



## EFFECTIVENESS OF DOG SALIVA PURIFICATION FROM THE PERSPECTIVE OF THE PROPHET'S HADITH AND MICROBIOLOGICAL ANALYSIS

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### ABSTRACT

This study examines dog saliva from the perspective of Prophetic hadith and modern microbiology, focusing on purification using water and soil as guided by Prophet Muhammad ﷺ, highlighting the harmony between Islamic jurisprudence and science. A qualitative library research integrated Islamic textual analysis and microbiological literature review, analyzing ten authentic hadith, five classical fiqh sources, and twenty-five peer-reviewed studies (2015–2024). Data were processed through reduction, descriptive display, and comparative integration. Findings show that dog saliva contains pathogenic microorganisms, including *Capnocytophaga canimorsus* and rabies virus. The Prophetic practice of washing vessels seven times, once with soil, aligns with science, as soil harbors antibacterial agents like *Streptomyces* that neutralize resistant pathogens, validating the method both religiously and scientifically. These findings reinforce adherence to Prophetic guidance, provide scientific justification and emphasize hygienic practices for public health. The study's integrative approach uniquely synthesizes hadith analysis with microbiological evidence, demonstrating the convergence of faith and science.

### KEYWORDS:

*Dog Saliva; Prophetic Hadith; Medical Science; Purification; Microbiological.*

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## A. INTRODUCTION

From the perspective of Hadith, dogs (*Canis lupus familiaris*) hold an interesting position, with discussions encompassing aspects of Islamic law and science.<sup>194</sup> In Islamic tradition, dogs are frequently discussed in the context of religious law, ritual purity (*tahārah*), and human interaction with these animals.<sup>195</sup> Meanwhile, the scientific view primarily focuses on their biological functions, behavior, benefits, and associated health risks.<sup>196</sup> The combination of these two perspectives offers a holistic understanding of the human-dog relationship across various aspects of life. The hadiths of the Prophet Muhammad (peace be upon him) demonstrate a balanced view of dogs, particularly regarding cleanliness. The Prophet (peace be upon him) said:

إِذَا شَرِبَ الْكَلْبُ فِي إِنَاءٍ أَحَدٍ كُمْ فَلْيَغْسِلْهُ سَبْعًا، أَوْ لَا هُنَّ بِالْتُّرَابِ

*"When a dog licks the vessel of one of you, then wash the vessel seven times, one of them with soil".<sup>197</sup>*

This hadith emphasizes the importance of maintaining cleanliness from the potential filth of dog saliva, which can carry disease. Scholars explain that using soil for washing has hygienic benefits, such as killing bacteria that cannot be removed with water alone, while repeated washing serves to ensure the vessel's complete purity. This law applies to all types of dogs, both those that are permitted to be kept as hunting dogs and those that are not permitted. However, there is also a hadith that explain the benefits of dogs in certain roles, such as hunting or security. Another hadith states:

مَنْ افْتَنَى كَلْبًا لَيْسَ بِكَلْبٍ مَاشِيَةً أَوْ ضَارِيَةً نَصَصَ كُلَّ يَوْمٍ مِنْ عَمَلِهِ قِيرَاطًا (رواه البخاري)

<sup>194</sup> Ananda Prayogi, "The Affection Towards Animals in The Perspective of Hadith (Thematic Study)," *Journal of Comprehensive Science (JCS)* 2, no. 3 (March 2023): 796–809, <https://doi.org/10.59188/jcs.v2i3.274>.

<sup>195</sup> Riri Maiyati et al., "Dog Raising in Jorong Kapalo Koto Nagari Gantung Ciri Kubung Subdistrict, Solok Regency (Study Living Hadith)," *International Journal of Research* 2, no. 2 (December 2024): 203, <https://doi.org/10.55062/IJR.2024.v2i2/634/5>.

<sup>196</sup> Farid Adnir and Alwi Padly Harahap, "The Relationship Between Hadith and Modern Scientific Knowledge: An Analysis of the Contribution of Hadith to Medical Science," *Tajdid: Jurnal Ilmu Ushuluddin* 23, no. 2 (December 2024): 647–73, <https://doi.org/10.30631/tjd.v23i2.500>.

<sup>197</sup> Muslim bin Hajjaj An-Naisaburi, *Shahih Muslim* (Beirut: Dar Ihya At-Turots, 1955), 2227.

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*"Whoever keeps a dog that is not for hunting or guarding livestock, his reward will be reduced by two qirath every day."*<sup>198</sup>

This hadith demonstrates that keeping dogs is not absolutely forbidden, but is permitted as long as it has a clear and beneficial purpose. Therefore, keeping dogs in an Islamic context must always consider legal aspects and objectives that align with sharia teachings.<sup>199</sup> From a scientific perspective, dogs are known to have many benefits, such as supporting medical research, helping with drug detection, disaster rescue, and emotional therapy.<sup>200</sup> However, dogs can also be carriers of zoonotic diseases, such as rabies, leptospirosis, and bacterial infections. *Capnocytophaga canimorsus*.<sup>201</sup> Therefore, it is important to have a balanced approach between understanding sharia and health science.

