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# MEDICAL EMERGENCIES IN SUNNAH CUPPING THERAPY: A CLINICAL REVIEW AND ISLAMIC ETHICAL PERSPECTIVE

# KEGAWATDARURATAN MEDIS DALAM TERAPI BEKAM SUNNAH: KAJIAN KLINIS DAN NILAI SYARIAH

**Andik Isdianto [1*], Novariza Fitrianti [2]**
[1]Universitas Brawijaya, Email: andik.isdianto@ub.ac.id
[2]Rehab Hati Malang Kota, Email : novarizza.sda@gmail.com

*email Koresponden: andik.isdianto@ub.ac.id

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**Abstract**

Sunnah cupping therapy (al-hijamah), a key element of prophetic medicine, is widely practiced across Muslim communities for its perceived health and spiritual benefits. However, the increasing popularity of prophetic cupping has raised safety concerns due to the absence of standardized medical protocols. This study aims to explore clinical complications related to sunnah cupping and propose integrated safety recommendations through a qualitative literature review. A total of 44 articles published from 2010 to 2024 were reviewed from databases such as PubMed, ScienceDirect, and Google Scholar. The analysis identified seven key complications: local to systemic infections, severe bleeding and hematoma, vasovagal and hypovolemic shock, allergic reactions, burns from fire cupping, epileptic seizures, and dissociative reactions resembling possession. These issues are often linked to non-medical practitioners, poor hygiene, inadequate patient screening, and lack of emergency preparedness. The findings confirm that while sunnah cupping aligns with Islamic healing traditions, it also poses clinical risks if not practiced under regulated standards. The study recommends integrating Islamic medical ethics with modern health protocols, enhancing practitioner certification, improving patient education, and developing sharia-compliant safety standards to reduce the risks of hijamah-related emergencies.

**Keywords :** complications of prophetic cupping, educational risk in hijamah practice, Islamic protocol for cupping safety, pre-cupping patient screening, sharia-compliant cupping standards

**Abstrak**

Terapi bekam sunnah (al-hijamah) merupakan bagian penting dari pengobatan nabawi yang banyak dipraktikkan di kalangan masyarakat Muslim karena diyakini memberikan manfaat

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kesehatan dan spiritual. Namun, meningkatnya popularitas bekam nabawi belum diimbangi dengan standar medis yang memadai, sehingga menimbulkan kekhawatiran terkait risiko komplikasi klinis. Studi ini bertujuan mengidentifikasi komplikasi medis pada terapi bekam sunnah serta menyusun rekomendasi protokol keselamatan berbasis kajian literatur kualitatif. Sebanyak 44 artikel yang diterbitkan antara tahun 2010–2024 ditinjau dari database seperti PubMed, ScienceDirect, dan Google Scholar. Hasil analisis menemukan tujuh jenis komplikasi utama: infeksi lokal hingga sistemik, perdarahan hebat dan hematoma, syok vasovagal dan hipovolemik, reaksi alergi, luka bakar karena bekam api, kejang epilepsi, serta reaksi disosiatif seperti kesurupan. Sebagian besar kasus terjadi karena praktik oleh non-tenaga medis, kurangnya skrining pasien, serta minimnya kesiapan menghadapi kondisi gawat darurat. Studi ini menyimpulkan bahwa meskipun bekam sunnah memiliki nilai spiritual, terdapat risiko klinis yang perlu dikendalikan melalui integrasi etika pengobatan Islam dengan standar klinis modern. Diperlukan sertifikasi praktisi, edukasi pasien, serta pedoman keselamatan bekam yang sesuai syariah untuk menjamin keselamatan dan manfaat terapi.

**Kata Kunci :** edukasi risiko bekam sunnah, komplikasi tindakan bekam sunnah, protokol keamanan bekam islami, skrining pasien sebelum bekam, standar praktik bekam sunnah

## 1. INTRODUCTION

Sunnah cupping therapy, or al-hijamah, is a form of traditional medical treatment recommended in Islamic teachings. The procedure involves drawing blood from the body through light incisions and suction using specialized instruments. As part of the legacy of prophetic medicine, sunnah cupping is believed to provide both physical and spiritual health benefits.

