky's safety [28-30] The rising of the sun from the West [31-35] Eclipse: a sign of God's power [36-39] Cleavage of the moon [40-43] Rain as Grace and Mercy from God Almighty. [44-49] Rain cycle: constant volume of rain each year [50-53] The elements of water, fire, iron, salt are from heaven [54-57] Mountains as earth's stake [58-61] Fire under the sea [62-65] The magic of sulbi bones (coccyx) [66-68] Human sperm [69-72]
Two	Plants (botanical topics in hadith)	Siwāk: tools for purification [75-77] Black cumin seeds (h)abbatu saudā') as the cure of all diseases [78-81] Benefits of olives [82-85] Dates: ideal food [86-89] Manna as a cure for eye diseases [90-93]
Three	Man's Health	Treatment with halal food [97-100] Fasting and health [101-104] Free sex (people's immorality) and the spread of disease outbreaks [105-110] Heart as the center of life (body) [111-115] Interrelation of limbs [116-118] Forecasting and magic [119-122]
Four	Arabian Peninsula	Efficacy of Zam-zam water [125-128] Doomsday and greening of Arab lands [129-132] The fire from Hijāz illuminates Bushra [133-136] Giant reservoir in the Arabian Peninsula [137-139]
Five	Epilogue	Epilogue [143-145]

The systematics contained in the book is generally different from the translation editions which are circulating especially in Malaysia and Indonesia. In Malaysia, the title of the translated book is *Keajaiban Sains dalam Hadis (Miracle of Sciences in Hadith)*, translated by Mohd Khoirul Nizam bin Zainan Nazri and Ustaz Muhammad Sabri Sahrir, published by al-Hidayah Publication. In the 591-page book, the discussion is divided into three broad themes: the universe, the creation of creatures, and health in the last theme (Sulaiman, n.d.). Whereas in Indonesia, the translation of this book is divided into three versions, all of them are different from the order of discussion in the original book.

The first book is *Pembuktian Sains Dalam Sunnah (Proof of Sciences in Sunnah)*. This book is printed into three volumes. The order of explanation is somewhat strange because it is very different from the original book, the English edition, or the other translations. For example, in volume I, after

opening, without any explanation of the big theme, the first discussion is started by “Bintang-bintang di Langit” (Stars in the Sky), while the second discussion after that is “Budaya seks bebas dan penyebaran wabah penyakit” (Culture of Free Sex and the Spread of Disease Outbreaks) (Al-Najjar., 2006). Of course, it seems apparently different from what we show in the previous table.

The second book is *Sains Dalam Hadis: Mengungkap Fakta Ilmiah Dari Kemukjizatan Hadis Nabi* (Science in Hadith: Revealing Scientific Facts From the Miracles of the Hadith of the Prophet). The 521-pages book is a revised edition of *Pembuktian Sains Dalam Sunnah* (Al-Najjar., 2011). Although both do not include what is said as major themes, it is easier to be understood than the first book because of the model of explanation.

The third book is the *Buku Pintar Sains Dalam Hadis: Mengerti Mukjizat Ilmiah Sabda Rasulullah SAW* (The Smart Book of Science in Hadith: Understand the Scientific Miracles of the Word of the Prophet Muhammad). In terms of the systematic adaptation and translation which we examined, this is very well compared to the other two Indonesian versions. This edition has 7 major themes followed by sub-themes which make it very easy to search. The seven themes are hadith about the eternity of Allah SWT, the universe, human creation, food, health and medicine, behavior, and traditions about the end of the world and its signs (Al-Najjar., 2013, p. 5).

The difference in the translation series into Malay and Indonesian is very reasonable, given the substance of the discussion of the book *al-I’jāz al-’Ilmī fi al-Sunnah al-Nabawiyyah* itself puts more emphasis on the content than the composition of the discussion. It means whether it is read from the very back of the theme or even from the middle, it will not change the understanding because the discussion is carried out by one tradition that has nothing to do with one another. Besides, the discussion of a hadith is also sometimes repeated by *Zaglūl al-Najjār* himself in another book. For example, the hadith “Seven Layers of the Earth” or “Rain Cycle” is discussed in three different books with the same discussion (Al-Najjar., 2009, pp. 385–390).

#### Characteristics of the Traditions in Discussion

Al-Najjār brings up the criteria of validity of the traditions as number two after prioritizing the traditions that allude to scientific facts, including which he analyzed is related to the phenomena, composition, and processes of creation, destruction, and replacement of the universe. In addition, he also concerns about the creation of man, the phase in which he passes, his death and resurrection (concerning the miracle of the coccyx), the rules of behavior, halal and forbidden food and drink, and preventive measures and allowable treatment (Al-Najjar., 2013, pp. 41–42).

