

Henna (*Lawsonia Inermis*) in Islamic Medicine: A Scientific and Hadith Perspective on Skin Disease Treatment

Inai (*Lawsonia Inermis*) dalam Perubatan Islam: Perspektif Saintifik dan Hadith terhadap Rawatan Penyakit Kulit

MOHD FAIZ HADI MOHD SANADI*

Research Center for Theology and Philosophy, Faculty of Islamic Studies,
Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia
ORCID iD : <https://orcid.org/0009-0005-3031-0012>

MAZLAN IBRAHIM

Faculty of Usuluddin and Al-Quran & Sunnah, Kolej Islam Antarabangsa Sultan Ismail Petra (KIAS), 15730,
Kota Bharu, Kelantan, Malaysia
ORCID iD : <https://orcid.org/0000-0003-0193-1379>

NORAZIAH MOHAMAD ZIN

Center of Diagnostics, Therapeutics & Investigations, Faculty of Health Sciences,
Universiti Kebangsaan Malaysia, Jalan Raja Muda Abdul Aziz, 50300 Kuala Lumpur,
Wilayah Persekutuan Kuala Lumpur, Malaysia
ORCID iD : <https://orcid.org/0000-0002-7839-1246>

MUHAMMAD ARIF YAHYA

Research Center for Theology and Philosophy, Faculty of Islamic Studies,
Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia
ORCID iD : <https://orcid.org/0000-0002-8732-5304>

FARAH AYUNI MOHD HATTA

Institute of Islam Hadhari (HADHARI), Universiti Kebangsaan Malaysia,
43600 Bangi, Selangor, Malaysia
ORCID iD : <https://orcid.org/0000-0002-9780-8676>

*Corresponding Author; email: mohdfaizhadi@gmail.com

Received: 12 January 2025/ Received in revised form: 16 March 2026/

Accepted: 17 March 2026/ Published: 2 June 2026

ABSTRACT

Henna (Lawsonia inermis) is extensively acknowledged in traditional medicine for its dermatological advantages, especially in wound healing and skincare. It has been historically utilized in various medical traditions, including Islamic for treating skin infections, burns, and inflammatory conditions. Beyond its medicinal applications, henna has also been employed as a protective agent against environmental, such as radiation and microbial infections, highlighting its diverse therapeutic properties. This study investigates the importance of henna from both Islamic and scientific viewpoints, concentrating on three key aspects: (1) its use in treating skin disorders and pain, (2) its role in wound healing from prophetic tradition to clinical applications, and (3) its potential as a natural alternative in dermatology, supported by scientific evidence. This study use a qualitative methodology to investigate hadith in conjunction with contemporary scientific research to assess the efficacy of henna. Research demonstrates that henna has bioactive components such as hennotannic acid, flavonoids, and tannins, which possess antibacterial, antifungal, and anti-inflammatory characteristics. Clinical investigations indicate that henna-based therapies expedite wound healing, suppress bacterial proliferation, and exhibit antifungal efficacy against Candida albicans. These findings endorse the amalgamation of prophetic medicine with contemporary dermatology, underscoring henna's potential as an adjunctive therapy for dermatological conditions and advocating for additional investigation into henna-derived pharmaceutical formulations.

Keywords: Antibacterial properties; dermatology; henna; prophetic medicine; wound healing

ABSTRAK

*Inai (Lawsonia inermis) diiktiraf secara meluas dalam perubatan tradisional kerana kelebihan dermatologinya, khususnya dalam penyembuhan luka dan penjagaan kulit. Ia telah digunakan secara tradisional dalam pelbagai amalan perubatan, termasuk perubatan Islam, untuk merawat jangkitan kulit, melecur, dan keadaan keradangan. Selain daripada aplikasi perubatannya, inai juga digunakan sebagai agen pelindung terhadap faktor persekitaran seperti radiasi dan jangkitan mikrob, sekali gus menyerlahkan kepelbagaian sifat terapeutiknya. Kajian ini meneliti kepentingan inai daripada perspektif Islam dan sains, dengan memberi tumpuan kepada tiga aspek utama: (1) penggunaannya dalam merawat gangguan kulit dan kesakitan, (2) peranannya dalam penyembuhan luka daripada tradisi nabawi hingga kepada aplikasi klinikal, dan (3) potensinya sebagai alternatif semula jadi dalam bidang dermatologi yang disokong oleh bukti saintifik. Kajian ini menggunakan metodologi kualitatif dengan menganalisis hadith berserta penyelidikan saintifik semasa bagi menilai keberkesanan inai. Penyelidikan menunjukkan bahawa inai mengandungi komponen bioaktif seperti asid hennotannik, flavonoid, dan tanin yang mempunyai ciri antibakteria, antikulat, dan anti-radang. Kajian klinikal menunjukkan bahawa terapi berasaskan inai mempercepatkan penyembuhan luka, menghalang pertumbuhan bakteria, dan menunjukkan keberkesanan antikulat terhadap *Candida albicans*. Penemuan ini menyokong penggabungan perubatan nabawi dengan dermatologi moden, sekali gus menekankan potensi inai sebagai terapi sokongan untuk penyakit kulit serta mencadangkan kajian lanjut terhadap formulasi farmaseutikal berasaskan inai.*

Kata kunci: Dermatologi; inai; penyembuhan luka; perubatan nabawi; sifat antibakteria

INTRODUCTION

Herbal medicine has been a fundamental component of traditional medicinal procedures since the era of Prophet Muhammad (PBUH). Prophetic traditions (hadith) record numerous natural compounds utilized in Islamic healing. A study conducted by Rusni, M. and Thuraya, A. (2023), titled *A Critical Analysis of the Malay Translation of Medicinal Plants in Kitab al-Tibb of Sahih Al-Bukhari*, discussing various plants with therapeutic characteristics, including habbatus sauda (black seed), bamboo matting for hemostasis and burdock root for inflammation reduction. These findings underscore the significance of natural medicines in preserving both bodily and spiritual wellness within Islamic culture. Among these medicinal plants, henna (*Lawsonia inermis*) is distinguished by its distinctive dermatologica applications, acknowledged in both prophetic medicine and contemporary scientific study. This study examines the therapeutic potential of henna in skincare via the perspectives of hadith and contemporary scientific research, emphasizing its antifungal, antibacterial, and anti-inflammatory attributes.

According to Othman, M. R. et al. (2021), henna has been employed as a traditional treatment in Malaysia prior to independence, namely for addressing skin ailments and alleviating inflammation. Hadith and sunnah hold significant importance in Islamic tradition since they promote the utilization of natural compounds such as henna, habbatus sauda, and the bidara tree. Scientific study has demonstrated the anti-inflammatory,

antimicrobial, and wound-healing capabilities of these compounds. Contemporary studies, like as one conducted by Ramli, R. R. et al. (2018), indicate that sunnah-based practices, including nasal rinse during ablution, may reduce the incidence of upper respiratory tract infections (ARI). This illustrates the impact of Islamic medical traditions on public health in a wider context. Research has shown that the bioactive chemicals in henna, including hennotannic acid, can reduce inflammation, promote skin regeneration, and accelerate wound healing. This renders it a natural, secure, and efficacious therapy alternative. The amalgamation of Islamic prophetic medicine with modern scientific approaches offers significant insights into the medicinal efficacy of henna, especially in dermatological applications. This study examines the integration of henna, historically significant in prophetic medicine, with contemporary dermatological applications, enhancing its utility as an adjunctive treatment for skin conditions.

The therapeutic effectiveness of henna is mainly ascribed to its bioactive constituents, especially hennotannic acid, renowned for its anti-inflammatory, antibacterial, and antioxidant attributes. Hennotannic acid is essential for safeguarding the gastric mucosa against acid-induced injury, promoting wound healing, and neutralizing free radicals that lead to inflammation. Besides its dermatological advantages, studies have shown that henna's active compounds are useful in treating systemic conditions, including as gastric ulcers (Nigussie, D., Makonnen et al. 2021). These findings underscore the significant potential

of henna as a natural alternative for therapeutic uses, especially in the formulation of plant-based pharmaceutical products. Due to its extensive pharmacological properties, henna is a promising candidate for incorporation into modern medicine, requiring additional clinical trials and comparative studies to thoroughly clarify its mechanisms of action, safety profile, and wider implications for current medical treatments.

When it comes to the benefits of this henna, it is widely recognised that this tree offers numerous advantages in the field of therapy. One of the benefits of utilising this henna for treating ailments is its role as an antioxidant. Antioxidants effectively inhibit the proliferation and maturation of oxidative stress in cancer cells. Furthermore, this tree also functions as an anti-inflammatory and analgesic. Additionally, this henna is employed for the treatment of wounds and damaged skin. The reason behind this is that the ethanol content derived from henna leaves might accelerate the process of healing (Batiha, G. E. S. et al. 2023; Moutawalli, A. et al. 2023).

