Multidisciplinary Output Research For Actual and International Issue (MORFAI Journal) ISSN (e): 2808-6635
Volumes 6 No. 3 (2026)

THE INFLUENCE OF GREEN HOSPITAL PRACTICES AND MEDICAL WASTE MANAGEMENT EFFICIENCY ON HOSPITAL IMAGE

Melinia Cahaya Fitri[1]*, Kosasih[2]
Universitas Sangga Buana, Bandung
E-mail: meliniacahaya07@gmail.com[1]*, kosasih@usbypkp.ac.id[2]

Received : 10 February 2026 Accepted : 12 March 2026
Revised : 20 February 2026 Published : 21 March 2026

Abstract

Environmental sustainability has become a critical concern in healthcare institutions, where hospitals generate significant amounts of waste and consume large volumes of energy and resources. This study reviews the literature on the influence of green hospital practices and efficient medical waste management on hospital image. A systematic review of five recent studies published between 2024 and 2026 was conducted, focusing on sustainable hospital management strategies, pharmaceutical and domestic waste management, and eco-efficiency initiatives. The findings indicate that the implementation of green hospital practices including energy efficiency, sustainable resource utilization, environmentally friendly infrastructure, and waste minimization contributes significantly to operational sustainability. Efficient medical waste management, supported by structured systems, staff training, and policy enforcement, reduces environmental risks and ensures regulatory compliance. Moreover, hospitals that adopt these practices demonstrate greater social responsibility, which enhances their public image, fosters patient trust, and strengthens stakeholder perceptions. In conclusion, green hospital practices and efficient medical waste management are essential for sustainable healthcare operations. They not only reduce environmental impact and improve operational efficiency but also serve as strategic tools for enhancing hospital reputation. Institutional commitment, continuous education, and policy integration are key factors for achieving effective environmental management in healthcare settings.

Keywords: Green Hospital, Medical Waste Management, Environmental Sustainability, Hospital Image, Healthcare Management.

INTRODUCTION

The healthcare sector plays a crucial role in improving public health; however, hospital operations also generate significant environmental impacts. Hospitals produce various types of waste, including hazardous medical waste, chemical waste, and general waste, which must be managed carefully to avoid environmental contamination and health risks (Perdini et al., 2023). According to global environmental health concerns, the rapid growth of healthcare services has led to a substantial increase in medical waste generation. If not managed properly, medical waste can contaminate soil, water, and air, posing serious threats to ecosystems and human health. Therefore, hospitals are increasingly required to adopt environmentally responsible practices as part of sustainable healthcare management (Sutanto et al., 2020). In response to these challenges, the concept of *green hospital practices* has emerged as an important approach in modern healthcare management. Green hospital practices refer to environmentally friendly operational strategies implemented by hospitals to reduce ecological footprints while maintaining high-quality healthcare services (Ahmed et al., 2025). These practices include energy efficiency, water conservation, sustainable procurement, waste reduction, recycling programs, and environmentally responsible medical waste management. Implementing green hospital initiatives not only helps reduce environmental damage but also supports long-term operational sustainability and compliance with environmental regulations (Anathasia et al., 2024). Among the various environmental challenges faced by hospitals, medical waste management remains one of the most critical issues. Medical waste consists of infectious materials, sharps, pathological waste, pharmaceutical waste, and chemical residues that require special handling and disposal procedures (Bintang, 2023). Inefficient management of medical waste can result in environmental pollution, occupational health hazards for healthcare workers, and negative public perceptions of hospital responsibility. Consequently, effective and efficient medical waste management systems are essential to ensure environmental safety and regulatory compliance while maintaining operational efficiency within healthcare institutions (Sukadewi et al., 2020). Efficient medical waste

management involves proper segregation, collection, storage, transportation, treatment, and final disposal of medical waste in accordance with established environmental and health standards. Hospitals that implement efficient waste management systems are more capable of minimizing environmental risks and improving operational effectiveness. Moreover, efficient waste management practices demonstrate a hospital's commitment to environmental responsibility, which can positively influence stakeholders' trust and perception toward the institution (Ciawi et al., 2024). In recent years, environmental sustainability has become an important factor influencing the public image of healthcare organizations. Hospital image reflects the overall perception of patients and the community regarding the hospital's quality, credibility, social responsibility, and service performance. A positive hospital image plays a crucial role in attracting patients, increasing patient loyalty, and strengthening institutional competitiveness in the healthcare industry. Environmental responsibility, including green hospital initiatives and responsible waste management, has become an increasingly important dimension in shaping hospital reputation (Nikmah et al., 2024). Hospitals generate large amounts of waste as a result of healthcare service activities, including infectious waste, pathological waste, pharmaceutical waste, and chemical waste. The rapid development of healthcare services, along with increasing patient visits and medical procedures, has significantly contributed to the growth of medical waste worldwide. If this waste is not properly managed, it can lead to serious environmental pollution and public health risks (Tenriawi, 2023).

