

Zeequn Nafs (Bronchial Asthma): Non Communicable Disease - A Systematic Review Analysis

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Abstract

Zeequn Nafs/Dama, known in conventional medicine as Bronchial Asthma, is a Balghami (phlegmatic) disease characterized by the accumulation of thick, viscid Balgham (phlegm) in the lung airways, leading to 'Usr al-Tanaffus' (difficulty in breathing). Individuals with a Balghami Mizaj are more susceptible to this ailment. According to conventional medicine, Bronchial Asthma ranks among the most common chronic syndromes globally. In 2019, the Global Burden of Disease study estimated that 339.4 million people worldwide were affected by BA, spanning all ages and regions. Symptoms may include difficulty breathing, chest pain, cough and wheezing, with occasional flare-ups. Management typically involves rescue inhalers (salbutamol) and controller inhalers (steroids) to prevent symptoms. Severe cases may necessitate long-acting inhalers (formoterol, salmeterol, tiotropium), inhalant steroids, albeit with associated side effects. In the Unani system, numerous single and compound drugs are available for managing Zeequn Nafs. Unani formulations with properties like Munzij Balgham (Concoctive), Mulattif (demulcent), Munaffis Balgham (Expectorant), Moharrik (Stimulant), Muqai (Emetic) and Muhallil (Resolvent) aim to Tadeel mizaj (Correct temperament) and Tanqia-e-mawad (Cleanse viscous humor). This review paper comprehensively discusses various aspects, risk factors, pathogenesis, prevention, and management of Bronchial Asthma.

Keywords: Zeequn Nafs; Bronchial Asthma; Unani System; Prevention; Management

Introduction

In conventional system of medicine, Zeequn Nafas is termed as "Bronchial Asthma". Zeequn Nafs is a disease of Sue Mizaj Maddi involving Balgham which leads to Sue Tarkeeb. Zeequn Nafs is an episodic disease characterized by constriction of airways.

Bronchial asthma has been a big cause of concern for people of all ages across the world. With the increasing amount of irritant and rising air pollution in the major cities of the world. Changes in seasons and winters especially pose an awful threat to people already suffering from asthma in India. Asthma is continuously spreading and adding new cases of asthma each year in all age groups in India.

Each year more than 3.5 crore people suffer from asthma across the world. It is a common disease among children and deadly in old age. The major risk factors in asthma is air pollution may provoke allergic reactions. Most asthma-related mortality cases occur in low- and lower-middle-income countries.

Bronchial asthma (BA) is a syndrome characterized by airflow obstruction that varies markedly, both spontaneously and with treatment. Asthmatics harbor a special type of inflammation in the airways that makes them more responsive than non-asthmatics to a wide range of triggers, leading to excessive narrowing with consequent reduced airflow and symptomatic wheezing and dyspnea [1,6]. BA is a major non-communicable disease characterized by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency from person to person [2,7]. In developing countries where the prevalence of asthma had been much lower, there is a rising prevalence, which is associated with increased urbanization [1,6]. In 2016, the Global Burden of Disease collaboration estimated that 420,000 people in the world died from asthma more than 1000 per day and 24.8 million attributable to Asthma in 2016 [3,8]. The crude prevalence of Asthma in India increased by 9% in 2016. There were 37.9 million cases of Asthma in India [4,9]. The national burden of asthma was estimated to be 17.23 million [5,10].

In Unani system of medicine, Bronchial Asthma is termed as “Zeequn Nafas” [6,7]. Zeequn Nafs is a disease of Sue Mizaj Maddi involving Balgham which leads to Sue Tarkeeb. Zeequn Nafs is an episodic disease characterized by constriction of airways [7-9]. Balghami Mizaj people are more prone to this disease [10].

Types of Zeequn Nafs [11]:

- Zeequn Nafs qasir: It is due to weakness of respiratory muscles.
- Zeequn Nafs Iltehabi: It is caused by the inflammation of diaphragm or excessive heat.
- Zeequn Nafs Mustaqeem: It is caused general weakness or atony of the respiratory muscles.
- Zeequn Nafs qawi: It is caused by Iltehab or hararat.
- Zeequn Nafs Zaef: It is caused by burudat.
- Zeequn Nafs Aseer: It is caused by accumulation of viscid material in the Bronchial tree or gaseous collection in the chest.