For al-Najjār a hadith which is punished by the majority of scholars as *ḍa’īf* (weak), as long as it has a strong correlation with scientific facts that are “indisputable” and do not include in *maudū’* level of traditions (fabricated), then it is still considered strong and must be taken into account. What is even more interesting is that the opinion of al-Najjār says that the hadith regarding the “rain cycle” — for example — is often seen as weak just because someone cannot understand the scientific instructions in it. Even though, continued al-Najjār, even though it is weak, there is a scientific breakthrough that preceded modern science since 1,400 years ago (Al-Najjar., 2013, p. 88). Although without mentioning what is meant by al-Najjār as “the party who considers weak because they do not know any scientific instructions”, it is a criticism of those who only understand the hadith textually without prioritizing the spirit and scientific guidance in the traditions of the Holy Prophet.

Al-Najjār is very careful in his efforts to explain the scientific side of the Prophet’s traditions. Therefore, the famous geologist of Egypt did not want to try to take hadith related to absolute occult issues, such as the Substance of God, spirit, angel, *Jinn*, ‘*Arasy*, *kursī*, sheet (which is in *al-lawḥ*), pen (*al-qalam*), the realm of *Barzakh*, resurrection, gathering (*al-hashr*), torment and favors on the Day of Judgment, the calculation (*hisāb*), the scale of charity (*al-mīzān*), bridge (*al-sirāt*), because according to al-Najjār, the case has a different law from the natural world (Al-Najjar., 2013, p. 43).

#### The Method of Explaining the Hadith uses Scientific Data

There are about 14 standards which Zaghūl al-Najjār are concerned about starting from choosing the criteria of the hadith as explained above to using "indisputable" scientific data to explain the hadith. The phrase "undeniable" needs more attention because al-Najjār often emphasizes that the scientific data it uses are scientific facts which it considers to have reached a degree of truth or have become law. The implication still according to al-Najjār if a science or scientific discovery is at the level of truth or become law, then it cannot be aborted again, but only possible to experience development, and even then the linear development. It is this perspective that makes every explanation of the hadith he does always include the source and who the researcher is very clearly.

The logical structure which is the basis for the method of explanation of the hadith with scientific data made by al-Najjār himself can be described in more detail and densely at the points below:

1. Select the Hadith according to the criteria - as explained in the last section.
2. Prioritizing combining (*al-jam'u*) hadith with the same theme rather than *tarjīh* one of them.
3. Understanding the text of the hadith according to semantic and Arabic rules.
4. Put forward the spirit and scientific guidance in the hadith.
5. Understanding the hadith in the framework of the Qur'an. Al-Najjār firmly believes that the hadith is an explanation of the Qur'an so that it cannot be contradictory, if there is a contradiction, then what is wrong is the lack of clarity of understanding or a weak/false hadith.
6. A Muslim must not reject a hadith that offends scientific facts and is proven true. If it has been proven the truth of scientific facts in the hadith, then do not be rejected (such as should not reject the authentic Hadith) just because there are defects in sanad, because scientific facts can overcome weaknesses/defects sanad.
7. Must be able to distinguish the traditions that have intrinsic and *majazi* meaning. Bringing the recitation of the hadith from the meaning of *majazi* into the intrinsic meaning must be avoided if according to logic, *Shari'a*, and science is not possible, because true religious texts cannot be contrary to common sense.
8. Do not force the traditions to match scientific facts. Al-Najjār always held that the Prophet's hadith higher than scientific facts, so it does not need to be forced to match.
9. Don't enter into absolute occult matters.
10. Utilizing scientific facts that are "indisputable" to prove scientific miracles in the Prophet's hadith.
11. Careful attention must be paid to the scientific specialization of each researcher. In the effort of scientific verification of the hadith texts, cannot be done just anyone, but must be done by people who are competent/specialists in their fields, also must be clear sources of references and researchers whose research is used to prove scientific facts in the Prophet's hadith.
12. Understanding of scientific facts in the hadith is not certain to be true.
13. Scientific proof of the Prophet's hadith different from the hadith shari'a. Shari'a hadith emphasizes the explanation of things that are not clear to understand the Prophet's hadith. while scientific proof can make theories that are still difficult to prove the truth, through the hadith of the Prophet can achieve scientific truth that has never been achieved before.
14. Do not underestimate the efforts of the previous scholars in making hadiths.

The rules are very strict and many compiled al-Najjār to make the project in explaining the hadith with scientific data really based on strict and authoritative standards as a reference to the trend of the study of the tradition of modern-contemporary era. In the level of practice when explaining a hadith that is strongly related to the scientific facts of Zaghūl al-Najjār does not take the same composition, both in terms of argumentation building or more or less explanation and commentary on the hadith.

