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Review Article

## A Comprehensive Literary Review of Bronchial Asthma (*Zīq-Un-Nafas Shu'Bi*) and its Management in the Unani System of Medicine

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### Abstract



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Lung diseases are among the leading global health concerns, affecting more than 500 million people and accounting for nearly 10% of annual deaths. Asthma, derived from the Greek verb *aazein* meaning "to pant," was first mentioned in Homer's Iliad and later recognized in the Corpus Hippocraticum as a medical condition. Initially used for general breathlessness, it was more clearly defined in the 19th century by Henry Hyde Salter as a disorder characterized by episodic breathing difficulty due to airway narrowing. In the Unani System of Medicine (USM), asthma is classified under *Amrāḍ-i-Majāri* (respiratory disorders). This paper explores the Unani perspective of bronchial asthma through classical references and modern research. Literature search included classical texts such as *Al-Qanoon*, *Kitab al-Hawi*, *Zakhira Thabit bin Qara*, *Kulliyat*, and *Tibbe Akbar*, along with modern databases (PubMed, Google Scholar, Science Direct, Web of Science, and Scopus). A total of 23 classical Unani books, 18 original research articles, and 34 review articles were reviewed. Scholars like *Buqrat*, *Jalinus*, *Razi* and *Ibn Sina* described asthma as *Rabw*, *Buhr*, and, *Ḍiq al-Nafas*, and recommended single drugs (*Adusa*, *Aslussus*, *Banafsha*, *Afteemoon*, *Unnab*) and compound formulations (*Sharbat-e-Banafsha*, *Sharbat-e-Ejaz*, *Sharbat-e-Unnab*, *Safoof-e-Dama*). The collected data were analysed and systematically organized to highlight the relevance of Unani approaches in asthma management.

**Keywords:** *Amrāḍ-i-Majāri*, *Ḍiq al-Nafas*, Asthma, lung disease, *Rabw*, USM

### Objective

The objective of this study is to review the ancient concept of *Ḍiq al-Nafas* mentioned in the Unani system of medicine in the light of available new information and to appraise the effects of herbs to update the current knowledge regarding the use of Single and compound herbs for management of *Ḍiq al-Nafas* (Bronchial asthma).

### Methodology

A manual literature survey of classical Unani texts such as *Kamiluṣ Sana'a*, *Alqanoon Fit Tib*, *Zakhira Khwarazm Shahi*, *Kitab Al-Adwiyya wal Aghziyya*, *Kitab al-Mukhtar al Fit tib*, *Muheet-e-Azam*, *Bayaz-e-Kabeer*, *Qarabadeen Qadri*, *Makhzanul mufradat*, *Khazain-ul Advia* etc., was conducted. Scientific names of Unani medicinal plants in line with their morphological description, the traditional names of prescribed herbs were matched with the current scientific names. Scientific databases like Google Scholar, Science Direct, Scopus and Web of Science etc,

were searched for available literature on *Ḍiq al-Nafas* (Bronchial asthma).

### Introduction

Asthma is defined as a chronic disease characterized by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency from person to person. Symptoms may occur several times a day or week, and for some people, they worsen during physical activity or at night.<sup>1</sup>

Due to the widespread exposure to harmful environmental, occupational, and behavioural inhalants, chronic respiratory diseases remain among the most common non-communicable conditions globally.<sup>3</sup> According to the World Health Organization (WHO), approximately 262 million individuals globally were living with asthma in 2019, showing a decline compared to 1990, when the prevalence was higher. The age-standardized global prevalence in 2019 was reported as 3415.53 per 100,000 population. Asthma prevalence

varies significantly by country, region, socioeconomic status, and local geography. In the same year, asthma was responsible for an estimated 455,000 deaths, the majority of which occurred in low- and lower-middle-income countries.<sup>5</sup>

In the first edition of his textbook *The Principles and Practice of Medicine* (1840), Sir William Osler, a founder of Johns Hopkins Medical School and a pioneer of modern Western medicine, described asthma as involving bronchial muscle spasms, mucosal swelling, and a distinct type of small airway inflammation. He observed that asthma often resembled hay fever, tended to run in families, and commonly began in childhood, sometimes persisting into old age. Osler also noted a wide variety of triggers for asthma attacks, including allergens like dust or animals, emotional stress, overeating, respiratory infections, and weather changes. He highlighted specific sputum characteristics, such as Leyden crystals, Curschmann spirals, and gelatinous "Perles".<sup>7</sup>

The hallmarks of asthma are intermittent, reversible airway obstruction; chronic bronchial inflammation with eosinophils; bronchial smooth muscle cell hypertrophy and hyperactivity; and increased mucus secretion. (Robbins)

The terms "*Zeeq*" and "*Nafas*," which imply "narrowing" and "breathing," respectively, combine to form the phrase "*Ḍīq al-Nafas* / *Ḍīq al-Nafas*." To put it another way, it indicates trouble breathing. Ancient doctors and thinkers like *Buqrat* (Hippocrates, 433–377 BC) and *Jalinus* (Galen, 129–210 AD) both referred to *Ḍīq al-Nafas*.<sup>9</sup>

*Buqrat* described this disease as breathlessness or panting.

