



ANALYTICAL STUDY OF THE TEACHINGS OF ISLAM AND CHRISTIANITY ON OPEN DEFECATION AND ITS IMPLICATIONS TO HUMAN HEALTH AND SOCIETY

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Abstract

Open defecation (OD) remains a major global public health and environmental challenge, imposing significant social, economic, and health burdens on communities worldwide. Despite advances in sanitation infrastructure, millions of people still practice OD, resulting in the spread of diarrheal diseases, stunting in children, helminth infections, and environmental contamination. The research problem addressed in this paper is the persistence of OD despite clear religious injunctions in Islam and Christianity that emphasize cleanliness, privacy, and the prevention of harm. The objective of this paper is to analyze the teachings of Islam and Christianity on sanitation and environmental stewardship, and to integrate them with contemporary public-health evidence in order to provide faith-informed strategies for eliminating OD. The significance of this study lies in its contribution to both religious scholarship and public-health interventions. By drawing on Qur'anic injunctions (e.g., Qur'an 2:222) and Biblical teachings (e.g., Deuteronomy 23:12–14), as well as prophetic and Christian ethical principles, the study demonstrates how religious values can reinforce scientific efforts toward improved sanitation and societal well-being. Findings indicate, first, that both Islam and Christianity strongly align with modern sanitation principles by promoting cleanliness, privacy, and harm-prevention. Second, faith leaders play a crucial role in influencing community behavior, making religious engagement essential for effective sanitation campaigns. In conclusion, integrating religious teachings with public-health strategies can accelerate the elimination of OD by shaping community norms, enhancing compliance, and fostering holistic well-being. Recommendations include, first, that religious leaders incorporate sanitation messages into sermons and community outreach, thereby linking faith with practical hygiene practices. Second, policymakers and development partners should partner with faith-based institutions to design community-owned sanitation programs that are culturally sensitive and sustainable.

Keywords: Open defecation; Sanitation; Islam; Christianity; Public health

Introduction

Open defecation (OD) is defined as the disposal of human feces in fields, forests, water bodies, or other open spaces rather than in improved sanitation facilities (WHO/UNICEF, 2023). Despite being recognized as a basic human rights and development challenge, it remains a widespread practice, especially in many low- and middle-income countries where access to safe water and sanitation is limited. OD is more than just an issue of infrastructure—it represents a multifaceted public health and social concern. It contributes substantially to fecal–oral disease transmission, including diarrhea, cholera, typhoid, and soil-transmitted helminth infections, which continue to account for significant morbidity and mortality, especially among children under five years of age (Abdulbaqi et al., 2019; Akorede et al., 2023; Prüss-Ustün et al., 2014). Beyond health, OD undermines human dignity, contaminates the environment, reduces productivity, and perpetuates cycles of poverty (Amin et al., 2024; Hutton, 2015).

Religions, long before the advent of modern science and public health, established norms related to cleanliness, privacy, and communal well-being. Both Islam and Christianity emphasize human responsibility toward self-care, social responsibility, and environmental stewardship. In Islam, purity (*tahārah*) is not only a prerequisite for worship but also a moral and social duty. The Qur'an praises those "who purify themselves" (Qur'an 2:222) and commands the removal of impurities from one's body and environment (Qur'an 74:4; 9:108). Prophetic traditions (hadith) also emphasize that relieving oneself should be done in private, away from paths, water sources, and shaded areas, thereby directly discouraging practices akin to open defecation. The Islamic legal maxim *lā ḍarar wa lā ḍirār* (no harming and no reciprocating harm) further reinforces the prohibition of behaviors that endanger human health and society.

Similarly, Christianity grounds sanitation practices in the ethic of love and stewardship. In the Old Testament, explicit instructions were given to the Israelites to designate a place outside the camp for waste disposal and to cover excreta (Deuteronomy 23:12–14). These teachings highlight the link between sanitation, holiness, and communal health. In the New Testament, the command to "love your neighbor as yourself" (Mark 12:31) and the principle that the body is the "temple of the Holy Spirit" (1 Corinthians 6:19–20) imply that sanitation and hygiene are essential acts of respect toward oneself, others, and God's creation.