Al-Najjār's model in explaining a hadith begins with directly including the hadith text that is to be explained. Then, if the hadith that is explained has many editors that are slightly different but have the same meaning, al-Najjār will mention it one by one even up to 23 traditions as in the explanation of the eclipse. But, if the hadith is considered not to have many editors, then only one hadith is mentioned. Likewise, the explanation is sometimes supported by verses of the Qur'an and sometimes not at all.

After the description of the hadith's editorial, the next part is the explanation of the hadith using scientific data.

The scientific data used as the basis for the explanation of the hadith also varies. Sometimes al-Najjār only mentions classical research, such as the discovery of al-Bīrunī about the earth which is round written in the 11th century AD. However, for the case of the hadith dipping flies into water.

The hadith explanation mode with scientific data of Zaghlūl al-Najjār if it is depicted in tabular form, it will be like in the table two.

Table 2. An explanation model of the Hadith with scientific data

Stage 1		A systematic explanation of the hadith with scientific data	
1	Text of the Hadith		
2	Mentioning other texts which contain the same meaning	Not mentioning other texts at all	
3	Supported by verses of the Qur'an	Not at all supported by verses of the Qur'an	
4	Detailed scientific data supported: 1. Sourced from classic inventions 2. Sourced research from the Middle East region by mentioning research references in great detail. 3. Sourced research from Western scholars by mentioning very detailed research references. 4. Scientific data information is very detailed, but the research subject and research source are not mentioned.	Only mentioning scientific facts in general without mentioning research reference sources	

**Examples of Hadith in al-Najjār's Book**

There are many traditions taken by al-Najjār in revealing the scientific fact of the miracles of the Prophet's hadith. But here only presents a few traditions as an example or illustration in his analysis.

The first Hadith contains a scientific explanation is the shape of the earth. The author, by taking the hadith narrated from Ibn Abbās explained that the Prophet was asked about the sinking of celestial bodies (celestial), and the rising of celestial objects. Then the Prophet replied, "he remained in his place, did not move and shift, he drowned for one people and published for one other people, and at the same time, one people declared sinking while others stated rising."

His commentary on the above hadith is strengthened by the verses of the Qur'an about natural phenomena. The urgency of this phenomenon is the roundness of the earth due to the diversity of *maṭla'* (rising position) due to the diversity of the horizon. Of course, some celestial bodies disappear from the inhabitants of the earth in one region and rise in one other region. Objects have been circulating on certain lines or orbits, so they don't move and move in the slightest.

At least in his analysis of the proof of science with the hadith in round earth theory includes four points. The first point is explained in QS. Al-Zumar (39): 5. Secondly, the Qur'anic affirmation that the earth stretches without edge edges, which is not possible, except if the earth is round or elliptical, because a stretch without an edge is a rounding thing, and the only endless form is a round shape. Third, al-Qur'an's cues about the east-west term, two east-two west, eastern regions, and western regions which increasingly confirms that the earth is round, rotates on its axis and revolves around the sun. Fourth, other cues from the Koran instead of the night to daylight. Thus the manifestation of Zaghlūl-Najjār on the hadiths presumably there is continuity in the proofs of the traditions with the discoveries of current theories.

The second hadith, regarding the heart as the center of the body, is the Prophet's SAW saying:

ألا وإن في الجسد مضغة، إذا صلحت، أصلح الجسد كله، وإذا فسدت، فسد الجسد كله، ألا وهي القلب

"Indeed, in the body, there is a clot of blood which if it is healthy and good, then the whole body is good. Conversely, if he is sick, then the whole body hurts. Know that blood clot is the heart. "

The above hadith is easily found in several books of hadith, including in Ṣaḥīḥ al-Bukhārī, as Ṣaḥīḥ Muslim, Sunan Ibn Mājah, Musnad Aḥmad, and Musnad al-Dārimī with a different editor, but the essence of matan hadith is the same.

According to the authors of the book, the heart is an extraordinary miracle. It is said, if the heart is attacked by disease, then the whole body will be damaged. That is because the heart's function is to pump dirty blood from the right ventricle into the lungs to carry out blood oxidation. Then the oxidized blood is returned to the heart in the left ventricle to be spread throughout the body. That is the process of working the material of the heart. Its job is to supply the cells forming the human body with oxygen gas and food juices. In the 7th century AH, Ibn al-Nafis had discovered a small blood circulation, but the thought was buried for three centuries. Furthermore, Westerners have discovered the science of blood circulation developed from the discovery of Ibn al-Nafis by examining more deeply and claiming that it is their finding.