Henna is frequently referenced in Islamic texts, particularly hadiths, as a method for coloring grey hair, beards, and nails; however, its medicinal benefits are not explicitly detailed in these writings. Discussions regarding the application of henna in Islamic law often highlight its appropriateness for both genders, while also noting restrictions to prevent copying of the other sex. Nevertheless, henna's role in society as a remedy for various health issues necessitates further exploration of its potential as a therapeutic agent. Unfortunately, the lack of modern research tools in the past has made it hard to get a full picture of henna's health benefits. However, hadiths already exist that say it can be used to treat diseases. Using ideas from Islamic texts like hadith along with modern scientific research, more research needs to be done on the healing properties of henna as an alternative treatment for skin problems. This approach aims to amalgamate traditional Islamic medicine with contemporary science, emphasizing henna's potential as a cosmetic and therapeutic agent for skin health and dermatological conditions.

METHODOLOGY

This study employs a qualitative research approach by integrating hadith analysis and scientific literature

review to examine the therapeutic potential of henna (*Lawsonia inermis*) in dermatology. The research begins with an in-depth examination of hadiths pertaining to henna, derived from *al-Kutub al-Sittah*, which is al-Tirmidhi (1975), Abu Daud (1996) and Ibnu Majah (1997). These hadiths constitute the fundamental basis for understanding the application of henna as a therapeutic remedy in Islamic tradition. Each hadith is assessed based on its authenticity by examining the chain of narration and its content. The study further analyzes the academic perspectives on the medicinal implications of these hadiths, determining their relevance to contemporary dermatological practices. To establish a comparative framework, Islamic medical traditions are examined alongside modern scientific research, enabling a comprehensive evaluation of henna's significance in wound healing, anti-inflammatory and antimicrobial applications.

The scientific component of this study consists of a systematic review of peer-reviewed journal articles and clinical trials that explore the dermatological benefits of henna. This research does not involve laboratory experiments but relies on secondary data analysis from previously published studies. The collected data primarily focus on clinical trials involving rats, rabbits and human test subjects to evaluate the efficacy of henna based treatments. The findings from these studies indicate that henna possesses notable wound-healing, anti-inflammatory, and antibacterial effects, making it a promising natural remedy for dermatological conditions. The pharmacological properties of henna are attributed to its bioactive compounds, including hennotannic acid, flavonoids, and tannins, which exhibit antimicrobial activity against bacterial and fungal pathogens, reduce oxidative stress, and promote tissue regeneration. By correlating traditional Islamic views on henna with contemporary scientific evidence, this study reinforces henna's viability as a safe and effective complementary treatment in dermatology.

In order to provide a structured approach to this study, a conceptual framework is developed to illustrate the relationship between Islamic medicine and modern dermatological applications.

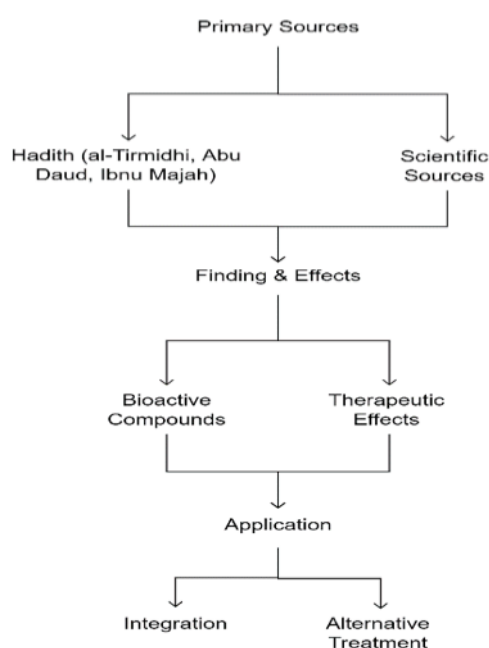


FIGURE 1: Conceptual Framework of Henna in Islamic Medicine and Dermatology

Figure 1 illustrates the conceptual framework, delineating the hierarchical structure of primary materials, which include hadith collections and scientific literature, and their function in validating the therapeutic importance of henna. The framework additionally classifies bioactive chemicals and their therapeutic properties, which underpin the investigation of incorporating prophetic medicine into contemporary dermatological practices. The study aims to assess the compatibility and continuity of henna’s use in both traditional and modern

medical practices, thereby reinforcing the case for its inclusion in evidence-based dermatological therapies.

The following portion of this paper, findings and effects offers a comprehensive analysis of the therapeutic capabilities of henna, substantiated by empirical research. This encompasses scientific papers illustrating the function of hennotannic acid, flavonoids, and saponins in accelerating wound healing and alleviating inflammation. The research findings enhance the existing information base that endorses the amalgamation of Islamic medicine with contemporary scientific progress, thereby substantiating henna as a dependable natural remedy for dermatological ailments and injuries.

RESULT AND DISCUSSION

This section analyzes the application of henna within Islamic tradition through an extensive examination of Hadith sources. Research indicates that over ten hadiths address several applications of henna, encompassing its use as a hair dye, embellishment for ladies, and remedy for wounds and dermatological conditions. This study concentrates on medical concerns, specifically the treatment of skin ailments, thereby limiting the examination to three pertinent hadiths. The hadiths are reported by Abu Daud (1996), Al-Tirmidhi (1975) and Ibnu Majah (1997) focusing on the significance of henna in Islamic medicine. The specifics of these hadiths are delineated in Table 1 below:

TABLE 1. Henna-related hadith compilation

No.	Hadith Number	Narrated	Hadith Translations	Hadith Status
1	3858	Abu Daud	حَدَّثَنَا مُحَمَّدُ بْنُ الْوَزِيرِ الدَّمَشَقِيُّ، ثنا يَحْيَى بْنُ يَحْيَى ابْنِ حَسَّانَ ، ثنا عَبْدُ الرَّحْمَنِ بْنُ أَبِي الْمَوَالِي، أَخْبَرَنَا فَايِدُ مَوْلَى عَبْدِ اللَّهِ بْنِ عَلِيٍّ بْنِ أَبِي رَافِعٍ، عَنْ مَوْلَاةِ عَبْدِ اللَّهِ بْنِ عَلِيٍّ بْنِ أَبِي رَافِعٍ، عَنْ جَدَّتَيْهِ سَلْمَى خَادِمِ رَسُولِ اللَّهِ ﷺ، قَالَتْ: «مَا كَانَ أَحَدٌ يَسْتَشْكِي إِلَى رَسُولِ اللَّهِ ﷺ وَجَعًا فِي رَأْسِهِ إِلَّا قَالَ: احْتَجِمِ، وَلَا وَجَعًا فِي رِجْلَيْهِ إِلَّا قَالَ: أَحْضِبْنِيهِمَا».	Hasan
<p>Narrated to us by Faid, the servant of ‘Ubaidillah Ibn ‘Ali Ibn Abi Rafi’, from his master, ‘Ubaidillah Ibn ‘Ali Ibn Abi Rafi’, from his grandmother, Salma, the servant of the Messenger of Allah (SAW), who said: “If someone complained to the Messenger of Allah (SAW) about a headache afflicting them, the Prophet (SAW) would say to them, ‘Undergo cupping (hijamah)!’ And if someone complained to him about pain in both of their legs, the Prophet (SAW) would say to them, ‘Dye (treat) with henna.’”</p>				
<p>(Abu Daud. Sunan Abu Daud, Kitab al-Tibb, Bab fi al-Hijamah, No. 3858)</p>				

continue ...

