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Takhrij and Syarah Hadith of Chemistry: The Nutrient Content of Zam-Zam Water

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Abstract

This research aims to discuss the hadith of Prophet Muhammad SAW. about content of zam-zam water. The research method used in the processing of takhrij and syarah hadith is a qualitative method with chemical analysis. The result and discussion of this research is that is zam-zam water is water that appeared during the period of Prophet Ismail AS. This water is believed to have many miracles and properties. There are several substances contained in zam-zam water, including sodium, magnesium, calcium, potassium, fluoride, and others. This water can also help cure various diseases. After analyzing iron content, it was found that the Fe concentration was 0,0599 mg/l at a wavelength of 248,3 nm, it is meaning this water is suitable for consumption in accordance with the drinking water standards of the Minister of Health.

Keywords: Chemistry, Hadith, Syarah, Takhrij, Zam-zam Water

Introduction

Zam-zam water is a gift from Allah SWT for Prophet Ismail AS and his mother Siti Hajar RA, who at that time was thirsty in the middle of the desert and was abandoned by her husband namely Prophet Ibrahim AS, then the anggel Jibril came with a source of water at the command of Allah SWT (Nurjannah, 2018). This water that makes the city of Mecca fertile because its water source never run out. Zam-zam water is purified by people all over the world, even in Indonesia it is a tradition for hajj and umrah pilgrims to bring zam-zam water as a souvenirs beacuse this water

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is known to have properties for anyone who drinks it. Many scientists argue thst this distinctive water content makes zam-zam water content healthier, research from Naeem and Alsanussi in 1983 found 34 elements contained in zam-zam water (Indonesia, 2020). It is said that a priest named Imam Sya'rani once recovered from a boil the size of the watermelon on his stomach after drinking zam-zam water while performing the pilgrimage (Yusuf, 2020). From this story the content in zam-zam water has the efficacy of curing diseases which can be confirmed by scientific studies.

There is a hadith of Prophet Muhammad SAW. With regard to the properties of zam-zam water in the Musnad Ibnu Majah Number 3053:

حَدَّثَنَا هِشَامُ بْنُ عَمَّارٍ حَدَّثَنَا الوَلِيْدُ بْنُ مُسْلِمٍ قَالَ قَالَ عَبْدُاللهِ بْنُ المُؤَمَّلِ أنَّهُ سَمِعَ أَبَا الزُّبَيْرِ يَقُوْلُ سَمِعْتُ جَابِرَ بْنُ عَبْدِ اللهِ يَقُوْلُ سَمِعْتُ رَسُوْلَ اللهِ حَلَّى اللهُ عَلَيْهِ وَ سَلَّمَ يَقُوْلُ مَاءُ زَمْزَمَ لِمَا

Has told us Hiasyam bin Ammar, has told us Al-Walid bin Muslim said; Abdullah bin Mu'ammal said; That he heard Abu Az Zubair said; I heard Jabir bin Abdullah Radhiallahu'anhu, he said; I heard Rasulullah SAW said, 'Zam-zam water (efficacious) according to the intention (purpose) to be drunk by the user).'

Based on the explanation above, the research formula was prepared, namely the formulation of the problem, research question, and research purposes (Darmalaksana, 2020a). The formulation of this problem is that there is a hadith of the Prophet SAW. about the properties of zam-zam water. The purpose of this research is to discuss the hadith of the Prophet SAW. about the properties of zam-zam water.

Research Methods

This research method is qualitative through literature and field studies (Darmalaksana, 2020b). Meanwhile, the approach applied is takhrij and syarah hadith (Soetari, 2015). The interpretation in this study used chemical analysis.

In general, there are two stages of research on hadith, namely takhrij and sharah. Takhrij is the process of extracting a hadith book to examine its authenticity, while sharah is the explanation of the hadith text with a certain analysis (Soetari, 2015). Chemistry itself, as a means of interpretation in this research, is a field of study that studies matter and its changes, substances that are involved in chemical changes, namely elements and compounds (Chang, 2005).



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Results and Discussion

At first, a search was carried out through the hadith application regarding the keyword "zam-zam water" until the hadith was found in the book Musnad Ibnu Majah Number 3035, as stated earlier.