So far, researchers have not found any literature that specifically examines "Dog Saliva from the Perspective of Hadith and Science." Several previous studies have focused on certain aspects, such as: Rendi Yan Markose (2024) who discusses "The Law of Dog Saliva in the Perspective of Imam Ash-Shafi'i and Imam Malik."<sup>202</sup> Hidayanti, Maulita (2020) which discusses "The law of licking dogs according to Ad Dardiri Al Maliky and Asy Syarbini Al Syafi'i."<sup>203</sup> This research analyzes the law of dog licking based on the views of two scholars from the Maliki (Ad Dardiri) and Syafi'i (Asy Syarbini) schools. This study aims to understand the method of purification according to each sect, as well as the underlying arguments. Khoirul Anam (2020) which discusses "Cat Saliva in Hadith (Science Review)."<sup>204</sup> Muh. Fikri (2023)

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<sup>198</sup> Al-Bukhari Abdullah Muhammad bin Ismail, *Shahih al-Bukhari*, V (Beirut: Dar al-Kitab al-‘Ilmiyyah, 1992), no. 5058.

<sup>199</sup> M Azhar Musaddiq and Anwar Hafidzi, "Review of Islamic Law on Keeping Pets That Defile Neighbors' Houses and Eat at Neighbors' Houses," *Indonesian Journal of Islamic Jurisprudence, Economic and Legal Theory* 1, no. 2 (June 2023): 123–31, <https://doi.org/10.62976/ijijel.v1i2.9>.

<sup>200</sup> Sheridan Polinsky, "Dogs in the Islamic Tradition: A Revisionist Examination," *Society & Animals*, June 3, 2022, 1–17, <https://doi.org/10.1163/15685306-bja10093>.

<sup>201</sup> Musaddiq and Hafidzi, "Review of Islamic Law on Keeping Pets That Defile Neighbors' Houses and Eat at Neighbors' Houses."

<sup>202</sup> Rendi Yan Markose, "Hukum Air Liur Anjing dalam Perspektif Imam Asy-Syafi'i dan Imam Malik" (PhD Thesis, UIN Suska Riau, 2024), <http://repository.uin-suska.ac.id/83021/>.

<sup>203</sup> Maulita Hidayanti, "Hukum Jilatan Anjing Menurut Ad Dardiri Al-Maliky Dan Asy-Syarbini Asy-Syafiyy" (PhD Thesis, UIN Sunan Gunung Djati Bandung, 2020), <https://etheses.uinsgd.ac.id/id/eprint/34602>.

<sup>204</sup> Khoirul Anam, *Liur Kucing dalam Hadits (Tinjauan Sains) Skripsi Diajukan Untuk Memenuhi Tugas & Melengkapi Syarat Guna Memperoleh Gelar Sarjana Tingkatan Satu (S1)*, n.d., accessed January 28, 2025, [https://eprints.walisongo.ac.id/15093/1/1504026008\\_Khoirul%20Anam\\_Full%20Skripsi%20-%20K%20E%20N%20D%20H%20O%281%29.pdf](https://eprints.walisongo.ac.id/15093/1/1504026008_Khoirul%20Anam_Full%20Skripsi%20-%20K%20E%20N%20D%20H%20O%281%29.pdf).

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discusses "General Overview of Pig Behavior from an Islamic and Scientific Perspective."<sup>205</sup> Although earlier studies have tended to isolate either Islamic legal (*fiqh*) or scientific perspectives, this research integrates the study of hadiths concerning the ritual purification of dog saliva with modern microbiological analysis, thereby underscoring the epistemic harmony between Islamic jurisprudence and contemporary scientific inquiry.

This study aims to analyze dog saliva from the perspective of hadith and science, specifically regarding the effectiveness of the water and soil purification method as taught by the Prophet Muhammad (peace be upon him). The study of hadith was conducted to understand the legal basis and wisdom of sharia, while microbiological analysis was used to test the content of dog saliva and the effectiveness of soil as a cleaning agent. Thus, this study is expected to provide scientific contributions to strengthening interdisciplinary studies of religion and science, as well as providing practical implications for the Muslim community in understanding cleanliness according to sharia while aligning with modern health principles.

This research process involves four main steps. First, we conducted a literature review of hadith by examining primary texts on dog licks from authentic sources and their classical commentaries (*shurūh*). Second, we reviewed fiqh literature to explain the divergent views of scholars regarding the ruling on dog saliva and its purification methods. Third, a review of modern microbiological research on the content of dog saliva, the microorganisms it contains, and the effectiveness of soil as an antimicrobial agent in the purification process. Fourth, an integrative analysis was conducted to reconcile the perspectives of hadith and fiqh with scientific data, resulting in a comprehensive understanding of the effectiveness of dog saliva purification.

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<sup>205</sup> Muh Fikri, *Tinjauan Umum Perilaku Babi Dalam Perspektif Islam Dan Sains*, OSF, n.d., accessed January 28, 2025, <https://osf.io/preprints/myds5/>.

## B. METHOD

This study employs a qualitative, library-based research approach that integrates Islamic textual studies and microbiology.<sup>206</sup> The research methodology is structured into three stages: Islamic textual analysis, microbiological literature review, and comparative integration. The corpus of data consisted of approximately ten authentic hadith related directly or indirectly to *wilāgh al-kalb* (dog licking vessels) and five classical fiqh references. The primary sources included the hadith collections of *Sahih al-Bukhari*, *Sahih Muslim*, *Sunan Abi Dawud*, and *Sunan an-Nasa'i*. Classical commentaries (*sharh*) by scholars such as al-Nawawi and Ibn Hajar were examined to contextualize the legal interpretations of dog saliva. A comparative analysis was conducted to map the different positions among the Shafi'i, Maliki, Hanafi, and Hanbali schools of thought.

