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# Takhrij and Syarah Hadith of Chemistry: Maintaining Environmental Cleanliness by Reducing Plastic Waste

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#### Abstract

The purpose of this research is to discuss the hadith of the Prophet SAW. about cleanliness. This research method is qualitative through the approach of takhrij and sharah hadith with chemical analysis. The result and discussion of this research are to maintain environmental cleanliness by reducing plastic waste so that it can reduce the occurrence of environmental pollution. This research concludes that keeping the environment clean is highly recommended by the Prophet SAW. based on takhrij and sharah hadith. This study recommends developing efforts to maintain environmental cleanliness by reducing plastic waste.

Keywords: Chemistry, Cleanliness, Hadith, Sharah, Takhrij

#### Introduction

Indonesia is a country that has the 4th largest population in the world, namely 264 million people. The large population has an effect on the amount of waste produced. The higher the population, the more waste is produced (egsaugm, 2019). In Indonesia, the amount of non-organic waste produced usually comes from human activities. The composition of non-organic waste generated from human activities is 30-40%. Of the non-organic waste, plastic waste is the second largest waste composition with a total of 14% (Purwaningrum, 2016). Most of the plastic waste is a type of

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plastic bag or plastic bag other than plastic packaging (Purwaningrum, 2016). Based on the results of World Bank research, it is stated that Indonesia is the second largest contributor to marine debris in the world after China by producing plastic waste in the waters reaching 3.2 million tons (Lapian et al., 2019). The findings in this study made Indonesia aware of starting real action in reducing plastic waste.

There is a hadith of the Prophet SAW. with regard to the importance of maintaining cleanliness at Ad-Damiri No. 651 in the Book of Thaharah:

أَخْبَرَنَا مُسْلِمُ بْنُ إِبْرَاهِيمَ حَدَّتَنَا أَبَانُ هُوَ ابْنُ يَزِيدَ حَدَّتَنَا يَحْيَى بْنُ أَبِي كَثِيرِ عَنْ زَيْدٍ عَنْ أَبِي سَلَّامٍ عَنْ أَبِي سَلَّامٍ عَنْ أَبِي سَلَّامِ عَنْ أَبِي اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ الطَّهُورُ شَطْرُ الْإِيمَانِ وَالْحَمْدُ لِلَّهِ يَمْلأُ الْمِيزَانَ وَلاَ اللَّهُ وَاللَّهُ أَوْرُ وَالْحَمْدُ لِلَّهِ يَمْلأُ الْمِيزَانَ وَلاَ اللَّهُ وَاللَّهُ أَوْرٌ وَالْحَمْدُقَةُ بُرُ هَانٌ وَالْأُوضُوءُ ضِيَاءٌ وَالْأَرْضِ وَالصَّلَاةُ نُورٌ وَالصَّدَقَةُ بُرُ هَانٌ وَالْوُضُوءُ ضِيَاءٌ وَالْقُرْانُ حُجَّةٌ لَكَ أَوْ عَلَيْكَ وَكُلُّ النَّاسِ يَعْدُو فَبَائِعٌ نَفْسَهُ فَمُعْتِقُهَا أَوْ مُوبِقُهَا

Having told us Muslim bin Ibrahim has told us Aban Ibn Yazid, has told us Yahya bin Abu Katsir from Zaid from Abu Salam from Abu Malik Al-Asy'ari Prophet sallallahu'alaihi wassalam said: "Cleanliness is half faith, and (speech) Alhamdulillah meets the scales, and (sentence) Laa Ilaaha Illallahu Wa Allahu Akbar both fill the heavens and the earth, prayer is light, alms are proof, ablution is light and the Qur'an can be evidence that defends you or evidence that demands you, all man in the morning, then sells himself, until he sets himself free or destroys him."

Based on the explanation above, a research formula was prepared, namely the formulation of the problem, research questions, and research objectives (Darmalaksana, 2020a). The formulation of this problem is found in the hadith of the Prophet SAW. about the importance of maintaining cleanliness. The research question is how the hadith of the Prophet SAW. about keeping cleanliness. The purpose of this research is to discuss the hadith of the Prophet SAW. about keeping the environment cleanliness.

