Official Journal of Erciyes University Faculty of Medicine

DOI: 10.14744/cpr.2025.54073 J Clin Pract Res 2025;47(4):444-452

Ibn Hubal al-Baghdādī's Perspective on Bathing and Hammams in Medieval Islamic Medicine

D Özgür Kuş, 1 D Ahmet Aciduman²

¹Department of History of Medicine and Ethics, Bandırma Onyedi Eylül University Faculty of Medicine, Balıkesir, Türkiye

²Department of History of Medicine and Ethics, Ankara University Faculty of Medicine, Ankara, Türkiye

ABSTRACT

Background: This study aims to translate and present a chapter on "bathing and hammams" from Ibn Hubal al-Baghdādī's 12th-century work Kitāb al-Mukhtārāt fī al-Ṭibb. The goal is to contribute this material to the literature on medical history and to evaluate it within the

Materials and Methods: The study is based on a manuscript copy of Kitāb al-Mukhtārāt fī al-Tibb preserved in the Süleymaniye Library, as well as a printed edition available at Ankara University. The relevant chapter was translated from Arabic into English by the authors and compared with contemporary sources addressing bathing and hammams.

Results: The section on bathing and hammams appears in the first volume of Kitāb al-Mukhtārāt fī al-Ţibb, under the heading Faşlun fī'l-istiḥmām ve'l-ḥammāmāt. It discusses the characteristics and use of the hammam, its relationship to digestion, associated benefits and risks, its application in relation to physical activity, the effects of bathing with hot and cold water, and important precautions.

Conclusion: Ibn Hubal's discussion of bathing and hammams closely parallels that of Ibn Sīnā's Kitāb al-Qānūn fī al-Ţibb. His descriptions, however, are more clearly articulated and accessible than those in other comparable works, and they appear to align with the principles of humoral pathology theory, which was the dominant medical paradigm of the period.

Keywords: Ibn Hubal al-Baghdādī, *Kitāb al-Mukhtārāt fī al-Ţibb*, bathing, hammams, history of medicine.

framework of medieval Islamic medicine. This article is based on an oral

Cite this article as: Kus Ö. Aciduman A. Ibn Hubal

presentation delivered at the

14th Lokman Hekim History of

Medicine and Folkloric Medicine Days, May 15-17, 2025; Sakarya,

al-Baghdādī's Perspective on Bathing and Hammams in Medieval Islamic Medicine. JClinPractRes2025;47(4):444-452.

Address for correspondence:

Özgür Kus.

Türkiye.

Department of History of Medicine and Ethics, Bandırma Onyedi Eylül University Faculty of Medicine, Balıkesir, Türkiye Phone: +90 530 497 96 57 E-mail: kus.ozgur@gmail.com

Submitted: 17.07.2025 **Accepted: 05.08.2025** Available Online: 25.08.2025

Erciyes University Faculty of Medicine Publications -Available online at www.jcpres.com



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License

INTRODUCTION

Muhadhdhib al-Dīn Ibn Hubal al-Baghdādī (also known as al-Khilāṭī) was a distinguished yet relatively understudied physician of medieval Islamic medicine. His full name was Abū'l-Ḥasan 'Alī b. Aḥmad b. 'Alī b. Hubal. He was born in Baghdad on 23 Dhū al-Qa'da 515 AH (February 2, 1122), where he received training in medicine, literature, and Islamic law under the guidance of leading scholars of his time.^{1,2} After completing his education, he practiced medicine in various cities, including Mosul, Ahlat (Khilāţ), and Mardin. He became particularly renowned

and affluent as a court physician at the palace of the Shah-Armens (also known as the Akhlatshahs).^{1,3} Due to political instability in Mardin, Ibn Hubal returned to Mosul, where he devoted himself to scholarly work for the remainder of his life. At the age of 75, he lost his eyesight following an accident and subsequently withdrew from public life due to a chronic illness. Regarded as one of the most important medical authorities of his era, he passed away in Mosul on 13 Muḥarram 610 AH (June 4, 1213) at the age of 91 and was buried there.¹⁻³

Ibn Hubal was not only an accomplished physician but also an influential scholar who systematically documented the medical knowledge of his time. As a member of the generation that succeeded al-Rāzī and Ibn Sīnā, he is especially renowned for his work *Kitāb al-Mukhtārāt fī al-Ţibb*. He also authored another text, *Kitāb al-Ţibb al-Jamālī*, which has not survived to the present day.^{1,3}

Ibn Hubal's principal work, *Kitāb al-Mukhtārāt fī al-Ṭibb* (*The Book of Selections in Medicine*), is a comprehensive Islamic medical encyclopedia composed in Mosul in the twelfth century (560 AH/1164-1165).^{4,5} The book, spanning about four volumes, is divided into three main sections—medical theory and health maintenance, pharmacology, and diseases with treatments—integrating the author's clinical observations and experience.³⁻⁶ Although relatively unknown in the Western world, the work was widely used throughout the Islamic world, as evidenced by the many extant manuscript copies. It was also published in Arabic by the Osmania Press in Hyderabad (India) in 1943–1944, underscoring its lasting importance in the Islamic medical tradition.³⁻⁷