The secondary corpus consisted of approximately twenty-five peer-reviewed microbiological studies published between 2015 and 2024, indexed in PubMed, Scopus, and other academic databases. These studies addressed the microbiological characteristics of dog saliva, including the presence of bacteria (*Capnocytophaga canimorsus*, *Helicobacter spp.*), viruses (rabies), and potential allergens. A content analysis approach was applied to categorize pathogens, identify their modes of transmission, and assess the scientific relevance of soil as a cleansing agent, with special attention to studies on the antibacterial activity of *Streptomyces* in soil.

The hadith analysis and microbiological review were synthesized into a comparative framework, with data analysis following stages of reduction, descriptive display, and conclusion drawing/verification, integrating religious texts and scientific evidence. This integration was supported by visual aids, including a table comparing fiqh opinions, a table listing pathogenic microorganisms and their implications, and a conceptual model illustrating the convergence of religious and scientific perspectives. This structured methodology ensures transparency in both textual and scientific analysis, aligning with the research objective of

<sup>206</sup> Ubeydullah Efe and Ali Veysel Akcan, “A Literature Review of the Studies on Islam-Science-Technology in Web of Science,” *Journal of STEM Teacher Institutes* 4, no. 1 (2024): 65–80.

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demonstrating the harmony between Islamic jurisprudential guidance and contemporary microbiological findings.

## C. RESULTS AND DISCUSSION

This section is the core of the research and consists of two main sub-discussions:

عَنْ أَبِي هُرَيْرَةَ - رَضِيَ اللَّهُ عَنْهُ - أَنَّ رَسُولَ اللَّهِ - صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ - قَالَ «إِذَا شَرِبَ الْكَلْبُ فِي إِنَاءٍ أَحَدِكُمْ فَلْيَغْسِلْهُ سَبْعًا» وَمُسْلِمٌ: أُولَاهُنَّ بِالثُّرَابِ

*From Abu Hurairah, that the Messenger of Allah, may God bless him and grant him peace, said: "When a dog drinks from the container of one of you, then wash it seven times."*<sup>207</sup>

With regard to the impurity of dogs, Ulema' Shafi'iyah considered that all parts of a dog's body are impure, as well as the opinion of some of the Hanabil schools, this opinion is based on several hadiths, among them the hadith narrated by Abu Hurairah, the Prophet said:

طَهُورُ إِنَاءِ أَحَدِكُمْ إِذَا وَلَغَ فِيهِ الْكَلْبُ: أَنْ يَغْسِلَهُ سَبْعَ مَرَّاتٍ، أُولَاهُنَّ بِالثُّرَابِ

*"The purity of the vessel of one of you which has been licked by a dog is that it is washed seven times, and the first washing is with soil."*<sup>208</sup>

Based on this Hadith, the Prophet ordered us to wash the traces of dog licks, he even mentioned the number of numbers, this shows that the dog's feces are not just ordinary Najis, but mughallazah Najis, because if the Najis is ordinary Najis, then it is enough to purify it once.<sup>209</sup> In contrast to the Shafi'iyah school of thought, the scholars of the Malikiyah school of thought are of the opinion that dogs are not impure.<sup>210</sup> Imam Malik said, There is no harm

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<sup>207</sup> Abdullah Muhammad bin Ismail, *Shahih al-Bukhari*, V, 2:279.

<sup>208</sup> Muslim bin Hajjaj An-Naisaburi, *Shahih Muslim*, vol. 2, no. 2.

<sup>209</sup> Lisa Anggraini and Lailah Syahidah, "Etika Terhadap Hewan: (Kajian Tafsir Ayat Sosial Terhadap Anjing Dalam Al-Qur'an)," *Basha'ir: Jurnal Studi Al-Qur'an dan Tafsir*, June 27, 2023, 9–16, <https://doi.org/10.47498/bashair.v3i1.895>.

<sup>210</sup> Sulcha Jalil and Siti Sa'dianti, "Hukum Taharah dengan Air Bekas Minum Hewan (Studi Komparatif Mazhab Maliki dan Mazhab Syafii): The Ruling of Purification Using Water Leftover by Animals: A Comparative Study of the Maliki and Shafi'i Schools of Thought," *Al-Mabsuth: Jurnal Studi Islam Dan Bahasa Arab* 1, no. 2 (2025): 492–511.

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in clothes that are stained with dog saliva. Among the foundations of this opinion is the word of God in Surat Al Maidah verse: 4, God Almighty says:

يَسْأَلُونَكَ مَاذَا أُحِلَّ لَهُمْ قُلْ أُحِلَّ لَكُمُ الظَّبَابُ وَمَا عَلِمْتُمْ مِنَ الْجَوَارِ حُمُكَيْنَ تَعْلَمُونَ مِمَّا عَلِمْتُمُ اللَّهُ فَكُلُّوا مِمَّا أَمْسَكْنَ عَلَيْكُمْ وَإِذْ كُرُوا اسْمَ اللَّهِ عَلَيْهِ سَوَّاتَقُوا اللَّهُ إِنَّ اللَّهَ سَرِيعُ الْحِسَابِ

*They ask you, "What is lawful for them?" Say, "Permissible for you is the good and (game caught) by wild animals that you have taught by training them to hunt; you teach them according to what Allah has taught you. So eat from what they catch for you, and mention the name of Allah over the wild animals (when releasing them) and fear Allah, indeed Allah is swift in reckoning." [Al-Maidah/5:4].*