*Majusi* has also mentioned this disease in his book *Kamil al-Sana'ah* with reference to *Buqrat* and *Jalinus*. Unani scholars have mentioned this disease under different headings in their treatises, e.g., *Rabw*, *Buhar*, *Dama*, *Intasabun Nafas*, etc.<sup>10</sup>

*Ḍīq al-Nafas* is a condition in which there is difficulty in breathing due to narrowing in the air passages caused by the accumulation of *Balgham Lazij* (viscous phlegm) in *Urooq-e-Khashna* (bronchioles).

It is also known as *Intisāb al-Nafas*, which is also a combination of two words, '*Intisab*' meaning 'to stand' and '*Nafas*' meaning 'breath'. In this condition, sometimes the patient is unable to breathe or feels uneasy in a sitting or lying position. So, he stands to take breath and feels comfortable.<sup>11,12</sup>

Throughout the centuries, research and medical advancements have provided valuable insights into the causes, diagnosis, and treatment of Asthma. In this review, we will explore the historical context, etiology, pathogenesis, and evolution of our understanding of Asthma.

## Historical Approach in Bronchial Asthma

It is believed that respiratory discomfort was foremost documented in China around 2330 BCE. The Greeks, Hebrews, Romans, and Chinese all recognized asthma as

a medical condition. The term "asthma" is derived from the Greek word *asthmaino*, meaning "panting" or "gasping." In Greek, it was first used by Hippocrates (433–377 BCE) to describe respiratory distress. However, in ancient classifications, asthma was considered less severe than orthopnoea but more severe than dyspnoea, and the term also implied the presence of an associated sound or wheezing. Unlike some modern perspectives, ancient physicians described asthma as a spasmodic or paroxysmal condition, meaning it occurred in sudden episodes, yet breathing remained difficult between attacks. Hippocrates, who viewed illness as a natural process with a logical progression similar to the unfolding of a Greek tragedy helped liberate internal medicine from the constraints of superstition. Although they only sporadically acknowledged asthma and attributed its primary causes merely to environmental factors, particularly cold and dampness.<sup>13</sup>

Next, Galen (130–201 CE) was the first to establish a connection between the upper and lower airways and to identify bronchospasm as an underlying cause of respiratory distress. From ancient times to the middle Ages, asthma did not receive significant medical attention. Instead, the term was broadly used to describe various cardiac and pulmonary dyspnoeic conditions. During this period, physicians adhered strictly to the medical paradigms set by Hippocrates and Galen, which were considered the gold standard.

In the 12<sup>th</sup> century, Maimonides (1135–1204), the physician of Sultan Saladin, provided one of the earliest documented therapeutic approaches to asthma. In his *Treatise on Asthma*, he emphasized the importance of relaxation, avoidance of opium, proper personal and environmental hygiene, and dietary regulation as essential components of asthma management.

By the 16<sup>th</sup> century, the German physician Georgius Agricola (previously Georg Bauer, 1154–1555) made significant contributions to understanding occupational asthma. He was among the first to recognize the link between environmental factors and airway symptoms, particularly in miners. To mitigate respiratory issues, he advocated the use of protective masks to prevent inhalation of dust.

During the Renaissance period, seasonal allergen exposure was already recognized as a trigger for airway symptoms. Physicians of the time recommended avoiding allergenic factors and prescribed cold baths every 14 days or once a month as a primary treatment for asthma.

The modern concept of bronchial asthma began to take shape in the early 1800s, particularly with the invention of the stethoscope by René Laennec (1781–1826). His discovery allowed for better clinical identification of bronchospasm, distinguishing asthma as a specific airway disorder. Additionally, physicians began recognizing the familial clustering of asthma and allergic conditions, laying the foundation for future research into its genetic and immunological aspects.<sup>14</sup>

Avicenna (980–1035 AD) defined asthma, or *Dama*, as a respiratory disorder affecting the lungs and the entire

bronchial tree. It is characterized by difficulty in breathing related to short and quick breaths like strangulation.<sup>15</sup>

**Rabw** refers to the viscous secretions that accumulate in the trachea, resulting in dyspnoea and restricting the lungs' ability to absorb air. As a result, breathing becomes more frequent.<sup>16</sup> as if someone is running, and the breath becomes short, a condition known as panting,

gasping, or dyspnoea. Also known as **Buhr** or *Ḍīq al-Nafas*.<sup>17,18,19,20</sup>

The condition is incurable in old age and yet difficult to treat in the young.<sup>21</sup>