Thus, both religions converge on principles that align with contemporary sanitation goals: privacy, dignity, cleanliness, and protection of public health. While modern science emphasizes epidemiological risks and economic costs of OD, faith traditions

underscore moral obligations and divine accountability. This dual framework provides a powerful foundation for mobilizing individuals and communities to eliminate OD.

This paper, therefore, seeks to analyze the convergences and distinctive emphases of Islamic and Christian teachings on sanitation, and to examine their implications for eliminating OD in contemporary societies. It gives particular attention to how these teachings can be integrated into policy formulation, educational curricula, and community engagement strategies. By bridging the wisdom of religious traditions with modern public-health evidence, the paper advocates for a holistic, faith-informed approach to ending open defecation and promoting sustainable sanitation practices.

Open Defecation

Open Defecation is the act of passing stool in the open, such as in fields, bushes, rivers, streets, or other open spaces, rather than in designated toilet facilities. According to WHO/UNICEF (2023), open defecation is the practice of human feces disposal in fields, forests, bushes, bodies of water, beaches, or other open spaces without using proper sanitation systems. It is a major cause of fecal–oral disease transmission, environmental pollution, and social indignity (Akorede et al., 2023; Nofiu et al., 2021; Solomon et al., 2025).

Sanitation

Sanitation is the process of keeping places clean and free from dirt, waste, and harmful substances to maintain health and hygiene. According to WHO (2018) defines sanitation as the provision of facilities and services for the safe disposal of human urine and feces, as well as the maintenance of hygienic conditions through services such as garbage collection and wastewater disposal. In public health, sanitation is a cornerstone of preventing disease transmission.

Islam

Islam is the Arabic word Islam literally means “submission” or “surrender” to the will of Allah (SWT). Islam is a monotheistic Abrahamic religion revealed to Prophet Muhammad (SAW) through the Qur’an, emphasizing submission to Allah, moral conduct, purification, and communal responsibility. In the context of sanitation, Islam provides guidelines on cleanliness (*taharah*), prohibiting harm (*la darar wa la dirar*), and promoting hygiene as an act of worship and social duty.

Christianity

The word Christianity derived from the Greek word *Christianos*, meaning “follower of Christ.” It refers to those who adhere to the teachings of Jesus Christ. Christianity is a religion based on the life, teachings, death, and resurrection of Jesus Christ as recorded in the Bible. It emphasizes love of God and neighbor, stewardship of the body and environment, and service to others. In relation to sanitation, Christianity promotes hygiene and cleanliness as expressions of respect for the body as the “temple of God” (1 Corinthians 6:19–20) and as an act of love toward others by preventing harm.

Public Health

Public Health is the health and well-being of the general population. According to the CDC (2021), public health is the science and practice of protecting and improving the health of communities through promotion of healthy lifestyles, research for disease and injury prevention, and control of infectious diseases. In the context of this research, public health involves strategies and policies aimed at eliminating open defecation, ensuring sanitation, and integrating religious perspectives to achieve holistic well-being.

Theological Foundations in Islam

Islam places purification at the heart of worship and daily life. The Qur’an states:

إِنَّ اللَّهَ يُحِبُّ التَّوَّابِينَ وَيُحِبُّ الْمُتَطَهِّرِينَ

“Indeed, Allah loves those who are constantly repentant and loves those who purify themselves” (Qur’an 2:222.).

According to *Tafsīr Ibn Kathīr* (2000), this verse emphasizes both spiritual purification through repentance (*tawbah*) and physical purification through cleanliness. The mention of *mutatahirīn* (those who purify themselves) was revealed in the context of personal hygiene after menstruation but is generally understood as encouraging ritual and environmental cleanliness, thereby supporting modern sanitation ethics. Similarly, Allah (SWT) commands the Prophet (SAW) in the following verse:

وَتَيَّابَكَ فَطَهِّرْ

“And purify your garments” (Qur’an 74:4.).