Despite the growing emphasis on sustainable healthcare, the implementation of green hospital practices and efficient medical waste management varies significantly among hospitals. Some hospitals have successfully integrated environmental sustainability into their operational strategies, while others still face challenges related to infrastructure, financial resources, technological capacity, and management commitment. These variations highlight the importance of examining how environmental management practices influence hospital image and public perception. Therefore, understanding the relationship between green hospital practices, medical waste management efficiency, and hospital image is essential for healthcare administrators and policymakers. Investigating these relationships can provide valuable insights into how environmentally responsible practices contribute not only to ecological sustainability but also to institutional reputation and competitiveness. By identifying the influence of green hospital practices and medical waste management efficiency on hospital image, hospitals can develop more effective strategies to improve both environmental performance and public perception (Yuliaty et al., 2025). Based on these considerations, this study aims to analyze the influence of green hospital practices and the efficiency of medical waste management on hospital image. The findings of this study are expected to contribute to the development of sustainable healthcare management strategies and provide practical recommendations for hospitals seeking to enhance their environmental responsibility while strengthening their institutional image in the healthcare sector.

LITERATURE REVIEW

Green Hospital Practices

Green hospital practices refer to environmentally sustainable strategies implemented by healthcare institutions to minimize environmental impact while maintaining high-quality healthcare services. Hospitals are recognized as one of the largest contributors to healthcare-related environmental pollution due to high energy consumption, intensive water usage, and the generation of hazardous medical waste. Therefore, the implementation of environmentally responsible practices has become increasingly important in modern healthcare management (Fitermen et al., 2025). Green hospital practices encompass several operational aspects including energy efficiency, water conservation, environmentally friendly procurement, sustainable infrastructure, and responsible waste management. These practices aim to reduce the ecological footprint of healthcare institutions while promoting sustainability in healthcare delivery. According to environmental management theory, organizations that adopt sustainable operational strategies not only contribute to environmental protection but also improve operational efficiency and stakeholder trust.

In the healthcare sector, green hospital initiatives have been widely promoted as part of sustainable healthcare systems. The implementation of green practices can reduce operational costs, improve resource utilization, and enhance institutional accountability toward environmental protection. Hospitals that adopt environmentally friendly management systems are often perceived as socially responsible organizations that contribute positively to community health and environmental sustainability (Uyun et al., 2022). Several studies have highlighted the importance of green hospital implementation in improving institutional reputation and service sustainability. Hospitals that integrate environmental responsibility into their operational management tend to gain stronger public trust and support. Consequently, green hospital practices are increasingly recognized as an important factor

influencing the competitiveness and long-term sustainability of healthcare organizations (Hutapea et al., 2025; Ciawi et al., 2024).

Medical Waste Management Efficiency

Medical waste management efficiency refers to the effectiveness and optimization of processes involved in handling healthcare waste, including segregation, collection, storage, transportation, treatment, and final disposal. Medical waste is classified as hazardous waste due to its potential to cause infection, environmental contamination, and health risks if not managed properly. Healthcare facilities generate different types of medical waste, including infectious waste, sharps, pharmaceutical waste, chemical waste, and pathological waste. These types of waste require specialized treatment and disposal procedures to ensure environmental safety and regulatory compliance. Inefficient waste management practices can result in environmental pollution, occupational health hazards for healthcare workers, and increased operational costs.

Efficient medical waste management systems involve the application of standardized procedures, technological support, trained personnel, and proper monitoring mechanisms. The implementation of effective waste segregation at the source, appropriate storage systems, and environmentally safe treatment technologies are essential components of efficient waste management practices (Baeti et al., 2022). In addition to environmental protection, efficient medical waste management also contributes to operational efficiency within healthcare institutions. Hospitals that implement structured waste management systems can reduce waste treatment costs, improve resource allocation, and enhance compliance with environmental regulations. Moreover, responsible waste management practices demonstrate a hospital's commitment to public health protection and environmental responsibility. Recent studies emphasize that effective medical waste management is a key component of sustainable healthcare management. Healthcare institutions that successfully implement efficient waste management systems are better positioned to minimize environmental risks while maintaining safe and effective healthcare services (Effendi et al., 2024).