#### **Research Methods**

This research method is qualitative through literature and field studies (Darmalaksana, 2020b). While the approach applied is takhrij and sharah hadith (Soetari, 2015). The interpretation in this study used chemical analysis (Kardono, 2016).



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Generally, there are two stages of research on hadith, namely takhrij and sharah. Takhrij is the process of removing hadiths from the hadith book to research its validity, while sharah is the explanation of the hadith text with certain analysis (Soetari, 2015). Chemistry itself, as a means of interpretation in this research, is a branch of science that studies the composition, structure, properties and changes of a material (F.n., 2018).

#### **Result and Discussion**

At first, a search was carried out through the hadith application regarding the keyword "Cleanliness" until the hadith was found in the book of Sunan Ad-Darimi Number 651, as stated earlier.

Table 1. List of Rawi Sanad

No ·	Rawi Sanad	Birth/Deat			Kuniya	Ulama's		6: 1
		В	h D	Country	h	_	Comments +	Circles
1	Abu Malik	_	18 H	Syam	Abu Malik		-Friend -Friend	Friend
2	Mamthur			Syam	Abu Sallam		-Tsiqah -Tsiqah -Mentioned in 'ats tsiqaat	Tabi'in Ordinary People
3	Zaid bin Sallam bin Abi Salam Mamthur			Syam			-Tsiqah -Tsiqah -Tsiqah -Tsiqah -Tsiqah - Mentioned in 'ats tsiqaat	Tabi'in (No see firends)
4	Yahya bin Abi Katsir Shalih bin Al- Mutawak kil		132 H	Yamama h	Abu Nashr		-Tsiqah -Tsiqah - Mentioned in 'ats tsiqaat -Tsiqah tsabat -A figure	Tabi'in Ordinary People
5	Aban bin Yazid		160 H	Bashrah	Abu Yazid		-Strong in every masyayikh -Tsiqah -Tsiqah -Tsiqah -Tsiqah	Tabi'ut Tabi'in Old People



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No ·	Rawi Sanad	Birth/Deat		Country	Kuniya	Ulama's		Circles
		h				Comments		
		В	D		h	-	+	
							-My hope he is ahlu shidqi - Mentioned in 'ats tsiqaat - According to our he is tsiqah - Tsabt, but Ibnul Jauzi mentioned it in the book Adl-Dlu'afa by mentioning the person who plundered it without mentioning the person who believe it	
6	Muslim bin Ibrahim		222 H	Bashrah	Abu 'Amru		-Tsiqah ma'mun -Tsiqah ma'mun -Tsiqah shaduuq -Tsiqah - Mentioned in ʻats tsiqaat -Hafizh	Tabi'in Old People
7	Ad- Darimi	181 H	255 H	Samarka nd	Abu Muham mad		Imam Al- Hadith	Mudawin

Table 1 is a list of the rawi and sanad hadith under research. Rawi is the narrator of hadith while sanad is the chain of narrators from shahabat to mudawin, namely ulama's who record hadiths in the hadith book (Soetari, 1994). According to the science of hadith, the requirement for shahih hadith is that rawi must be positive according to the comments of the ulama's. if there is comment from a ulama's who gives a negative assessment to one of the narrators in the sanad lane, then the hadith is a

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dhaif hadith (Darmalaksana, 2020d). Sahih hadith is a strong hadith, while dhaif hadith is a weak hadith (Soetari, 1994). Requirements for shahih hadith must also be continued. If the hadith sanad is broken, then the hadith is a dhaif hadith. The proof of continuity is meeting between teacher and student. If there is no objective evidence, the encounter between teacher and student can be seen from birth and death. If there is no data on births and deaths, it is predicted that the average age of ulama's 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 met (Darmalaksana, 2020d).