Asbab (Etiology)

According to Unani physicians, BA (Zeequn Nafas) is caused by thick Phlegm (Ghaleez khilt or Balgham-e- ghaleez) adhering to the bronchial mucosa thus narrowing the lumen. Some Unani scholars described its cause as Barid and Raqeeque khilt, Auram-e-Riya (inflammation of Lungs. It is also mentioned that Zeequn Nafs) is a disease of Sue Mizaj Maddi caused by thick Phlegm (Ghaleez khilt or Balgham-e-ghaleez) adhering to the bronchial mucosa thus narrowing the lumen [8-11]. Some Unani scholars described its cause as Barid and Raqeeque khilt, Auram-e-Riya (inflammation of Lungs), Accumulation of large amount of Mawaad (morbid matter) in the chest, Baad-e-Ghaleez (Dense air) trapped within air passages [11]. Yaboosat (Dryness) of lungs, Insebab-e-Nazla Daima and Imtela of Akhlat in trachea and its branches [12].

According to conversation medicine It is caused by hypersensitive immune system may get trigger from airborne allergens like dust, pollen, molds, grass, hair, grains, lint, tobacco smoke, animal dander, etc., and may cause allergy and irritation into the throat, sometimes it is due to heredity, sometimes synthetic medication like non-steroidal medicines, aspirin, and many more also cause Asthma, or sometimes weather fluctuation, respiratory infection during childhood, and digestive disorders are other main reasons.

Alamat (Symptoms)

Cough: It can occur at night, during exercise, can be chronic, dry, with phlegm, mild, or severe.

Respiratory: Difficulty in breathing, wheezing, breathing through the mouth, fast breathing, frequent respiratory infections, rapid breathing, or shortness of breath at night and also common chest pressure, flare, anxiety, early awakening, fast heart rate or throat irritation.

Usoole Ilaj (Principal of treatment)

The principles of treatment of Zeequn Nafas include Tadeel-e-mizaj (correction of temperament), Tanqia-e-mawad (cleansing of viscous humour) which is achieved by using Mulattif (Demulcent), Muhallil (Resolvent), Dafa-e-Tashannuj, mufatteh, Munzij (Concoctive), Munaffis-e-Balgham (Expectorant) and Mukhrij-e-Balgham drugs. Sometimes Muqi (Emetics) are recommended for the evacuation of Balgham [7,10,12,13]. Zeequn Nafas occurs due to obstruction in the lung airways because of Auram and accumulation of excess Akhlat in the chest. It is evident from the studies that Unani formulation has a potent role on asthma.

In conventional system of medicine, the line of management for BA is mainly with Bronchodilators and Controllers. Though these drugs give rapid relief of symptoms mainly through relaxation of airway smooth muscle and inhibiting the underlying inflammatory process but they have systemic side effects including obesity, nausea, vomiting, gastric ulceration, osteoporosis, muscle tremors, tachycardia, palpitations, hoarseness, oral candidiasis, glaucoma, cataracts, etc.

Ilaj (Treatment) [7,10,12,13]

Unani medicine treats asthma by using a combination of dietary modifications, lifestyle changes, and herbal remedies. Here are some of the commonly used Unani medicines for asthma treatment.

Numerous single as well as compound drugs are available for the treatment of Zeequn Nafas like Zufa Khushk (*Hyssopus officinalis*), Tukhm Katan (*Linum usitatissimum.*), Irsa (*Iris ensata* Thunb.), Kurkum (*Curcuma longa* Linn.), Kalonji (*Nigella sativa* Linn.), Isbaghol (*Plantago ovata* Forsk.), Pudina (*Mentha arvensis* Linn.). Temperaments of all the drugs are Haar Yabis and possess munzij and Mukhrij-e-balgham, Munaffis, mulattif, Mufatteh Urooq-e-Khashna, Dafa-e-Tashannuj, muhallil-e-Auram and Muqi properties by which they make Phlegm much lighter and less viscous so that it gets eliminated from body easily. Evacuation of Morbid matter is carried out by purgation and Emesis (Mushil and Muqiyaat) [7,10,12,13].

		
<p>Zufa khushk</p>	<p>Tukhm Katan</p>	<p>Irsa</p>
		
<p>Kurkum</p>	<p>Kalonji</p>	<p>Isapghol</p>

Table

Several *in vitro* and *in vivo* pharmacological studies reported that the ingredients of Unani formulation possess antioxidant, antimicrobial, anti-inflammatory, antiasthmatic, antiallergic, immunomodulatory, muscle relaxant activities [17-27]. These pharmacological properties may be attributed to their chemical constituents: Cinnamic acid, Cinnamyl acetate, Cinnamyl alcohol, Cinnamaldehyde, Pinene, Linalool Eugenol and essential oils, Lignans, cyanogenic glycosides, phytic acid, trypsin inhibitor, linatine, mucilage, linamarin, linustatin, isopinocampnone, terpenic ketones, camphor, thuhujone, pinocampnone, camphene, pinocampheol etc [15,16,28].