Hospital Image

Hospital image refers to the overall perception of patients and the community regarding a hospital's reputation, credibility, service quality, and social responsibility. Institutional image plays a significant role in shaping public trust and influencing patient decisions when selecting healthcare providers (Dewi et al., 2023). A positive hospital image is often associated with high-quality medical services, professional healthcare staff, modern facilities, and strong organizational values. In addition to service quality, environmental responsibility has become an increasingly important factor influencing hospital reputation in recent years. Hospitals that demonstrate commitment to environmental sustainability are often perceived as responsible and trustworthy institutions. Hospital image is formed through various factors including service quality, patient experience, communication effectiveness, corporate social responsibility, and operational transparency. When patients perceive a hospital as reliable, safe, and socially responsible, their satisfaction and loyalty tend to increase. This perception ultimately contributes to stronger institutional reputation and competitive advantage within the healthcare industry (Winata et al., 2022). Environmental management practices such as green hospital initiatives and responsible medical waste management can significantly influence hospital image. Hospitals that actively promote environmentally friendly policies and sustainable healthcare practices are more likely to gain positive recognition from patients, communities, and regulatory authorities. Therefore, maintaining a positive hospital image requires not only excellent medical services but also responsible environmental management. Integrating sustainability into healthcare operations can strengthen institutional credibility and enhance long-term organizational performance (Wicaksono et al., 2024).

METHOD

This study employs a literature review method to examine and synthesize existing research related to green hospital practices, medical waste management efficiency, and hospital image. The literature review approach is used to identify theoretical perspectives, empirical findings, and research gaps regarding environmentally sustainable hospital management and its influence on institutional reputation. The data used in this study are secondary data obtained from scientific publications, including peer-reviewed journal articles, academic books, and international reports related to sustainable healthcare management. The literature sources were collected from several academic databases such as Google Scholar, Scopus-indexed journals, ScienceDirect, and other reputable scientific databases. These databases were selected to ensure the credibility and relevance of the sources used in this study.

The literature search process was conducted using several keywords, including "green hospital practices," "medical waste management," "healthcare waste management efficiency," "hospital sustainability," and "hospital image." The search focused primarily on articles published within the last ten years to ensure that the reviewed literature reflects recent developments and contemporary perspectives in sustainable healthcare management. To ensure the quality of the reviewed literature, inclusion and exclusion criteria were applied during the selection process. The inclusion criteria consisted of: (1) articles discussing environmental management in healthcare institutions, (2) studies examining medical waste management systems in hospitals, and (3) research addressing hospital reputation or image related to sustainability practices. Meanwhile, publications that were not directly related to healthcare institutions or did not provide empirical or theoretical discussions relevant to the research variables were excluded from the analysis.

After the literature collection process, the selected articles were analyzed using a qualitative descriptive analysis approach. This analysis involved reviewing the theoretical frameworks, research methodologies, and findings from previous studies to identify patterns, similarities, and differences in the relationship between green hospital practices, medical waste management efficiency, and hospital image. The synthesis of the literature was then organized to develop a comprehensive understanding of how environmental management practices influence hospital reputation. Through this systematic literature analysis, the study aims to provide a comprehensive conceptual understanding of sustainable hospital management and its role in shaping hospital image. The findings of this literature review are expected to contribute to the development of theoretical insights and serve as a reference for future empirical research in the field of sustainable healthcare management.

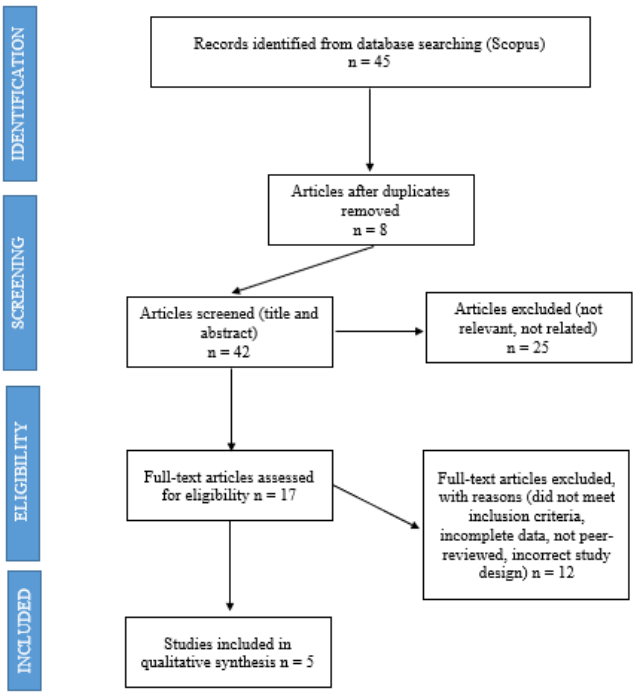

Figure 1. PRISMA Flow Diagram

The literature search initially identified 50 articles from several academic databases including Google Scholar, ScienceDirect, and Scopus. After removing eight duplicate records, 42 articles remained for the screening stage. During the title and abstract screening process, 25 articles were excluded because they were not directly related to green hospital practices, medical waste management, or hospital image. Seventeen articles were then assessed for full-text eligibility. After a thorough evaluation, 12 articles were excluded due to limited relevance or insufficient discussion of the research variables. Finally, five articles met all inclusion criteria and were selected for the final literature analysis in this study.