... continued

2	2054	Tirmidhi	حَدَّثَنَا أَحْمَدُ بْنُ مَنِيعٍ، قَالَ: حَدَّثَنَا حَمَّادُ بْنُ خَالِدِ الْخَيَّاطِ، قَالَ: حَدَّثَنَا فَايِدُ مَوْلَى لِيَالِ أَبِي رَافِعٍ، عَنْ عَلِيِّ بْنِ عَبْدِ اللَّهِ، عَنْ جَدَّتِهِ سَلْمَى، وَكَانَتْ تُخْدِمُ النَّبِيَّ ﷺ، قَالَتْ: مَا كَانَ يَكُونُ بِرَسُولِ اللَّهِ ﷺ قَرْحَةً وَلَا نَكْبَةً إِلَّا أَمَرَنِي رَسُولُ اللَّهِ ﷺ أَنْ أَضَعَّ عَلَيْهَا الْجَنَاءَ.	Sahih
<p>Narrated by Ahmad bin Mani': Hammad bin Khalid Al-Khayyat narrated to us from Fa'id, a freed slave of the family of Abi Rafi', who narrated from Ali bin Ubaidillah, from his grandmother Salma, who served the Prophet Muhammad (PBUH). She said: "There was no ulcer or wound that afflicted the Messenger of Allah (PBUH), except that the Messenger of Allah (PBUH) would instruct me to apply henna to it.</p> <p>(Al-Tirmidhi, Sunan Al-Tirmidhi, Kitab al-Tib, Bab Ma Ja fi al-Tadawi bi al-Hinna', No. 2054.)</p>				
3	3567	Ibnu Majah	عَنْ سَلْمَى أُمِّ رَافِعٍ، مَوْلَاةِ رَسُولِ اللَّهِ ﷺ، قَالَتْ: "كَانَ لَا يُصِيبُ النَّبِيَّ ﷺ قَرْحَةً وَلَا شَوْكَةً إِلَّا وَضَعَ عَلَيْهِ الْجَنَاءَ."	Hasan
<p>Narrated by Salma Umm Rafi', the servant of the Messenger of Allah (PBUH), she said: "The Prophet (PBUH) would not suffer from an ulcer or be pricked by a thorn except that he would apply henna to it.</p> <p>(Al-Qazwaini, Sunan Ibnu Majah, Kitab al-Tib, Bab Al-Hinna', No. 3567)</p>				

The three hadiths underscore the prophetic tradition of employing henna (*Lawsonia inermis*) as a natural treatment, namely for alleviating pain and treating wounds. The account from Abu Daud demonstrates that the Prophet Muhammad (PBUH) endorsed cupping (*hijamah*) for headaches and henna for leg pain, indicating its function as a remedy for physical ailments. Simultaneously, the Tirmidhi narration elucidates the Prophet's particular application of henna for the purpose of wound treatment. Salma, a servant of the Prophet, reported that anytime the Prophet (PBUH) experienced an ulcer or lesion, he would direct her to use henna as a remedy. This underscores the therapeutic properties of henna in facilitating wound healing and alleviating pain. Likewise, the hadith from Ibn Majah corroborates this practice by stating that the Prophet (PBUH) would utilize henna even for trivial injuries, such as a thorn puncture.

These hadiths collectively emphasize the significance of henna as a prophetic treatment, especially for skin-related conditions and wound care. The recurrent reference to henna across several situations, including pain alleviation, wound treatment, and minor injuries, illustrates its therapeutic adaptability and extensive application in prophetic medicine. Recent research has scientifically substantiated the bioactive qualities of henna including its anti-inflammatory, antibacterial and wound healing effects, consistent with its ancient use in prophetic traditions.

HENNA IN TREATMENT FOR SKIN DISORDERS AND PAIN

Henna has been utilized in traditional medicine for an extended period, notably in the medical practices of Prophet Muhammad (PBUH), especially for the purpose of wound healing. The aforementioned hadiths suggest that Prophet Muhammad (PBUH) advocated for the application of henna in the treatment of wounds and foot discomfort. This technique embodies the ancient understanding of henna's therapeutic powers, utilized since the era of the Prophet. To bolster this viewpoint, the subsequent hadith illustrates the application of henna as a remedy:

Hadith 1:

حَدَّثَنَا مُحَمَّدُ بْنُ الْوَزِيرِ الدَّمَشْقِيُّ، ثَنَا يَحْيَى يَعْنِي ابْنَ حَسَّانَ، ثَنَا عَبْدُ الرَّحْمَنِ بْنُ أَبِي الْمَوَالِي، أَخْبَرَنَا فَايِدُ مَوْلَى عَبْدِ اللَّهِ بْنِ عَلِيٍّ بْنِ أَبِي رَافِعٍ، عَنْ مَوْلَاةِ عَبْدِ اللَّهِ بْنِ عَلِيٍّ بْنِ أَبِي رَافِعٍ، عَنْ جَدَّتِهِ سَلْمَى خَادِمِ رَسُولِ اللَّهِ ﷺ، قَالَتْ: "مَا كَانَ أَحَدٌ يَشْتَكِي إِلَى رَسُولِ اللَّهِ ﷺ وَجَعًا فِي رَأْسِهِ إِلَّا قَالَ: احْتَمِمْ، وَلَا وَجَعًا فِي رِجْلَيْهِ إِلَّا قَالَ: أَخْضِبِيهِمَا."

Meaning:

Narrated to us by Fa'id, the servant of 'Ubaidillah Ibn 'Ali Ibn Abi Rafi', from his master, 'Ubaidillah Ibn 'Ali Ibn Abi Rafi', from his grandfather, Salma, the servant of the Messenger of Allah (SAW), who said: "If someone complained to the Messenger of Allah (SAW) about a headache afflicting them, the Prophet (SAW) would say to them, 'Undergo cupping (*hijamah*)!' And if someone complained

to him about pain in both of their legs, the Prophet (SAW) would say to them, ‘Dye (treat) with henna.’”

This hadith indicates that Prophet Muhammad (PBUH) advocated for the application of henna (*Lawsonia inermis*) as a remedy for pain or injuries on the body, especially in the foot region. This narration indicates that when an individual reported foot pain, the Prophet recommended henna as a treatment. From a contemporary medical viewpoint, henna comprises bioactive constituents such as hennotannic acid, which demonstrates anti-inflammatory and antibacterial characteristics and enhances the wound healing process. Moreover, henna serves as a natural coolant that alleviates inflammation and accelerates the regeneration of compromised skin cells. The application of henna for wound treatment and pain relief corresponds with contemporary scientific evidence that acknowledges its effectiveness in addressing dermatological issues. Consequently, additional investigation into the therapeutic advantages of henna is crucial to evaluate its viability as an effective natural alternative treatment in contemporary medicine. Moreover, the application of henna in Islamic medicine aligns with the principles of *al-Tibb al-Nabawi* (Prophetic Medicine), derived from the teachings of Prophet Muhammad (PBUH). Henna, recognized for its wound healing and analgesic properties, is utilized in Islamic medical practices not only as a physical treatment but also as a sunnah ritual imbued with blessings (*barakah*).

This is further substantiated by a study by Niazi, M. et al. (2022) entitled *Efficacy of a Topical Formulation of Henna (Lawsonia Inermis Linnaeus) on the Itch and Wound Healing in Patients With Epidermolysis Bullosa: a Pilot Single-arm Clinical Trial*. The research underscores the significance

of henna in wound management via multiple mechanisms, including its anti-inflammatory and antibacterial capabilities, as well as its capacity to expedite the healing process. This study involved the application of a 1% topical solution of henna to wounds and pruritic skin regions in patients with epidermolysis bullosa (EB). The results demonstrated that henna significantly alleviated symptoms like pruritus, erythema, and burning sensations. This action is ascribed to the phenolic and flavonoid chemicals in henna, which function as antioxidants and anti-inflammatory agents, aiding in the reduction of inflammation and the acceleration of injured skin tissue regeneration. Moreover, henna possesses antibacterial characteristics that may help avert infections in open wounds an important consideration in the management of EB, a condition frequently linked to a heightened risk of secondary infections.

The majority of patients in this study demonstrated a favorable reaction to henna treatment. Six of seven patients indicated a notable enhancement in pruritus symptoms post-treatment, with one patient characterizing the results as “superior” relative to alternative therapies. Clinical evaluations demonstrated that the henna formulation offered healing results that were either superior than or similar with standard drugs like Mupirocin and Biafine. During a four-week therapy period, patients exhibited a notable decrease in itching severity (from 8.57 ± 0.71 to 2.00 ± 0.43), skin erythema (from 6.28 ± 1.26 to 2.42 ± 0.48), and burning sensations (from 3.57 ± 1.21 to 1.00 ± 0.43). These data indicate that henna possesses significant potential as an adjunctive therapy for patients. The report advocates for additional research utilizing a bigger sample size to thoroughly evaluate the effectiveness of henna as a therapeutic alternative.