It can also appear as epilepsy and tetanus seizures.<sup>12,16,17,18,22</sup>

### Several Atibba have expressed it with differing interpretations.

Avicenna ( <i>Ibne Sina</i> ) <sup>11</sup> (980-1035 AD)	<p>Defined asthma, or <i>Dama</i>, as a respiratory disorder affecting the lungs and the entire bronchial tree. It is characterized by difficulty in breathing related to short and quick breaths like strangulation.<sup>28</sup> <i>Rabw</i> refers to the viscous secretions that accumulate in the trachea<sup>12</sup>, resulting in dyspnoea and restricting the lungs' ability to absorb air.<sup>12</sup> As a result, breathing becomes more frequent<sup>12</sup> as if someone is running, and the breath becomes short, a condition known as panting, gasping, or dyspnoea. Also known as <i>Buhr</i> or <i>Ḍīq al-Nafas</i>.<sup>14,15,21,15</sup> The condition is incurable in the old age and yet difficult to treat in the young.<sup>12</sup> It can also appear as epilepsy and tetanus seizures.<sup>11,14,15,12,12</sup></p> <p>This disease is typically acquired from both paternal and maternal offshoot.<sup>14,33</sup> The morbid matter cannot be concocted in the lungs of old men due to their cold temperaments. And it does not have adequate faculty to eliminate and evacuate the morbid materials from the trachea. When a person with that disease sleeps liable to prone breathing difficulty and shorter span.<sup>12</sup> Other philosophers differentiate <i>Ḍīq al-Nafas</i> from <i>Rabw</i>.</p> <p>Ibn Sina stated that <i>Rabw</i> is difficulties in breathing, respiration of a diseased person resembles labored breathing (who works hard) and its breath is not devoid of expansion, tawwatur (frequency), and Sighr (shortness), whether accompanied with difficulty or not. <i>Intiṣāb al-Nafas</i> (orthopnoea) is a severe kind of <i>Ḍīq al-Nafas</i> and <i>Rabw</i>.<sup>14,15,12</sup></p> <p>'<i>Uṣr al-Nafas</i> (breathlessness) is caused by the congestion of lung vessels it is called <i>Buhr</i> and <i>Rabw</i> and the congestion of the tracheal branches ('<i>Urūq-i-Khashna</i>, or bronchioles) is called <i>Intiṣāb al-Nafas</i> stated by some physicians.</p>
Ali Ibne Abbas Al- Majusi <sup>19</sup>	<p>States that <i>Buhr</i> and <i>Rabw</i> refer to congestion in the lungs' vessels. Furthermore he mentions, <i>Intiṣāb al-Nafas</i> (orthopnoea) refers to the congestion of the tracheal branches ('<i>Urūq-i-Khashna</i>, or bronchioles) since the air cannot pass to the lungs until the subject in upright position. It is because cold thick viscous humour sticks into the passage of lungs.</p> <p>In other words all respiratory illnesses such as <i>Rabw</i> and <i>Buhr</i> are due to airway narrowing. When this narrowing affects the branches of the trachea, it causes <i>Ḍīqun nafas</i> and <i>Intiṣāb al-Nafas</i>; when it affects the arteries of the lungs, it causes <i>Rabw</i> and <i>Buhr</i>.<sup>15</sup> Some other philosophers differentiate between, <i>Buhr</i> and <i>Rabw</i>. <i>Buhr</i> represents the congestion of the lungs' vessels, and <i>Rabw</i> represents the congestion of the bronchioles.<sup>21,12</sup></p>
Sahib Khulasa Mahmud Ibn Muhammad Chughmini <sup>91</sup>	Sahib Khulasa states that <i>Rabw</i> is a disorder of lung in which the patients is compelled to breathe constantly, even while they are at rest. The condition is also referred to as <i>Buhr</i> and <i>Ḍīq al-Nafas</i> .
Najibuddin Samarqandi	Najibuddin Samarqandi did not distinguish between <i>Buhr</i> , <i>Ḍīq al-Nafas</i> , and <i>Rabw</i> . He says that all three are interchangeable terms.
Zakriya Razi	<i>Rabw</i> is a condition in which a person suffers from severe cough with expectoration, difficulty in breathing, face and eyes become red, heaviness in the chest, feels that throat is obstructed. In this state, the patient is unable to lie down, being forced to sit upright in order to breathe. <sup>29</sup>

## Types of *Ḍīq al-Nafas*

1. ***Ḍīq al-Nafas Qaşīr***: This disorder is caused by a weakening or constriction of the muscle that cause the chest in movement. In bronchial asthma, airway obstruction is caused by the following four mechanisms:

- Bronchial smooth muscle contraction;
- Edema of the walls of the airways;
- Mucous clogging of the bronchioles;
- Irreversible alterations in the lungs (remodelling).

### 2. *Ḍīq al-Nafas Mutatābī*:

Extreme heat or hot inflammation occurs in the diaphragm. On account of hot inflammation and extreme heat cause the diaphragm to excite the related muscles (moving respiratory muscles), allowing cool air to enter the body. This manifestation is seen in asthma.

