Available online through
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ISSN 2321 - 6328

Review Article

A REVIEW ON IRRITABLE BOWEL SYNDROME IN UNANI MEDICINE: CLASSICAL AND MODERN PERSPECTIVES

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Article Received on: 30/04/25 Accepted on: 29/05/25

DOI: 10.7897/2321-6328.132403

ABSTRACT

Unani medicine, an ancient Greco-Arabic system of healing, emphasizes the maintenance of humoral balance for overall health. Irritable Bowel Syndrome (IBS), a chronic gastrointestinal disorder primarily affecting the large intestine, is acknowledged in classical Unani texts under conditions resembling *Zalaq-ul-Ama*. Despite its prevalence, limited contemporary research addresses IBS from a Unani perspective. This review aims to explore the classical understanding of IBS in Unani medicine, examining its etiology, symptomatology, and management strategies while drawing parallels with modern medical knowledge. A detailed analysis of classical texts such as *Kitab Al-Hawi* and *Al-Qanun fi'l-Tibb* was conducted to interpret historical references to IBS-like symptoms. This was supplemented with modern scientific literature to identify shared concepts and evaluate the potential for integrated therapeutic approaches. According to Unani scholars, IBS results from an imbalance of bodily humors, particularly excess *Balgham* (phlegm) and *Safra* (bile). Core symptoms include abdominal pain, bloating, flatulence, constipation, diarrhea, and alternating bowel habits. Management in Unani practice centers on restoring humoral balance through personalized dietary modifications (*Ilaj bil Ghiza*), herbal formulations like Safoof Muqliyasa, Majoon Sangdana Murg, and Sharbat Belgiri, as well as detoxification regimens. This individualized and holistic treatment framework aligns with the current emphasis on personalized medicine. Integrating Unani principles with evidence-based approaches could enhance IBS management, though further clinical validation is required to substantiate these interventions and facilitate their inclusion in mainstream care.

Keywords: Unani medicine, *Zalaq-ul-Ama*, gastrointestinal disorders, humoral theory, herbal remedies, phlegm imbalance.

INTRODUCTION

Unani medicine is one of the oldest and most well-established traditional medical systems, deeply rooted in the teachings of Hippocrates (Buqrat) and further developed by scholars like Al-Razi and Avicenna (Ibn Sina)[1]. Based on the principles of humoral balance, Unani medicine emphasizes the role of natural healing and holistic treatment approaches[2]. It categorizes diseases based on their causes, symptoms, and effects on the body's temperament (*Mizaj*). Among the many conditions described in Unani literature, *Zalaq-ul-Ama* is a significant disorder of the gastrointestinal system that has been recognized for centuries[3]. *Zalaq-ul-Ama* is primarily associated with abnormalities in the digestive system, particularly the large intestine[4].

It is a long-term (chronic) condition that can cause a variety of uncomfortable symptoms, often affecting daily life[5]. It is characterized by symptoms including abdominal pain or cramping, bloating and gas, diarrhea, constipation, and sometimes alternating between diarrhea and constipation[6]. This condition is often linked to an imbalance in bodily humors, specifically an excess of phlegm (*Balgham*) and bile (*Safra*), which leads to irritation and dysfunction in the affected regions[7]. The term *Zalaq-ul-Ama* itself is derived from classical Unani terminology, where *Zalaq* denotes slipperiness or smoothness, and *Ama* refers to the intestine[8]. The Unani approach to treating *Zalaq-ul-Ama* is multifaceted, incorporating *Ilaj bil Ghiza* (dietary therapy), *Ilaj bil Dawa* (pharmacotherapy), *Ilaj bil Tadbeer* (regimental therapy), and *Ilaj bil Yad* (surgical or manual intervention)[9]. Polyherbal Unani formulations, including mucilaginous, demulcent, and anti-inflammatory herbs, are often prescribed to alleviate symptoms[10]. Some commonly used Unani remedies include Tukhm Kanocha, Tukhm Bartanh, Tukhm Raihan, Tukhm Isapgol, Mulethi, Belgiri, Gulnar, Mazoo, Inderjo Talkh, and Amla, which help in soothing the mucosal lining, reducing inflammation, and promoting natural healing.In addition, lifestyle modifications and dietary adjustments play a crucial role in managing the condition effectively[11-14]. Modern medical perspectives have started exploring the relevance of Unani concepts in understanding gastrointestinal disorders like Irritable Bowel Syndrome (IBS), which shares similarities with *Zalaq-ul-Ama*[3]. Scientific studies indicate that Unani therapies, particularly herbal interventions, offer potential benefits in treating mucosal irritation and promoting digestive health[15].