Murakkabat (Compound formulations) [29-32]

Habbe Zeequn Nafs: It is a tablet prepared from the ingredients having munzij and mushil balgham properties. one tablet thrice a day with honey or luke warm water. have also been mentioned below. The key ingredients of Habbe Zeequn Nafs are Dhatura, Ginger, Rhubarb. These drug used to prevent symptoms of ashtma such as difficulty in breathing, wheezing, coughing, and congestion.

Habbe Hindi Zeeqi: It is used primarily in the management of respiratory tract disorders specifically in the control of Zeequn Nafas. Studies of ingredients showed antispasmodic, analgesic, anti-inflammatory, and antioxidant activities.

Lauq Katan: It is a type paste made by the ingredients having the action of muhallil, mukhrij balgham and tanqoye mawad. It is used orally 5 to 10 gm thrice a day, Lauq Rabvi 5 gm twice a day [29,30].

Majoon Rahulumomineen: It is also a type of paste madeup with the powder of multiple ingredients mixing with honey or sugar. The dosage of this compound formulations is 5 gm twice a day.

Sharbate Zufa Murrakab: This a syrup used 15 to 20 ml thrice a day to get relief from Asthma symptoms [31,32].

Habbe Suranjan: It is an Unani medicine that contains the extract of *Colchicum luteum*. It is used to reduce inflammation and provide relief from asthma symptoms [32].

Safoof Mughaliz: It is a powder made from a combination of herbs like Black pepper, Ginger, Dried ginger, Cloves, Cinnamon, and Caraway seeds. This powder helps in reducing the phlegm and provides relief from asthma symptoms [29,30].

Qurs Konch: It is a pill made from the extract of the herb *Butea monosperma*. It is used to reduce inflammation and provide relief from asthma symptoms [30,31].

Habbe Khubsul Hadeed: It is a combination of herbs like *Nigella sativa*, *Piper longum*, *Piper nigrum*, and *Ferula asafoetida*. It helps in reducing inflammation and provides relief from asthma symptoms [32].

These formulations having specific properties like Munzij-e-Balgham (concoctive) [14], Mulattif (demulcent) [14-16], Munaffis-e-Balgham (Expectorant) [14,15], Moharrik (Stimulant) [14,16], Muqi (Emetic), Muhallil (Resolvent) [14,15] which results in Tadeel-e-mizaj (correction of temperament) and Tanqia-e-mawad (cleansing of viscous humour). Pharmacological studies suggest that the ingredients of Unani formulation possess antioxidant, antimicrobial, antibacterial, anti-inflammatory, antiasthmatic, antiallergic, immunomodulatory and muscle relaxant properties [17-27] and are known to contain cinnamic acid, cinnamyl acetate, cinnamyl alcohol, cinnamaldehyde, pinene, P-cymene, linalool eugenol and essential oils, lignans, cyanogenic glycosides, phytic acid, trypsin inhibitor, linatine, minerals, vitamins, cadmium, mucilage, linamarin, linustatin, camphor, thujone, pinocampnone, camphene, pinocampheol, maltose, sucrose, isomaltose turanose [15,16,28].

In addition to using maintenance medications, taking steps each day to help make healthier and reduce risk for asthma attacks. These include:

- Eating a healthier diet: Eating a healthy, balanced diet can help improve overall health.
- Maintaining a moderate weight: Asthma tends to be worse in people with overweight and obesity. Losing weight is healthy for heart, joints and lungs.
- Quitting smoking: Irritants such as cigarette smoke can trigger asthma and increase risk for COPD.
- Exercising regularly: Activity can trigger an asthma attack, but regular exercise may actually help reduce the risk of breathing problems.
- Managing stress: Stress can be a trigger for asthma symptoms. Stress can also make stopping an asthma attack more difficult.
- Nutrient-rich foods: It is vital to helping reduce symptoms, but food allergies can trigger asthma symptoms.

Conclusion

The conventional system of medicine can control asthma symptoms but does not cure the condition, often requiring lifelong medication. Modern treatments typically involve bronchodilators and corticosteroids, which can have adverse effects on other organs. In contrast, Unani medicine offers safe and effective management for respiratory disorders such as Zeequn Nafas (bronchial asthma). The Unani system includes a range of single and compound drugs that are free from harmful chemicals, ensuring their safety and efficacy. These remedies have been practiced for centuries, highlighting their longstanding reliability in managing Zeequn nafs (Bronchial Asthma).

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