



Takhrij and Syarah Hadith of Chemical: The Abundance of Oxygen Content on Earth Based on Science and Hadith

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Abstract: The purpose of this research is to discuss the hadith of the Prophet about an abundance of oxygen. The qualitative research method uses the takhrij and sharah hadith approaches with chemical analysis. The results and discussion of this research is the abundance of oxygen in the earth, sea, land, and air, as has been informed by the hadith which is a sign of the greatness of Allah for the life of creatures in the universe. The conclusion of this research is takhrij and syarah hadith of the Prophet. about the abundance of oxygen on earth by chemical analysis it has been proven based on the second abundant oxygen content in the air.

Keywords: Chemistry, Hadith, Oxygen, Syarah, Takhrij

Introduction

The universe contains an abundance of elements, one of which is oxygen. Oxygen is the second largest major element in the atmosphere at 20.9%. Some atmospheres also have oxygen levels appropriate to the conditions (Pusat, Dan, & Atmosfer, 2006). Thus, the perfection of God's creation is once again manifested in the abundance of oxygen on earth in harmony with the atmospheric pressure, signifying that oxygen is a necessity (Purba, L. S. L. & Harefa, 2020). Therefore, oxygen content is a necessity and a privilege to meet basic human needs (Kusnanto et al., 2019). In essence, oxygen is also one of the pleasures that we can use indefinitely (Pusat et al., 2006).

There is a hadith of the Prophet. with regard to the abundance of oxygen on earth in Muslim Musnad Number 15611:

قَالَ حَدَّثَنَا بِهِ حَدَّثَنَا حَمَّادُ بْنُ سَلَمَةَ قَالَ أَخْبَرَنِي بِعَلَى بْنُ عَطَاءٍ عَنْ وَكَيْعِ بْنِ خُدْسٍ عَنْ عَمِّهِ أَبِي رَزِينٍ الْعُقَيْلِيِّ أَنَّهُ قَالَ يَا رَسُولَ اللَّهِ أَيْنَ كَانَ رَبُّنَا عَزَّ وَجَلَّ قَبْلَ أَنْ يَخْلُقَ السَّمَوَاتِ وَالْأَرْضَ قَالَ فِي عَمَاءٍ مَا فَوْقَهُ هَوَاءٌ وَتَحْتَهُ هَوَاءٌ ثُمَّ خَلَقَ عَرْشَهُ عَلَى الْمَاءِ.

Ahmad bin Hanbal said; have told us Bahz and Hasan said; has told us Hammad bin Salamh from Ya'la bin 'Atha' from Waki 'bin Hudus from his uncle, Abu Razin. Hasan Al-Uqailli said; O Rasullulah, where was our Rabb 'Azza wa Jalla before the creation of the heavens and the earth? Belu replied, in the cloud above which is air and below is also air. Then He created His throne on the water.

Based on the explanation above, a research formula is prepared, namely the formulation of the problem, research questions, and research objectives (Darmalaksana, 2020a). The formulation of this problem is that there is a hadith from the Prophet. about the abundance of air or oxygen on earth. The research question is how the hadith of the Prophet. about an abundance of oxygen. The purpose of this research is to discuss the hadith of the Prophet. about the abundance of oxygen or air on earth.

Research Methode

This research method is qualitative by means of literature study and field studies (Library, 2020). Meanwhile, the approach taken is takhrij and syarah hadith (Soetari, 2015). The interpretation in this study used chemical analysis (Kimia & Tanjungpura, n.d.).

Globally, there are two stages of research on hadith, namely takhrij and syarah. Takhrij is removing the hadith from the original source by writing down its sanad and matan, then describes the quality of the hadith (Hajar et al., n.d.). Sedangkan syarah berarti menguraikan ucapan, tindakan, dan ketetapan Rasulullah Saw., sehingga menjadi lebih jelas (Pamil et al., 2012). Chemistry itself, as a means of interpretation in this research, is the study of the structure and properties of a material or particle, as well as changes in matter with the energy that accompanies changes in matter. The topic of chemistry globally deals with the structure of compounds and abstract concepts that cannot be observed with the naked eye (Kimia & Tanjungpura, n.d.).

Results and Discussion

At first, a search was carried out through the application of the hadith regarding the keyword "air" because air is another term for oxygen, until the hadith was found in the Musnad book of the inhabitants of Medina Imam Ahmad Number 15611, as stated earlier.

Table 1. List of Rawi Sanad

No.	Rawi Sanad	Birth/Death		State	Kunyah	Ulama's Comment		Circle
		B	D			-	+	
1	Laqith bin Shabirah bin 'Abdullah bin Al Muntafiq bin 'Amir			Tha'if	Abu Razin		Shahabat	Shahabat
2	Waki' bin 'Udus			Tha'if	Abu Mush'ab	- Majhulul hal	- Ibnu Hibban Mentioned in 'Ats Tsiqat's - Ibnu Qaththan - Ibnu Hajar al'Asqalani - Maqbul - Adz Dzahabi - Tsiqah	Tabi'in ordinary people
3	Ya'laa bin 'Atha'		120 H	Tha'if			Yahya bin Ma'in - Tsiqah - An Nasa'i - Tsiqah - Abu Hatim - Shalihul hadits - Ibnu Hibban Mentioned in	Tabi'in ordinary people