However, there remains a need for extensive clinical research to validate these traditional claims through modern pharmacological and clinical trials. This review aims to provide an in-depth analysis of *Zalaq-ul-Ama*, its etiology, symptoms, pathophysiology, and Unani treatment approaches, while also drawing comparisons with contemporary medical understandings. By exploring classical Unani texts, scientific literature, and recent research, this paper seeks to bridge the gap between ancient wisdom and modern medical advancements. Understanding the holistic principles of Unani medicine can help in integrating its beneficial aspects into mainstream healthcare for improved patient outcomes[16-18].

Causes of Zalaq-ul-Ama in Unani Medicine

Unani medicine is an ancient system of healing that emphasizes the balance of bodily humors (*Akhlat*), lifestyle management, and natural therapies[1]. *Zalaq-ul-Ama* is a pathological condition described in Unani literature, primarily associated with disturbances in the gastrointestinal system, particularly the large intestine[19]. This disorder is attributed to various Internal and external factors lead to excessive mucus and bilious secretion, indigestion, and other related symptoms such as abdominal pain or cramping, bloating and gas, diarrhea, constipation, and sometimes alternating between diarrhea and constipation[20]. The causes of *Zalaq-ul-Ama* can be broadly categorized into dietary factors, lifestyle influences, humoral imbalances, and underlying medical conditions[21].

Dietary Factors

One of the primary causes of *Zalaq-ul-Ama* is improper dietary habits. The Unani system classifies foods based on their temperament (*Mizaj*)—hot, cold, dry, and moist. Consuming excessive amounts of cold and moist foods (*Barid wa Ratb*) can lead to an overproduction of mucus in the stomach and intestines, or excessive bile production may enhance the peristaltic movement of the gastrointestinal tract, resulting in *Zalaq-ul-Ama*[22,23]. Some specific dietary causes include: Overconsumption of dairy products such as milk, yogurt, and cheese, which increase mucus production and inflammation. Fatty and greasy foods, which slow down digestion and contribute to stagnation in the gastrointestinal tract or alter bilious metabolism. Excessive intake of refined carbohydrates and sugar, which promotes phlegm accumulation. Cold and heavy foods, which hinder digestion and weaken gastric fire (*Hararat-e-Ghariziya*). Lack of fibrous foods, leading to improper bowel movements and mucus retention.

Lifestyle and Behavioral Factors

A sedentary lifestyle is another major contributor to *Zalaq-ul-Ama*. In Unani medicine, movement and physical activity are essential for maintaining digestive health[24], as they are a key part of *Asbab-e-Sitta Zarooriya*[25]. The following factors can lead to the condition: Lack of physical activity, which slows down metabolism and digestive efficiency. Irregular eating habits, such as skipping meals or excessive eating at odd hours. Stress and anxiety, which affect the digestive process and contribute to excessive mucus production. Insufficient hydration, which thickens the mucus and affects its normal expulsion. Sleep disturbances, particularly sleeping immediately after meals, leading to improper digestion.

Humoral Imbalance

According to Unani medicine, the human body functions based on the balance of four humors (Akhlat): blood (Dam), phlegm (Balgham), yellow bile (Safra), and black bile (Sauda). *Zalaq-ul-Ama* is primarily linked to an excess of *Balgham* (phlegm) and *Safra* (bile), which causes excessive mucus secretion and increases the peristaltic movement in the digestive tract[26]. The imbalance may be due to: Weak digestive power (*Quwat-e-Hazima*), leading to improper breakdown of food. Cold and moist temperament (*Mizaj Barid wa Ratb*), which promotes mucus accumulation. Retention of undigested food, which ferments and increases phlegm production. Sluggish liver function, affecting digestive metabolism and increasing phlegm.