### 3. *Ḍīq al-Nafas Mustaqīm*:

This is a condition in which the respiratory muscles' secretions descend or become weak or flaccid, and Tanaffus straightens. When the patient sits up straight, *Mustaqīm* breathing occurs because the muscles are fixed in place. Suffocation may result from the patient's upper and lower muscles colliding while they are lying on their side.

### 4. *Ḍīq al-Nafas Qawī*:

This kind of breathing happens when the lungs are inflamed.

### 5. *Ḍīq al-Nafas Ḍ'yīf*:

This kind is caused by thick *Burūdat*.

### 6. *Ḍīq al-Nafas 'asīr*:

It occurs due to thick morbid matter that obstructs the respiratory system or thick flatus that traps in the chest or on the sides of the chest. Sometimes, breathing trouble is due to an abnormality in brain or cervical vertebrae or flatus in the uterus and abnormal morbid materials. Sometimes the morbid matter travels toward the chest and lungs, breathing becomes more difficult.<sup>23</sup>

Razi states that bronchial asthma classifies into four different forms:<sup>26</sup>

1. ***'Aẓīm Mutawātīr***: It is an indication of *Ikhtilāṭ al-Dhihn* (A disoriented mental state below *Junūn*'s level).

2. ***'Aẓīm Mutawātīr***: it is an indication of suffering stated by Galen.

3. ***'Aẓīm Sarī***: Representing *Ikhtilāṭ al-Dhihn*.

4. ***'Aẓīm Sarī***: pain signal.

In his book, Razi did not mention of third and fourth types.

According to Jalinus, *Rabw* begins to start epileptic seizure-like attacks if the disease is left and untreated.<sup>12</sup>

Muhammad Tabari identified three types of bronchial asthma.<sup>23</sup>

## Type 1:

*Rabw Ḥaqīqī*, this condition is caused by obstruction of tracheal branches by cold secretions. If there is a cough, prognosis is good; if not, ascites is the disease's outcome. Breathlessness can occasionally occur, but it is not always the case.

## Type 2:

Caused by tracheal branch narrowing due to lung abscess. That swelling therefore stays like a hot inflammation rather than maturing or releasing pus. This patient has a fever, thirst, and burning sensation in addition to breathing similar to a *Rabw* patient. Hot *Sawdāwī*, aberrant blood, or blood thickening are the causes of this inflammation. The first type is manifested by no thirst, no breathing difficulty and cough with sputum and in second type has the restlessness and burning sensation.

## Type 3:

As a result of the chest muscles' flaccidity. This flaccidity (A pathological state defined by the loss of rigidity of muscles leading to their weakness), is produced by the accumulation of humour in the chest from the head, weakening of the chest, or change of temperament. Breathlessness is a constant feature of this kind of patient, and they occasionally cease breathing.<sup>24</sup>

## Causes:

- Samarqandi* was the first to explain the cause of *Rabw*.<sup>25</sup>
- The main cause of dyspnoea of *Ḍīq al Nafas* patients is the narrowing of *'Urūq-i-Khushūna* (Bronchioles), which can occur when *Raqīq Khilṭ* or *Balgham* become lodged in the airways and reducing airflow.<sup>27</sup>
- Ghalīẓ Ruṭūbāt* which restricts the air passages.<sup>27,29</sup>
- Prolonged accumulation of *Fāsīd Mawād* in the chest.<sup>27,29</sup>
- Ghalīẓ Riyāḥ* collate in the airways.<sup>11,27</sup>
- Burūdat Ḥarārat* of lungs.<sup>21,28</sup>

Asthma may be congenital; in this case lungs do not expand properly due to the smallness and firmness of the chest.<sup>17,19,27</sup>

The most common cause is a build-up of thick phlegm in the trachea.<sup>18,31,27,26,32,35</sup>

The humours which are developed by the coldness of the lungs. Sometimes *Awram-i-Riyā* resulting from *Balgham Ghalīẓ* or *Ṣafrā'* and *Dam*<sup>17</sup> Narrowing of airways due to any cause.<sup>21,36</sup> *Imtilā'-i-Mi'da*,<sup>22,27</sup> *Waram* lungs (Inflammation of air passages). *Inṣībāb Mawād-i-Nazla* i.e. exudation and buildup of *Balgham Lazij* (viscid phlegm) *Imtilā'-i-Ṣadr* (Thoracic congestion)<sup>12</sup> *Yubūsat* (dryness)<sup>12</sup> *Iḥtibās Riyāḥ*<sup>15</sup>

Secondary causes of Asthma-like *Dhāt al-Janb* (Pleurisy), *Sill-o-Diq* (Pulmonary Tuberculosis), *Dhāt al-Ri'a* (Pneumonia), *Waram Sho'b Muzmin* (Chronic Bronchitis), *Waram -i-qalb*, *Waram al-Kulya* (Nephritis),



it is called as *Ḍīq al-Nafas Shirkī*.<sup>15,12,14,19, 37</sup> Sometimes, humours are neither present in the lungs nor the pulmonary arteries, but they are present in the stomach, and their flow is directed from the head to the stomach or produced in the stomach itself these humors move towards the liver.<sup>11,14,12</sup>

In modern medicine discuss cause of Asthma is a multifactorial disease resulting from a combination of genetic susceptibility and environmental influences. A strong familial tendency has been observed, particularly in individuals with a history of atopic diseases such as eczema or allergic rhinitis. Genetic studies have identified several loci, including regions on chromosome 5q that are associated with the regulation of immune responses involving interleukins like IL-4 and IL-13, which contribute to airway inflammation and hyper responsiveness.