Al-Ṭabarī (2001) interprets this verse as a directive to maintain physical cleanliness as a symbol of spiritual purity. The command to purify one’s garments points to an obligation for Muslims to avoid *najāsah* (impurities) in their daily lives and worship, which aligns with modern concerns about hygiene and waste management. And Allah (SWT) praises a mosque whose foundation was built upon piety, saying:

فِيهِ رِجَالٌ يُحِبُّونَ أَنْ يَتَطَهَّرُوا وَاللَّهُ يُحِبُّ الْمُطَهَّرِينَ

“...within it are men who love to purify themselves; and Allah loves those who purify themselves” (Qur’an 9:108.).

This verse refers to the people of Qubā', whose practice of cleansing themselves with water after relieving themselves was praised by Allah (Ibn Kathīr, 2000). Scholars regard this as a direct Qur'anic endorsement of proper sanitation, linking ritual practice with public health and community hygiene.

These verses collectively illustrate that cleanliness is not only a spiritual act but also a communal obligation in Islam. Prophet Muhammad (SAW) provided detailed guidance on sanitation. He instructed Muslims to seek privacy when relieving themselves and to avoid polluting water sources, pathways, and shaded areas where people rest:

اتَّقُوا اللَّاعِنَيْنِ قَالُوا وَمَا اللَّاعِنَانِ يَا رَسُولَ اللَّهِ قَالَ الَّذِي يَتَخَلَّى فِي طَرِيقِ النَّاسِ أَوْ فِي ظِلِّهِمْ

"Beware of the two acts that cause curses: relieving oneself in the pathways of people or in their shade" (Muslim, *Ṣaḥīḥ Muslim*, Kitāb al-Ṭahārah, no. 262; also in Ibn Mājah, *Sunan Ibn Mājah*, no. 328).

According to al-Nawawī (1996), the "curse" here refers to public condemnation and divine displeasure that results from causing harm to others through unhygienic practices. He explains that the hadith establishes a principle of public rights, showing that sanitation is not merely an individual duty but a communal obligation tied to *ḥifẓ al-nafs* (preservation of life), one of the objectives of Islamic law. He further emphasized:

اتَّقُوا الْمَلَاعِينَ الثَّلَاثَةَ: الْبَرَازَ فِي الْمَوَارِدِ، وَالظِّلَّ، وَقَارِعَةَ الطَّرِيقِ

"Beware of the three acts that cause you to be cursed: relieving oneself in shaded places, in the middle of pathways, or in water sources" (Abū Dāwūd, *Sunan Abī Dāwūd*, no. 26).

Ibn Hajar al-ʿAsqalānī (1997) explains that this narration identifies specific public spaces whose pollution would directly inconvenience or harm others. He argues that it demonstrates Islam's preventive approach to health hazards, centuries before modern epidemiology, by protecting water sources and social spaces from contamination. Contemporary jurists extend this ruling to modern sanitation infrastructure, prohibiting practices that lead to pollution of drinking water and residential areas.

Moreover, the Prophet (peace be upon him) declared:

إِمَاطَةُ الْأَذَى عَنِ الطَّرِيقِ صَدَقَةٌ

"Removing harmful things from the road is an act of charity" (al-Bukhārī, *Ṣaḥīḥ al-Bukhārī*, no. 298).

These narrations collectively underscore Islam's proactive concern for public hygiene, safety, and dignity. Al-Ghazālī (2013) interprets this hadith as part of the wider Islamic ethic of *iḥsān* (benevolence) and social responsibility. He observes that acts like clearing waste from pathways embody the principle of public benefit (*maslaḥah*), which is a foundational value in Islamic law. In this light, sanitation is not only a physical necessity but also a form of worship, as maintaining public cleanliness protects life and dignity.

The Islamic legal maxim *lā ḍarar wa lā dirār* (لا ضرر ولا ضرار), "no harming and no reciprocating harm", serves as a universal principle for communal protection against environmental hazards (Ibn Mājah, *Sunan Ibn Mājah*, no. 2340). This maxim is widely applied by jurists to prohibit practices that may cause harm to individuals or communities, including open defecation, which contaminates shared resources and spreads disease.