TABLE 2. Patients with epidermolysis bullosa who treated with local henna ointment

Outcome Measures	Week 0	Week 1	Week 2	Week 4
Itching sensation (mean \pm SD)	8.57 ± 0.71	4.71 ± 0.47	3.42 ± 0.86	2.00 ± 0.43
Skin redness (mean \pm SD)	6.28 ± 1.26	6.14 ± 1.10	3.57 ± 0.68	2.42 ± 0.48
Skin burning (mean \pm SD)	3.57 ± 1.21	2.28 ± 0.77	1.57 ± 0.61	1.00 ± 0.43

Furthermore, a study examined the efficacy of henna extract in facilitating burn healing in rabbits (*Oryctolagus cuniculus*). The study utilized ointments with varying concentrations of henna leaf extract (2.5%, 5%, and 10%) and compared them to a positive control (Bioplacenton). The findings

indicated that the 10% henna extract concentration was equally effective as the positive control, facilitating the accelerated healing of burn sites within 11 days. The active phytochemicals in henna, including tannins, flavonoids and saponins promote tissue regeneration, stimulate fibroblast activity and

inhibit microbial proliferation. This indicates that henna possesses antibacterial, antifungal and anti-inflammatory properties. The findings corroborate the notion that henna may serve as a natural remedy for burns, demonstrating its safety and efficacy (Wandira, A., Astriani, A. D., & Wahyuddin 2022).

HENNA IN WOUND HEALING FROM PROPHETIC TRADITION TO CLINICAL

Henna's application as a remedy is documented in the hadith of Prophet Muhammad (pbuh). This hadith constitutes the basis for this discourse:

Hadith 2:

حَدَّثَنَا أَحْمَدُ بْنُ مَنِيعٍ حَدَّثَنَا حَمَّادُ بْنُ خَالِدِ الْخَيَّاطِ حَدَّثَنَا فَايِدُ مَوْلَى لَأَلِ أَبِي رَافِعٍ عَنْ عَلِيِّ بْنِ عَبْدِ اللَّهِ عَنْ جَدِّهِ سَلْمَى وَكَانَتْ تَخْدُمُ النَّبِيَّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَتْ مَا كَانَ يَكُونُ يَرْسُولُ اللَّهُ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ فَرَحَةً وَلَا نَكْبَةً إِلَّا أَمَرَنِي رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ أَنْ أَضَعَّ عَلَيْهَا الْجَنَاءَ.

Meaning:

Narrated by Ahmad bin Mani': Hammad bin Khalid Al-Khayyat narrated to us from Fa'id, a freed slave of the family of Abi Rafi', who narrated from Ali bin Ubaidullah, from his grandmother Salma, who served the Prophet Muhammad (PBUH). She said: "There was no ulcer or wound that afflicted the Messenger of Allah (PBUH), except that the Messenger of Allah (PBUH) would instruct me to apply henna to it.

This hadith indicates that the application of henna in Islamic medicine, especially for wound healing and ulcers, exemplifies Prophet Muhammad's (PBUH) comprehensive approach to health preservation. This hadith demonstrates that the Prophet (PBUH) did not exclusively depend on *tawakkal* (faith in Allah) for health issues but also pursued suitable medical interventions utilizing the physical and medicinal resources accessible during his day. This corresponds with the Islamic notion of *ikhtiar* (effort), wherein individuals are urged to pursue optimal therapy prior to eventually entrusting their recovery to Allah. Moreover, the Prophet's application of henna for wound care signifies that Muslims should explore and employ natural and efficacious medicinal practices in their daily lives, emphasizing the necessity of harmonizing prophetic wisdom with contemporary scientific progress.

In addition to its function as a conventional medicine, the application of henna in this hadith suggests that Muslims are permitted to employ remedies validated by empirical evidence and scientific inquiry. This corresponds with the fiqh principle "*al-Asl fi al-Ashya' al-Ibahah*," which asserts that all things are permitted unless there is explicit evidence to the contrary. This indicates that natural remedies such as henna are not only allowed but actively advocated if they confer health advantages. Contemporary scientific study has broadened the investigation into the usefulness of henna, revealing beneficial effects in the treatment of skin problems, mainly attributable to its anti-inflammatory, antibacterial, and wound-healing characteristics. This hadith not only substantiates the medicinal practices of Prophet Muhammad (PBUH) but also promotes further contemporary research into henna's potential use in dermatology, pharmacology, and regenerative medicine.

This is further corroborated by the research conducted by Niazi, M. et al. (2022) entitled *Efficacy of a Topical Formulation of Henna (Lawsonia inermis L.) in Contact Dermatitis in Patients Using Prosthesis: A Double-Blind Randomized Placebo-Controlled Clinical Trial*. This study evaluated the efficacy of henna in managing dermatitis in patients with prosthetic limbs, offering robust scientific evidence for its anti-inflammatory, antibacterial, and dermatological healing attributes, which have been acknowledged in Islamic medicine for an extended period. A hadith reported by Salma, the servant of Prophet Muhammad (PBUH), states that the Prophet regularly employed henna for the treatment of wounds and ulcers. This affirms that the application of henna is not solely a cultural custom but is grounded in Islamic medicinal principles. Niazi's research corroborates this hadith by illustrating that henna significantly alleviates symptoms like erythema, pruritus, burning sensations, and pain, consistent with prophetic guidance regarding its efficacy in mitigating discomfort and promoting wound healing.

The study included 95 people with contact dermatitis resulting from prosthesis use, divided into two groups: one group was administered a 1% henna cream overnight for two weeks, whereas the control group received a placebo cream. The findings indicated that patients utilizing henna exhibited notable enhancements in dermatitis symptoms, encompassing decreases in edema,

pruritus, cutaneous sweat, and discomfort. Despite the lack of statistical significance in the reduction

of burning sensation, a favorable trend towards improvement was nonetheless evident.

TABLE 3. Effects of henna cream on dermatitis symptoms compared to placebo

Variables	Henna (n = 37) (Changed/Unchanged)	Placebo (n = 37) (Changed/Unchanged)	p-value
Skin edema	10/27	3/34	0.029
Skin redness	0/37	10/27	0.001
Skin burning	9/28	3/34	0.052
Skin itching	11/26	2/35	0.005
Pain	16/21	0/37	0.0
Skin sweating	16/21	0/37	0.0
Skin thinning	26/11	0/37	0.0

In addition to human testing, the application of henna has also been evaluated in animal studies including rats. The research by Metwally, A. A. et al. (2020) yang bertajuk *Wound-Healing Properties Of Green (Using Lawsonia Inermis Leaf Extract) And Chemically Synthesized ZnO Nanoparticles In Albino Rats*, demonstrated that henna leaf extract utilized in the synthesis of zinc oxide nanoparticles (ZnO-NPs) significantly influenced wound healing. This study showed that a gel formulation with ZnO nanoparticles from henna was superior to chemically generated ZnO in promoting wound healing, improving epithelialization, and boosting fibroblast activity.

Moreover, ZnO nanoparticles derived from henna have demonstrated beneficial effects on wound healing in experimental albino rats. When rats were given a gel with henna extract, their wounds closed faster than those in the control group, which only got a saline solution. This change could be seen because new epidermal layers formed faster, and there were a lot fewer signs of inflammation, like redness and swelling around the lesion. Additionally, the rats in the henna treatment group had higher levels of fibroblast activity. Fibroblasts are the cells that make collagen during tissue regeneration. These findings demonstrate that henna serves as both an anti-inflammatory and antibacterial agent while also facilitating the acceleration of skin regeneration in open wounds.

The epithelialization process, which is the growth of new skin layers, worked better in the henna treatment group than in the control group. This was seen along with faster wound healing. A histological study of the wound tissue showed that rats that were given henna had more organized epidermal cell proliferation, as shown by a denser and more structured collagen matrix. Conversely, wounds in the control group exhibited extended symptoms of inflammation, while those in the henna treatment

group demonstrated near-complete healing in a shorter duration. This discovery indicates that henna possesses considerable potential as a wound therapy that expedites healing without producing substantial negative effects.

A study by Talab, T. A. et al. (2022), investigated the effects of lawsone on pain and inflammation relative to aspirin, utilizing 120 rats as subjects. Based on how long lawsone, aspirin, and a control group were able to relieve pain in rats, this study looked at their pain-relieving effects. The control group exhibited the briefest analgesic duration of 6.20 ± 0.26 seconds, while aspirin prolonged the duration to 9.75 ± 1.70 seconds. The pain-relieving effect of Lawsone was the strongest, lasting 23.50 ± 0.57 seconds, which was much longer than both the control and aspirin groups. The anti-inflammatory effects of lawsone, aspirin, and the control group were tested by checking how much the swollen hind paws of rats that had been given carrageenan went down. The control group exhibited the greatest edema thickness at 1.53 ± 0.43 mm, whereas lawsone decreased it to 1.20 ± 0.10 mm. Aspirin exhibited the most significant effect, decreasing edema thickness to 1.13 ± 0.25 mm. Lawsone significantly reduced edema compared to the control group. However, there was no significant difference between the effects of lawsone and aspirin, suggesting that lawsone has an anti-inflammatory effect similar to aspirin in the model of inflammation that was studied. The data indicate that lawsone demonstrates superior analgesic efficacy compared to aspirin, positioning it as a promising natural alternative for pain management.