No	Rawi Sanad	Birth/Deat h		Country	Kuniyah	Ulama's Comments		Circle
		L	W	.,		-	+	
1	Jabir bin 'Abdullah bin 'Amru bin Haram		78 H	Medina	Abu 'Abdullah			Shahabat
2	Muhammad bin Muslim bin Tadrus		126 H	Marur Rawdz	Abu Az- Zubair		 Laisa bihi ba's Tsiqa h Shadu uq tsiqah Tsiqa h tsabat Shadu uq Shadu uq Tsiqa h hafidz 	Tabi'in the common people
3	Abdullah bin Al- Muammal bin Wahballah		160 H	Marur Rawdz		 Dla'if Mung karul hadits Menti oned in adl- dlu'af a Laisa bi qowi 		Tabi'ut Tabi'in the elderly
4	Al Walid bin Muslim		195 Н		Abu Al 'Abbas		 Tsiqa h Shalih ul hadits 	Tabi'ut Tabi'in ordinary people

Table 1.	List of	Rawi Sanad
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No	Rawi Sanad	Birth/Deat h		Country	Kuniyah	Ulama's Comments		Circle
		L	W			-	+	
5	Hisyam bin 'Ammar bin Nushair bin Maisarah bin Aban		245 H	Syam	Abu Al Walid		 Tsiqa h Kaisu n La ba'sa bih Shadu uq Hafiz h Menti oned in 'ats tsiqaat 	Tabi'in ordinary people
6	Ibnu Majah	209 H	275 H	Iran	Abu Abdillah		Imam fi al- hadith	Mudawin

Hadith takhrij requires to trace the hadith text in any master book. Because, it could be that the hadith about zam-zam water is found in the hadith books, either in the same editorial or in a different editorial. Through this search, a list of hadith texts and a list of narrators will be found. This is intended to determine in terms of the number of narrators whether it is mutawatir or ahad. Mutawatir is the amount of rawi is a lot, and ahad is the amount of rawi is not much (Soetari, 2015).

The above hadith from the point of view of relying on the mind is the hadith of marfu', which was relied on the Prophet Muhammad SAW. In terms of sanad connection (chain of narrators), this hadith is connected from shahabat to mudawin. In terms of narrators, the quality of this hadith is dhaif. This is because there are comments from scholars who gave negative assessments, namely Abdullah bin Al-Muammal bin Wahballah.

According to Muhammad Nashirudin Al-Albani's view, he categorized this hadith is shahih. Also Abu Hasan bin Abdul Hadi Al-Sindi, categorized this hadith is shahih, his opinion was expressed in the anthology of syarah against the story of *Sunan Ibn Majah*. This opinion of the last scholar is the category of hasan li ghairih, this opinion is because there is a narrator of hadithg who is considered dhaif, namely Abdullah bin Al-Muammal bin Wahballah. Ahmad bin Hambal argues that every hadith narrated by Abdullah bin Al-Muammal is a mungkar hadith (Mahmud & Arafah, 2020). Although from the narrator Abdullah bin Al-Muammal is



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considered dhaif, there is another hadith that can strengthen it, namely the Musnad Imam Ahmad Number 14320:

حَدَّثَنَا عَلِيُّ بْنُ ثَابِتٍ حَدَّثَنِي عَبْدُ اللهِ بْنُ الْمُؤَمَّلِ عَنْ أَبِي الزُّبَيْرِ عَنْ جَابِرٍ قَالَ قَالَ رَسُولُ اللهِ صَلَّى اللهُ عَلَيْهِ وَ سَلَّمَ مَاءُ زَمْزَمَ لِمَا شُرِبَ لَهُ

Told us 'Ali bin Thabit has told me Abdullah bin Al-Mua'ammal from Abu Az-Zubair from Jabir said; Rasulluah SAW said, "Zam-zam water has properties depending on the intention of the drinker".

This hadith narrated by Imam Ahmad can elevate the hadith of Ibn Majah through muttabi' Ali bin Thabit and is considered hasan by Syu'aib al-Arna'uth.