Classical and contemporary jurists connect these teachings to the *maqāṣid al-sharīʿah* (objectives of Islamic law), which include preservation of life (*ḥifẓ al-nafs*), intellect (*ḥifẓ al-ʿaql*), progeny (*ḥifẓ al-nasl*), and wealth (*ḥifẓ al-māl*) (Auda, 2008; al-Qaradawī, 1997). By this reasoning, OD clearly contradicts Islamic objectives since it endangers health, spreads diseases, impairs children's development, and imposes social and economic costs (Prüss-Ustün et al., 2014).

Christian Perspectives on Sanitation and Neighbor-Love

The Hebrew Bible provides explicit guidance on sanitation. God commanded the Israelites:

"Designate a place outside the camp where you can go to relieve yourself. As part of your equipment have something to dig with, and when you relieve yourself, dig a hole and cover up your excrement" (Deuteronomy 23:12–14, NIV).

This shows a direct connection between hygiene, holiness, and communal well-being.

In the New Testament, sanitation and bodily care are framed within the broader ethic of stewardship and love. Paul teaches that the body is the "temple of the Holy Spirit" (1 Corinthians 6:19–20), thus requiring cleanliness and dignity, while Jesus commanded: "Love your neighbor as yourself" (Mark 12:31). Together, these teachings establish sanitation as an act of justice, love, and respect for both God and humanity.

Historically, churches have promoted hygiene by leading campaigns for clean water, building latrines, and teaching personal hygiene in missionary schools. Today, faith-based organizations continue to leverage their moral authority and extensive networks to promote sanitation, making them key stakeholders in the elimination of OD (UNICEF, 2016).

Public-Health and Environmental Evidence on Harms of OD

Epidemiological studies confirm the negative impacts of OD on health and development. Unsafe sanitation contributes significantly to diarrheal diseases, soil-transmitted helminth infections, and child growth failure (Akorede & Toyin, 2020; Akorede et al., 2023; Prüss-Ustün et al., 2014; Mara et al., 2010; Spears, 2013). Fecal contamination of soil and water exacerbates outbreaks of cholera and typhoid and is increasingly linked to the spread of antimicrobial resistance (Abdulbaqi et al., 2019).

The economic costs are equally high. Households and governments bear increased healthcare expenses, reduced productivity, and high rates of school absenteeism. Analyses consistently show that sanitation interventions are cost-effective and yield significant returns on investment (Hutton, 2015). Socially, women and girls face disproportionate risks, including sexual violence due to lack of privacy, as well as barriers to education during menstruation (WHO, 2019).

Convergence Between Faith Teachings and Modern Science

Islamic and Christian teachings converge strongly with WHO/UNICEF recommendations for safely managed sanitation, handwashing with soap, and protection of water resources (WHO/UNICEF, 2023). Scriptural imperatives, such as the Qur'anic command to purify oneself (*Qur'an* 74:4), prophetic prohibitions against defiling water sources (Muslim, *Ṣaḥīḥ Muslim*, Kitāb al-Ṭahārah), and Biblical laws on covering excreta (Deuteronomy 23:12–14), are in harmony with modern hygiene promotion, latrine use, and fecal-sludge management.

Classical *Tafsīr* works, such as *Tafsīr Ibn Kathīr*, highlight the spiritual and social value of *ṭahārah* (purity) in both private and public spaces (Ibn Kathīr, 2000). Similarly, Christian stewardship views sanitation as an act of love and care for God's creation and for the vulnerable, resonating with contemporary environmental health ethics.

Implementation Pathways: Faith-Informed Community-Led Sanitation

Community-Led Total Sanitation (CLTS) approaches can be made more effective when reinforced by mosque–church partnerships. Religious leaders can mobilize congregations to reject OD as both a sin and a public danger, embed sanitation teachings in sermons and homilies, and promote compliance with community bylaws (Curtis & Cairncross, 2003; UNICEF, 2016).