### 1. Signs & symptoms:

- Breathlessness.<sup>11,14,21,12,33,33</sup>
2. Difficulty in breathing. (orthopnoea)
3. Cough with or without expectoration.<sup>21</sup>
4. Wheezing.<sup>11,14,21,12,33,38</sup> (Chest tightness is induced by phlegm retention. (Chest constriction)<sup>21,1512,38,102</sup>
5. Burning sensation during breathing.<sup>11,14,21,12,33,38</sup>
6. Pulse is deep, fast, and soft.<sup>14,11,12,33,38</sup>
7. Respiration is deep, fast, and frequent. Symptoms are aggravated when the patient lying in the supine position.<sup>14,33</sup>
8. Severe thirst when the cause is dryness.<sup>12,38</sup>

### Etiopathogenesis:

The disease involves three processes (1) *Sū'-i-Mizāj* (2) *Sū'-i-Tarkīb* (3) *Tafarruq al-Ittiṣāl*

*Sū'-i-Mizāj* is classified into two types:

1. *Sū'-i-Mizāj Sāda*
2. *Sū'-i-Mizāj-Māddī*. *Ḍīq al-Nafas* is *Sū'-i-Mizāj Māddī* involving Balgham, which leads to *Sū al-Tarkīb* constriction of bronchioles.<sup>4,11</sup>

Ahmad Tabri has described three pathogenic alterations:

1. *Rabw Ḥaqīqī* is caused by *Ruṭūbāt Bārīda* accumulated in the trachea (*Qaṣaba'-i-Rī'a*). It may or may not be accompanied by shortness of breath (*Intiṣāb*). Its symptoms include thirst, loud breathing, and expectoration in the cough.

2. Waram that narrows the airways; this type of Waram is caused by other *Khilt* that has been mixed with blood as well as *Ḥārr Sawdāwī Khūn*. It is characterized by fever, burning sensation, restlessness, thirst, and shortness of breath.
3. A cascade of material from the brain, also known as *Du'fṢadr, Sū'-i-Mizāj Ḥārr, or Sū'-i-Mizāj Bārīd*, results in *Istirkhā'* of the thoracic muscles. It is always associated with shortness of breath and, in rare cases, apnoea.<sup>15</sup> Ibn-i-Sina states that congenital shortening of the thoracic cavity, *Awram* of the airways, *Khilt Ḡhalīz* accumulating in the airways, and *Burūdat* and *Yubūsat* of the airways are the causes of *Ḍīq al-Nafas*.<sup>14</sup>

The term status asthmaticus (a severe condition in which asthma attacks occur one after the other without interruption) was first used by Zakaria Razi. He considered the most serious type of asthma as *Intiṣāb al-Nafas*. Razi indicates that three pathological alterations take place in *Ḍīq al-Nafas*, *Awram Ṣadr* and the accumulation of blood, pus, or *Khilt Ḡhalīz* around the lungs; and *Inṣībāb Nazla-i-dāyma* from the head into the lungs. After reviewing the literature, Majoosi has given a novel concept regarding bronchial asthma.<sup>21</sup>

Hakim Ajmal Khan concurs with the hypothesis that respiratory muscle spasm causes airway blockage. He indicates that it is incredibly tough to treat. *Ḡhalīz Bārīd Ruṭūbāt* which may be *Balgham*, *Sawdā*, or both, causes bronchial asthma<sup>39</sup>. Chronic inflammation, nonspecific airway hyperreactivity, and reversible airway blockage are the hallmarks of the pathophysiology of bronchial asthma. The recurrent airflow limitation is driven by inflammatory mediators leading to bronchoconstriction, airway oedema, hyper responsiveness, and airway remodelling. The first response of the bronchial smooth muscle to an inhaled allergen or irritant is bronchoconstriction. Asthma is typically diagnosed by a complete reverse of airway blockage, although in many cases, there is only a partial or absent reversal of obstruction.<sup>40</sup>

Recurrent episodes of acute-onset dyspnoea, usually during the night or early morning, are the hallmark signs of asthma. Breathlessness that occurs frequently, usually during the night or early morning, is the primary symptom of bronchial asthma. Further symptoms include cough, wheezing, and a sense of tightness in the chest. Asthmatic symptoms frequently emerge after physical exercise.