From the hadith of Ibn Majah, when viewed textually, has the meaning taht zam-zam water has properties according to the intention (purpose) of drinking it. For example if someone drinks zam-zam water with the intention of curing a disease the Allah will heal him then if someone drinks zam-zam water with the aim of eliminating thirst then Allah will eliminate thirst for him. The efficacy of zam-zam water has been proven by stories that have been experienced by several people. Of course, many scientists have researched the water content of zam-zam.

A story shows that the chemical elements in zam-zam water consist of positive ions and negative ions.

Positiv	ve Ion	Negative Ion		
Element	Element Content		Content	
Sodium	250 mg	Sodium	375 mg	
Calcium	Calcium 200 mg		366 mg	
Potassium	120 mg	Potassium	273 mg	
Magnesium	Magnesium 50 mg		25,0 mg	
		Ammonia	6 mg	

Table 2. Content of Zam-Zam Water (Mahmud & Arafah, 2020).

There is another analysis comparing zam-zam water with PDAM (Municipal Waterworks) water.

Table 3. Comparative Analysis of Zam-Zam Water and PDAM water (Lutfiah,2020)

Element	Device Used	Tap Water	Zam-Zam Water	Zam-Zam Pipe Water	
Na	Flame Photometer	37,8	133	135	
Ca	Titration EDTA	75,2	96	96	

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Element	Device Used	Tap Water	Zam-Zam Water	Zam-Zam Pipe Water
Mg	Titrationi EDTA	6,8	38,88	38,88
K	Flame Photometer	2,7	43,2	43,2
HCO ₃	Titration Acid	70,2	195,4	195,4
CI	Ion Chromatograph	73,3	163,3	159,7
F	Ion Chromatograph	0,28	0,72	0,68
NO ₃	Ion Chromatograph	2,6	124,8	126,1
SO ₄	Ion Chromatograph	107	124	123,3
pH	pH Meter	7,2	8	7,90
TDS	Oven 105°C	350	835	840

Note: All values except pH are in mg/l units

Judging from the analysis, the chemical elements contained in zamzam water are many times more than ordinary water or PDAM water. Therefore, zam-zam water eliminates toxins in the body faster so that it can help cure diseases such as cancer, food poisoning, weakness throughout the body, and so on. Zam-zam water can also stabilize blood pressure because it has very high calcium concentration so it can reduce the risk of low birth and lower blood pressure.

Calcium is the substance most needed by the body but it is difficult to be absorbed and utilized by the body's cells. Calcium can increase the body's immune system againts viruses, parasites, cancer, and bacteria that can cause tooth decay.

Calcium occurs naturally as a compound molecule. When calcium is in compound form, magnesium and vitamin D can increase its absorption. Sodium helps to keep calcium in a soluble form in the body. In order to be utilized by the body, calcium must dissolve in water. The human body requires calcium and magnesium which are soluble in water. If the body does not have two magnesium in every one calcium, then calcium will be polluting for the body. While magnesium itself can help keep bones from becoming brittle.

The fluorides in zam-zam water play a role in helping the prevention of dental caries. A number of large studies have confirmed the advantages of fluoride in drinking water. Drinking water that contains fluoride about 1 ppm can reduce the experience of dental caries by up to 50%. Zam-zam water can also function to reduce tumors or cancer. Zam-zam water has an oncolytic action which affects the endocrine immunology and body growth



system indirectly. To study the oncolytic action of zam-zam water, an experiment was carried out on mice, the mice were injected with azoxymethane to induce large tumors. Then a biopsy is taken of the non-tumor tissue to prepare microarray data on the different genes. The mice were given 500 cc of zam-zam water daily for one month, then a significant reduction in tumor was observed which eventually decreased in a long-term study. The cause of tumor reduction is possible due to the biochemical properties of zam-zam water (Khalid, Ahmad, Khalid, Ahmed, & Irfan, 2014).

Iron is one of the components needed by the body. When the body is deficient in iron, it will cause anemia, however, if the iron in the body exceeds the dose required by the body it can interfere with health. This is because iron cannot be secreted by the body. Drinking water that contains large doses of Fe tends to cause nausea. Excessive doses of Fe will also cause damage to the intestinal wall which can lead to death. Fe contains exceeding 1 mg/l will cause irritation to the skin and eyes. An analysis of iron (Fe) contains in zam-zam water was caerried out using the Atomic Absorption Spectrophotometry (AAS) method. This analysis was conducted to determine whether the Fe content in zam-zam water could be consumed in accordance with the drinking water standards set by the Minister of Health No. 907/Menkes/SK/VII/2002 dated 29 july 2002, namely 0,3 mg/l for iron (Indonesia M. K., 2002) or not. The results of he analysis showed that the concentration of Fe in zam-zam water was 0,0599 mg/l with a wavelength of 248,3 nm. This concentration is far below the limit set by the government. This shows that zam-zam water is safe for consumption (Harahap, 2017).