Sections of the work concerning kidney and bladder stones were published in French by De Koning.8 Ibn Hubal's contributions to medicine and urology have been analyzed by Abdel-Halim.9 Studies by Aciduman et al. have included Turkish translations of sections addressing topics such as spinal disorders, head trauma, hydrocephalus, treatment regimens for the elderly and children, and smallpox and measles.10-15

The present study focuses on the section on "bathing and hammams (bathhouses)" in Ibn Hubal's *Kitāb al-Mukhtārāt fī al-Ṭibb*, compares it with contemporaneous literature, and aims to contribute to the field of medical historiography.

MATERIALS AND METHODS

This study, conducted between February and June 2025, made use of two primary sources of Muhadhdhib al-Dīn Ibn Hubal's *Kitāb al-Mukhtārāt fī al-Ţibb*: a manuscript

KEY MESSAGES

- This study presents the first English translation of Ibn Hubal al-Baghdādī's twelfth-century Arabic medical text on bathing and hammams, providing insights into medieval Islamic medical perspectives.
- The chapter reflects humoral theory and parallels with Ibn Sīnā, while also standing out for its clarity and structured account of therapeutic bathing practices.
- By making this previously untranslated source accessible, the work enriches the history of medicine literature and broadens scholarly understanding.

dated 610 AH/1213, held at the Presidency of the Turkish Manuscripts Institution, Istanbul Süleymaniye Manuscript Library, Fatih Collection, no. 3620 (Fig. 1), and a printed edition from 1362 AH/1943-1944, available at the Ankara University Faculty of Medicine, Department of History of Medicine and Ethics Library.^{4,5} The relevant material on bathing and hammams was located in the first volume of the work, under the title Faşlun fī'l-istiḥmām ve'l-ḥammāmāt/ The authors compared the فصل في الاستحمام والحمامات content of both sources, translated the Arabic text into English with the aid of various dictionaries, and presented the findings in the Results section. 16-18 To place Ibn Hubal's perspective on bathing and hammams in its historical context, explanations found in the works of earlier leading Islamic physicians available in the literature were also reviewed. As part of this study, the following sources and their pertinent sections were examined:

- Abū Bakr Muḥammad b. Zakariyyā al-Rāzī (Rhazes)'s al-Manṣūrī fī al-Ṭibb, 4th article, "On the benefits and harms of bath and its usage" and Kitāb al-Murshid aw al-Fuṣūl, in the chapter titled "Aphorisms on bath."
- Abū al-Qāsim Khalaf b. 'Abbās al-Zahrāwī (Abulcasis)'s Kitāb al Taṣrīf li-man 'ajaza 'an al-ta'līf, 1st article, "On the benefits and harms of bath." 19-22
- 'Alī b. al-'Abbās al-Majūsī (Haly Abbas)'s Kāmil al-Ṣinā'a al-Ṭibbiyya, Volume I, 5th article, 13th chapter, "On the characteristics of bathing actions in the body," and Volume II, 1st article, 5th chapter, "On hammam and the preservation of health."^{23,24}
- Ibn Sīnā (Avicenna)'s Kitāb al-Qānūn fī al-Ţibb: 1st Book, 2nd section, 19th chapter: "On the reasons requiring bathing and sun exposure," and 20th chapter, "On exposure to the

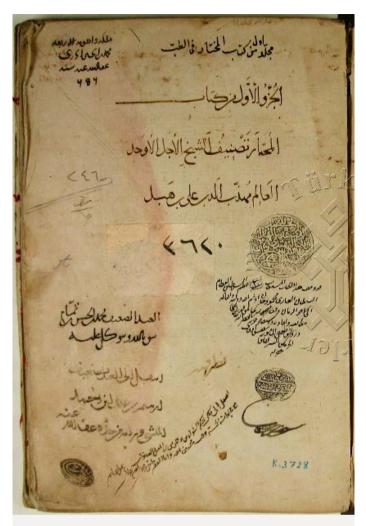


Figure 1. Cover page of *Kitāb al-Mukhtārāt fī al-Ṭibb* by Ibn Hubal al-Baghdādī, preserved in the Presidency of the Turkish Manuscripts Institution, Istanbul Süleymaniye Manuscript Library, Fatih Collection, no. 3620⁴ (Courtesy of the Turkish Manuscripts Institution, İstanbul, Türkiye).

sun," as well as the 1st Book, 3rd section, 5th chapter, "On bathing and hammams," and 6^{th} chapter, "On bathing with cold water." 25,26

Using this comparative analysis, the study identifies both the similarities and differences between Ibn Hubal's views on bathing and hammams and those of earlier authorities, thereby evaluating their significance within Islamic medical history.