This illustrates that henna serves as a potent agent for wound healing and skin regeneration, according to the principles of Prophetic medicine (Tibb al-Nabawi). The hadiths of Prophet Muhammad (SAW) suggest that he advocated for the application of henna in the treatment of wounds

and ulcers, a practice now corroborated by scientific data. Recent research has shown that henna can help reduce swelling, redness, itching, and pain by killing bacteria and promoting wound healing. Henna-based therapies have also been shown to improve epithelialization and fibroblast activity. This leads to a more structured growth of new

skin layers and a stronger collagen network, which makes scars less likely to form. The utilization of natural ingredients in Islamic medicine is not solely a traditional practice it is increasingly bolstered by robust scientific data. In conclusion, Table 4 below demonstrates the efficacy of henna in facilitating wound healing in both people and animals.

TABLE 4. Efficacy of henna in facilitating wound healing in both people and animals

Category of Study	Effects and Efficacy	Pharmacological Properties
Clinical Trials on Humans	- Reduction in skin itching from 8.57 ± 0.71 to 2.00 ± 0.43 . - Reduction in skin redness from 6.28 ± 1.26 to 2.42 ± 0.48 . - Reduction in burning sensation from 3.57 ± 1.21 to 1.00 ± 0.43 .	Anti-inflammatory, antimicrobial, antioxidant, accelerates tissue regeneration.
Preclinical Trials on Rats	- Wound contraction occurs faster compared to the control group. - Significant increase in epithelialization and collagen production.	Stimulates fibroblast activity, enhances collagen synthesis.
Preclinical Trials on Rabbit	- 10% concentration of henna extract is as effective as the positive control (Bioplacenton) in burn wound healing. - Wounds fully healed within 11 days. - Exhibits high antibacterial, antifungal, and anti-inflammatory activity.	Possesses antibacterial, antifungal activity and accelerates the recovery of damaged skin.
Analgesic (Pain Relief)	Lawsone exhibits an analgesic duration of 23.50 ± 0.57 seconds, significantly higher than aspirin (9.75 ± 1.70 seconds) and the control group (6.20 ± 0.26 seconds).	Lawsone inhibits inflammation and reduces nerve sensitivity to pain.
Anti-Inflammatory	Lawsone reduces hind paw edema by 1.20 ± 0.10 mm, nearly equivalent to aspirin (1.13 ± 0.25 mm), both significantly lower than the control group (1.53 ± 0.43 mm).	Reduces inflammation through modulation of pro-inflammatory responses and edema reduction.

In addition to henna's application in the treatment of severe wounds, another hadith suggests that Prophet Muhammad (SAW) utilized henna for minor ailments, such as thorn pricks. This hadith reinforces the extensive application of henna in the treatment of wounds, from slight lacerations to more serious traumas. The subsequent hadith demonstrates this:

Hadith 3:

عن سلمى أم رافع، مولاة رسول الله ﷺ قالت: كان لا يصيب النبي ﷺ قرحة ولا شوكة إلا وضع عليه الجناء.

Meaning:

Narrated by Salma Umm Rafi', the servant of the Messenger of Allah (PBUH), she said: "The Prophet (PBUH) would not suffer from an ulcer or be pricked by a thorn except that he would apply henna to it.

This hadith shows that Prophet Muhammad (SAW) used henna not just for serious wounds but also as a quick remedy for minor injuries. This suggests that henna serves both preventive and therapeutic purposes, making it a complete and holistic method of treatment. Modern science has

also confirmed that henna has antibacterial and antioxidant qualities, which can help minimize infections, speed up skin regeneration, and lessen inflammation.

This method also follows an important principle in Islamic medicine: starting treatment early to avoid problems with wounds is a good way to keep them from getting worse. In contemporary medicine, unaddressed wounds can elevate the likelihood of infection and impede the healing process. Prompt application of henna, known for its antibacterial and anti-inflammatory attributes, can mitigate inflammation, avert infections, and expedite skin regeneration. Research indicates that henna possesses bioactive chemicals, including flavonoids and tannins, which aid in the healing of small wounds. Studies have demonstrated that applying henna to minor wounds accelerates wound contraction, enhances skin cell regeneration, and reduces scarring. This hadith not only demonstrates that Prophet Muhammad (SAW) employed effective medical practices but also facilitates further investigation into the usefulness of henna as a safe and effective wound therapy in contemporary medicine.

HENNA IN TRADITION AND SCIENCE

Emphasize the medicinal significance of the mambu tree (*Azadirachta indica*), a traditional remedy for dermatological ailments. This tree is acknowledged for its antioxidant and anti-inflammatory properties and holds importance in Ayurvedic, Unani and Chinese medicine, addressing conditions such as ulcers and skin-related pain (Preez, D. A. D. et al. 2023). The leaves and bark are frequently utilized to alleviate itching, scarring and inflammation demonstrating their therapeutic effectiveness. Likewise, henna is a plant essential to traditional medicine, particularly in dry areas like Arafah, providing similar advantages for skin health.

The henna tree, as described by El Massoudi, S. et al. (2023), the henna plant has been renowned since ancient times and is traditionally utilised for both medicinal and cosmetic purposes. The plant possesses both aesthetic appeal because to its appealing colour and medicinal properties that aid in the treatment of wounds and ailments on the human body. This is because, in the leaves of the tree there are several active elements that help in skin health such as red-orange color, hydroxy-1,4-naphthoquinone also known as hennotannic acid which has benefits for hair, nails, hands and also functions as an anti-bacterial (Li, D., Zhou et al. 2020), anti-fungal (Hossain, C. M. et al. 2022), antioxidant, analgesic (Sveaas, S. H. et al. 2023) and anti-inflammatory (Tinesya, D. et al. 2019).

Henna (*Lawsonia inermis*) has been extensively employed in clinical settings for its ethnopharmacological attributes, encompassing antifungal, antibacterial, and anti-inflammatory qualities. Abubakar, I. B. et al. (2022) elucidate its utilization in South India and Southwestern Nigeria for the treatment of pinworms, bacterial infections, dermatological ailments, as well as tumors and poliomyelitis. Moreover, henna is utilized to mitigate symptoms of fever, jaundice, cough, bronchitis and inflammation. These findings highlight henna's significance as a credible alternative remedy in traditional medicine, demonstrating its geographical and cultural adaptability.

APPLICATION AND USAGE

According to a research Hareshbhai, P. H., (2021) titled *Review of Herbal Plants Used in The Treatment of Skin Disease*, various techniques use the application of finely ground henna combined with water to treat certain ailments, like the

consistency of clay. An effective method is to apply the henna to the affected area twice daily. One of the advantages of henna is its ability to regulate and diminish wounds, as well as its capacity to avoid fungal infections on the skin (mycotic infection). Furthermore, this henna possesses anti-fungal properties, specifically targeting the *Candida albicans* fungi, a type of fungus commonly seen in the female vaginal region. Furthermore, henna possesses significant UV absorption properties, making it a popular choice in the cosmetic industry for its ability to prevent fungal illnesses such as athlete foot (Alhamadi, N. et al. 2023 ;Nigam, P. K., Syed et al. 2023).

Thus, clinical investigations undertaken by academics have unequivocally demonstrated the efficacy of the henna tree as an alternate treatment for several skin ailments. While the use of this tree does not directly prevent the recurrence of a skin condition, it does have the indirect benefit of alleviating and reducing the spread of diseases. Furthermore, it is worth noting that apart from the henna tree, there exist other trees, including the semambu tree (*Azadirachta indica*), that possess similar qualities and are utilised in traditional medicine for the treatment. The benefits of this tree, including as its antioxidant, anti-inflammatory and antifungal properties, can alleviate skin pain and aid in the treatment of diseases.

The dried leaves of the semambu tree can repel flies and pests, while its fruit produces medicinal oil appropriate for wound care and the treatment of head lice. Henna (*Lawsonia inermis*) has been traditionally utilized for dermatological conditions, as noted by Al-Jawziy, I. Q., (2010). A hadith describes its effectiveness in curing burns, oral ulcers and moniliasis (Pittara 2022). Aloe vera (*Aloe barbadensis* linn), a plant characterized by spiny leaves, possesses a gelatinous sap utilized for wound washing and the treatment of dermatological conditions. Additionally, there are other botanical species, such as aloe vera that have been historically utilised as alternative remedies for skin ailments. Aloe vera is a botanical specimen characterised by little thorns along the edges of its leaves. Internally, it contains a viscous or pale yellow juice that is utilised for cleansing wounds and addressing dermatological ailments (Abaekwume, C. O., and Kagbo, H. D. 2021).