**Table 1: Brief description of Single herbs used in asthma and their Unani pharmacological actions.**

Sr No	Unani Name	Botanical Scientific Name	Part used	Unani pharmacological actions	Pharmacological activity
1	Adusa	Justicia adhatoda L.	Leaf/ root	<i>Munaffith-i Balgham; Dāfi'-i-Su'āl</i> <sup>[1]</sup>	Anti-allergic; <sup>[41]</sup> antihistaminic; <sup>[42]</sup> antioxidant <sup>[43]</sup>
2	Aftimoon	Cuscuta reflexa Roxb.	Seed	<i>Mukhrij-i Balgham; Muhallil</i> <sup>[5]</sup>	Anti-inflammatory; <sup>[44]</sup> antioxidant <sup>[45]</sup>
3	Anjeer Zard	Ficus carica L.	Leaves/ Fruit	<i>Mukhrij-i Balgham; Muhallil</i> <sup>[5]</sup> ,	Anti-inflammatory; <sup>[46]</sup> antioxidant <sup>[47]</sup>
4	Anisoon	Pimpinella anisum L.	Seed	<i>Mukhrij-i Balgham</i> <sup>[10]</sup>	Bronchodilator <sup>[48]</sup>
5	Aslussoos	Glycyrrhiza glabra L.	Root	<i>Mukhrij-i Balgham</i> <sup>[10]</sup>	Antihistaminic; <sup>[49]</sup> antiallergic <sup>[50]</sup>
6	Banafsha	Viola odorata L.	Leaves/ Flowers	<i>Munaffith-i Balgham</i> <sup>[5]</sup>	Anti-bronchitis; anti-inflammatory; anti-asthmatic <sup>[51]</sup>
7	Behidana	Cydonia oblonga Mill.	Seed	<i>Munaffith-i Balgham; Mugharrī wa Muzliq</i> <sup>[10,14]</sup>	Antiallergic; <sup>[52]</sup> bronchodilator <sup>[53]</sup>
8	Badiyan (seeds)	Foeniculum vulgare Mill.	Seed	<i>Mundij-i Balgham; Mukhrij-i Balgham</i> <sup>[5]</sup>	Bronchodilator; <sup>[54]</sup> Antioxidant <sup>[55]</sup>
9	Chob Zard	Curcuma longa L.	Rhizome	<i>Muhallil; Mukhrij-i Balgham</i> <sup>[10]</sup>	Antiallergic; <sup>[56]</sup> anti-inflammatory <sup>[57]</sup>
10	Darchini	Cinnamomum verum J. Persl.	Bark	<i>Munaffith-i Balgham; Muhallil</i> <sup>[5]</sup>	Anti-inflammatory; <sup>[58]</sup> antiallergic <sup>[59]</sup>
11	Gaozaban	Borago officinalis L.	Flowers/ Leaves	<i>Munaffith-i Balgham</i> <sup>[10]</sup>	Bronchodilator; anti-inflammatory; antioxidant <sup>[60]</sup>
12	Ghafis	Agrimonia eupatoria L.	Flowers	<i>Muhallil</i> <sup>[10]</sup>	Anti-inflammatory; antioxidant <sup>[61]</sup>
13	Hulba	Trigonella foenum-graecum L.	Seed	<i>Munaffith-i Balgham; Mundij-i Balgham</i> <sup>[1]</sup>	Anti-inflammatory; antioxidant <sup>[62]</sup>
14	Hilteet	Ferula foetida (Bunge) Regel.	Oleo-gum-resin	<i>Mukhrij-i Balgham; Muhallil</i> <sup>[5]</sup>	Relaxant; antioxidant <sup>[63]</sup>
15	Irsa	Iris ensata Thunb.	Root	<i>Munaffith-i Balgham; Muhallil; Mundij-i Balgham</i> <sup>[14]</sup>	Bronchodilator; antihistamine; anti-inflammatory <sup>[64]</sup>
16	Khubbazi	Malva sylvestris L.	Seed/Herb	<i>Munaffith-i Balgham; Dāfi'-Su'āl</i> <sup>[1]</sup>	Anti-inflammatory; <sup>[65]</sup> antioxidant; antiallergic <sup>[66]</sup>
17	Khatmi	Althaea officinalis L.	Seed/Root	<i>Munaffith-i Balgham; Dāfi'-Su'āl</i> <sup>[5]</sup>	Anti-inflammatory; antitussive; soothing <sup>[67]</sup>
18	Kalonji	Nigella sativa L.	Seed	<i>Munaffith-i Balgham; Muhallil</i> <sup>[5]</sup>	Antiallergic; anti-inflammatory; antioxidant <sup>[68]</sup>
19	Kakra Singhi	Pistacia chinensis Bunge	Leaves	<i>Mukhrij-i Balgham</i> <sup>[14]</sup>	Anti-inflammatory; antispasmodic <sup>[69]</sup>
20	Katan	Linum usitatissimum L.	Seed	<i>Mulattif; Dāfi'-Su'āl</i> <sup>[10]</sup>	Anti-inflammatory; antioxidant <sup>[70]</sup>