Based on this verse, there is no command to wash the part of the game animal that was touched by the dog's mouth, even though the game animal was exposed to the dog's saliva, of course this shows that the dog's saliva is not impure, especially since there is an affirmation about the halal status of the game animal that was caught by the dog. This opinion is also strengthened by Ibnu 'Umar's words narrated in the book Sahih Al Bukhari, he said:

كَانَتِ الْكِلَابُ تُقْبِلُ وَتُدْبِرُ فِي الْمَسْجِدِ فِي عَهْدِ رَسُولِ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ فَلَمْ يَكُونُوا يَرْشُونَ شَيْئًا مِنْ ذَلِكَ

*The dogs went in and out of the mosque in the time of Rasûlullâh Shallallahu 'alaihi wa sallam and they did not water a bit from it.<sup>211</sup>*

As for the order to wash the traces of dog licks seven times, they think that it is a "ta'abbudi" worship (worship that cannot be digested with the mind, such as the number of Raka'ats of prayer, parts of the body washed during ablution, etc.), not related to the dog's impurity.<sup>212</sup> The third opinion in this problem is that dog saliva is impure, but in addition to saliva not being impure, this is the opinion of the Hanafiyah scholars and some of the Hanabil scholars. Ibnu Taimiyah explained that if a shirt touches a dog's body in a damp condition, then the shirt is not impure, among the foundations of this opinion is that everything is basically pure, it cannot be said to be impure until there is evidence that explains its impurity,

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<sup>211</sup> Abdullah Muhammad bin Ismail, *Shahih al-Bukhari*, V, no. 57.

<sup>212</sup> Kholid Saifulloh, "Mengqadha Shalat dalam Perspektif Fiqh Islam," *Al-Majaalis : Jurnal Dirasat Islamiyah* 7, no. 2 (May 2020): 45–67, <https://doi.org/10.37397/almajaalis.v7i2.139>.

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so according to them, dogs are not impure except for their saliva based on the hadith of Abu Hurairah.<sup>213</sup>

Regardless of which opinion is more important, as a Muslim we must follow the guidance of the Prophet ﷺ, whether his wisdom is known or not, because Islam is a perfect religion: it does not command anything unless it is certain to be beneficial and does not prohibit anything unless it is certain to cause harm. This principle is in line with the study A Comparative Study of the Hadith Prohibiting Gambling and Positive Law in Indonesia, where the prohibition of gambling in the hadith and positive law both show that there are negative impacts that must be prevented for the benefit of individuals and society.<sup>214</sup>

### A Scientific Perspective on Dog Saliva

Dog saliva is a complex biological fluid containing various components that play a role in digestion, immune defense, and social interaction. Biologically, dog saliva plays a crucial role in maintaining the dog's oral health and can also impact human health through direct interaction.<sup>215</sup> Dog saliva contains various bioactive components, including enzymes, proteins, and peptides that can serve as biomarkers of health. One of the main components of dog saliva is mucin, a glycoprotein with viscoelastic properties that helps lubricate and protect oral tissues.<sup>216</sup> Mucin has antibacterial properties that support local immune defense, while enzymes such as amylase, peroxidase, lysozyme, and lactoferrin play a role in carbohydrate breakdown, antimicrobial activity, bacterial cell wall degradation, and microorganism growth inhibition. Furthermore, dog saliva contains immunoglobulins, particularly IgA, which function to protect the mucosa and serve as indicators of physiological stress.<sup>217</sup>

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<sup>213</sup> Isnan Ansory, *Ritual Bersuci Rasulullah SAW Menurut 4 Mazhab (Mandi-Wudhu-Tayammum)* (Penerbit A-Empat, 2024).

<sup>214</sup> Bisri Tujang, Hendri Waluyo Lensa, and Abd. Muthalib, "Studi Komparatif antara Hadits Larangan Berjudi dan Hukum Positif di Indonesia," *Al-Majaalis : Jurnal Dirasat Islamiyah* 12, no. 2 (May 2025): 319–41, <https://doi.org/10.37397/al-majaalis.v12i2.781>.

<sup>215</sup> Sabah Pasha et al., "The Saliva Proteome of Dogs: Variations Within and Between Breeds and Between Species," *Proteomics* 18, nos. 3–4 (February 2018): 1700293, <https://doi.org/10.1002/pmic.201700293>.

<sup>216</sup> Megan A. Stephens et al., "Capnocytophaga Canimorsus from Dog Saliva Exposure Causing Severe Sepsis in a Healthy Adult: A Case Report," *American Journal of Case Reports* 26 (April 2025), <https://doi.org/10.12659/AJCR.946691>.

<sup>217</sup> Alberto Muñoz-Prieto et al., "Changes in Salivary Proteins Can Reflect Beneficial Physiological Effects of Ejaculation in the Dog," *Theriogenology* 164 (2021): 51–57.