							'Ats Tsiqat's - Tsiqah - Adz Dzahabi - Tsiqah	
4	Hammad bin Salamah bin Dinar		167 H	Bashrah	Abu Salamah	-Ibnu Hiban disputed his status as shahabat	An Nasa'I -Tsiqah -Yahya bin Ma'in -Tsiqah -Al 'Ajli -Tsiqah - Muhammmad bin Sa'd -Tsiqah	Tabi'ut Tabi'in middle circles
5	Bahza bin Asad		197 H	Bashrah	Abu Al Aswad		- Yahya bin Ma'in - Tsiqah - Abu Hatim - Imam shaduq tsiqah - An Nasa'i - Tsiqah - Al Ajli - Tsiqah - Ibnu Hajar - Tsiqah tsabat - Adz Dzahabi - Hujjah - Ibnu Hibban Mentioned in 'Ats Tsiqat's	Tabi'ut Tabi'in middle circles
6	Ahmad Bin Hanbal	164 H	241 H	Bagdad	Ahli hadis		Imam of hadis	Mudawin

Table 1 is a list of the hadith narrators and sanad under study. Rawi is the narrator of hadith while sanad is the chain of narrators from companionship to mudawin, namely scholars who record hadiths in the hadith book (Soetari, 1994). According to the science of hadith, the requirement for a valid hadith is that the rawi must be positive according to the comments of the scholars. If there is a commentary from a scholar who gives a negative assessment to one of the narrators in the sanad lane, then the hadith is a hadith dhaif (Library, 2020). Sahih hadith are strong traditions while dhaif traditions are weak traditions (Soetari, 1994). Hadith requirements sahih too sanad must be continued. If sanad the hadith is cut off, then the hadith is a hadith dhaif. Proof sanad to be continued is to meet between teachers and students. If there is no objective evidence, then the meeting between teacher and

student can be seen from birth and death. If there is no data on birth and death, then predictable the average age of scholars is around 70-90 years. The meeting of teachers and students can also be seen from the narrator's life journey. If the teacher and student are in the same place, it is predicted that the teacher and student will meet (Darmalaksana, 2020b).

The quality of this hadith is sahih. Because from the side of the narrator, there were no comments from scholars who gave negative assessments. Indeed, Hammad bin Salamah bin Dinar has disputed his status as a friend. It is true that he is not the generation of friends, the generation of *tabi'ut tabi'in* among the middle class as seen from the year of his death, namely 167 H. Also from the side of sanad, it is connected from friendship to *mudawin*. Although Waki 'bin' Udu is called *majhulul hal* because the year of birth and death is not known, it is estimated that teachers and students met or were contemporaries if it was assumed that their average age was 90 years and they were in one area, namely Tha'if. Basically the science of hadith has another parameter in providing reinforcement to hadith. Among other things, hadiths are called *mut* Worries in a very popular sense if the hadiths being researched are scattered in several hadith books (Soetari, 2015). The distribution of this hadith plays a role as *syahid* and *mutabi*. *Syahid* is another hadith of the same kind meanwhile *mutabi* is other sanad (Darmalaksana, 2020b). The rest, as far as hadith is the virtue of Islamic practice, it can be argued despite its status *dhaif* (Darmalaksana, Pahala, & Soetari, 2017).

The scholars have provided *syarah*, namely the explanation of the content and the meaning of the hadith (Darmalaksana, 2020a). This hadith also explains that in the field of chemistry, in terms of air meteorology it is called an atmosphere with a mixture of various colorless and odorless gases (such as oxygen and nitrogen) that occupy the space above the earth as inhaled by humans, air, space, air conditions or weather. According to its time, oxygen was the most abundant element in the biosphere, air, sea, land and earth. However, oxygen is only abundant on earth and very rarely found on other planets. The element content of gaseous compounds and air particles will vary depending on the height of the soil surface as well as its mass. The air will be completely empty when it crosses the earth's gravitational limit. This means that the oxygen content when living things breathe will decrease (So et al., 2018). Oxygen is very important for living things. Humans need oxygen for the process of cellular respiration which runs continuously. In the metabolic process, one example of a gas component that plays an important role is oxygen, whereas the size of the human body is related to its activity in the respiration process, the bigger the body, the lower the oxygen demand, and vice versa (Mustofa, 2019). Although the composition of the brain is only 2% of the total body mass, oxygen is needed by the brain in very large quantities. This means that when we breathe, the incoming oxygen will immediately run to the brain. Meanwhile, the brain has only a small amount of oxygen (Sanga, Purba, & Harefa, 2020).

Based on a study that describes the results of data on gas concentrations in the air, one of which includes oxygen which has the second highest concentration of 21% after nitrogen which has a concentration of 78%. This shows the abundance of oxygen contained in the air (So et al., 2018).

Meanwhile, oxygen levels in normal marine waters range from 5.7-8.5 ppm (parts per million) (Fosfat et al., 2015). Dissolved oxygen dynamics in aquatic ecosystems are determined by the balance between oxygen production and consumption. One study also said that increasing the temperature of the water will decrease the capacity of water to bind oxygen, so that in the water the oxygen saturation level will decrease and accelerate the rate of respiration. This will increase the rate of oxygen demand. One example of the abundance of oxygen on earth in the oceans or waters is that which is produced by the photosynthetic process of aquatic plants and phytoplankton. However, phytoplankton respiration requires a lot of oxygen (Dan et al., n.d.).

Conclusion

The atmosphere has the second highest concentration of oxygen at 21% after nitrogen and is colorless and odorless. In addition, oxygen occupies all parts of the earth, including land, oceans and air. Oxygen is also only found on planet Earth and is needed by plants for photosynthesis, the dynamics of aquatic ecosystems, the need for breathing for humans and the body's metabolic processes. This research is expected to have beneficial implications for scientists in the development of science with respect to oxygen through Islamic literature. Research on takhrij and sharah hadith is recognized as having limitations without including martyrdom and mutabi more broadly, so further research is needed on the authenticity and explanation of hadith about oxygen through chemical analysis. This research recommends the development of the chemical field with regard to oxygen based on information from the Holy texts, both the Qur'an and the hadith.

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