RESULTS AND DISCUSSION

Overview of Selected Studies

Table 3. Summary of Selected Studies

No	Author	Year	Research Focus	Method	Main Findings
1	Rahmi et al.	2026	Pharmaceutical waste management based on green hospital policies and sustainable practices	Literature review	Green hospital strategies such as waste prevention, source segregation, and policy strengthening improve the effectiveness of pharmaceutical waste management and reduce environmental contamination risks.
2	Effendi, Warlina, & Nurmawati	2024	Eco-efficiency implementation of green hospital in Nganjuk Regional Hospital	Descriptive observational study	The implementation of green hospital has not been fully achieved due to operational limitations, but eco-efficient regulations and sustainable material usage are key strategies for environmental hospital management.
3	Ardiani et al.	2025	Sustainable hospital management integrating ESG principles and energy efficiency	Literature-based conceptual study	The adoption of green hospital strategies and energy efficiency technologies can reduce hospital energy consumption by up to 30% and support sustainable healthcare systems.
4	Binuko et al.	2025	Implementation of medical waste SOP training toward green hospital practices	Community-based intervention study	Educational assistance and training significantly improve healthcare workers' understanding and compliance in medical waste segregation and environmentally safe practices.
5	Kusumayanti et al.	2025	Evaluation of domestic solid waste management in hospitals using POAC and 5M approaches	Descriptive evaluative study	Hospital waste management systems require improvement in organizational and technological aspects to enhance environmental safety and operational effectiveness.

The studies summarized in Table 3 demonstrate that environmental management in hospitals has become an increasingly important issue in the healthcare sector. Hospitals are known to generate various types of waste, including pharmaceutical waste, medical waste, and domestic waste, all of which require proper management to prevent environmental pollution and health risks. The literature indicates that the implementation of green hospital practices plays a significant role in addressing these environmental challenges while improving the sustainability of healthcare services. The study conducted by Rahmi et al. (2026) emphasizes the importance of implementing green hospital strategies in the management of pharmaceutical waste. Pharmaceutical waste such as expired medicines, unused drugs, and packaging materials can potentially contaminate soil and water if not properly managed. The findings highlight that preventive strategies, such as reducing waste generation at the source, improving waste segregation systems, and strengthening institutional policies, are essential to improving the effectiveness of pharmaceutical waste management. These strategies are consistent with the broader concept of green hospital practices, which aim to minimize environmental impacts through sustainable operational management. Effendi, Warlina, and Nurmawati (2024) further highlight the challenges associated with implementing green hospital initiatives in healthcare institutions. Their research at Nganjuk Regional Hospital shows that although eco-efficiency strategies have been introduced, several operational constraints still limit the full implementation of green hospital principles. These limitations include insufficient infrastructure, lack of operational regulations, and limited awareness among hospital management. However, the study also emphasizes that the development of environmentally friendly policies and the use of sustainable materials can significantly support the transition toward

environmentally responsible hospital management. The importance of integrating sustainability principles into hospital management systems is also highlighted by Ardiani et al. (2025). Their study discusses the integration of environmental, social, and governance (ESG) principles in sustainable hospital management. The findings suggest that hospitals adopting green hospital strategies, particularly energy efficiency technologies such as building energy management systems and LED lighting, can significantly reduce energy consumption and operational costs. This approach supports the global target of achieving net-zero carbon emissions while simultaneously improving hospital service efficiency. The integration of ESG principles also strengthens institutional transparency and accountability, which are important factors in enhancing the reputation of healthcare institutions.

Another important aspect highlighted in the literature is the role of education and training in improving the effectiveness of medical waste management. The study conducted by Binuko et al. (2025) shows that training programs and mentoring initiatives for healthcare workers significantly improve their understanding and compliance with waste management procedures. The implementation of standard operating procedures (SOP) for medical waste management, supported by continuous education and monitoring, can improve waste segregation practices and reduce environmental risks. These findings indicate that human resource capacity and organizational culture play a crucial role in supporting the successful implementation of green hospital practices. The evaluation study conducted by Kusumayanti et al. (2025) also provides important insights into the management of domestic solid waste in hospitals. Their research reveals that although waste management systems have been implemented, several aspects such as organizational structure, technological support, and resource allocation still require improvement. The study recommends strengthening human resource competence, adopting environmentally friendly technologies, and increasing institutional collaboration to improve the effectiveness of waste management systems. These strategies are aligned with national environmental initiatives aimed at reducing waste generation and promoting sustainable environmental practices.