The quality of this hadith is dhaif. Because, from the sanad side there was a disconnect between Mamthur and Zaid bin Sallam bin Abi Salam Mamthur where the year of his death was not known. Also if it is assumed that each of them is 90 years old, it is possible to meet between the first and second generations as well as the second and third generations. Moreover, from the side of the narrator, there were no comments from ulama's who gave negative assessments. Although this hadith is included in the dhaif hadith, the ulama's argue that this hadith can be used as evidence because it contains elements of goodness (fadhail amal). Basically the science of hadith has other parameters in providing reinforcement of hadith. Among other things, hadiths are called mutawatir in a very popular sense if the hadiths being researched are scattered in several hadith books (Soetari, 2015). The distribution of this hadith acts as a syahid and a mutabi. Syahid is another similar hadith while mutabi is another sanad (Darmalaksana, 2020d). The rest, hadith so far is the virtue of Islamic practice, so it can be argued even though the statute is dhaif (Darmalaksana et al., 2017).

The ulama's have given syarah, namely an explanation of the content and meaning of the hadith (Darmalaksana, 2020c). According to the views of jumhur ulama's regarding environmental cleanliness, maintaining environmental cleanliness is included in one of the branches of faith because maintaining environmental cleanliness is a form of implementation of a Muslim's gratitude for the blessings that have been given by Allah SWT (Ibrahim et al., 2017).

This hadith can also be explained in chemical terms. Maintaining the environment clean is very important, because if the environment is not properly maintained, the environment will be polluted. Maintaining the

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environment clean can be done by not littering. Garbage that is dumped carelessly will cause many natural disasters such as floods, landslides and others. This is because the type of waste that is often disposed of carelessly is plastic waste.

Plastic is a material that is formed from the organic condensation process. The materials contained in plastics are *polymers* and other *additives*. This *polymer* is composed of monomers that are bound by a chain of chemical bonds (Purwaningrum, 2016). Plastic waste is waste that is difficult to decompose on the ground because it has a long carbon chain, making it difficult for microorganisms to break down. This allows the plastic to break down thousands of years later. Environmentally friendly plastics also take a long time to decompose and will remain waste (Diet Kantong Plastik, 2016).

Plastic waste can have a bad impact on the environment if the waste is littered or burned carelessly. When plastic is burned, the smoke from burning plastic materials is very dangerous because it contains toxic gases such as carbon monoxide (CO) and hydrogen cyanide (HCN). These toxic gases can cause air pollution and can lead to global warming in the earth's atmosphere. Plastic waste that is in the soil, which is difficult to decompose causes the minerals in the soil to decrease and the oxygen level in the soil will be less, so that soil animals and plants will find it difficult to get food, difficult to breathe, and eventually die. Besides that, there is also plastic waste that is carelessly dumped into drainage drain, gutters and rivers which will clog the drain so that they can cause flooding (Purwaningrum, 2016).

Associated with the bad impacts caused by the use of plastic waste, it will become an increasingly serious problem if a solution is not sought. Therefore, efforts that can be made to reduce the use of plastic waste is to apply the 3R concept (*Reuse*, *Reduce*, *Recycle*). Reuse is to reuse plastic items that are no longer used, Reduce is to reduce the use of items made of plastic, especially items that are only disposable and Recycle is to recycle items made of plastic (Purwaningrum, 2016). Besides that, there are other efforts that can be made to reduce the use of plastic waste, namely not littering, not burning littering, bringing your own basket from home when shopping, and others.

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#### Conclusion

Maintaining the environment clean by reducing plastic waste is recognized as a highly recommended activity in Islam. Based on the hadith takhrij, the quality of this hadith is dhaif because there is a disconnected narrator sanad, namely between Mamthur and Zaid bin Sallam bin Abi Salam Mamthur where the year of his death is not known. However, according to the jumhur of ulama's, the hadith is still useful because it contains elements of goodness (fadhail amal), so this hadith can be used as evidence. According to the sharah hadith, cleanliness is half of faith. Reducing plastic waste is an effort to maintain the environment clean. Materials contained in plastics, namely polymers and other additives, can cause environmental pollution. To reduce this impact, efforts that can be made are to apply the 3R concept (Reuse, Reduce, Recycle). This research is expected to have benefits in developing insights about reducing plastic waste, especially in the chemical field. This research has limitations, namely simple takhrij and sharah hadith, so it requires more adequate follow-up research in the field of chemistry. This study recommends community development in reducing plastic waste through the chemical field beyond its effectiveness as an effort to maintain environmental cleanliness.