Over the past two decades, this practice has witnessed a resurgence in popularity, particularly in countries with large Muslim populations such as Indonesia, Malaysia, and Saudi Arabia. It is commonly offered not only by alternative medicine clinics but also by non-medical individuals who claim to be practitioners of ruqyah or prophetic therapies (Ghazi, 2016; Buran-Omar & Alaban, 2022).

However, growing public enthusiasm for sunnah cupping has not always been accompanied by adequate medical safety standards. Several reports have highlighted that cupping procedures—especially wet cupping—can lead to serious medical complications when performed by untrained practitioners or without proper patient screening. Documented complications include localized and systemic infections (Lu et al., 2020; Wang et al., 2023), severe bleeding (Xiao et al., 2014), vasovagal and hypovolemic shock (Han et al., 2014), and neurological responses such as seizures in epileptic patients (Çetinkaya et al., 2021).

Additionally, episodes of dissociation or spirit possession have been reported in both clinical and anthropological studies, particularly during emotionally intense cupping sessions (Salama et al., 2024; Şar, 2022). These findings underscore a critical gap in public and clinical understanding of the potential emergencies associated with sunnah cupping therapy.

While numerous studies have discussed the therapeutic benefits of sunnah cupping from an alternative medicine perspective, systematic reviews that identify and classify the range of medical emergencies related to the practice remain scarce.

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Therefore, this study aims to identify and analyze the clinical complications that may arise in sunnah cupping therapy, providing a scientific foundation for the development of safe and sharia-compliant cupping protocols.

## 2. RESEARCH METHODS

This study employs a critical literature review approach to identify and analyze the types of medical emergencies that may occur in the practice of sunnah cupping therapy. The review was conducted using a descriptive-qualitative design by collecting secondary data from scholarly articles published between 2010 and 2024.

Literature sources were obtained from databases such as PubMed, ScienceDirect, DOAJ, and Google Scholar, using keywords including "cupping therapy," "wet cupping complication," "medical emergency," and "hijamah risk." Articles were selected based on the following inclusion criteria: (1) peer-reviewed status, (2) direct relevance to medical complications in cupping therapy or similar practices, and (3) publication within the 2010–2024 time frame. Opinion pieces, non-scholarly sources, and unrelated content were excluded.

A total of 31 articles met the inclusion criteria and were included in the final review. The article selection process followed PRISMA guidelines and is illustrated in Figure 1.

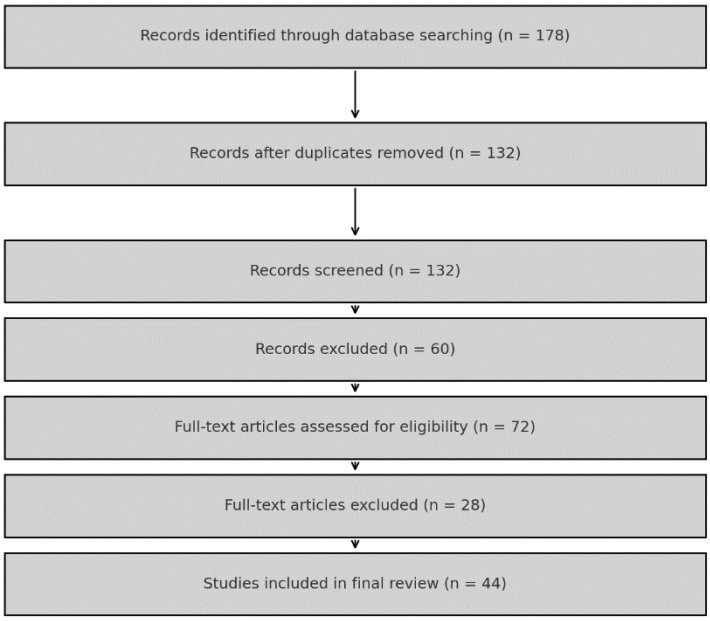


**Figure 1.** PRISMA Flow Diagram and Article Selection

Data analysis was conducted using thematic synthesis techniques, which involved categorizing the findings into key complication types: infection, bleeding, shock, allergic reactions, and neurological or psychological responses. This method allows for structured reconstruction of diverse empirical data (Snyder, 2019).