According to Othman, M. R. et al. (2023), hennotannic acid is the principal ingredient in henna leaves (*Lawsonia inermis*) that generates a reddish-brown hue when application to skin or

hair. It operates by a chemical reaction with keratin, delivering enduring coloring while demonstrating antibacterial and antioxidant characteristics. These properties render henna efficacious in mitigating inflammation, facilitating wound healing, and averting infections, establishing it as a natural cure in dermatological treatment. The application of henna in hadith emphasizes its historical importance, indicating an awareness of its healing capabilities prior to scientific confirmation. This concordance between prophetic medicine and modern science validates the “concealed advantages” of henna referenced in Islamic traditions. Contemporary research corroborates its function in combating skin infections and improving skin health, connecting traditional wisdom with evidence-based medicine. The dual significance of henna renders it a useful asset in both traditional and contemporary healthcare systems.

HENNA IN DERMATOLOGY AS A NATURAL ALTERNATIVE WITH SCIENTIFIC EVIDENCE

The Qur’an references trees that offer advantages to humanity, such as the henna tree (*Lawsonia inermis*), which has been esteemed for millennia across various cultures. Ahmad, K. et al. (2016) characterize henna as a species within the Lythraceous family, which includes more than 500 species flourishing in tropical and subtropical environments. This tree, native to Africa and Asia, is commercially farmed in countries including Morocco, Algeria, Yemen, Tunisia, Libya, Saudi Arabia, Egypt, India, Iraq, and Iran, highlighting its global significance. Botanically, henna is distinguished by its little green leaves akin to those of the pomegranate tree, and its aromatic, white, climbing blossoms provide a red or crimson dye upon crushing. The dye derived from henna leaves has historically been utilized for body art, textiles, and medical applications, highlighting its versatility and cultural importance, especially in Islamic traditions and ancient civilizations such as Egypt and India.

Henna is celebrated for both its decorative uses and its medicinal benefits. Ahmad, K. et al. (2016), emphasize its effectiveness in addressing oral wounds and inflammation, as well as in alleviating burns or infections induced by waterborne fungus. The dye derived from henna leaves is utilized to fortify fingers, improve nail health, and tint hair, demonstrating its versatility in personal care. Moreover, henna exhibits soothing properties on the nervous system, rendering it a natural treatment

for headaches and stress-related ailments. Its anti-inflammatory characteristics additionally aid in alleviating swelling and skin irritation, rendering it a significant resource in the management of illnesses such as eczema, dermatitis, and superficial wounds. This extensive application highlights henna’s persistent significance in both traditional and contemporary healthcare.

The bioactive constituents of henna leaves, including flavonoids, tannins, and phenolic acids, substantially enhance its medicinal efficacy. Khantamat, O. et al., (2021) elucidate that these components alleviate inflammation by suppressing pro-inflammatory mediators such as COX-2, a crucial enzyme associated with inflammatory mechanisms. Furthermore, henna possesses antioxidative characteristics that mitigate oxidative stress, a component frequently linked to chronic inflammation. These pathways make henna very efficacious in addressing inflammatory skin conditions, promoting tissue regeneration, and mitigating liver inflammation. Henna’s anti-inflammatory and antioxidant characteristics are advantageous for skin ailments like eczema and burns, as well as for systemic problems such as arthritis, underscoring its versatility as a medicinal agent in addressing both localized and systemic inflammatory disorders.

Furthermore, this henna possesses the ability to treat several ailments beyond those previously mentioned such as yellow fever and amoebiasis (Ullah, R. et al. 2022). The plant has carbohydrates (Djarami, J., & Tunny 2023), proteins (Kumar, K., Kumar, P., & Ahmed 2024), flavonoids, tannins, phenolic compounds, alkaloids, terpenoids (Siddiqui, T. et al. 2024), quinones, coumarins (Carneiro, A. et al. 2021), xanton, and fatty acids. Research indicates that henna extract reduces glucose and cholesterol levels while alleviating parasite diseases. Notwithstanding the negative consequences of contemporary medications, henna continues to be a favored natural cure. According to Adiga, A. et al. (2022), *Lawsonia inermis* is utilized in Ayurvedic medicine for the treatment of jaundice, dermatological conditions and wounds, exhibiting hepatoprotective, anti-inflammatory, antibacterial and tissue-repairing capabilities hence, it serves as a multifaceted herb for different disorders.

Then, according to Othman, M. R. (2021), there are multiple therapeutic approaches that utilise henna for the treatment of illnesses. The sickness and therapy methods involving henna can be observed through the table 2 of the henna tree:

TABLE 5. Classification of disorders and henna-based treatments

Types of Disease	Henna-Based Treatments
Postpartum Depression	Henna leaf decoction is prepared and consumed to alleviate emotional distress post-childbirth.
Circumcision	Crushed henna leaves are utilized as a poultice to facilitate healing and diminish irritation..
Dermatitis	A paste of henna leaves, turmeric, and rice is applied to soothe inflammation and itching.
Stomach ache	Henna leaf infusions are consumed as a traditional remedy for abdominal pain.
Wound	Ground henna leaves are applied directly to wounds to expedite healing.
Joint pain and Bloating	Powdered henna leaves combined with turmeric and egg yolk are utilized to alleviate discomfort.

Table 5 delineates several illnesses alongside their respective therapies utilizing henna (*Lawsonia inermis*), illustrating its multifaceted use in traditional medicine. Henna leaf decoction is frequently utilized to mitigate postpartum depression by improving mental well-being following childbirth. Crushed henna leaves are utilized as a poultice for circumcision to enhance healing due to its anti-inflammatory and antibacterial characteristics. In instances of dermatitis, a paste composed of henna leaves, turmeric, and rice is utilized to alleviate inflammation and diminish pruritus. Stomach aches are conventionally alleviated with infusions derived from boiling henna leaves, which are ingested as a herbal beverage. Ground henna leaves are applied directly to wounds to expedite healing and prevent infection. Moreover, joint discomfort and bloating are alleviated with the application of a powdered blend of henna leaves, turmeric, and egg yolk to the affected regions.

Henna has long been utilized to treat both internal and exterior conditions, showcasing its medicinal versatility. Henna leaf decoctions are frequently utilized as a natural therapy for abdominal pain, facilitating digestion and mitigating gastrointestinal discomfort. The bioactive constituents, including flavonoids and tannins, enhance its anti-inflammatory and antioxidative effects, aiding in the reduction of inflammation in the digestive tract. Crushed henna leaves are used externally to wounds to enhance tissue regeneration and reduce scarring, utilizing its antibacterial and anti-inflammatory properties. In instances of arthralgia and bloating, henna leaves are ground into a fine powder, mixed with egg yolk, and externally applied to alleviate swelling and discomfort. These traditions highlight henna's dual function as a preventative and therapeutic agent, providing comprehensive health advantages. Rooted in extensive traditional knowledge and corroborated by scientific evidence, henna is an essential natural treatment, proficient in properly treating a diverse array of diseases.



FIGURE 2. Illustration of the henna tree (*Lawsonia inermis*)
Source: Md Ariffin, M. F. et al., (2020)



FIGURE 3: Botanical details of the henna tree: stalk, flowers, and seed
Source: Othman, M. R. et al., (2021)

Henna (*Lawsonia inermis*) has been historically acknowledged as a plant of considerable cultural, medical, and ceremonial importance. Historically, it functioned as a natural dye for hair and nails, in addition to being a crucial medicinal substance during the era of the Prophet Muhammad (PBUH). Authentic hadiths record its use in the treatment of wounds, burns, and numerous diseases, highlighting its essential significance in traditional Islamic medicine. Moreover, henna's cultural relevance is seen in its application during ceremonial preparations, especially in distinguishing male

and female fingers, underscoring its symbolic importance. The enduring application of henna across millennia in both cosmetic and medical fields is now substantiated by scientific research. Contemporary research validates its medicinal attributes, including antifungal, antibacterial, and anti-inflammatory actions. This lasting significance highlights henna's function as a crucial link between traditional and modern healthcare systems. Its dual role in aesthetics and medicine underscores its enduring significance, rendering it an essential element of both cultural legacy and contemporary therapeutic methods.

CONCLUSION

Henna (*Lawsonia inermis*) demonstrates significant potential as a dermatological therapy, consistent with its historical application in Islamic medicine and contemporary scientific research. Analysis of Hadith indicates that the Prophet Muhammad (PBUH) advocated the use of henna for the treatment of wounds, alleviation of foot pain, and minor injuries, such as thorn punctures. This highlights that henna is not only a cosmetic color but a fundamental element of *Tibb al-Nabawi* (Prophetic Medicine), functioning as a natural therapeutic agent. Scientific study substantiates its therapeutic efficacy, revealing that henna has bioactive constituents including hennotannic acid, flavonoids, and tannins, which possess antibacterial, antifungal, and anti-inflammatory attributes. Clinical research demonstrate that henna can alleviate redness, itching, and burning sensations linked to dermatological diseases, while animal studies indicate its ability to enhance burn wound healing beyond standard therapies. These findings underscore henna's importance as a natural therapy with considerable relevance in modern medicine.