Here, he also gives the reader a question as well as demonstrating divine power, how did the Prophet know in advance of present discoveries, and who informed about the circulation of blood in the Arabian region fourteen centuries ago, if the reference source was not from celestial revelation? Next al-Najjār also explains the heart that is immaterial, by citing the words of Imam al-Gazalī that the desired heart is a matter relating to feelings, reason, thoughts, understanding, beliefs, pillars of morals, and ambivalence behavioral sign.

As a valuable lesson, to glorify the miracles of Allah SWT., a pure heart will bring forth good, right thoughts, understandings, and beliefs. Conversely, a dirty heart full of bad qualities will also bring up bad thoughts, a necessity for humans to keep themselves healthy physically and spiritually

### **Strengths, Weaknesses, and Criticisms**

Zaghlūl al-Najjār's effort to integrate religious texts (which in this case is a hadith) deserves high appreciation. In addition to enriching scientific work and opening insights about the relationship of science in religion, his efforts can also be an opening path for future research inspiration, both from religious knowledge and or science itself. But, of course, there are no works that are perfect and cannot be criticized, as well as Zaghlūl al-Najjār's works. Some of the shortcomings of this work include the absence of sufficient hadith commentary in terms of science *Mustalaḥ al-Ḥadīth*. Besides, although in the book in general the traditions cited are traditions sourced from literature whose scientific credibility is accepted, such as ṣaḥīḥ al-Bukhārī and as ṣaḥīḥ Muslims, but on another occasion, he also quoted traditions from literature whose status was considered questionable.

For example, he quoted a hadith that was based on Ibn Mas'ūd, narrated by al-Baihaqī in *al-Sunan al-Kubrā* and al-Ḥākim in his *Mustadrak* with the editorship of Ibn 'Abbās, which were the two narrations are *mawqūf* so it is considered *ḍa'īf* (weak) by some scholars, whereas according to al-Najjār it is because they do not understand the scientific instructions in the hadith. Here is the meaning of the hadith in question: "There is no year of rainfall less than (another) year", or in the second narration: "There is no more rain year than (another) year. But God diverted it (controlled it)."

On the one hand, it is understandable if the author of the book does not provide a long commentary on the hadith that he quoted in his book, even more so in terms of science *Musṭalaḥ al-Ḥadīth*, because he departs from a scientific approach following his background as a geologist, so he focused more on his studies to show the compatibility of the editorial of hadith with scientific theories of science. However, from here some questions will arise, including how he draws the relationship between hadith and science? How can this evidence influence the status or authenticity of the hadith, whose status is not as strong as the hadith mentioned above? Then, what if the existing scientific theory



or the author of the present book is later experiencing falsification and there is a new theory that is more accepted or different from the sound of the hadith, whether the hadith becomes unable to be studied or quoted as a scientific hadith because it no longer has value science? Will this also affect the status and validity of the traditions he reviewed earlier because the editor of the hadith itself remains the same? Those questions need to answer and further research should be conducted to al-Najjār's work (International Qur'anic Conference, Universiti Malaya, & Pusat Penyelidikan al-Quran, 2012; Saleh, 2011).

### 3. Conclusions

Zaghlūl al-Najjār is a scientist in the field of geology who teaches at various universities in both East and West. Al-Najjar's anxiety about the phenomenon of some modern-contemporary scientists who doubted the authenticity of the hadith invited him determined to do a serious study of the relations of modern science and the hadith of the Holy Prophet by explaining the hadith with scientific data through his book entitled *al-I'jāz al-'Ilmī fi al-Sunnah al-Nabawiyyah*. Al-Najjār explains a hadith using the thematic method and directly includes the hadith text that is to be explained. Then, if the hadith described has many slightly different but equally meaningful editors, al-Najjār will mention them one by one. But, if the hadith is considered not to have many editors, then only one hadith is mentioned. Likewise, the explanation is sometimes supported by verses of the Qur'an and sometimes not at all. After the hadith's editorial description, the next part is an explanation of the Hadith (reviews or explanations of the hadith) using various forms of scientific data: sometimes very detailed, using research reference sources from East and West, and sometimes scientific data that is given so publicly.

The study of the hadith through scientific approach contributed to open up new horizons for reading religious texts which initially only stopped around theological, ethical, and legal issues, beginning to penetrate the study of the cosmos and the humanities. Studies like this should purely depart from the spirit of scientific study and continue to be on such a track. Studies such as this work will also be more comprehensive and qualified if the focus is not only focused on aspects of scientific science but also deepened from the fundamental study of the religious texts themselves, for example, this book will be more complete if the review in terms of the science of hadith is also examined in more detail. So for further studies, it would be very good if the book which is the material object in this study is compared with the book *al-I'jāz al-'Ilmī fi al-Sunnah al-Nabawiyyah* by Ṣāliḥ ibn Aḥmad Riḍā who is a hadith expert.

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