Friday sermons (*khuṭbah*), Sunday homilies, madrasa and Sunday-school curricula can integrate WASH (Water, Sanitation, and Hygiene) messages with Qur'anic verses and Hadith. For example, reminding communities that “Purity is half of faith” (Muslim, *Ṣaḥīḥ Muslim*, no. 223) and that Jesus commanded love for neighbor (Mark 12:31) can inspire both Muslims and Christians to embrace safe sanitation.

Faith leaders can further advocate for inclusive designs—child-friendly toilets, disability-accessible latrines, safe fecal-sludge management, and handwashing stations near places of worship. Partnerships with local government strengthen these efforts by ensuring sustainable financing, regular monitoring, and alignment with national WASH policies (WHO, 2019).

Findings

1. Islamic and Christian sources both prohibit practices that harm others and explicitly or implicitly require safe, private feces disposal (*Qur'an* 2:222; Deuteronomy 23:12–14).
2. OD is causally linked with diarrheal disease, helminth infections, environmental contamination, and child stunting (Prüss-Ustün et al., 2014; Spears, 2013).
3. Women, girls, and persons with disabilities are disproportionately affected by OD through safety, privacy, and dignity constraints (WHO, 2019).
4. Sanitation investments yield favorable cost–benefit ratios and productivity gains (Hutton, 2015).
5. Engagement of imams, pastors, and faith-based organizations accelerates behavior change and community compliance with anti-OD norms (UNICEF, 2016).

Conclusion

Eliminating open defecation is both a moral and scientific necessity. Islamic principles of *ṭahārah* and harm-prevention and Christian commandments of stewardship and neighbor-love converge with the best public-health evidence. Integrating faith teachings with CLTS, inclusive design, and municipal services can transform norms, protect the environment, and improve human health. Universities and Departments of Education can equip teachers, religious leaders, and students with interdisciplinary WASH competencies rooted in local beliefs and global standards.

Recommendations

1. Develop sermon guides and religious-studies modules linking *Qur'an* 2:222; 9:108; 74:4 and Deuteronomy 23:12–14 to everyday sanitation practices.
2. Form local interfaith committees to champion OD-free bylaws, latrine coverage targets, and handwashing campaigns aligned with national policy.
3. Prioritize safe, private, accessible toilets for women, girls, persons with disabilities, and schools; ensure safe fecal-sludge management (WHO, 2019).
4. Track OD-free status with community scorecards and recognize congregations and neighborhoods achieving sustained OD elimination (WHO/UNICEF, 2023).

5. Mobilize zakat/waqf and church social funds alongside public budgets; train faith leaders and teachers in WASH messaging and basic maintenance (Auda, 2008; UNICEF, 2016).