RESULTS

Section on Bathing and Hammams

Ibn Hubal begins by offering a general description of the structural features and qualities of the hammam (Fig. 2):

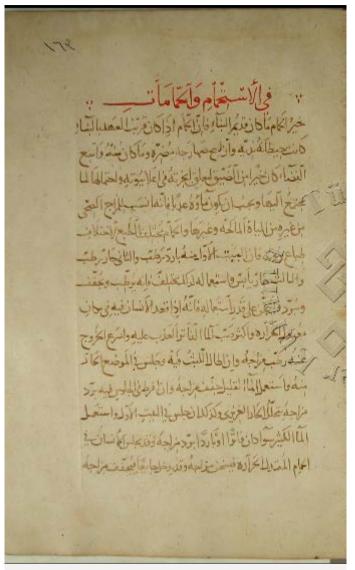


Figure 2. Opening section of the chapter on bathing and hammams in *Kitāb al-Mukhtārāt fī al-Ṭibb* by Ibn Hubal al-Baghdādī, located in the Presidency of the Turkish Manuscripts Institution, Istanbul Süleymaniye Manuscript Library, Fatih Collection, no. 3620 ^{4,£163r} (Courtesy of the Turkish Manuscripts Institution, İstanbul, Türkiye).

The most suitable hammam is one of older construction. If the hammam is newly built, its walls tend to retain moisture, and the odors emanating from its water reservoirs may be detrimental. Hammams with wide interiors are preferable to narrower ones, as their steam tends to accumulate in the upper areas of the structure and can be more easily ventilated. Moreover, the water used for bathing should be fresh, since

fresh water is more in harmony with a healthy temperament compared to saline or other types of water.

Following this, Ibn Hubal discusses the temperature and humidity conditions of the hammam chambers, their effects on an individual's temperament, and proper methods of water application:

The impact of the hammam varies depending on the characteristics of its chambers. The first chamber is cold and humid, the second is warm and humid, and the third is warm and dry. As such, the use of the hammam produces different effects—it may hydrate, dry, cool, or warm the body—based on how long and in what manner it is used. If a person sits in a moderately warm section, pours a large amount of fresh, lukewarm water over themselves, and leaves soon afterward, their temperament becomes moistened. However, if they stay inside for a longer time, remain in a hotter area, and use less water, their temperament becomes dry. Prolonged exposure in the hammam may also lead to the loss of innate heat (al-harārat al-qharīziyya), resulting in a cooling of the temperament. Likewise, sitting in the first chamber (cold and humid) while applying ample lukewarm or cold water also causes the temperament to cool. However, remaining in a moderately warm chamber may cause the temperament to become warmed.

He then further explained the connection between food intake, digestion, and hammam use:

Entering the hammam on an empty stomach tends to result in a drying of the temperament (4, f.163r); entering immediately after a meal, however, leads to a moist temperament. Entering the hammam after digestion also causes moistening of the temperament, and if the time spent inside is not excessive, it may promote weight gain. The benefits derived from the hammam depend on one's temperament, the timing of entry, and how water is used. Individuals with a balanced temperament should refrain from entering the hammam with a full stomach. Entry into the hammam chambers should occur gradually, without extended sitting positions, and drinking water—especially very cold water—should be avoided while inside or directly after exiting. For those with a safrāwī (choleric) temperament, staying in hot chambers is contraindicated.⁵ One should not enter the hammam on an empty stomach; however, consuming a few bites of food dipped in sour fruit juice beforehand is recommended.

The discussion then turned to the benefits and harms of the hammam, as well as the effects of the water used:

The hammam is beneficial in that it opens the pores, dissolves waste matter, matures substances requiring maturation, liquefies bodily materials, and aids in the elimination of what needs to be expelled. However, it can also produce certain adverse effects. It may activate humors that tend toward effusion and direct them toward weakened organs, loosen the organs and nerves, decrease body temperature, reduce appetite, and impair sexual function. The effects of the hammam also depend on the type of water used. The water may be saline, sulfurous, rich in natron (alkaline), or similar in composition. These types of water are typically harmful to individuals with a healthy and balanced temperament,⁴ although they may be beneficial in treating illnesses similar to those discussed in the section on medicinal waters.

The appropriate use of the hammam for individuals who engage in physical exercise is as follows (Fig. 3):

The most appropriate hammam for those who exercise is one supplied with fresh water. They should enter the hammam only after completing their exercise and resting, allowing their sweat to dry. They are advised to gradually adjust to the different chambers of the hammam, pour ample water onto the heated floor, sit in the bath, and apply oils to the body. Long stays in the hammam should be avoided. Those aiming to gain weight should enter the hammam immediately after eating; however, if they are concerned about congestion, it is recommended that they drink a small quantity of sikanjabīn (a mixture of vinegar and honey) after exiting the hammam.