Where applicable, interrater reliability was ensured through collaborative validation among both authors during article screening and thematic coding to reduce subjectivity and increase analytical consistency.

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## 3. RESULTS AND DISCUSSION

### Infection (Local to Systemic)

Infection remains one of the most frequently reported and clinically significant complications in sunnah cupping therapy. Localized infections, such as abscesses and cellulitis, are primarily caused by poor sterilization practices, use of contaminated tools, and inadequate skin preparation (Kim et al., 2011; Mohammadi et al., 2019).

Case studies have documented progression to severe outcomes. For instance, Lu et al. (2020) reported intraperitoneal hemorrhage due to post-cupping infection, while Wang et al. (2023) described a case of disseminated Staphylococcus aureus infection following wet cupping. Similarly, Alajmi et al. (2021) highlighted the occurrence of necrotizing fasciitis, a rapidly spreading and life-threatening soft tissue infection, directly linked to unsterile cupping.

Beyond bacterial infections, viral transmissions also pose risks. Al-Nwany et al. (2021) identified a positive association between wet cupping and hepatitis B seroprevalence, particularly in settings with poor hygiene. Vulnerable populations, such as immunocompromised patients, face a greater risk of systemic infections and sepsis, as emphasized by Fang et al. (2018) and Vassilopoulos et al. (2023).

Additionally, other dermatological effects like bullous pemphigoid, hyperpigmentation, and cupping-induced anemia have been reported by Azizpour et al. (2018) and Kim et al. (2012). These findings reflect how infections can overlap with inflammatory and hematological complications if safety standards are not observed.

In short, infections from cupping span a wide clinical spectrum—from localized inflammation to life-threatening sepsis—highlighting the need for strict medical oversight during therapy.

### Severe Bleeding and Hematoma

Wet cupping in sunnah therapy involves controlled skin incisions to draw blood, yet it carries inherent risk of excessive bleeding and hematoma, especially in individuals with clotting disorders or those on anticoagulants (Kim et al., 2011; Xiao et al., 2014).

Case reports have documented bleeding severe enough to cause acute anemia and circulatory instability. Desfika et al. (2022) noted that patients with comorbidities such as diabetes are more prone to hematoma formation post-cupping. Hematomas may range from mild bruising to severe tissue injury requiring further medical attention.

Other studies report that excessive blood loss during cupping can trigger hypovolemia, as well as increase oxidative stress, disrupting the body's physiological balance (Unat et al., 2023; Wang et al., 2018). Inflammatory responses may be exacerbated in patients with chronic conditions, compounding the clinical risk (Kim et al., 2012).

Recent evaluations by Alizadeh et al. (2022) and Foppen et al. (2024) emphasize the need for proper patient selection and pre-cupping coagulation assessment. While cupping has therapeutic potential for pain and circulation (Andi & Setyawan, 2022), the risks of bleeding remain clinically relevant, particularly among high-risk populations.

### Vasovagal and Hypovolemic Shock

Vasovagal shock is a reflex reaction to stressors like pain, anxiety, or blood exposure. In sunnah cupping, it frequently affects patients with a history of hypotension, blood phobia, or emotional instability (Han et al., 2014; Park & Kim, 2010; Malave & Vrooman, 2022).

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Typical symptoms include nausea, pallor, cold sweats, and syncope—which, if unaddressed, may result in falls or trauma (Prasetya & Handian, 2023; Kenny & McNicholas, 2016). Lack of practitioner awareness of these signs increases clinical risk.

In more severe cases, vasovagal reactions may escalate to hypovolemic shock, particularly when blood loss is excessive due to large or repeated incisions. Pradhan et al. (2022) and Zein et al. (2022) report symptoms such as hypotension, weak pulse, and altered consciousness, potentially progressing to multi-organ failure (Vincent & Backer, 2013; Hefny et al., 2015).