Underlying Medical Conditions

Certain chronic diseases and medical conditions can also contribute to the development of *Zalaq-ul-Ama*: Chronic indigestion (*Zo'f-e-Hazm*), leading to excessive mucus formation. Gastric ulcers, which trigger excessive secretion of mucus as a protective mechanism. Inflammatory bowel conditions, which cause excessive phlegm and irritation. Respiratory disorders such as chronic bronchitis or sinusitis may lead to the swallowing of mucus from the respiratory tract, which can interfere with normal digestion. Liver and gallbladder dysfunctions affect digestive secretions[27].

Other Causes

The exact cause of IBS isn't fully understood, but several contributing factors have been identified: Abnormal muscle contractions in the intestine – These contractions may be stronger or weaker than normal, affecting the movement of food and waste. Increased sensitivity of the gut (*Visceral Hypersensitivity*) – This heightened sensitivity can cause greater pain or discomfort in response to normal digestive processes.

Gut-Brain Connection Issues – Disruptions in communication between the brain and digestive system may lead to changes in bowel habits or increased sensitivity.

Infections – Episodes of gastroenteritis and other gut infections can trigger or worsen IBS symptoms.

Stress and Mental Health Factors – Psychological conditions like anxiety or depression can significantly influence IBS symptoms.

Changes in Gut Bacteria – Alterations in the gut microbiota have been linked to IBS in some individuals[28].

Common Symptoms Of Irritable Bowel Syndrome (IBS) - Irritable Bowel Syndrome (IBS) is a functional gastrointestinal disorder characterized by a range of chronic and recurrent symptoms that affect the digestive tract[29]. Symptoms can differ greatly among individuals and may fluctuate over time[30]. Several factors—such as diet, stress, hormonal fluctuations (e.g., menstruation), and infections—can influence symptom severity[31].

Abdominal Pain and Cramping - Recurring abdominal pain is a hallmark symptom of IBS. It often improves after a bowel movement and may worsen following meals. This pain is commonly described as cramping, aching, or sharp and is typically felt in the lower abdomen[32].

Altered Bowel Habits - IBS frequently involves changes in bowel patterns. These may include diarrhea (IBS-D), constipation (IBS-C), or alternating between the two (IBS-M). The frequency and urgency of bowel movements are often inconsistent[33].

Bloating and Excessive Gas - Abdominal bloating is one of the most prevalent and distressing symptoms of IBS. Many individuals experience increased gas production, which contributes to a sensation of fullness, pressure, and visible distention of the abdomen[34].

Mucus in Stool - The appearance of clear or whitish mucus in the stool is commonly observed in individuals with IBS. Although mucus is naturally present in the intestines, its visibility in the stool is more noticeable during IBS flare-ups[35].

Urgency and Incomplete Evacuation - People with IBS often report a sudden, strong need to defecate, sometimes leading to anxiety when access to a restroom is limited. Additionally, many experience a sensation of incomplete evacuation, even after a bowel movement[36].

Changes in Stool Consistency and Shape - IBS frequently causes variations in stool appearance. Stools may range from small, hard pellets to loose, watery diarrhea. These changes can

fluctuate throughout the day and are often associated with episodes of pain[37].

Nausea - Some individuals with IBS experience mild to moderate nausea, particularly after meals or during periods of severe abdominal discomfort[38].

Fatigue - Persistent tiredness and low energy levels are commonly reported among individuals with IBS. This fatigue may be related to the physical stress of chronic symptoms and the impact of disrupted sleep due to nocturnal discomfort[39].

Backache - A dull, aching pain in the lower back is sometimes reported alongside abdominal symptoms. While the exact cause of back pain in IBS is not fully understood, it may be linked to referred pain from abdominal muscle tension or nerve sensitivity[40].

Urinary Symptoms - Bladder discomfort, frequent urination, and a feeling of incomplete bladder emptying can occur in some individuals with IBS. This overlap of urinary and digestive symptoms is believed to be due to shared nerve pathways between the bladder and bowel [41].

Sexual Dysfunction - Some individuals with IBS, particularly those experiencing significant pelvic pain or bloating, report discomfort during sexual activity or a reduced desire for intimacy[42].