Overall, the findings from the reviewed studies indicate that the implementation of green hospital practices and efficient waste management systems are essential for achieving sustainable healthcare management. Effective environmental management not only helps reduce environmental pollution and health risks but also contributes to improving hospital operational performance and institutional credibility. Hospitals that successfully integrate environmental sustainability into their operational strategies are more likely to strengthen their reputation and gain greater trust from patients and the community. The literature therefore suggests that sustainable environmental management should be considered a strategic priority in hospital administration. By adopting green hospital principles, improving waste management efficiency, and strengthening institutional policies, hospitals can contribute to environmental protection while simultaneously enhancing the quality and sustainability of healthcare services.

Green Hospital Practices in Healthcare Institutions Green hospital practices have emerged as an important approach in promoting environmental sustainability within healthcare institutions. Hospitals are complex organizations that consume large amounts of energy, water, and materials while simultaneously generating various types of waste. These operational characteristics make hospitals one of the sectors with significant environmental impacts. Therefore, the concept of green hospital practices has been introduced to encourage healthcare institutions to adopt environmentally responsible management strategies while maintaining the quality of healthcare services. The implementation of green hospital practices generally involves several key components, including energy efficiency, environmentally friendly infrastructure, sustainable procurement, and effective waste management systems. These practices aim to minimize the environmental footprint of hospital operations by reducing resource consumption and improving waste management efficiency. In addition, green hospital practices support long-term sustainability by integrating environmental considerations into hospital planning, operational processes, and organizational policies.

Based on the literature reviewed, the implementation of green hospital practices varies significantly across healthcare institutions. Some hospitals have successfully integrated environmentally sustainable practices into their operational management, while others still face challenges related to infrastructure, funding, and managerial commitment. For example, the study conducted by Effendi, Warlina, and Nurmawati (2024) indicates that although eco-efficiency strategies have been introduced in Nganjuk Regional Hospital, the implementation of green hospital principles has not been fully achieved due to several operational constraints. These limitations include insufficient regulations, limited resources, and the lack of comprehensive environmental management systems within the hospital. In addition to operational challenges, the successful implementation of green hospital practices also depends on the integration of sustainability principles into hospital management strategies. Ardiani et al. (2025) highlight that sustainable hospital management requires the integration of environmental, social, and governance (ESG) principles in healthcare institutions. Through the adoption of environmentally friendly technologies, such as building energy

management systems and energy-efficient lighting, hospitals can significantly reduce energy consumption and operational costs. These initiatives not only support environmental protection but also improve hospital operational efficiency and service quality. Another important dimension of green hospital implementation is waste management. Hospitals generate different types of waste, including pharmaceutical waste, infectious medical waste, and domestic waste, which must be properly managed to prevent environmental contamination. Rahmi et al. (2026) emphasize that green hospital strategies in pharmaceutical waste management include preventive measures such as minimizing waste generation, implementing waste segregation systems, and strengthening internal policies related to waste management. These strategies help ensure that pharmaceutical waste is handled in a safe and environmentally responsible manner.

Furthermore, the effectiveness of green hospital practices is closely related to the level of awareness and participation among hospital staff. Environmental sustainability cannot be achieved solely through technological improvements but also requires strong institutional commitment and behavioral changes among healthcare workers. Training programs, environmental education, and continuous monitoring mechanisms are essential in ensuring that hospital personnel follow proper environmental management procedures. Overall, the reviewed literature demonstrates that green hospital practices represent a comprehensive approach to sustainable healthcare management. The successful implementation of environmentally responsible operational strategies enables hospitals to reduce environmental impacts, improve resource efficiency, and strengthen institutional accountability. As environmental sustainability becomes an increasingly important concern globally, healthcare institutions are expected to adopt green hospital practices as part of their long-term management strategies to support sustainable healthcare systems.

Efficiency of Medical Waste Management in Hospitals

Efficient medical waste management is a critical component of sustainable hospital operations, as improper handling of medical waste can pose serious health and environmental risks. Hospitals generate a wide range of waste, including infectious waste, sharps, chemical and pharmaceutical residues, and domestic solid waste. If not properly segregated, stored, and treated, these wastes can lead to contamination of soil, water, and air, while also increasing the risk of occupational exposure to healthcare workers. Therefore, implementing efficient waste management systems is essential for protecting public health, complying with regulations, and achieving the goals of green hospital practices. The literature indicates that hospitals that adopt structured and systematic approaches to medical waste management are able to reduce environmental impacts and improve operational efficiency. Kusumayanti et al. (2025) highlight that hospitals using management frameworks such as POAC (Planning, Organizing, Actuating, Controlling) combined with the 5M approach (Man, Money, Material, Method, Machine) can systematically evaluate and improve their waste management processes. Their study found that although hospitals may have implemented some procedures, gaps in organizational structure, resource allocation, and technological support can limit the effectiveness of medical waste management.