He then discussed cold water washing, including its methods of application, associated benefits, those for whom it is unsuitable, the conditions under which it should be avoided, and necessary precautions:

Cold water washing is appropriate for individuals with a warm and robust temperament. Such

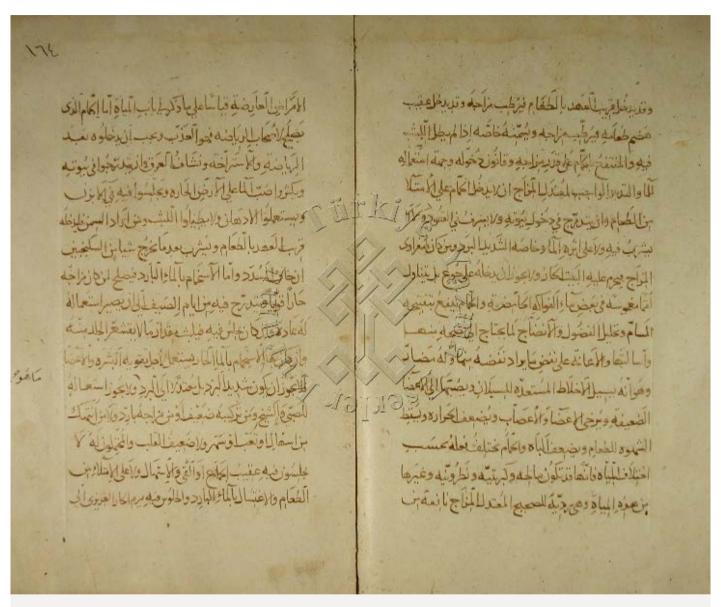


Figure 3. Continuation of the chapter on bathing and hammams in *Kitāb al-Mukhtārāt fī al-Ṭibb* by Ibn Hubal al-Baghdādī, housed in the Presidency of the Turkish Manuscripts Institution, Istanbul Süleymaniye Manuscript Library, Fatih Collection, no. 3620 ^{4,ff.163v,164r} (Courtesy of the Turkish Manuscripts Institution, İstanbul, Türkiye).

individuals should begin acclimating to its use during the summer months and adopt it as a regular practice. When sitting in cold water, one should remain only until the skin begins to exhibit signs of shivering or goosebumps. When cold water is used following a warm wash to strengthen the skin and organs, it should not be excessively cold but rather moderately cool. Cold water should not be used by children, the elderly, those with frail constitution, individuals with a cold temperament, or persons weakened by diarrhea,

fatigue, exhaustion, or insomnia, as well as those with heart-related conditions. Even those who can tolerate cold water should avoid sitting in it immediately after sexual intercourse, vomiting, diarrhea, or on a full stomach. Washing or sitting in cold water draws the innate natural heat (al-ḥarr al-ġarīzī) inward. Upon exiting the water, this heat emerges more intensely than before and is thereby strengthened. For individuals with a warm and strong temperament, this process tightens the limbs and strengthens the skin.

A person who experiences a headache* upon entering or while inside the hammam⁵ should avoid entering the hotter chambers. They should also refrain from pouring very hot water or washing the head with bazr quṭūna[†]. Instead, they should inhale certain cooling aromas, particularly camphor, rose water, fresh lily, and luffāh[‡].

Finally, he offered explanations concerning washing with warm water and the precautions that should be taken (Fig. 4):

If the use of warm water is necessary, or if one prefers very hot water, it is advised to sit in a warm bath while avoiding the pouring of hot water over the head. To stimulate mental clarity, one should inhale moisturizing oils such as pumpkin seed oil and willow oil. If a headache consistently occurs upon entering the hammam, a preparation made from rose water, rose oil, and crushed bazr quţūna soaked in wine vinegar should be applied to the head after leaving§ the hammam. Whether a particular location in the hammam feels pleasant or not can serve as an indication of whether the environment aligns with the bather's temperament. Ideally, one should remain in a spot where they feel at ease, without experiencing excessive heat or skin shivering.4,5

DISCUSSION

The roots of hammam culture and architecture can be traced to the civilizations of Ancient India, Egypt, Greece, and Rome.²⁷ In medieval Islamic medicine, bathing and the use of hammams were considered not only hygienic measures but also effective natural therapeutic practices, and specific sections devoted to these topics were included in medical treatises. The medical practices of the time were largely informed by the theory of "elements, humors, and temperaments," which was grounded in Hippocratic and Galenic medical philosophy. According to this theory, the universe is composed of four primary elements—air, water, fire, and earth—each corresponding to one of the four bodily humors: blood, phlegm, yellow bile, and black bile. The unique combination of these elements in each person is referred to as their "temperament (mizāi)." Health was understood as the result of a proper balance among the humors in both quantity and quality, while illness was attributed to an imbalance.