Psychological Symptoms - Anxiety, depression, and mood disturbances are common among those with IBS. The stress of managing chronic symptoms can impact mental well-being, and emotional stress itself can exacerbate gastrointestinal symptoms, creating a cyclical effect[43].

Diagnosis

In Unani medicine, the diagnosis of *Zalaq-ul-Ama* relies on clinical evaluation through Nabz (pulse), Baul (urine), and Baraz (stool) examination. Nabz assessment helps determine humoral imbalances, particularly excessive *Balgham* (phlegm) and *Safra* (yellow bile), which contribute to intestinal irritation[44].

Baul analysis reveals changes in urine color, consistency, and sediment, indicating digestive disturbances. Baraz examination plays a crucial role in diagnosing *Zalaq-ul-Ama*, assessing stool consistency, mucus presence, and frequency, which reflect intestinal inflammation and excessive secretion[45].

These diagnostic parameters help Unani physicians identify underlying humoral imbalances and guide treatment approaches for restoring digestive health. Other than Nabz, Baul, and Baraz, **Ajnas-e-Ashra** is also considered for a more comprehensive evaluation[46].

Table 1: Nabz, Baul, and Baraz for diagnosis

Diagnostic Parameter	Description	Clinical Indications in Zalaq-Ul-Ama
Nabz (Pulse Examination)	Assessment of pulse to determine the temperament and underlying pathology	Pulse may be rapid (Saree'), soft (Layyin), and weak (Za'eef), indicating digestive weakness and excessive mucus production
Baul (Urine Examination)	Analysis of urine color, consistency, and sediment	Urine may appear turbid or thick due to excessive phlegm (Balgham) and may lack normal clarity
Baraz (Stool Examination)	Evaluation of stool consistency, color, and frequency	Stool may be loose, slimy, or contain excessive mucus, often accompanied by undigested food particles, indicating gastrointestinal imbalance

Table 2: Ajnas-e-Ashra (Ten Categories of Diagnosis)

Ajnas-e-Ashra (Ten Categories of Diagnosis)	Diagnostic Features of Zalaq-Ul-Ama
Mizaj (Temperament)	Predominantly Balghami (Phlegmatic) or Saudawi (Melancholic) imbalance
Madda (Pathological Material)	Presence of abnormal or excessive Balgham (Phlegm) and mixed Sauda (Black bile) in the affected area
Kaifiyat (Quality of Disease)	Viscous, slippery, and thick consistency of secretions leading to obstruction and irritation
Adad (Number of Affected Areas)	Can affect multiple sites, primarily the gastrointestinal tract, leading to discomfort
Kammiyat (Quantity of Disease Factors)	Excessive accumulation of phlegm and altered humors contributing to symptoms
Kaifiyat Ittisal (Mode of Affliction)	Continuous or intermittent disturbance due to faulty digestion and accumulation of morbid matter
Makaan (Site of Disease)	Mostly affects the stomach and intestines, causing indigestion, heaviness, and discomfort
Wajh-e-Ikhtisas (Specific Characteristics)	Sticky and slippery consistency of morbid matter, leading to difficulty in elimination
Zaman (Time of Occurrence)	More common during cold and humid seasons, especially in individuals with a phlegmatic temperament
Awariz (Complications)	Can lead to chronic indigestion, flatulence, bloating, and obstruction in the digestive system

Usool-E-Ilaj (Principles Of Treatment)

Unani medicine is based on the holistic approach of balancing bodily humors (*Akhlat*) and restoring health through natural therapies[47]. The treatment principles (*Usool-e-Ilaj*) for *Zalaq-ul-Ama*, a condition primarily affecting the gastrointestinal system, aim to correct humoral imbalance, strengthen digestion, and prevent excessive secretion of mucus or inflammatory substances[48]. The management strategy includes Tadbeer (Regimenal Therapy), Ilaj bil Ghiza (Dietotherapy), Ilaj bil Dawa (Pharmacotherapy), and Ilaj bil Yad (Surgical or Manual Therapy – rarely used).