Educational and training interventions also play a significant role in improving medical waste management efficiency. Binuko et al. (2025) show that training programs, mentoring, and practical simulations significantly increase healthcare workers' compliance with SOPs for waste segregation and disposal. Post-intervention assessments revealed marked improvements in waste handling practices, demonstrating that human resource capacity is as important as technological and infrastructural components in achieving efficient waste management. Pharmaceutical waste management, in particular, requires specialized attention due to the chemical and bioactive nature of the waste. Rahmi et al. (2026) emphasize that integrating green hospital strategies such as reducing waste at the source, segregating expired and unused medicines, and enforcing internal policies enhances the effectiveness of pharmaceutical waste management. Hospitals that implement these measures not only reduce environmental contamination but also minimize potential public health risks.

Efficiency in medical waste management also has operational and economic implications. Ardiani et al. (2025) note that integrating energy-efficient technologies and sustainable waste treatment methods can reduce operational costs and optimize resource utilization. Hospitals that manage waste efficiently can allocate resources more effectively, maintain compliance with environmental regulations, and enhance overall operational sustainability. Overall, the reviewed literature demonstrates that efficient medical waste management is a multidimensional process that requires a combination of technological, managerial, and educational interventions. Hospitals that successfully implement structured waste management systems, train their personnel, and enforce clear policies are able to minimize environmental risks, improve operational efficiency, and support broader green hospital

initiatives. These findings highlight that medical waste management efficiency is not only a matter of compliance but also a strategic component of sustainable healthcare and institutional credibility.

The Influence of Environmental Management on Hospital Image

Hospital image reflects the perceptions of patients, communities, and stakeholders regarding the credibility, responsibility, and overall quality of a healthcare institution. In recent years, environmental management has emerged as a key factor influencing hospital image. Hospitals that demonstrate commitment to sustainability through green practices and efficient waste management are increasingly recognized as socially responsible institutions, which can enhance public trust and institutional reputation. The literature shows a consistent link between environmental management and positive hospital image. Rahmi et al. (2026) argue that hospitals implementing effective pharmaceutical waste management as part of green hospital strategies are perceived as more responsible and environmentally conscious. Similarly, Effendi, Warlina, and Nurmawati (2024) highlight that eco-efficient initiatives, such as sustainable material usage and adherence to green operational criteria, not only reduce environmental impacts but also signal the hospital's commitment to community well-being, which strengthens public perception and trust.

In addition, Ardiani et al. (2025) emphasize that integrating ESG (Environmental, Social, Governance) principles into hospital management enhances transparency, accountability, and social responsibility, all of which positively influence hospital image. The adoption of energy-efficient technologies, sustainable waste management, and environmentally friendly infrastructure demonstrates that the hospital prioritizes both environmental and social objectives, which are increasingly valued by patients and stakeholders alike. Education and staff involvement also contribute indirectly to hospital image. Binuko et al. (2025) show that training and mentoring programs improve staff compliance with waste management SOPs and promote a culture of environmental responsibility. When hospital personnel consistently practice sustainable behaviors, this reinforces the perception that the hospital is committed to environmental stewardship, further enhancing its image among patients and the public.

Kusumayanti et al. (2025) also suggest that operational efficiency in waste management and adherence to structured management frameworks positively influence institutional reputation. Hospitals that systematically manage domestic solid waste demonstrate organizational competence, regulatory compliance, and proactive environmental responsibility, all of which contribute to a positive public image. Overall, the reviewed literature indicates that environmental management is more than an operational necessity; it is a strategic tool that directly affects hospital image. Hospitals that integrate green hospital practices and efficient waste management systems into their operations are likely to enhance their credibility, foster patient trust, and strengthen their competitive position in the healthcare sector. A positive hospital image derived from environmental responsibility not only supports public relations but also encourages stakeholder engagement, regulatory compliance, and long-term institutional sustainability.