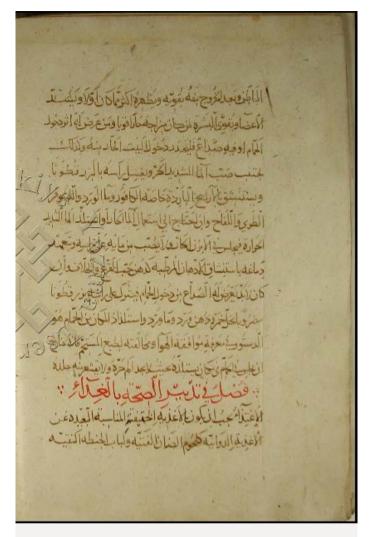


Figure 4. Concluding portion of the chapter on bathing and hammams in *Kitāb al-Mukhtārāt fī al-Ţibb* by Ibn Hubal al-Baghdādī, held in the Presidency of the Turkish Manuscripts Institution, Istanbul Süleymaniye Manuscript Library, Fatih Collection, no. 3620 ^{4,f.164v} (Courtesy of the Turkish Manuscripts Institution, İstanbul, Türkiye).

Temperaments were categorized into four main types: hot and dry (*ṣafrāwī*/choleric), cold and dry (*ṣawdāwī*/melancholic), cold and moist (*balghamī*/phlegmatic), and hot and moist (*damawī*/sanguine). Bathing practices and hammam treatments were designed according to this temperament-based medical framework.^{28–31} Additionally, the human body was believed to be governed by three essential forces: the

^{*} In the printed edition of the Ankara University Faculty of Medicine, it appears as "إلحمى او فيه صداع" -meaning "fever or headache."

[†] See (بزر قطونا - bazr quṭūna) s. Fleaseed, seed of Plantago psyllium. ابزر قطونا - psyllium. المرابع

⁺ See (رتانا - luffāḥ) s. 1.The fruit of the mandrake, Mandragora officinalis. 2. The fruit of the purple egg-plant, Solanum melongena. 3. A variety of small melon carried in the hand for its fragrance. 16, p.1636

[§] It is not present in the manuscript copy at the Süleymaniye Library in Istanbul.

natural (tabī'ī), the vital (ḥayawānī), and the psychic (rūḥānī). In hammam therapy, special emphasis was placed on the vital forces and the body's innate heat (al-ḥarārat al-gharīziyya).^{28,29} As such, bathing and hammam treatments in medieval Islamic medicine were formulated and applied within the context of humoral pathology theory.

Meanwhile, existing studies suggest that in composing certain parts of his *Kitāb al-Mukhtārāt*, Ibn Hubal made use of the works of major Greco-Roman figures such as Hippocrates, Galen, Oribasius, and Paulus, alongside key contributors to the Islamic medical tradition, including al-Rāzī, al-Zahrāwī, 'Alī b. al-'Abbās, and Ibn Sīnā. He integrated these sources with his own clinical observations.^{10–15} In this context, the principal works of Islamic medicine that may have served as references for Ibn Hubal's section on bathing and hammams have been reviewed in chronological order.

While discussing the physical structure of hammams, Ibn Hubal emphasized that the most favorable hammams are those of older construction, spacious in design, capable of retaining steam in their upper sections, and supplied with fresh water. In contrast, it is observed that al-Rāzī, al-Zahrāwī, and 'Alī b. al-'Abbās did not comment on the architectural or structural features of hammams; instead, they focused on the effects of sweet (fresh) and saline water on the human body, distinguishing between the two and recommending the more frequent use of hot fresh water baths.^{19–24} The statement that most closely aligns with Ibn Hubal's account appears in the 19th chapter of Ibn Sīnā's work, where he notes: "Some scholars have said: The best hammam is one that is old in structure, has spacious air, sweet water, and abundant steam..."

Regarding the rooms of the hammam, their temperature, humidity, and physiological effects, Ibn Hubal states that the first room is cold and humid, the second warm and humid, and the third hot and dry. He further stated that, depending on how it is used, the hammam may hydrate, dry, cool, or warm the body, thereby affecting the individual's temperament in various ways. Such a description does not appear in the relevant works of al-Rāzī or al-Zahrāwī.²² In the 13th chapter, 'Alī b. al-'Abbās offers a somewhat detailed explanation: "... The air of the first room is mild and has no noticeable warming effect on the body; the air of the second room is moderately warm, partially heats the body, and has a slight dissolving effect; the air of the third room is strongly hot, significantly heats the body, and facilitates the expulsion of residual substances through dissolution and sweating..."²³ Similarly, in the 19th chapter, Ibn Sīnā presents an almost identical classification: "The first room of the hammam is cooling and moisturizing, the second is heating and moisturizing, and the third has a drying effect." He also elaborates on the effect of acclimatization on bodily temperaments.^{25,26}