While dog saliva has some protective properties, research also suggests that this fluid can act as a vector for various pathogens. Some of the bacteria and viruses found in dog saliva include: *Helicobacter spp.*: These bacteria have been linked to gastritis in dogs and humans and can be transmitted through saliva.<sup>218</sup> *Capnocytophaga canimorsus*: This bacterium can cause serious infections in humans, especially in individuals with weakened immune systems. Infection usually occurs through a dog bite or a dog licking an open wound.<sup>219</sup> Rabies Virus: Rabies is a zoonotic disease transmitted through the saliva of infected animals, primarily through bites. Periodontopathogenic bacteria: For example, *Porphyromonas gulae*, which contributes to periodontal disease in dogs and has the potential to infect humans through salivary contact. Dog saliva can also contain allergens that can trigger allergic reactions in humans. Certain proteins in dog saliva have been identified as allergens, so interacting with saliva can be risky for sensitive individuals.<sup>220</sup>

Some of the health risks associated with human contact with dog saliva include: Zoonosis: Diseases that can be transmitted from animals to humans, such as rabies and other infections. *Capnocytophaga canimorsus*.<sup>221</sup> Wound Infection: A dog licking an open wound can introduce bacteria that cause serious infections.<sup>222</sup> Allergies: Proteins in dog saliva can trigger allergic reactions in sensitive individuals.<sup>223</sup> Digestive Disorders: Exposure to bacteria such as *Helicobacter spp.* through dog saliva can contribute to gastrointestinal disorders in humans.<sup>224</sup>

<sup>218</sup> Daniel D. Guerra Segundo et al., “Evidence of *Helicobacter Spp.* in Saliva and Gastric Mucosa of Domestic Dogs in the Central Region of Rio Grande Do Sul, Brazil,” *Veterinary Medicine International* 2021 (January 2021): 1–11, <https://doi.org/10.1155/2021/8857231>.

<sup>219</sup> Stephens et al., “Capnocytophaga Canimorsus from Dog Saliva Exposure Causing Severe Sepsis in a Healthy Adult.”

<sup>220</sup> Hadba AL-Amrah et al., “The Impact of Dogs Oral Microbiota on Human Health :A Review,” *Biosciences Biotechnology Research Asia* 21, no. 1 (March 2024): 1–9, <https://doi.org/10.13005/bbra/3197>.

<sup>221</sup> Tengfei Zhang et al., “The Impacts of Animal Agriculture on One Health—Bacterial Zoonosis, Antimicrobial Resistance, and Beyond,” *One Health* 18 (2024): 100748.

<sup>222</sup> Hageboeck Shepherd Katherine et al., “Dogs Licks Are Not Benign: *Pasteurella Multocida* Bacteremia From Household Dog,” *Cureus* 16, no. 4 (2024).

<sup>223</sup> Wei An et al., “Allergies to Allergens from Cats and Dogs: A Review and Update on Sources, Pathogenesis, and Strategies,” *International Journal of Molecular Sciences* 25, no. 19 (2024): 10520.

<sup>224</sup> Emily Taillieu et al., “Gastric *Helicobacter* Species Associated with Dogs, Cats and Pigs: Significance for Public and Animal Health,” *Veterinary Research* 53, no. 1 (2022): 42.

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## Modern Scientific View

According to Islamic teachings, dog saliva is categorized as heavy impurity (*mughalazah*). Rasulullah ﷺ ordered that the container licked by the dog be washed seven times, one of them using soil. At the time of the Prophet, this order was accepted as a form of obedience to the Sharia. However, the development of science proves that this teaching holds extraordinary scientific truth. Dog saliva contains various dangerous bacteria and viruses, such as: Rabies (Lyssavirus) which attacks the nervous system and can cause death, Leptospirosis, a bacterial infection that can be transmitted to humans through wounds or mucous membranes, Canine distemper and parvovirus which attack the immune and digestive systems of animals.<sup>225</sup> Rabies itself can be transmitted through dog bites or licks, and this virus will multiply in the nervous system until it spreads throughout the body.

Soil is not just a dead substance, but a living medium rich in microorganisms. It contains various types of bacteria that are beneficial to humans. One of these is Streptomyces, a natural antibiotic-producing bacterium.<sup>226</sup> Streptomyces produces tetracycline, a broad-spectrum antibiotic that can kill both Gram-positive and Gram-negative bacteria.<sup>227</sup> Tetracycline works bacteriostatically, inhibiting bacterial growth by interfering with protein synthesis. This explains soil's ability to neutralize harmful germs from dog saliva. Furthermore, Streptomyces also produces other bioactive compounds with antioxidant, anticancer, antibacterial, and anti-inflammatory properties.<sup>228</sup>

According to one study, two containers that dogs had licked were cleaned using different methods: The first container is washed with regular detergent. The second container is washed with a mixture of soil and water. The results of observations under a microscope

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<sup>225</sup> Togar Timoteus Gultom, “Penerapan Metode Demster Shafer Pada Sistem Pakar Terhadap Penyakit Rabies Hewan,” *SATESI: Jurnal Sains Teknologi Dan Sistem Informasi* 1, no. 2 (October 2021): 92–98, <https://doi.org/10.54259/satesi.v1i2.70>.

<sup>226</sup> Durin Maknum, “Hadis Manfaat Tanah Sebagai Media Penangkal Bakteri Air Liur Anjing Dengan Pendekatan Ilmu Kimia (Studi I’jazul Ilmi Pada Hadis Sunan Abi Dawud Nomor 73)” (undergraduate, UIN Sunan Ampel Surabaya, 2022), <http://digilib.uinsa.ac.id/54492/>.

<sup>227</sup> Manmohan Singh et al., “Chloramphenicol and Tetracycline (Broad Spectrum Antibiotics),” in *Antibiotics-Therapeutic Spectrum and Limitations* (Elsevier, 2023), 155–65.