#### References

- Darmalaksana, W. (2020a). Formula Penelitian Pengalaman Kelas Menulis. *Jurnal Ilmiah Islam Futura*, 2(1), 1–8.
- Darmalaksana, W. (2020b). Metode Penelitian Kualitatif Studi Pustaka dan Studi Lapangan. *Pre-Print Digital Library UIN Sunan Gunung Djati Bandung*.
- Darmalaksana, W. (2020c). Penelitian Metode Syarah Hadis Pendekatan Kontemporer: Sebuah Panduan Skripsi, Tesis, dan Disertasi. *Diroyah: Jurnal Studi Ilmu Hadis*, 5.
- Darmalaksana, W. (2020d). Prosiding Proses Bisnis Validitas Hadis untuk Perancangan Aplikasi Metode Tahrij. *Jurnal Ushuluddin UIN Sunan Gunung Djati Bandung*, 1, 1–7.
- Darmalaksana, W., Pahala, L., & Soetari, E. (2017). Kontroversi Hadis sebagai Sumber Hukum Islam. *Wawasan: Jurnal Ilmiah Agama Dan Sosial Budaya*, 2(2), 245–258.
- Diet Kantong Plastik. (2016). *Mengapa kantong plastik berbahaya?* Diet Kantong Plastik. https://dietkantongplastik.info/bahaya-kantong-plastik/#:~:text=Kantong plastik (dan jenis plastik,dan tetap akan menjadi sampah.



ISSN: 2774-6585

Website: https://conferences.uinsgd.ac.id/index.php/gdcs

- egsaugm. (2019). Sejauh Manakah Inovasi Pengelolaan Sampah di Indonesia? Egsaugm. https://egsa.geo.ugm.ac.id/
- F.n., S. (2018). Pengembangan Ranah Afektif Kimia Melalui Penyuluhan kepada Masyarakat. *Ranah Afektif*.
- Ibrahim, R., Mulyo, A. M. T., & Fatimah, L. (2017). Konsep Ramah Lingkungan dalam Perspektif Alquran, Hadis, dan Kitab Kuning di Pesantren. *Madania: Jurnal Kajian Keislaman*, 21(2), 209. https://doi.org/10.29300/madania.v21i2.578
- Kardono, K. (2016). Analisis Kimia Limbah B3 Untuk Menentukan Efisiensi Penghancuran Dalam Uji Bakar Di Insinerator. *Jurnal Teknologi Lingkungan*, 13(2), 167. https://doi.org/10.29122/jtl.v13i2.1416
- Lapian, F. E. P., Ramli, M. I., Pasra, M., & Arsyad, D. A. (2019). Pengaruh Limbah Plastik PET (Polyethylene Teterphthalate) terhadap Nilai Kadar Aspal Optimum Campuran AC-WC. *Adaptasi Dan Mitigasi Bencana Dalam Mewujudkan Infrastruktur Yang Berkelanjutan*.
- Purwaningrum, P. (2016). Upaya Mengurangi Timbulan Sampah Plastik Di Lingkungan. *Indonesian Journal of Urban and Environmental Technology*, 8(2), 141. https://doi.org/10.25105/urbanenvirotech.v8i2.1421
- Soetari, E. (1994). *Ilmu Hadits*. Amal Bakti Press.
- Soetari, E. (2015). Syarah dan Kritik Hadis dengan Metode Tahrij: Teori dan Aplikasi (2nd ed.). Yayasan Amal Bakti Gombong Layang.



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