CONCLUSION

This study's literature review demonstrates that environmental management in hospitals, particularly through green hospital practices and efficient medical waste management, plays a critical role in shaping both operational sustainability and institutional reputation. Green hospital practices, including energy efficiency, sustainable resource utilization, environmentally friendly infrastructure, and waste minimization, help hospitals reduce their environmental footprint while improving service efficiency. Efficient medical waste management is equally essential, as it mitigates health risks, prevents environmental contamination, and strengthens hospital compliance with regulatory standards. The combination of structured management systems, technological support, and staff training ensures that medical waste is handled safely and sustainably, reflecting both operational competence and environmental responsibility. Moreover, the literature consistently highlights that hospitals implementing strong environmental management strategies positively influence their public image. Commitment to sustainability, adoption of ESG principles, and the promotion of a culture of environmental awareness enhance credibility, foster patient trust, and improve stakeholder perceptions. This demonstrates that environmental management is not only an operational necessity but also a strategic asset for building a positive hospital image.In conclusion, the integration of green hospital practices and efficient waste management systems is fundamental for sustainable healthcare management. Hospitals that prioritize environmental responsibility can achieve operational efficiency, contribute to environmental protection, and strengthen their reputation within the community. These findings underline the importance of institutional commitment, policy enforcement, and continuous staff engagement as key drivers in creating environmentally sustainable and socially responsible healthcare institutions.

REFERENCES

Ahmed, M., Supriyadi, S., Redjeki, F., & Delima, M. (2025). Etika Bisnis dan Tanggung Jawab Sosial Rumah Sakit dalam Pengelolaan Dampak Lingkungan: Tinjauan Sistematis. *Jurnal Akademika Baiturrahim Jambi*, *14*(2), 422-432.

Anathasia, S. E., Kosasih, K., Syahidin, R., Asnar, E. S. M., & Yuliaty, F. (2024). Pengaruh Kualitas Pelayanan Dan Fasilitas Medis Terhadap Kepuasan Pasien Dan Implikasinya Terhadap Jumlah Kunjungan Pasien (Studi Pada Instalasi Rawat Inap Ruangan Mawar Dalam Rumah Sakit Umum Sinar Kasih Tentena Kabupaten Poso). *Innovative: Journal Of Social Science Research*, *4*(5), 5076-5099.

Ardiani, S. R. M., Yanis, H., Halim, A., & Paramarta, V. (2025). Sustainability Hospital Management: Strategi Green Hospital dan Efisiensi Energi di Era Net-Zero Emission 2050:(Integrasi prinsip Environment, Social, Governance dalam strategi jangka panjang Rumah Sakit. *Journal of Tax and Business*, *6*(2), 511-522.

Baeti, M. K., Raharjo, M., Dewanti, N. A. Y., & Sulistiyani, S. (2022). Efektivitas Instalasi Pengolahan Air Limbah (IPAL) Rumah Sakit Umum Roemani Muhammadiyah Semarang. *Jurnal Kesehatan Masyarakat*, *10*(3), 281-289.

Bintang, V. S. (2023). *Analisis Timbulan Limbah Padat Medis dari Berbagai Tipe Rumah Sakit Swasta (Rumah Sakit Tipe B, C, dan D)* (Doctoral dissertation, Universitas Islam Indonesia).

Binuko, R. S. D., Fauziyah, N. F., Al Fajri, A., Amirinda, K. A., & Aini, F. N. (2025). Pendampingan Implementasi Praktik SOP Limbah Medis Rumah Sakit Menuju Era Green Hospital. *Jurnal Pengabdian kepada Masyarakat Nusantara*, *6*(3), 3746-3754.

Ciawi, Y., Dwipayanti, N. M. U., & Wouters, A. T. (2024). Pengelolaan limbah medis rumah sakit yang berkelanjutan: Eksplorasi strategi ekonomis dan ramah lingkungan. *Jurnal Ilmu Lingkungan*, *22*(2), 365-374.

Dewi, A. R., Suryawati, C., & Arso, S. P. (2023). Pengaruh kualitas pelayanan dan citra rumah sakit terhadap kepuasan pasien di Indonesia: Literature review. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI)*, *6*(10), 1940-1949.

Effendi, F. N., Warlina, L., & Nurmawati, S. (2024). Implementasi Eko-efisiensi Rumah Sakit Ramah Lingkungan (Green Hospital) di Rumah Sakit Daerah Nganjuk. *Jurnal Teknologi Lingkungan Lahan Basah*, *12*(2), 319-329.

Fitermen, A. R. F., Mintarti, S., & Khairin, F. N. (2025). Environmental Management Accounting Practices in Hospital Waste Management: A Legitimacy Theory Perspective. *RIGGS: Journal of Artificial Intelligence and Digital Business*, *4*(3), 13-21.