Conclusion

The substances contained in zam-zam water inlude sodium, calcium, potassium, magnesium, ammonia, fluoride, iron, nitrate, and others. Because the water content of zam-zam is many times more than ordinary drinking water, zam-zam water can help remove toxins in the body quickly so that it can help cure diseases such as cancer, weakness throughout the body, poisoning, prevent dental caries, and so on. Takhrij and syarah hadith about zam-zam water content with a chemical approach still needs further multidisciplinary and transdisciplinary research. The hadith of the Prophet Muhammad SAW has been informed about zam-zam water about its properties. So the presence of zam-zam water needs to be utilized and research on this zam-zam water needs to be developed more broadly and again with a chemical approach.



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References

Chang, R. (2005). Kimia Dasar Konsep-Konsep Inti. Jakarta: Erlangga.

- Darmalaksana, W. (2020a). Formula Penelitian Pengalaman Kelas Menulis. Jurnal Kelas Menulis UIN Sunan Gunung Djati Bandung, 1-8.
- Darmalaksana, W. (2020b). Metode Penelitian Kualitatif Studi Pustaka dan Studi Lapangan. Pre-Print Digital Library UIN Sunan Gunung Djati Bandung.
- Harahap, F. S. (2017). Analisa Kadar Besi (Fe) dalam Air Zam-Zam secara Spektrofotometri Serapan Atom (SSA). *Jurnal Eksakta Volume 2 Nomor 1*, 62-67.
- Indonesia, C. (2020, Mei 15). *Air Zamzam, Khasiat dan Kandungan Secara Ilmiah*. Retrieved from CNN Indonesia: https://www.cnnindonesia.com/teknologi/20200515131248-199-503711/air-zamzam-khasiat-dan-kandungan-secara-ilmiah
- Indonesia, M. K. (2002, Juli 29). Keptusan Menteri Kesehatan RI Nomor 907/Menkes/SK/VII/2002 Tentang Syarat-Sayart dan Pengawasa Kualitas Air Minum. Retrieved from Kelair.bppt.go.id: http://www.kelair.bppt.go.id/Hukum/Data/kepmen/bml/907-2002.pdf
- Khalid, N., Ahmad, A., Khalid, S., Ahmed, A., & Irfan, M. (2014). Mineral Composition and Health Functionality of Zamzam Water: A Review. *International Journal of Food Properties*, 611-677.
- Lutfiah, H. (2020). The Scientific Analysis of Zamzam Water in The Perspective of Hadith Prophet Muhammad SAW. *As-Salam Vol. IX No.* 1, 61-76.
- Mahmud, M., & Arafah, R. N. (2020). Air Zam-zam dalam perspektif Hadis dan Sains (Upaya Mendamaikan Agama dan Sains). *Prosiding Konferensi Integrasi Interkoneksi Islam dan Sains*, 219-223.
- Nurjannah, D. S. (2018). Air Zam-Zam Dalam Hadis Ibn Majah No. Indeks 3053 (Pendekatan Medis). Surabaya.
- Soetari, E. (2015). Syarah dan Kritik Hadis dengan Metode Tahrij: Teori dan Aplikasi (2nd ed). Yayasan Amal Bakti Gombong Layang.

Yusuf, A. (2020, Desember 14). Kisah Kesembuhan Para Ulama dari Penyakit dengan Air Zam-Zam. Retrieved from Ihram.co.id: Copyright © 2021 The Authors. Published by Gunung Djati Conference Series This is an open access article distributed under the CC BY 4.0 license https://creativecommons.org/licenses/by/4.0



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https://ihram.co.id/berita/qlbg2c327/kisah-kesembuhan-paraulama-dari-penyakit-dengan-air-zamzam

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