<sup>228</sup> Ahmed Ghareeb et al., “Marine Actinobacterium Streptomyces Vinaceusdrappus Mediated Nano-Selenium: Biosynthesis and Biomedical Activities,” *BMC Complementary Medicine and Therapies* 25, no. 1 (2025): 329.

showed that the containers washed with soil were clean of germs, while those using detergent still contained bacteria.<sup>229</sup> Hadith of the Prophet ﷺ in Sunan Abi Dawud no. 73 which ordered to wash the container with water and soil is now scientifically proven. The soil contains Streptomyces and other antimicrobial compounds that are effective in eradicating pathogenic bacteria, including those found in dog saliva.<sup>230</sup> The teachings of the Prophet Muhammad (peace be upon him) are not only based on spiritual values but also proven to contain health wisdom relevant to this day. Seemingly simple soil actually contains natural antimicrobial substances that can scientifically and effectively cleanse serious impurities. This is one form of scientific miracle evidence in the Prophet's hadith, demonstrating that Islam and science go hand in hand, mutually reinforcing, and not contradictory.

According to Islamic teachings, there is a hadith that advocates cleaning if you come in contact with dog saliva. For example, a hadith from the Prophet Muhammad peace be upon him

إِذَا شَرَبَ الْكَلْبُ فِي إِنَاءٍ أَحَدِكُمْ فَلْيَغْسِلْهُ سَبْعًا وَفِي رَوَايَةٍ: أُولَاهُنَّ بِالثُّرَابِ.

*"If a dog licks the vessel of one of you, then wash the vessel seven times, one of them with earth."*<sup>231</sup>

Research shows that microorganisms in dog saliva can survive for quite some time on surfaces, including eating utensils. Some pathogenic bacteria in dog saliva can form biofilms that are difficult to remove with conventional washing methods. In decontamination studies, soil has been found to contain abrasive properties and bioactive substances that can help remove microorganisms from surfaces.<sup>232</sup> Thus, the recommendations in the hadith can have hygiene benefits that are in line with modern scientific findings.<sup>233</sup>

<sup>229</sup> Dede Suhendar, "Fikih (Fiqh) Air Dan Tanah Dalam Taharah (Thaharah) Menurut Perspektif Ilmu Kimia," *Jurnal Istek* 10, no. 1 (2017), <https://journal.uinsgd.ac.id/index.php/istek/article/view/1465>.

<sup>230</sup> Maknun, "Hadis Manfaat Tanah Sebagai Media Penangkal Bakteri Air Liur Anjing Dengan Pendekatan Ilmu Kimia (Studi I'jazul Ilmi Pada Hadis Sunan Abi Dawud Nomor 73)."

<sup>231</sup> Muslim bin Hajjaj An-Naisaburi, *Shahih Muslim*, 2:2:167.

<sup>232</sup> Guerra Segundo et al., "Evidence of Helicobacter Spp. in Saliva and Gastric Mucosa of Domestic Dogs in the Central Region of Rio Grande Do Sul, Brazil."

<sup>233</sup> Rani Zaindina Wibawanti Mashuri and Ilmu Hadis, *Upaya Menjaga Hadis dari Pemalsuan: Perspektif Abi Al-Hasan Ibn 'Ali Ibn Muhammad Ibn 'Iraq Ak-Kinani*, n.d.

Dog saliva has a protective function through certain enzymes and proteins, but it can also be a vector of dangerous pathogens such as zoonotic bacteria and rabies virus.<sup>234</sup> Some of the microbes in the dog's saliva are resistant to common detergents, so more intensive washing methods, as recommended in the Hadith, have proven more effective for decontamination. From a health perspective, human interaction with dog saliva must be carefully managed to prevent infections and allergies. Modern research in microbiology and immunology further substantiates the scientific basis of Islamic principles of hygiene, while encouraging a more informed approach to maintaining cleanliness and minimizing health risks.<sup>235</sup>

## D. CONCLUSION

This study concludes that dog saliva carries important implications from both religious and scientific perspectives. From the hadith standpoint, most scholars classify it as *najis mugallazah* (major impurity) that must be purified by washing seven times, one with soil. Scientifically, dog saliva contains harmful microorganisms such as *Capnocytophaga canimorsus*, the rabies virus, and other pathogens that threaten human health, especially through contact with wounds. The Prophet Muhammad's command to wash utensils licked by dogs reflects remarkable alignment with modern hygiene principles, revealing harmony between revelation and science. Islamic rulings on this matter, derived from authentic hadiths, thus possess strong scientific grounding in hygiene and health. These teachings are not only *ta'abbudi* (purely devotional) but also *ta'lili* (rationally grounded), emphasizing human well-being. The findings hold significance for contemporary *fiqh* in cleanliness, animal care, and public health. Ultimately, this study highlights the need for an interdisciplinary approach that unites religion and science to uncover the wisdom behind Islamic law.

<sup>234</sup> Shivangi Udainiya et al., "Zoonotic Diseases of Dogs and Cats," in *Introduction to Diseases, Diagnosis, and Management of Dogs and Cats* (Elsevier, 2024), 559–72.

<sup>235</sup> Indah Rahmawati, Akhmad Khusnur Rozak, and Muhammad Amiruddin, "Kebudayaan Keshatan Islam: Tinjauan Sejarah Dan Relevansinya Dalam Keshatan Masyarakat Kontemporer," *Ameena Journal* 2, no. 3 (2024): 280–97.

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## E. REFERENCES

### *Al-Quran.*

Abdullah Muhammad bin Ismail, al-Bukhari. *Shahih al-Bukhari*. V. Beirut: Dar al-Kitab al-‘Ilmiyyah, 1992.

Adnir, Farid, and Alwi Padly Harahap. “The Relationship Between Hadith and Modern Scientific Knowledge: An Analysis of the Contribution of Hadith to Medical Science.” *Tajdid: Jurnal Ilmu Ushuluddin* 23, no. 2 (December 2024): 647–73. <https://doi.org/10.30631/tjd.v23i2.500>.