Statements comparable to Ibn Hubal's remarks on the relationship between food, digestion, and hammam use can also be found in the writings of other physicians. For example, al-Zahrāwī, in al-Taṣrīf, offers comparable advice: "Entering the hammam regularly on a full stomach causes a thin person to gain weight... except for those who seek to gain weight, entering the hammam when full should be avoided. If one must do so, they should drink honeyed water for several days afterward, avoid heavy foods, and be cautious of heat." The statements of al-Zahrāwī and al-Rāzī on this matter are strikingly similar.²² In the 13th chapter, 'Alī b. al-'Abbās explains: "If a bath with warm water is taken before eating or after digestion, it moisturizes the body, dissolves and expels harmful substances, and cleanses food residues remaining in the stomach and intestines. Additionally, it increases the body's natural heat. If taken after eating, but only after consuming a small amount of food, it creates beneficial moisture in the body, nourishes it, and supports weight gain."23 In the 19th chapter, Ibn Sīnā offers detailed commentary: "When one stays in the hammam for a long time, dryness increases due to sweating; when the stay is short, moistening occurs. If one enters the hammam on an empty stomach, excessive dryness, weakness, and fatigue can occur. When entered on a full stomach, it superficially nourishes the body, but it may cause obstruction in the internal organs due to undigested food. If one enters after the first digestion is completed but the food has not yet left the stomach, it is beneficial and leads to balanced weight gain...."25,26

Ibn Hubal advised that individuals with a balanced temperament should avoid entering the hammam on a full stomach, should enter the various chambers gradually, should not remain inside for an extended period, and should refrain from drinking cold water either while inside or immediately after exiting. He stated that individuals with a safrāwī temperament should not remain in hot rooms, should avoid entering the hammam on an empty stomach, and should consume a few bites of food soaked in sour fruit juices beforehand. In both of his works, al-Rāzī only mentioned that entering the hammam on a full stomach should be avoided. Al-Zahrāwī stated that one should not enter the hammam on a full stomach and should stay in the hot section just long enough not to induce sweating.²² 'Alī b. al-'Abbās, in the 13th chapter, only referred to the necessity of avoiding bathing immediately after a meal.²³ In the 5th chapter, Ibn Sīnā expressed views that are nearly identical to those of Ibn Hubal: "All hammam users should enter the hot sections gradually and should remain in the hot room only as long as is sufficient for the dissolution of waste substances in the body and for preparing the body for food." He also noted, "... If bile has increased and the person is going to enter the hammam on an empty stomach, they should eat something light beforehand. For şafrāwī individuals, this may be unavoidable, but such persons should not enter the hot room...

The most suitable food for these individuals is bread soaked in fruit juice or rose water. Drinking something cold either after leaving the hammam or inside the hammam is prohibited."^{25,26}

Statements partially corresponding to Ibn Hubal's explanations concerning the benefits and harms of the hammam are found in the writings of nearly all major physicians. The parallels between the remarks of al-Rāzī and al-Zahrāwī are particularly significant.²² In the 13th chapter, 'Alī b. al-'Abbās, referencing Hippocrates' Aphorisms (al-Fusūl), described the benefits of hot water bathing as follows: "...it warms the body, moisturizes it, and opens the pores... dissolves and expels harmful substances accumulated in the body, alleviates pain, removes excess substances from the body, imparts beneficial moisture to the organs, matures the fluids, softens the skin and subcutaneous organs, and relaxes the body...."23 The account that most closely aligns with Ibn Hubal's is found in the 19th chapter of Ibn Sīnā's work, where he states: "... the hammam has certain harms: it causes excessive accumulation of substances in weak organs, relaxes the nerves, reduces the innate heat, diminishes appetite, and weakens sexual potency."25,26 Additionally, it is worth noting that nearly identical descriptions of the harms associated with the hammam, as given by Ibn Sīnā, also appear in the 4th treatise of al-Rāzī's work.²²

Ibn Hubal observed that the therapeutic effects of bathing vary by water type, noting that mineral waters such as saline or sulfurous may benefit patients more than healthy individuals, for whom fresh water is preferable. Al-Rāzī and al-Zahrāwī referred only to the use of fresh warm or cold water,²² whereas 'Alī b. al-'Abbās, in the 13th chapter, addressed other types of water and their therapeutic properties.²³ Ibn Sīnā provided the most detailed discussion of various water types and their effects in the 19th chapter.^{25,26}

Ibn Hubal also gave multiple explanations concerning the appropriate use of the hammam for individuals who engage in physical exercise. It has been observed that al-Rāzī and al-Zahrāwī made no comments on this subject.²² In the 13th chapter, 'Alī b. al-'Abbās wrote: "... The most appropriate time for bathing in terms of preserving health is after exercise and before eating... one should not bathe immediately after eating. For this causes the accumulation of excess substances in the head region and may lead to the movement of undigested food toward the stomach and intestines, resulting in blockages in the digestive tract...."23 Furthermore, in the 5th chapter, he discussed matters related to food intake and digestion in the context of physical exertion. In cases involving liver obstruction, he advised: "...it is treated with deobstruent remedies such as sikanjabīn-i bazūrī (a vinegar syrup made from seeds) and absinthe syrup (a drink made with wormwood)..."24 In the 5th chapter, Ibn Sīnā offered views closely aligned with those of Ibn Hubal: "...A person who exercises should not enter the hammam without having

fully rested... All hammam users should enter the hot sections gradually... A person who wishes to gain weight should enter the hammam after eating; if there is a fear of blockage, and if the person has a hot temperament, then sikanjabīn (a vinegar and honey syrup) should be used."25,26