21	Maweez Munaqqa	Vitis vinifera L.	Fruit	<i>Munaqqi-i-sadr; Mundij-i Balgham</i> <sup>[14]</sup>	Antihistamine inhibition; cytokine reduction <sup>[71]</sup>
22	Parsioshan	Adiantum capillus-veneris L.	Whole herb	<i>Munaffith-i Balgham; Mulattif; Muhallil</i> <sup>[5]</sup>	Anti-inflammatory; antioxidant <sup>[72]</sup>
23	Qust	Saussurea costus (Falc.) Lipsch.	Root	<i>Munaffith-i Balgham</i> <sup>[10]</sup>	Anti-inflammatory; antiallergic <sup>[73]</sup>
25	Sapistan	Cordia dichotoma G. Forst.	Fruit	<i>Munaffith-i Balgham; Mulattif</i> <sup>[14]</sup>	Broncho-relaxant; [74] anti-inflammatory <sup>[75]</sup>
26	Saboos-e Gandum	Triticum aestivum L.	Bran/Seed	<i>Munaffith-i Balgham; Muhallil</i> <sup>[14]</sup>	Bronchodilator; anti-interleukins <sup>[76]</sup>
27	Sahejna	Moringa oleifera Lam.	Seed/Leaf	<i>Muhallil; Munaffith-i Balgham</i> <sup>[10]</sup>	Antihistaminic; anti-asthmatic <sup>[77]</sup>
28	Taj Qalmi	Cinnamomum cassia (L.) J.Presl	Bark	<i>Munaffith-i Balgham</i> <sup>[14]</sup>	Anti-inflammatory; antiallergic <sup>[78]</sup>
29	Tulsi	Ocimum sanctum L.	Leaves	<i>Munaffith-i Balgham</i> <sup>[10]</sup>	Bronchodilator; <sup>[79]</sup> anti-asthmatic; anti-inflammatory <sup>[80]</sup>
30	Ustukhuddus	Lavandula stoechas L.	Leaves/Flowers	<i>Muhallil; Mushil-i-Balgham; Mushil-i-Sawda'</i> <sup>[14]</sup>	Tracheal relaxant; anti-inflammatory <sup>[81]</sup>
31	Unnab	Ziziphus jujuba Mill.	Leaves/Seed/ Fruit	<i>Munaffith-i Balgham; Dāfi'-Su'āl</i> <sup>[1,10]</sup>	Antiallergic; antiasthmatic <sup>[82]</sup>
32	Unsul	Urginea indica (Roxb.) Jessop.	Root/Rhizome	<i>Muhallil; Munaffith-i Balgham</i> <sup>[5]</sup>	Bronchodilator; antioxidant <sup>[83]</sup>
33	Zufa Khushk	Hyssopus officinalis L.	Flower/Herb	<i>Muhallil; Munaffith-i Balgham</i> <sup>[1]</sup>	Anti-inflammatory; airway remodeling effects <sup>[84]</sup>
34	Zanjabeel	Zingiber officinale Roscoe	Rhizome	<i>Munaffith-i Balgham</i> <sup>[10]</sup>	Bronchodilator; inhibits acetylcholine <sup>[85]</sup>
35	Zarambaad	Zingiber zerumbet (L.)	Rhizome	<i>Munaffith-i Balgham</i> <sup>[10]</sup>	Antiallergic; antioxidant <sup>[86]</sup>

\* Munaffith-i Balgham (expectorant) drugs expel the excretable morbid matters from the body while Dāfi- Su'āl (antitussive) relieves excessive cough.

\* Muhallil (resolvent) drugs resolve inflammation caused by the morbid matters in the body (Kabir, 2003)

**Table 2: Compound formulations used in asthma (Dīq al-Nafas).<sup>90</sup>**

Sr No	Formulation	Drug form	Pharmacological action	Therapeutic uses	Dosage
1	Barshasha <sup>[87]</sup>	Semi-solid	<i>Munawwim; Musakkin-i-Alam</i>	<i>Suāl-i Muzmin; Nazla-o-Zukam</i>	1–3 g orally
2	Habb-e Hindi Zeeqi <sup>[87]</sup>	Pills	<i>Munaffith-i Balgham; Dāfi'a Tashannuj</i>	<i>Dīq al-Nafas</i>	1–2 pills (250–500 mg each) BD
3	Habb-e Dīq al-Nafas <sup>[89]</sup>	Pills	<i>Munaffith-i Balgham</i>	<i>Dīq al-Nafas</i>	1–2 pills daily
4	Lauq-e Katan <sup>[89]</sup>	Semi-solid	<i>Munaffith-i Balgham</i>	<i>Dīq al-Nafas</i>	5–10 g linctus
5	Lauq-e Motadi <sup>[88]</sup>	Semi-solid	<i>Mundij; Munaffith-i Balgham; Musakkin-i Suāl</i>	<i>Dīq al-Nafas; Suāl; Nazla</i>	5–10 g linctus BD
6	Lauq-e Nazli <sup>[88]</sup>	Semi-solid	<i>Munaffith-i Balgham</i>	<i>Nazla-o-Zukam; Suāl</i>	5–10 g linctus
7	Lauq-e Dīq al-Nafas <sup>[89]</sup>	Semi-solid	<i>Munaffith-i Balgham</i>	<i>Dīq al-Nafas</i>	5–10 g linctus