AL-Amrah, Hadba, Reham Aburokba, Asseel Alotiby, Badriyah AlJuhani, Hadeel Huri, Noha Al Garni, and Reem Aljedani. “The Impact of Dogs Oral Microbiota on Human Health :A Review.” *Biosciences Biotechnology Research Asia* 21, no. 1 (March 2024): 1–9. <https://doi.org/10.13005/bbra/3197>.

An, Wei, Ting Li, Xinya Tian, Xiaoxin Fu, Chunxiao Li, Zhenlong Wang, Jinquan Wang, and Xiumin Wang. “Allergies to Allergens from Cats and Dogs: A Review and Update on Sources, Pathogenesis, and Strategies.” *International Journal of Molecular Sciences* 25, no. 19 (2024): 10520.

Anam, Khoirul. *Liur Kucing dalam Hadis (Tinjauan Sains) Skripsi Diajukan Untuk Memenuhi Tugas & Melengkapi Syarat Guna Memperoleh Gelar Sarjana Tingkatan Satu (S1)*. n.d. Accessed January 28, 2025. [https://eprints.walisongo.ac.id/15093/1/1504026008\\_Khoirul%20Anam\\_Full%20Skripsi%20-%20K%20E%20N%20D%20H%20O%281%29.pdf](https://eprints.walisongo.ac.id/15093/1/1504026008_Khoirul%20Anam_Full%20Skripsi%20-%20K%20E%20N%20D%20H%20O%281%29.pdf).

Anggraini, Lisa, and Lailah Syahidah. “Etika Terhadap Hewan: (Kajian Tafsir Ayat Sosial Terhadap Anjing Dalam Al-Qur’an).” *Basha’ir: Jurnal Studi Al-Qur’an dan Tafsir*, June 27, 2023, 9–16. <https://doi.org/10.47498/bashair.v3i1.895>.

Ansory, Isnan. *Ritual Bersuci Rasulullah SAW Menurut 4 Mazhab (Mandi-Wudhu-Tayamum)*. Penerbit A-Empat, 2024.

Bisri Tujang, Hendri Waluyo Lensa, and Abd. Muthalib. “Studi Komparatif antara Hadis Larangan Berjudi dan Hukum Positif di Indonesia.” *Al-Majaalis : Jurnal Dirasat Islamiyah* 12, no. 2 (May 2025): 319–41. <https://doi.org/10.37397/al-majaalis.v12i2.781>.

Fikri, Muh. *Tinjauan Umum Perilaku Babi Dalam Perspektif Islam Dan Sains*. OSF, n.d. Accessed January 28, 2025. <https://osf.io/preprints/myds5/>.

Ghareeb, Ahmed, Amr Fouda, Rania M Kishk, and Waleed M El Kazzaz. “Marine Actinobacterium Streptomyces Vinaceusdrappus Mediated Nano-Selenium: Biosynthesis and Biomedical Activities.” *BMC Complementary Medicine and Therapies* 25, no. 1 (2025): 329.

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Guerra Segundo, Daniel D., Camila B. E. Mello, Juliana F. Cargnelutti, Mariana M. Flores, Luís F. Pedrotti, Bernardo N. Antunes, Vanessa Milech, Omar G. Velasquez, Letícia R. Martins, and Saulo T. L. Pinto Filho. "Evidence of Helicobacter Spp. in Saliva and Gastric Mucosa of Domestic Dogs in the Central Region of Rio Grande Do Sul, Brazil." *Veterinary Medicine International* 2021 (January 2021): 1–11. <https://doi.org/10.1155/2021/8857231>.

Hidayanti, Maulita. "Hukum Jilatan Anjing Menurut Ad-Dardiri AlzMaliky dan Asy-Syarbini Asy- Syafiyy." PhD Thesis, UIN Sunan Gunung Djati Bandung, 2020. <https://etheses.uinsgd.ac.id/id/eprint/34602>.

Jalil, Suleha, and Siti Sa'dianti. "Hukum Taharah Dengan Air Bekas Minum Hewan (Studi Komparatif Mazhab Maliki Dan Mazhab Syafii): The Ruling of Purification Using Water Leftover by Animals: A Comparative Study of the Maliki and Shafi'i Schools of Thought." *Al-Mabsuth: Jurnal Studi Islam Dan Bahasa Arab* 1, no. 2 (2025): 492–511.

Katherine, Hageboeck Shepherd, Mark Colantonio, Matthew Santer, Mahmud Haseeb, and Shannon Brooke. "Dogs Licks Are Not Benign: *Pasturella Multocida* Bacteremia From Household Dog." *Cureus* 16, no. 4 (2024).

Kholid Saifulloh. "Mengqadha Shalat dalam Perspektif Fiqh Islam." *Al-Majaalis : Jurnal Dirasat Islamiyah* 7, no. 2 (May 2020): 45–67. <https://doi.org/10.37397/almajaalis.v7i2.139>.

Maiyati, Riri, Rahma Ghania Alhafiza, Sarmida Hanum, and Ismiati Ismiati. "Dog Raising in Jorong Kapalo Koto Nagari Gantung Ciri Kubung Subdistrict, Solok Regency (Study Living Hadith)." *International Journal of Research* 2, no. 2 (December 2024): 203. <https://doi.org/10.55062//IJR.2024.v2i2/634/5>.