Complicating factors like sepsis can diminish responsiveness to fluid therapy, making prompt recognition critical (Khaleel, 2020). Studies also highlight the role of communication and positioning in reducing vasovagal episodes (Randmaa et al., 2014; Korkut et al., 2017).

Although rare, these shock-related responses represent high-risk clinical events that demand appropriate vigilance and training among cupping practitioners (Yolcu et al., 2014; Coffin & Raj, 2014).

**Allergic Reactions**

Allergic responses during sunnah cupping therapy are typically triggered by contact with oils, disinfectants, or components of cupping tools. Clinical symptoms range from itching and skin rashes to more severe outcomes such as anaphylaxis (Mohamed et al., 2023; Lee et al., 2010).

Studies have identified oxidized oils and essential oils as common allergens that can activate cytokine-mediated immune responses, especially in individuals with atopic predispositions (Ogino et al., 2021; Lakshmi, 2014). In some cases, these reactions mimic contact dermatitis, requiring dermatological management (Moon et al., 2011).

Despite their non-invasive appearance, cupping-related allergic reactions are clinically significant, especially when misdiagnosed or overlooked. Mushtaq et al. (2024) stress the importance of evaluating patient sensitivity to topical agents used during complementary treatments.

Since these reactions are often underreported, better documentation and practitioner awareness are essential to prevent complications in sensitized or allergic-prone individuals.

**Burns in Fire Cupping (Non-Sunnah Practice)**

Although al-hijamah (sunnah cupping) does not involve heat, many communities still practice fire cupping, which uses flame-heated glass cups to create suction. This method poses a higher risk of thermal burns, especially when performed by untrained individuals (Wang et al., 2023; Külahçi et al., 2011).

Reported injuries range from first- and second-degree burns to permanent scarring, with potential for secondary infections and psychological distress (Mrad et al., 2022). Such cases are mostly associated with non-Islamic traditional practices that visually resemble hijamah but differ in technique and risk profile.

Public confusion between sunnah cupping and fire cupping contributes to underestimation of burn risks. Soliman et al. (2018) and Al-Shidhani & Al-Mahrezi (2021) emphasize the need for public education to clarify these distinctions and prevent misapplication.

In essence, burn injuries are primarily linked to cultural adaptations of cupping, not the

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prophetic method itself—but must still be addressed due to their clinical severity and widespread use.

**Epilepsy as a Neurological Reaction**

Patients with epilepsy may be vulnerable to seizure recurrence when exposed to physical stimulation in neurologically sensitive zones such as the nape or scalp. Although cupping is often perceived as therapeutic, it can provoke abnormal neuronal activity in predisposed individuals (Çetinkaya et al., 2021; Oktar et al., 2023).

Animal studies have shown increased seizure frequency following cupping application, indicating the potential risk of exacerbating epileptic episodes (Çetinkaya et al., 2021). Lauche et al. (2013) also noted the need for caution when treating neurologically unstable patients.

Islamic medical ethics, particularly the principle of hifzh al-nafs (preservation of life), emphasizes that procedures must not endanger patients. AlBedah et al. (2019) and Kaki et al. (2019) recommend pre-treatment screening and avoidance of high-risk areas in epileptic patients.

Ultimately, cupping in epilepsy-prone individuals should be considered contraindicated without medical supervision and proper risk assessment.

**Possession as a Psychological (Dissociative) Reaction**

Episodes resembling spirit possession during sunnah cupping are increasingly recognized as forms of dissociative trance disorders, particularly among individuals with underlying psychological trauma (WHO, 2022; Salama et al., 2024).

Symptoms may include altered consciousness, voice changes, and involuntary movements, often triggered by emotional stress or pain during therapy. These phenomena are clinically interpreted as dissociative responses, not merely metaphysical events (Şar, 2022; Hecker et al., 2015).