References

- Abdulbaqi, S. Z., Tejideen, T. O., & Isiaq, A. T. (2019). Perceived effects of poor sanitation on health of undergraduate students in Hall of Residents, University of Ilorin. *Osun Sociological Review*, 5, 112-122.
- Akorede, S. N., & Toyin, A. (2020). Knowledge of Personal Hygiene among Undergraduates. *JHE (Journal of Health Education)*, 5(2), 66-71. <http://dx.doi.org/10.15294/jhe.v5i2.38383>
- Akorede, S. N., Getso, A. S. Abdulmumini, M., & Aliyu, K. (2023). Assessment of availability of water sanitation hygiene in secondary schools in Federal Capital Territory, Abuja, Nigeria. *Jigawa Journal of Multidisciplinary Studies (JJMS)*, 6(2), 217-223.
- Akorede, S. N., Isiaq, A. T., & Akorede, A. A. (2023). Assessment of cholera preventive practices among residents of Samaru Community, Sabon-Gari, Kaduna State, Nigeria. *Unnes Journal of Public Health*, 12(1), 46-52. <https://doi.org/10.15294/ujph.v12i1.55178>
- Al-Ghazālī, A. H. (2013). *Ihyā' 'ulūm al-dīn* [Revival of the religious sciences] (Vol. 2). Beirut: Dār al-Ma'rifah.
- Al-Nawawī, Y. (1996). *Sharḥ Ṣaḥīḥ Muslim* [Commentary on Ṣaḥīḥ Muslim] (Vol. 3). Beirut: Dār al-Kutub al-'Ilmiyyah.
- al-Qaradawī, Y. (1997). *The lawful and the prohibited in Islam* (K. al-Helbawy, M. Siddiqui, & S. Shukry, Trans.). American Trust Publications.
- Amin, A., Abdulrauf, A., & Isiaq, A. T. (2024). Strategies for the implementation of environmental protection regulations towards sustainable waste management in Oyo State. *Gusau International Journal of Management and Social Sciences*, 7(2), 83-104. <https://doi.org/10.57233/gijmss.v7i2.05>
- Auda, J. (2008). *Maqasid al-Shariah: A beginner's guide*. International Institute of Islamic Thought.
- Corinthians 6:19–20. (2011). In *The Holy Bible: New International Version*. Biblica.
- Curtis, V., & Cairncross, S. (2003). Effect of washing hands with soap on diarrhoea risk in the community: A systematic review. *The Lancet Infectious Diseases*, 3(5), 275–281. [https://doi.org/10.1016/S1473-3099\(03\)00606-6](https://doi.org/10.1016/S1473-3099(03)00606-6)
- Deuteronomy 23:12–14. (2011). In *The Holy Bible: New International Version*. Biblica.
- Hutton, G. (2015). Benefits and costs of the water, sanitation and hygiene targets for the post-2015 development agenda. *World Bank Water and Sanitation Program*.
- Ibn Hajar al-'Asqalānī, A. (1997). *Fath al-Bārī bi-sharḥ Ṣaḥīḥ al-Bukhārī* [Commentary on Ṣaḥīḥ al-Bukhārī] (Vol. 5). Cairo: Dār al-Rayyan.
- Ibn Kathīr, I. (2000). *Tafsīr Ibn Kathīr* (Abridged ed.; Dārussalām trans.). Dārussalām.
- Ibn Mājah, M. (2007). *Sunan Ibn Mājah* (N. Al-Khāni, Trans.). Dārussalām. (Hadith on avoiding harming people by polluting pathways and water)
- Mark 12:31. (2011). In *The Holy Bible: New International Version*. Biblica.
- Muslim, I. (2007). *Saḥīḥ Muslim* (A. H. Siddiqi, Trans.). Dār al-Arabia. (Chapters on etiquette of relieving oneself and avoiding harm)
- Nofiu, O. D., Abdul, B. S., Akorede, S. N., Enyikwola, R. O., Yunusa, A. S., & Jimoh, M. (2021). Knowledge of water sanitation among boarders in senior secondary schools students in Kaduna State, Nigeria. *African Journal of Educational Assessors*, 6(1), 88-93.
- Prüss-Ustün, A., Bartram, J., Clasen, T., Colford, J. M., Jr., Cumming, O., Curtis, V., ... Cairncross, S. (2014). Burden of disease from inadequate water, sanitation and hygiene in low- and middle-income settings: A retrospective analysis. *Tropical Medicine & International Health*, 19(8), 894–905. <https://doi.org/10.1111/tmi.12329>
- Qur'an 2:222; 9:108; 74:4. (2004). In M. A. S. Abdel Haleem (Trans.), *The Qur'an*. Oxford University Press.
- Solomon, H. A., Umaru, M., Isiaq, A. T., Akorede, A. A., & Daniel, O. A. (2025). Assessment of knowledge of toilet infection preventive measures among boarding secondary school students in North East, Nigeria. *Global Journal of Health Related Researches*, 7(1), 62-67. <https://journals.abu.edu.ng/index.php/gjhrr/article/download/625/292>
- UNICEF. (2016). *Strategy for water, sanitation and hygiene 2016–2030*. United Nations Children's Fund.
- WHO. (2019). *Guidelines on sanitation and health*. World Health Organization.
- WHO/UNICEF Joint Monitoring Programme (JMP). (2023). *Progress on household drinking water, sanitation and hygiene 2000–2022*. World Health Organization and UNICEF.