8	Lauq-e Dīq al-Nafas Balghami <sup>[88]</sup>	Semi-solid	<i>Munaffith-i Balgham; Musakkin-i Suāl</i>	<i>Dīq al-Nafas; Suāl-i Muzmin</i>	5–10 g linctus
9	Kushta Abrak Safaid <sup>[87]</sup>	Calx	<i>Munaffith-i Balgham; Dafi-e Suāl</i>	<i>Dīq al-Nafas; Suāl</i>	125–250 mg
10	Kushta-e Qaran-ul-Eyyal <sup>[87]</sup>	Calx	<i>Munaffith-i Balgham; Muhallil Waram</i>	<i>Dhāt al-Janb; Dhāt al-Ri'a</i>	60–120 mg
11	Sharbat-e Sadar <sup>[87]</sup>	Syrup	<i>Munaffith-i Balgham; Mundij</i>	<i>Suāl; Dīq al-Nafas; Nazla Muzmin; Sill</i>	10–20 ml BD
12	Sharbat-e Banafsha <sup>[87]</sup>	Syrup	<i>Mundij; Mulayyin-i-Am'a</i>	<i>Nazla; Suāl; Hummā; Qabz</i>	10–20 ml BD
13	Sharbat-e Ejaz <sup>[87]</sup>	Syrup	<i>Munaffith-i Balgham; Musakkin-i Suāl</i>	<i>Suāl; Nazla-o-Zukam</i>	10–20 ml BD
14	Sharbat-e Unnab <sup>[87]</sup>	Syrup	<i>Munaffith-i Balgham; Musakkin-i Suāl</i>	<i>Suāl</i>	10–20 ml BD
15	Safoof-e Dama <sup>[87]</sup>	Powder	<i>Munaffith-i Balgham</i>	<i>Dīq al-Nafas; Suāl-i Muzmin; Suāl-i Balghami</i>	3–5 g powder

## Discussion

Asthma is a chronic respiratory condition that continues to challenge modern healthcare systems due to its high prevalence, recurrent nature, and associated morbidity. While contemporary medicine has advanced in diagnosis and management, limitations such as adverse effects of long-term pharmacotherapy and high treatment costs necessitate exploration of complementary approaches.

The Unani System of Medicine (USM), with its holistic principles and centuries-old clinical observations, offers a unique perspective on asthma. Classical Unani scholars like *Jalinoos*, *Razi*, *Majusi*, *Tabri*, *Ibn Sina* and *Arzani* described asthma under the terms *Rabw*, *Buhr*, and *Diq an-Nafas*, emphasizing not only symptomatology but also underlying humoral imbalances. Their recommended therapies included single drugs (*Adusa*, *Aslussus*, *Banafsha*, *Afteemoon*, *Unnab*) and compound formulations (*Sharbat-e-Banafsha*, *Sharbat-e-Ejaz*, *Sharbat-e-Unnab*, *Safoof-e-Dama*), which aim to restore balance, relieve symptoms, and improve overall quality of life.

This review reveals that many classical remedies possess pharmacological activities supported by contemporary studies such as Bronchodilation, anti-inflammatory, mucolytic, and antioxidant effects demonstrating the scientific relevance of Unani prescriptions. Furthermore, the integration of lifestyle modifications, diet, and regimental therapies in USM highlights its comprehensive approach compared to the predominantly pharmacological focus of modern medicine.

However, there remain challenges: limited large-scale clinical trials, lack of standardized formulations, and the need for rigorous safety and efficacy evaluations. Bridging this gap requires collaborative research integrating Unani principles with modern methodologies, which may yield safer, cost-effective, and accessible interventions for asthma.

## Conclusion

Asthma remains a major global health challenge, requiring safe and effective management approaches. The Unani System of Medicine, enriched by classical texts and the works of scholars like *Razi*, *Tabri*, *Majusi* and *Ibn Sina*, provides valuable perspectives on asthma (*Rabw*, *Buhr*, *Diq an-Nafas*). Remedies include single herbs such as *Adusa*, *Aslussus*, *Banafsha*, *Afteemoon*, *Katan*, *Khatmi*, *Sapistan* and *Unnab* etc. along with compound formulations like *Sharbat-e-Banafsha*, *Sharbat-e-Ejaz*, *Sharbat-e-Unnab*, *Sharbat-e-Adusa* and *Safoof-e-Dama*. This review highlights the holistic Unani approach, which addresses both symptoms and underlying causes. Integrating traditional wisdom with modern evidence may enhance asthma care and reaffirm the relevance of Unani medicine in contemporary healthcare.

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