In Indonesian and other Southeast Asian contexts, these responses are often misclassified or dismissed, leading to delayed psychological support (Rahardanto et al., 2024; Hendriko & Effendy, 2019). Studies emphasize the need for therapeutic communication and pre-procedural psychological screening in emotionally vulnerable patients (Fung et al., 2023).

From an Islamic ethical perspective, the principle la dharara wa la dhirara (do no harm) affirms the need to mitigate psychological distress during therapy. An integrative approach—addressing both spiritual and psychological dimensions—is essential for compassionate and effective care.

**Table 1.** Summary of Reported Complications in Sunnah Cupping Therapy

| Complication Type | Reported Cases / Findings | Selected References |
|---|---|---|
| Infection (local/systemic) | Abscess, cellulitis, hepatitis B, necrotizing fasciitis, sepsis, bullous pemphigoid | Kim et al., 2011; Mohammadi et al., 2019; Lu et al., 2020; Wang et al., 2023; Alajmi et al., 2021; Al-Nwany et al., 2021; Fang et al., 2018; Vassilopoulos et al., 2023; Kim et al., 2012; Azizpour et al., 2018 |
| Severe bleeding/hematoma | Acute anemia, hematoma, | Kim et al., 2011; Xiao et al., |

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| Complication Type | Reported Cases / Findings | Selected References |
|---|---|---|
| | oxidative stress, hypovolemia | 2014; Desfika et al., 2022; Kim et al., 2012; Sutriyono et al., 2019; Wang et al., 2018; Unat et al., 2023; Alizadeh et al., 2022; Foppen et al., 2024 |
| Vasovagal & hypovolemic shock | Syncope, hypotension, circulatory collapse, multi-organ failure | Han et al., 2014; Park & Kim, 2010; Malave & Vrooman, 2022; Prasetya & Handian, 2023; Kenny & McNicholas, 2016; Randmaa et al., 2014; Korkut et al., 2017; Pradhan et al., 2022; Zein et al., 2022; Khaleel, 2020; Vincent & Backer, 2013; Hefny et al., 2015; Yolcu et al., 2014; Coffin & Raj, 2014 |
| Allergic reactions | Rash, itching, anaphylaxis, contact dermatitis | Ogino et al., 2021; Lakshmi, 2014; Mohamed et al., 2023; Moon et al., 2011 |
| Burns (fire cupping) | Mild to moderate burns, scarring | Wang et al., 2023; Külahçi et al., 2011; Mrad et al., 2022; Soliman et al., 2018 |
| Epileptic seizures | Seizure recurrence in sensitive zones, neuronal hypersensitivity | Çetinkaya et al., 2021; Lauche et al., 2013; AlBedah et al., 2019; Kaki et al., 2019 |
| Dissociative reactions | Possession-like dissociation, trauma-related trance | Salama et al., 2024; Şar, 2022; Rahardanto et al., 2024; Hendriko & Effendy, 2019 |

**Recommendations for Cupping Safety Protocols**

Based on the complications summarized in Table 1, the following safety protocols are proposed to minimize adverse outcomes during sunnah cupping therapy.

1. **Pre-Cupping Medical Screening**

   Practitioners must perform thorough assessments to identify contraindications such as anemia, bleeding disorders, epilepsy, cardiovascular instability, allergies, or psychological vulnerability (Aboushanab & Alsanad, 2018). Special attention should be given to elderly patients (Uzun & Akın, 2024), immunocompromised individuals (Zhu & Zheng, 2021), and those on anticoagulant medications (Nijjar et al., 2023). Pre-cupping medical screening is essential for identifying risks, guiding treatment, and ensuring practitioner–patient communication in line with modern medical standards.

2. **Sterilization and Hygiene Standards**

   Strict aseptic procedures must be followed, including the use of disposable or medically sterilized cupping sets (Panta et al., 2019), skin disinfection before incision (Allegranzi et al., 2016), proper wound care post-therapy (Khanam & Saha, 2023), and clean and

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hygienic therapy room (Rutala & Weber, 2019). These standards are crucial to prevent infections ranging from cellulitis to necrotizing fasciitis.