Izala-e-Sabab (Elimination of Cause)

The first step in treating *Zalaq-ul-Ama* is identifying and removing the underlying cause. Common causes include an imbalance of *Balgham* (phlegm) and *Safra* (yellow bile), excessive intake of moist and cold foods, and weak digestive power (*Quwwat-e-Hazimah*), or foods which produce irritant material that enhance peristaltic movement[1,2,49]. The physician advises dietary and lifestyle modifications to eliminate the causative factors.

Ta'deel-e-Mizaj (Correction of Temperament)
Since *Zalaq-ul-Ama* is associated with abnormal humoral dominance, treatment focuses on restoring the temperament (*Mizaj*) of the digestive tract[50]. If excess *Balgham* is present, warm and dry foods are recommended. In the case of *Safrawi* dominance, cooling and soothing remedies are used—for example, Khatmi, Khubazi, Chahar Tukhm, etc.

Tanqiya-e-Midah wa Ama'a (Evacuation of Morbid Substances)
Unani physicians emphasize the removal of excess mucus and morbid substances from the gastrointestinal tract. This is achieved through:

Munzij wa Mushil Therapy (Concoctive and Purgative Therapy) – *Munzij* (concoctive drugs) help in liquefying thick mucus, which is then expelled through *Mushil* (purgative drugs). Herbs like Ispaghol (Psyllium husk), Senna (*Sana Makki*), and Turbud (*Operculina turpethum*) are commonly used, based on the patient's health condition and after identifying the *mizaj*[51].

Qai (Emesis Therapy) – In cases where excessive mucus is lodged in the upper digestive tract, mild emetics such as honey, salt, mustard, and warm water are used to induce vomiting and clear phlegm accumulation[52].

Hammam (Bath Therapy) and Riyazat (Exercise) – These regimens help in enhancing metabolism, reducing excessive moisture, and improving digestion[53, 54].

Quwat-e-Hazima Ki Islah (Strengthening Digestive Power)
Since weak digestion (*Zoafe Huzoome Arba*) contributes to excessive mucus secretion, Unani medicine emphasizes Muqawwi-e-Midah (stomach tonics) like Zanjabeel (Ginger), Saunf (Fennel), Amla (Indian gooseberry), and Ajwain (Carom seeds) to enhance gastric function. Digestive stimulants such as Habb-e-Papita, Habb-e-Halteet, Majoon Dabidul Ward, Habbe Kabid Naushadri, Jawarish Bisbasa, Jawarish Jalinus, Jawarish Kamuni Kabir, and Jawarish Zanjbeel are also used[54, 55, 56].

Ilaj bil Ghiza (Dietotherapy)
Dietary modifications play a crucial role in managing *Zalaq-ul-Ama*. Patients are advised to consume easily digestible, warm, and dry foods, including: Barley soup (good for digestion).Honey and lemon water (reduces excess mucus). Light, non-greasy meals to prevent further irritation, Cold, damp, and mucus-forming foods like dairy, bananas, and heavy meats are restricted[54].

Ilaj bil Dawa (Pharmacotherapy)
Unani medicines with Mufarreh (carminative), Qabiz (astringent), and Muzliq (demulcent) properties are prescribed.
Ispaghol (Psyllium husk) – Forms a soothing gel in the intestines and is used during episodes
of intestinal irritation.
Safoof-e-Satt-e-Gilo – Strengthens digestion and reduces inflammation, particularly useful during states of digestive weakness.
Roghan-e-Zaitoon (Olive oil) – Helps facilitate smooth bowel movements, especially when constipation persists[55].
Tadeel-e-Baroodat (Regulation of Cold Humors)
Since *Zalaq-ul-Ama* is often associated with *Barid Mizaj* (cold temperament), warm and dry therapies such as Hammam (warm baths), Dalk (massage), and the application of Roghan-e-Kunjad (sesame oil) are utilized to balance cold humors[56].

Ilaj (Treatment)
These medicinal sources act synergistically in Unani medicine to manage *Zalaq-ul-Ama*, primarily by reducing inflammation, regulating mucus secretion, strengthening the intestinal mucosa, and supporting digestive health[10-14].