Maknun, Durin. "Hadis Manfaat Tanah Sebagai Media Penangkal Bakteri Air Liur Anjing Dengan Pendekatan Ilmu Kimia (Studi I'jazul Ilmi Pada Hadis Sunan Abi Dawud Nomor 73)." Undergraduate, UIN Sunan Ampel Surabaya, 2022. <http://digilib.uinsa.ac.id/54492/>.

Markose, Rendi Yan. "Hukum Air Liur Anjing dalam Perspektif Imam Asy-Syafi'i dan Imam Malik." PhD Thesis, UIN Suska Riau, 2024. <http://repository.uin-suska.ac.id/83021/>.

Mashuri, Rani Zaindina Wibawanti, and Ilmu Hadis. *Upaya Menjaga Hadis dari Pemalsuan: Perspektif Abi Al-Hasan Ibn 'Ali Ibn Muhammad Ibn 'Iraq Al-Kinani*. n.d.

Muñoz-Prieto, Alberto, Damián Escribano, Anita Horvatić, María Dolores Contreras-Aguilar, Luis Bernal, Ivana Rubić, José Joaquín Cerón, Roman Dąbrowski, and Vladimir Mrljak. "Changes in Salivary Proteins Can Reflect Beneficial Physiological Effects of Ejaculation in the Dog." *Theriogenology* 164 (2021): 51–57.

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Musaddiq, M Azhar, and Anwar Hafidzi. "Review of Islamic Law on Keeping Pets That Defile Neighbors' Houses and Eat at Neighbors' Houses." *Indonesian Journal of Islamic Jurisprudence, Economic and Legal Theory* 1, no. 2 (June 2023): 123–31. <https://doi.org/10.62976/ijijel.v1i2.9>.

Muslim bin Hajjaj An-Naisaburi. *Shahih Muslim*. Vol. 2. Beirut: Dar Ihya At-Turots, 1955.

Pasha, Sabah, Taichi Inui, Iain Chapple, Stephen Harris, Lucy Holcombe, and Melissa M. Grant. "The Saliva Proteome of Dogs: Variations Within and Between Breeds and Between Species." *PROTEOMICS* 18, nos. 3–4 (February 2018): 1700293. <https://doi.org/10.1002/pmic.201700293>.

Polinsky, Sheridan. "Dogs in the Islamic Tradition: A Revisionist Examination." *Society & Animals*, June 3, 2022, 1–17. <https://doi.org/10.1163/15685306-bja10093>.

Prayogi, Ananda. "The Affection Towards Animals in The Perspective of Hadith (Thematic Study)." *Journal of Comprehensive Science (JCS)* 2, no. 3 (March 2023): 796–809. <https://doi.org/10.59188/jcs.v2i3.274>.

Rahmawati, Indah, Akhmad Khusnur Rozak, and Muhammad Amiruddin. "Kebudayaan Kesehatan Islam: Tinjauan Sejarah Dan Relevansinya Dalam Kesehatan Masyarakat Kontemporer." *Ameena Journal* 2, no. 3 (2024): 280–97.

Singhal, Manmohan, Mohit Agrawal, Kumar Bhavna, Neeraj Kumar Sethiya, Samir Bhargava, Komal Satish Gondkar, Kumud Joshi, Vijay Singh Rana, Jagannath Sahoo, and Mandeep Kumar Arora. "Chloramphenicol and Tetracycline (Broad Spectrum Antibiotics)." In *Antibiotics-Therapeutic Spectrum and Limitations*, 155–65. Elsevier, 2023.

Stephens, Megan A., Nawras Silin, Tahani Dakkak, Sangamithra Sathian, Aditya K. Ghosh, Hardeep Singh, and Navneeth Bongu. "Capnocytophaga Canimorsus from Dog Saliva Exposure Causing Severe Sepsis in a Healthy Adult: A Case Report." *American Journal of Case Reports* 26 (April 2025). <https://doi.org/10.12659/AJCR.946691>.

Suhendar, Dede. "Fikih (Fiqh) Air Dan Tanah Dalam Taharah (Thaharah) Menurut Perspektif Ilmu Kimia." *Jurnal Istek* 10, no. 1 (2017). <https://journal.uinsgd.ac.id/index.php/istek/article/view/1465>.

Taillieu, Emily, Koen Chiers, Irina Amorim, Fátima Gärtner, Dominiek Maes, Christophe Van Steenkiste, and Freddy Haesebrouck. "Gastric Helicobacter Species Associated with Dogs, Cats and Pigs: Significance for Public and Animal Health." *Veterinary Research* 53, no. 1 (2022): 42.

Togar Timoteus Gultom. "Penerapan Metode Demster Shafer Pada Sistem Pakar Terhadap Penyakit Rabies Hewan." *SATESI: Jurnal Sains Teknologi Dan Sistem Informasi* 1, no. 2 (October 2021): 92–98. <https://doi.org/10.54259/satesi.v1i2.70>.

Udainiya, Shivangi, Amita Tiwari, Apoorva Mishra, and Amita Dubey. “Zoonotic Diseases of Dogs and Cats.” In *Introduction to Diseases, Diagnosis, and Management of Dogs and Cats*, 559–72. Elsevier, 2024.

Zhang, Tengfei, Rhea Nickerson, Wenting Zhang, Xitian Peng, Yu Shang, Youxiang Zhou, Qingping Luo, Guoyuan Wen, and Zhenyu Cheng. “The Impacts of Animal Agriculture on One Health—Bacterial Zoonosis, Antimicrobial Resistance, and Beyond.” *One Health* 18 (2024): 100748.