3. **Certified and Trained Practitioners Only**
   All cupping should be performed by certified practitioners trained in anatomy, hygiene, emergency protocols, and ethical guidelines (Aboushanab & Alsanad, 2018; El-Olemy et al., 2017; Lu et al., 2020). The certification of practitioners is imperative for safeguarding patient welfare and improving the overall acceptance and effectiveness of cupping as a therapeutic measure.
4. **Emergency Preparedness**
   Practitioners must be trained to recognize early signs of shock, allergic reactions, and seizures (Pierce et al., 2016; Herstein et al., 2021). Emergency kits should be readily available to support immediate response and facility readiness (Skryabina et al., 2020). A reliable referral system is also vital to ensure timely, appropriate care during emergencies. Studies show that efficient referrals reflect emergency care quality and influence patient outcomes, including maternal and neonatal health (Risky et al., 2021; Akaba & Ekele, 2017; Handriani & Melaniani, 2015). Together, these elements strengthen emergency preparedness in healthcare settings.
5. **Avoidance of High-Risk Techniques**
   Fire cupping and cupping over neurologically sensitive areas (e.g., nape, scalp) should be avoided unless medically indicated and conducted by professionals. Patients with epilepsy or a history of neurological disorders should not undergo cupping near trigger zones (Çetinkaya et al., 2021; Choi et al., 2021; Daneshfard et al., 2025). The public and practitioners must remain aware of the potential risks associated with cupping in sensitive areas, reinforcing the need for avoiding high-risk techniques unless clinically justified.
6. **Patient Education and Informed Consent**
   Patients must be informed about potential risks, side effects, and safety measures before therapy begins (Mehta et al., 2015). Written informed consent should be obtained, especially when treating patients with comorbidities (Marwiyah, 2023). This is particularly pertinent for patients undergoing treatments that may present higher risks, such as anticoagulant therapies, which have been associated with increased bleeding in patients with existing health conditions (Caldeira et al., 2015; Molnar et al., 2016). It is a critical component that safeguards patient safety, facilitates shared decision-making, and ultimately enhances patient outcomes. Building a supportive environment for patients to understand and engage with their therapeutic options is paramount to ensuring their healthcare aligns with both clinical guidelines and their personal health needs.
7. **Psychological and Spiritual Support**

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Psychological and spiritual support is essential for patients at risk of dissociation or possession-like reactions. The presence of a trusted companion can reduce distress and improve emotional stability during care. Wang et al. (2025) show that addressing psychological needs enhances recovery in critically ill patients. Pierson et al. (2023) emphasize empathetic engagement and emotional cue recognition to build trust. Ashouri et al. (2018) note that emotional support benefits both patients and nurses, reducing stress and burnout. Integrating spiritual counseling provides comfort and meaning, reinforcing the importance of empathetic, holistic care in managing severe psychological challenges.

By consolidating these recommendations into a unified protocol, sunnah cupping therapy can better align with both clinical safety standards and Islamic ethical values, ensuring optimal patient care and minimizing avoidable harm.

## 4. CONCLUSION

This review demonstrates that sunnah cupping therapy, although rooted in prophetic tradition and widely practiced for its perceived health benefits, poses clinical risks when not performed in accordance with modern medical standards. The seven identified complications—including infections, hemorrhage, vasovagal shock, allergic reactions, burns, seizures, and dissociative responses—underscore the need for proper risk screening, practitioner competency, and ethical safeguards. These findings affirm the research objective by synthesizing evidence across diverse cases while aligning with Islamic principles such as hifzh an-nafs (preservation of life).

To mitigate the risks identified, the integration of Islamic medical ethics with clinical safety protocols is essential. We recommend strengthening practitioner certification, implementing standardized pre-procedure screenings, improving patient education on risks and contraindications, ensuring emergency preparedness at all cupping locations, and distinguishing sunnah from non-sunnah (fire) practices in public health guidance. In addition, further clinical research and regulatory frameworks are needed to establish national cupping safety standards that reflect both scientific rigor and sharia compliance.

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