Ibn Hubal addressed the topic of bathing with cold water, including the appropriate methods of application, its benefits, those for whom it is unsuitable, and the specific conditions under which it should be avoided. Al-Rāzī and al-Zahrāwī only recommended that if it is necessary for individuals with hectic fever to use the hammam, they should rest there for a time, then suddenly enter cold water, and rest again afterward.²² In the 13th chapter, 'Alī b. al-'Abbās cited Hippocrates and offered similarly detailed explanations.²³ Ibn Sīnā, in the 6th chapter, expressed views that were nearly identical to those of Ibn Hubal.^{25,26}

Finally, Ibn Hubal included additional guidance on precautions for individuals who develop fever or headache after exposure to cold water, the use of certain cooling fragrances, measures to protect the brain when using hot water, and substances that should be applied in cases of headache. ^{4,5} These specific explanations do not appear in the works of other physicians, ^{22–26} suggesting that Ibn Hubal may have derived them from his own clinical observations and experiences.

CONCLUSION

Ibn Hubal's discussions on bathing and hammams are more concise, clear, and accessible than those found in other texts. His explanations align with the principles of the "humoral pathology theory," which dominated medical thought during his time, and he primarily drew upon Ibn Sīnā's *Kitāb al-Qānūn fī al-Tibb* as a source.

Ethics Committee Approval: Since the study does not require ethical committee approval, no application was submitted.

Informed Consent: This study does not involve any patients or volunteers requiring informed consent.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: No financial support was received for this study.

Use of AI for Writing Assistance: Not declared.

Author Contributions: Concept – ÖK, AA; Design – ÖK, AA; Supervision – ÖK, AA; Resource – ÖK, AA; Materials – ÖK, AA; Data Collection and/or Processing – ÖK, AA; Analysis and/or Interpretation – ÖK, AA; Literature Search – ÖK, AA; Writing – ÖK, AA; Critical Reviews – ÖK, AA.

Acknowledgments: Preparation for publication of this article is partly supported by Turkish Neurosurgical Society. The authors would like to thank Enago (www.enago.com) for the English language review.

Peer-review: Externally peer-reviewed.

REFERENCES

- Ibn Abī Uşaybi'ah. 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā'. Beirut: Menşûrâtü Dâri Mektebeti'l-Hayât; 1978. p. 304-6.
- 2. Vernet J. Ibn Hubal. In: Lewis B, Ménage VL, Pellat Ch, Schacht J, editors. The Encyclopaedia of Islam. New ed. Vol. 3. Leiden: E.J. Brill; 1971. p. 802.
- 3. Harvey ER. Ibn Hubal. In: Selin H, editor. Encyclopaedia of the history of science, technology, and medicine in non-Western cultures. Dordrecht: Springer; 2008. p. 1104-5. [CrossRef]
- 4. Ibn Hubal al-Baghdādī. Kitāb al-Mukhtārāt fī al-Ṭibb. İstanbul: Türkiye Yazma Eserler Kurumu Başkanlığı, Süleymaniye Manuscript Library, Fatih Collection, nr. 3620; 610 H. [1213]. ff. 163r-164v.
- Ibn Hubal al-Baghdādī. Kitāb al-Mukhtārāt fī al-Ṭibb. Vol.
 Hyderabad: Dā'irat al-Ma'ārif al-'Uthmānīyah; 1362 H. [1943]. p. 210-2.
- 6. Meyerhof M. Science and medicine. In: Arnold T, Guillaume A, editors. The legacy of Islam. Oxford: Clarendon Press; 1931. p. 311-54.
- İhsanoğlu E. Türkiye kütüphaneleri İslâmî tıp yazmaları (Arapça, Türkçe ve Farsça) kataloğu. İstanbul: Renkler Matbaası; 1984. p. 107-8.
- 8. De Koning P. Traité sur le calcul dans les reins et dans la vessie (French translation of Ibn Hubal and al-Rāzī on urinary stones). Leiden: Brill; 1896.
- 9. Abdel-Halim RE. Contributions of Muhadhdhab Al-Deen Al-Baghdadi to the progress of medicine and urology. A study and translations from his book Al-Mukhtar. Saudi Med J 2006;27(11):1631-41.
- 10. Acıduman A, Er U. İbn Hubel ve eseri Kitābu'l-Muḫtārāt fī'ţ-Ṭıbb'da omurga hastalık ve travmaları üzerine. Mersin Univ Tip Fak Lokman Hekim Tip Tarihi Folklorik Tip Derg 2018;8(1):71-81.
- 11. Acıduman A, Kökeş F. İbn Hubel ve eseri Kitābu'l-Muḫtārāt fī'ţ-Ṭıbb'da kafa yaraları ve kafatası kırıkları üzerine. Mersin Univ Tip Fak Lokman Hekim Tip Tarihi Folklorik Tip Derg 2019;9(3):302-11. [CrossRef]
- 12. Aciduman A, Kus O, Belen D. Two different approaches regarding hydrocephalus treatment in the Islamic world during the Middle Ages. Turk Neurosurg 2022;32(6):1047-53. [CrossRef]
- 13. Acıduman A. On regimen of elders in Kitāb al-Mukhtārāt fī al-Ţibb by Muhadhdhab al-Dīn b. Hubal. Lokman Hekim Derg 2020;10(1):115-23. [CrossRef]
- 14. Acıduman A, Kuş Ö. İbn Hubel el-Baġdādī'nin Kitābu'l-Muḥtārāt fī'ţ-Ṭıbb adlı eserinde çocuk sağlığı ve hastalıkları üzerine. Çocuk Sağlığı Hast Derg 2021;64(1-2):49-59.
- 15. Acıduman A. Orta Çağ'da İslam dünyasında yazılmış eserlerde "çiçek ve kızamık" üzerine Gerileme dönemi I:

- Kitābu'l-Muḥtārāt fī'ţ-Ṭıbb. Gülhane Tıp Tarihi ve Tıp Etiği Derg 2024;1(1):26-37. [CrossRef]
- 16. Redhouse JW. Turkish and English lexicon. İstanbul: Çağrı Yayınları; 2015.
- 17. Güneş K. Arapça-Türkçe sözlük. İstanbul: Mektep Yayınları; 2011.
- 18. Al-Maani online dictionary. Available from: https://www.almaany.com/tr/dict/ar-tr/. Accessed Aug 12, 2025.
- 19. Al-Rāzī, Ebū Bakr Muḥammad b. Zakariyyā. Al-Manşūrī fī al-ţibb. Ḥāzim al-Bakrī al-Şiddikī, editor. 1st ed. Kuwait: Manshūrātu Ma'had al-Maḥṭūṭāt al-'Arabiyya; 1408 H [1987 M]. p. 221-2.
- 20. Iskandar AZ. Kitāb al-Murshid aw al-Fuşūl ma'a nuşūşi ţıbbiyyati muḫtārati li-Abī Bakr Muḥammad b. Zakariyyā al-Rāzī. Majallat Ma'had al-Maḫṭūṭāt al-'Arabiyya. 1961;7:1-125.
- 21. Al-Zahrāwī, Abū l-Qāsim Khalaf b. 'Abbās. Al-Taṣrīf mawsū'a ţibbiyya min al-qarn al-'āshir al-mīlādī. Ḥaqqaqaḥu ve tarjamahu: al-Duktūr Şubhī Maḥmūd Ḥamāmī. Mu'assasat al-Quvayt li'l Takaddum al-'llmī;2004. pp.230-1.
- 22. Acıduman A. Ebū'l-Ķāsım Ḥalef b. 'Abbās ez-Zehrāvī Ebu Bekr Muḥammed b. Zekeriyyā er-Rāzī'nin hamam üzerine yazdıklarından etkilendi mi? Mersin Univ Tip Fak Lokman Hekim Tip Tarihi Folklorik Tip Derg 2020;10(2):231-41. [CrossRef]
- 23. 'Ali b. al-'Abbās al-Majūsī. Kāmil al-Şinā'a al-Ṭibbiyya. Volume I. Cairo (Bulaq): al-Maṭba'at al-Kubrā al-'Āmira; (1294 AH/ 1877 CE). pp. 173-176.
- 24. 'Ali b. al-'Abbās al-Majūsī. Kāmil al-Şinā'a al-Ṭibbiyya. Volume II. Cairo (Bulaq): al-Maṭba'at al-Kubrā al-'Āmira; (1294 AH/ 1877 CE). p.10.
- 25. Ibn Sīnā. Kitāb al-Qānūn fī al-ṭibb. Roma: In Typographia Medicea; 1593. Collection: McGill University Library (Arabic), Toronto. p. 52, 81-2.
- 26. İbn Sînâ. El-Kānūn fi'ţ-Ṭıbb. Birinci kitap. Kahya E, translator. Ankara: Atatürk Kültür, Dil ve Tarih Yüksek Kurumu, Atatürk Kültür Merkezi Yayınları; 2017. p. 183-7, 303-6.
- 27. Ararat M. Tarihi Gaziantep hamam yapıları [master's thesis]. Gaziantep: Hasan Kalyoncu Üniversitesi; 2018.
- 28. Sarı N. Türkçe tıp yazmalarına göre hamam ve sağlığa etkisi. In: Namal A, Demirhan Erdemir A, Plonka Syroka B, editors. Sağlık ve su kültürü. İstanbul: Reis Dijital Baskı Sistemleri; 2014. p. 161-9.
- 29. Bayat A. Tıp tarihi. İstanbul: Merkezefendi Geleneksel Tıp Derneği; 2010. p. 110-3.
- 30. Arda B. Batı Orta Çağı'nda hastalık kavramı. Ankara: Güneş Yayınları; 1997. p. 56-9.
- 31. Kuş Ö. Surgical treatment practices of Haly Abbas in his book The Perfect Book of the Art of Medicine and its place in history of medicine [dissertation]. Ankara: Ankara