Despite the widespread application of henna in traditional medicine, there is a deficiency of large-scale clinical investigations to thoroughly substantiate its therapeutic effectiveness and safety profile. Additional research is necessary to clarify the processes by which henna interacts with the immune system and human dermal cells, especially with inflammatory reactions and wound healing. Furthermore, comparative analyses between henna and traditional dermatological therapies, such as antiseptics, antibiotics, and topical corticosteroids, are crucial to ascertain whether henna can serve as a replacement or supplementary therapy.

Based on these findings, subsequent study should concentrate on creating pharmaceutical-grade henna formulations, including lotions, gels, and dermatological ointments, to evaluate their clinical efficacy and therapeutic reliability.

Recent scientific evidence progressively endorses the incorporation of henna into contemporary dermatological practices, establishing it as a safe, natural, and potentially economical therapeutic alternative. Due to its historical application in traditional medicine, henna offers a potential integration of natural and conventional therapy, especially for persistent skin ailments like eczema, psoriasis, and bacterial infections. Nonetheless, its integration into mainstream dermatology necessitates a more robust basis of empirical data via standardized pharmacological research and clinical trials. Therefore, a collaborative effort among Islamic medical scholars, dermatologists, pharmacologists, and biomedical researchers is essential to enhance research initiatives, refine formulation techniques, and develop regulatory guidelines for henna-based dermatological solutions. Moreover, collaboration with public health authorities and healthcare policymakers is essential for the secure and ethical integration of henna into contemporary medical practices, guaranteeing compliance with stringent safety, efficacy, and quality control standards prior to its widespread therapeutic implementation.

This study validates the medicinal importance of henna, confirming its status as a natural cure recognized in Islamic medicine and supported by modern scientific research. This research integrates hadith interpretation with contemporary scientific investigations, offering valuable insights into the dermatological applications of henna and affirming its potential as an alternative therapeutic agent with many medicinal effects. Nevertheless, additional systematic clinical studies are necessary to determine its pharmacokinetics, ideal dosage, and long-term safety profile, especially with various skin types, age demographics, and medical problems. Subsequent investigations should examine the synergistic interactions of henna with additional natural chemicals to augment its therapeutic efficacy and stability in pharmaceutical formulations. Furthermore, comparative studies assessing the efficacy of henna relative to traditional dermatological therapies, including corticosteroids and antifungal drugs, would yield essential insights into its potential as a viable alternative or adjunct therapy. Establishing a rigorous scientific

framework will validate henna's role in modern dermatology, facilitating its standardized use in evidence-based medical practice and reinforcing its connection between traditional Islamic medicine and contemporary health sciences.

ACKNOWLEDGEMENTS

This research received no external funding and was conducted independently without institutional financial support.

AUTHOR'S CONTRIBUTIONS

The authors' contributions to the provided information are as follows: Conceptualization, Mohd Faiz Hadi Mohd Sanadi; analysis and interpretation of research data, Mazlan Ibrahim and Mohd Faiz Hadi Mohd Sanadi; writing original draft preparation, Mohd Faiz Hadi Mohd Sanadi; writing review and editing, Mohd Faiz Hadi Mohd Sanadi, Mazlan Ibrahim, Noraziah Mohamad Zin, Arif Yahya, and Farah Ayuni Mohd Hatta; supervision, Mohd Faiz Hadi Mohd Sanadi, Mazlan Ibrahim, Noraziah Mohamad Zin, and Arif Yahya. All authors have read and agreed to the published version of the manuscript.

ARTIFICIAL INTELLIGENCE (AI) GENERATED TEXT DECLARATION

During the preparation of this manuscript, the author used ChatGPT (OpenAI) in a limited capacity to assist with language refinement and sentence clarity. The tool was utilized solely for improving linguistic expression and did not contribute to the development of the research design, data analysis, interpretation, or core academic arguments. All substantive content was independently developed, reviewed, and finalized by the author, who assumes full responsibility for the accuracy and integrity of the manuscript.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICS STATEMENT

This research did not involve any human participants or animal experimentation. The study was based

solely on publicly accessible materials and did not contain identifiable personal data. Accordingly, formal ethical approval was not required.

REFERENCES

- Abaekwume, C. O. & Kagbo, H. D. 2021. Hepato-renal-curative effect of the herbal supplement of *Aloe vera* Linn gel versus *Moringa oleifera* on acetaminophen-induced damage on the liver and kidney of Wistar rats (*Rattus norvegicus*). *Journal of Advances in Medical and Pharmaceutical Sciences* 23(1): 12–23. <https://doi.org/10.9734/jamps/2021/v23i130213>
- Abī ʿAbdillah Muhammad bin Yazīd al-Qazwainī. 1997. *Ṣahīh Sunan Ibnu Mājah*. 1st ed. Riyāḍ: Maktabah al-Maʿārif Linashar wa al-Tauzīʿ.
- Abī Dāud, S. bin al-A. al-S. 1996. *Sunan Abī Dāud*. Edited by Muhammad ʿAbd al-ʿAzīz al-Khālidī. 1st ed. Beirut: Dār al-Kutub al-ʿIlmiyyah.
- Abubakar, I. B., Kankara, S. S., Malami, I., Danjuma, J. B., Muhammad, Y. Z., Yahaya, H., Singh, D., Usman, U. J., Ukwuani-Kwaja, A. N., Muhammad, A., Ahmed, S. J., Folami, S. O., Falana, M. B. & Nurudeen, Q. O. 2022. Traditional medicinal plants used for treating emerging and re-emerging viral diseases in northern Nigeria. *European Journal of Integrative Medicine* 49: 1–28. <https://doi.org/10.1016/j.eujim.2021.102094>
- Adiga, A., Gandhi, A., Pradeep & Hegde, P. L. 2022. Comprehensive review on madayantika (*Lawsonia inermis* L.). *Journal of Ayurveda and Integrated Medical Sciences* 7(10): 204–210.
- Ahmad, K., Md Ariffin, M. F., Abd Razzak, M., Fauzi, N. & Yakob, M. A. 2016. Tumbuhan inai dalam al-Quran dan hadith: Manfaat dan cadangan lanjutan berasaskan penyelidikan semasa. Dlm. *Penyelidikan Tentang Makanan Perspektif Nabawi dan Sainifik*, disunting oleh Ahmad, K. & Abd Razzak, M., 171–194. Kuala Lumpur: Jabatan al-Quran dan al-Hadith, Akademi Pengajian Islam Universiti Malaya. https://www.academia.edu/24619520/TUMBUHAN_INAI_DALAM_AL_QURAN_DAN_AL_HADITH_MANFAAT_DAN_CADANGAN_LANJUTAN_BERASASKAN_PENYELIDIKAN_SEMASA
- Alhammadi, N., Al-Jallal, M., AlKaabi, H. A., Malibari, W. M., Al Jallal, R. S., Almarshad, A. S., Binshalhoub, F. H., Albalawi, A. N., Adam, T. A. & Al-Khairat, A. H. 2023. Prevalence and factors associated with tinea pedis among diabetic patients in Saudi Arabia: A descriptive cross-sectional study. *Cureus* 15(12): 1–9. <https://doi.org/10.7759/cureus.51210>
- Batiha, G. E. S., Teibo, J. O., Shaheen, H. M., Babalola, B. A., Teibo, T. K. A., Al-kuraishy, H. M., Al-Garbeeb, A. I., Alexiou, A. & Papadakis, M. 2023. Therapeutic potential of *Lawsonia inermis* Linn: A comprehensive overview. *Naunyn-Schmiedeberg's Archives of Pharmacology* 397: 3525–3540. <https://doi.org/10.1007/s00210-023-02735-8>