Hutapea, J. H. S. M., Rahmawati, R., Dona, F., Utami, M. S., & Arianto, S. (2025). PENERAPAN PENGELOLAAN LIMBAH RUMAH SAKIT SWASTA TERHADAP LINGKUNGAN MASYARKAT DIJAKARTA TIMUR TAHUN 2024. *Integrative Perspectives of Social and Science Journal*, *2*(03 Juni), 3637-3644.

Istahara, I., Sidqi, A. G., Paramarta, V., Yuliaty, F., Kosasih, K., & Fitriana, F. (2026). Analysis of total quality management (TQM) by employees towards constructive improvement efforts in hospital. *Multidisciplinary Output Research For Actual and International (MORFAI Journal)*, 6(3)

Kusumayanti, K., Suryono, H., Hermiyanti, P., & Sari, D. K. (2025). Evaluasi Penerapan Manajemen Pengelolaan Limbah Padat Domestik di Rumah Sakit X Surabaya. *Jurnal Kesehatan*, *18*(2), 204-214.

Maliga, I. (2023). *Penanganan Limbah Medis Padat pada Rumah Sakit Rujukan COVID-19*. Penerbit NEM.

Nikmah, M., Safira, N. V., Lestari, N. S. P., Asvianto, N. S. A. N., & Radianto, D. O. (2024). Perkembangan Pengelolaan Limbah Medis Pada Rumah Sakit. *Jurnal Wilayah, Kota Dan Lingkungan Berkelanjutan*, *3*(1), 99-108.

Perdini, M., Riani, E., & Nurhasanah, N. (2023). Strategi menuju penerapan green hospital serta dampaknya bagi rumah sakit studi kasus pada rumah sakit x. *Jurnal Teknologi Lingkungan UNMUL*, *7*(1), 68-80.

Rahmi, S. F., Kasmiati, N., Amalia, R., Dewi, N. H., Yorismanto, Y., & Hartono, B. (2026). Pengelolaan Limbah Farmasi Rumah Sakit Berbasis Green Hospital: Tinjauan Literatur terhadap Kebijakan dan Praktik Berkelanjutan. *RIGGS: Journal of Artificial Intelligence and Digital Business*, *4*(4), 13941-13948.

Sukadewi, N. M. T. E., Astuti, N. P. W., & Sumadewi, N. L. U. (2020). Efektivitas sistem pengolahan limbah cair di rumah sakit bali med denpasar tahun 2020. *HIGIENE: Jurnal Kesehatan Lingkungan*, *6*(3), 113-120.

Sutanto, S., Putri, E. I. K., Pramudya, B., & Utomo, S. W. (2020). Atribut Penilaian Keberlanjutan Pengelolaan Lingkungan Rumah Sakit Menuju Green Hospital di Indonesia. *Jurnal Kesehatan Lingkungan Indonesia*, *19*(1), 51-61.

Tenriawi, W. (2023). Analisis Manajemen Pengelolaan Limbah Medis B3 di Rumah Sakit Umum Daerah (RSUD) Padjonga Dg. Ngalle Kabupaten Takalar 2023. *Jurnal Penelitian Multidisiplin Ilmu*, *2*(1), 1341-1348.

Uyun, F. N., Siska, F., & Chotidjah, N. (2022). Pengawasan pemerintah daerah terhadap pengelolaan limbah B3 internal rumah sakit. *Jurnal Riset Ilmu Hukum*, *2*(1), 52-56.

Verianto, V., Yuliaty, F., Kosasih, K., Sobarna, S., Paramarta, V., & Fitriana, F. (2026). The effect of information accessibility, digital literacy, and organizational commitment on the optimization of working documents on the Mutiara Pustaka website. *Multidisciplinary Output Research For Actual and International*, 6(3).

Wicaksono, A. F., Tresnati, R., & Kesumah, N. (2024). Pengaruh kualitas pelayanan dan citra rumah sakit terhadap loyalitas pasien rawat jalan di Rumah Sakit Mata Cicendo Bandung. *Jurnal Integrasi Kesehatan & Sains*, *6*(2), 99-106.

Winata, H., Wahyoedi, S., & Gunardi, W. D. (2022). Pengaruh Kualitas Layanan terhadap Loyalitas Pasien yang Dimediasi oleh Citra Rumah Sakit dan Kepuasaan Pasien (Studi pada Pasien Rawat Inap RS Ukrida Jakarta). *Jurnal Manajemen Dan Administrasi Rumah Sakit Indonesia (MARSI)*, *6*(2), 120-127.

Yuliaty, F., Kosasih, K., Rosady, F., Erlambang, R. Y., & Amin, H. (2025). The Impact of Service Innovation, Total Quality Management, and Technology Adoption on Competitiveness and Its Effects on the Performance of Third-Level Military Health Center Hospitals. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, *8*(3), 15305-15326.