Common Name	Botanical Name	Family	Parts Used	Mechanism of Action
Amla	*Emblica officinalis*	Phyllanthaceae	Fruit	Acts as a digestive tonic, anti-inflammatory, and mucosal protective agent.
Halela Siyah	*Terminalia chebula*	Combretaceae	Fruit	Astringent, gut-healing, improves intestinal tone and reduces excess mucus secretion.
Bel	*Aegle marmelos*	Rutaceae	Fruit, Root Bark	Anti-diarrheal, astringent, and antimicrobial properties to strengthen the gut lining.
Mazoo	*Quercus infectoria*	Fagaceae	Galls	Astringent, anti-inflammatory, and helps in tightening intestinal mucosa.
Inderjo Talkh	*Holarrhena antidysenterica*	Apocynaceae	Seeds, Bark	Antidiarrheal, antimicrobial, and gut-protective effects.
Mastagi	*Pistacia lentiscus*	Anacardiaceae	Resin	Carminative, mucoprotective, and anti-inflammatory properties.
Zeera Siyah	*Carum carvi*	Apiaceae	Seeds	Carminative, digestive stimulant, and gut-calming effects.
Tukhm Gandana	*Allium porrum*	Amaryllidaceae	Seeds	Anti-inflammatory, demulcent, and gut protective.
Tukhm Alsi	*Linum usitatissimum*	Linaceae	Seeds	Rich in mucilage, soothing and protective for gut mucosa.
Tukhm Tarah Tezak	*Lepidium sativum*	*Brassicaceae*	Seeds	Anti-inflammatory, demulcent, and helps in regulating bowel movement.

Famous Unani Formulations For Zalaq-Ul-Ama
Several Unani formulations are commonly prescribed in clinical practice for the management of *Zalaq-ul-Ama* due to their astringent, anti-inflammatory, gut-strengthening, and mucoprotective properties[57]. These include Safoof Muqliyasa, Safoof Chutki, Majoon Sangdana Murg, Majoon Suparipak, Majoon Dabidul Ward, Sharbat Belgiri, Sharbat Habbul Aas, Sharbat Anjabar, Qurs Koharba, Qurs Gulnar, Qurs Tabasheer, Qurs Malti Basant, Habbe Pech, Habbe Nazla, etc.These formulations help regulate bowel movements, reduce excessive mucus secretion, and restore intestinal balance, making them effective in Unani treatment for *Zalaq-ul-Ama*[54,55, 56, 58].

CONCLUSION

The Unani concept of *Zalaq-ul-Ama* offers a profound understanding of gastrointestinal health, rooted in the principles of humoral balance and holistic healing. This condition is characterized by excessive mucus secretion affecting the lower gastrointestinal tract and is primarily attributed to an overabundance of *Balgham* (phlegm) or *Safra* (bile). Classical Unani scholars provided detailed descriptions of its symptoms, which include abdominal pain, bloating, altered bowel habits (diarrhea, constipation, or both), excessive gas, mucus in the stool, urgency, incomplete evacuation, nausea, fatigue, backache, urinary discomfort, and psychological symptoms such as anxiety

and depression. Alongside comprehensive symptomatology, effective management strategies were also proposed. These treatments emphasize the importance of dietary regulation (*Ilaj bil Ghiza*) and the use of polyherbal formulations (*Ilaj bil Dawa*), such as Safoof Muqliyasa, Majoon Sangdana Murg, and Sharbat Belgiri, aimed at restoring humoral balance and improving gastrointestinal function. The integration of these time-tested approaches with modern medical research highlights potential parallels between *Zalaq-ul-Ama* and contemporary gastrointestinal disorders like IBS and mucus hypersecretion. This alignment suggests a valuable opportunity for deeper clinical investigations into the efficacy of Unani treatments in managing such conditions. Ultimately, combining traditional knowledge with evidence-based research may not only validate Unani therapies but also expand therapeutic options for patients suffering from chronic gastrointestinal diseases. Further scientific studies are essential to establish the broader clinical relevance and safety of these classical interventions.

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Cite this article as:

Razia Sultana, Md. Najibur Rahman, Md. Shamim Akram and Md. Tanwir Alam. A Review on Irritable Bowel Syndrome in Unani medicine: Classical and modern perspectives. J Biol Sci Opin 2025;13(2): 16-21.
http://dx.doi.org/10.7897/2321-6328.132403

Source of support: Nil; Conflict of interest: None Declared