- Carneiro, A., Matos, M. J., Uriarte, E. & Santana, L. 2021. Trending topics on coumarin and its derivatives in 2020. *Molecules* 26(2): 1–15. <https://doi.org/10.3390/molecules26020501>
- Djarani, J. & Tunny, R. 2023. Studi farmakognostik tanaman inai (*Lawsonia inermis* Linn) asal Maluku. *JUMANTIK* 8(1): 8–14. <http://dx.doi.org/10.30829/jumantik.v8i1.12600>
- Hareshbhai, P. H. 2021. Review of herbal plants used in the treatment of skin disease. *Journal of Pharmacognosy and Phytochemistry* 10(3): 349–356. <https://www.phytojournal.com/archives/2021.v10.i3.14095/review-of-herbal-plants-used-in-the-treatment-of-skin-diseases>
- Hossain, C. M., Ryan, L. K., Gera, M., Choudhuri, S., Lyle, N., Ali, K. A. & Diamond, G. 2022. Antifungals and drug resistance. *Encyclopedia* 2: 1722–1737. <https://doi.org/10.3390/encyclopedia2040118>
- Al-Jawziy, I. Q. 2010. Al-ṭib al-nabawi. Dlm. *Faṣl fī al-Hinnā'*, 67–68. Beirut: Dār al-Hilāl.
- Khantamat, O., Dukaewa, N., Karinchai, J., Chewonarin, T., Pitchakarn, P. & Temviriyankul, P. 2021. Safety and bioactivity assessment of aqueous extract of Thai henna (*Lawsonia inermis* Linn.) leaf. *Journal of Toxicology and Environmental Health* 84(7): 298–312. <https://doi.org/10.1080/15287394.2020.1866129>
- Kumar, K., Kumar, P. & Ahmed, S. 2024. Isolation and biological properties of lawsone: A review. *International Journal of Pharmaceutical Sciences and Medicine (IJPSM)* 9(4): 13–25. <https://doi.org/10.47760/ijpsm.2024.v09i04.002>
- Li, D., Zhou, B. & Lv, B. 2020. Antibacterial therapeutic agents composed of functional biological molecules. *Journal of Chemistry* 2020(1): 1–13. <https://doi.org/10.1155/2020/6578579>
- El Massoudi, S., Zinedine, A., Rocha, J. M., Benidir, M., Najjari, I., El Ghadraoui, L., Benjelloun, M. & Errachidi, F. 2023. Phenolic composition and wound healing potential assessment of Moroccan henna (*Lawsonia inermis*) aqueous extracts. *Cosmetics* 10(92): 1–13. <https://doi.org/10.3390/cosmetics10030092>
- Md Ariffin, M. F., Othman, M. R., Ahmad, K. & Mohd Yakub@Zulkifli, M. Y. 2020. Inai menurut perspektif hadis dan sains. *Al-Basirah* 10(2): 37–56. <https://ejournal.um.edu.my/index.php/ALBASIRAH/article/view/27906/12580>
- Metwally, A. A., Abdelaziz, S. M., Hassan, A. S. & Mohamed, A. A. 2020. Wound-healing properties of green (*Lawsonia inermis* leaf extract) and chemically synthesized ZnO nanoparticles in albino rats. *Veterinary World* 13(6): 1280–1288. <https://doi.org/10.21203/rs.3.rs-639379/v1>
- Moutawalli, A., Benkhouili, F. Z., Doukkali, A., Benzeid, H. & Zahidi, A. 2023. The biological and pharmacologic actions of *Lawsonia inermis* L. *Phytomedicine Plus* 3(3): 1–15. <https://doi.org/10.1016/j.phyplu.2023.100468>
- Niazi, M., Parvizi, M. M., Saki, N., Parvizi, Z., Mehrbani, M. & Heydari, M. 2022. Efficacy of a topical formulation of henna (*Lawsonia inermis* Linnaeus) on the itch and wound healing in patients with epidermolysis bullosa: A pilot single-arm clinical trial. *Dermatology: Practical and Conceptual* 12(3): 1–9. <https://doi.org/10.5826/dpc.1203a115>
- Nigam, P. K., Syed, H. A. & Saleh, D. 2023. Tinea pedis. *National Library of Medicine*. <https://www.ncbi.nlm.nih.gov/books/NBK470421/>. Retrieved on 30 January 2025.
- Nigusie, D., Makonnen, E., Tufa, T. B., Brewster, M., Legesse, B. A., Fekadu, A. & Davey, G. 2021. Systematic review of Ethiopian medicinal plants used for their anti-inflammatory and wound healing activities. *Journal of Ethnopharmacology* 276: 1–17. <https://doi.org/10.1016/j.jep.2021.114179>
- Othman, M. R., Ahmad, K., Yusoff, Z. M., Basir, S. A. & Awang, K. 2023. Analysis of the significance treatment of henna in the formulation based on fiqh al-hadith. *Islamiyyat: The International Journal of Islamic Studies* 45(1): 23–36. https://www.researchgate.net/publication/371721623_Analysis_of_The_Significance_Treatment_of_Henna_in_The_Formulation_Based_on_Fiqh_Al-Hadith
- Othman, M. R., Md Ariffin, M. F., Ahmad, K., Othman, R., Awang, K. & Yusoff, Z. M. 2021. *Lawsonia inermis* Linn. (inai) dalam perspektif hadith: Aplikasi dalam etnobotani Melayu dan kehadiran aktiviti antioksidasi. *Islamiyyat: The International Journal of Islamic Studies* 43(1): 97–111. <https://doi.org/10.17576/islamiyyat-2021-4301-09>
- Pittara. 2022. Candidiasis. *Alodokter*. <https://www.alodokter.com/candidiasis>. Retrieved on 20 November 2024.
- Preez, D. A. D., Akanmu, A. M., Adejoro, F. A. & Hassen, A. 2023. The effect of monensin vs. neem, and moringa extracts on nutrient digestibility, growth performance, methane, and blood profile of Merino lambs. *Animals* 13(3514): 1–11. <https://doi.org/10.3390/ani13223514>
- Al-Qazwainī, A. A. M. b. Y. 1997. *Sunan Ibnu Mājah*. Edited by Muhammad Nāṣir al-Dīn al-Bānī. 1st ed. Riyāḍ: Maktabah al-Ma'ārif Linashar wa al-Tauzīr.
- Ramli, R. R., Mohamad, I., Ab Wahab, M. S., Naing, N. N. & Wan Din, W. S. 2018. A pilot study on the efficacy of nasal rinsing during ablation in reducing acute respiratory tract infection (ARI) among male hajj pilgrims. *Journal of Taibah University Medical Sciences* 13(4): 364–369. <https://doi.org/10.1016/j.jtumed.2018.04.004>
- Rusni, M. & Thuraya, A. 2023. A critical analysis of the Malay translation of medicinal plants in Kitab al-Tibb of Sahih al-Bukhari. *GJAT Special Issue*: 1–17. <https://doi.org/10.7187/GJATSI072023-1>
- Siddiqui, T., Khan, M. U., Sharma, V. & Gupta, K. 2024. Terpenoids in essential oils: Chemistry, classification, and potential impact on human health and industry. *Phytomedicine Plus* 4(2): 1–25. <https://doi.org/10.1016/j.phyplu.2024.100549>

- Sveaas, S. H., Smedslund, G., Walsh, D. A. & Dagfinrud, H. 2023. Effects of analgesics on self-reported physical function and walking ability in people with hip or knee osteoarthritis: A systematic review and meta-analysis. *Physical Therapy & Rehabilitation Journal* 104(2): 1–15. <https://doi.org/10.1093/ptj/pzad160>
- Al-Tirmidhī, M. 'I. 1975. *Sunan al-Tirmidhī*. Edited by Shākir, A. M., 'Abd al-Bāqī, M. F. & 'Aṭwah. 2nd ed. Egypt: Maktabah wa Maṭba'ah Muṣṭafā al-Bābī al-Ḥalabī.
- Talab, T. A., Alfuraiji, N. & Al-Snafi, A. E. 2022. The analgesic and anti-inflammatory effect of lawsone isolated from *Lawsonia inermis*. *ScienceRise: Pharmaceutical Science* 1(35): 77–84. <https://doi.org/10.15587/2519-4852.2022.253555>
- Tinesya, D., Andhita, N. & Vidmar, R. 2019. Eksplorasi potensi ekstrak biji alpukat (*Persea americana*) sebagai agen antiinflamasi. *LENSA (Lentera Sains): Jurnal Pendidikan IPA* 9(2): 52–56. <https://doi.org/10.24929/lensa.v9i2.66>
- Ullah, R., Shafiq, M., Rehman, M. U., Khan, I., Hayat, A. & Jehangir, I. 2022. The public health and clinical importance of amoebiasis. *Health Science Journal* 16(3): 1–7. <https://doi.org/10.36648/1791-809X.16.4.934>
- Wandira, A., Astriani, A. D. & Wahyuddin, M. 2022. Formulation and effectivity of henna leaves (*Lawsonia inermis* L.) extract ointment against burn healing of rabbit (*Orctolagus cuniculus*). *Ad-Dawaa' Journal of Pharmaceutical Sciences* 5(2): 103–113. <http://dx.doi.org/10.24252/djps.v5i2.36124>