

Hypertension in Unani Medicine: A Comprehensive Review of *Daghṭ Al Dam Qawī* (Hypertension) and Its Therapeutic Approaches

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DOI: <https://doi.org/10.51584/IJRIAS.2025.100700048>

Received: 11 July 2025; Accepted: 19 July 2025; Published: 06 August 2025

BACKGROUND

Hypertension, a leading contributor to global mortality and morbidity, presents a significant public health challenge, particularly in low- and middle-income countries. While conventional medicine defines it by persistently elevated systolic and diastolic pressure, classical Unani texts correlate it with the concept of *Imtila* (congestion) and *Sue-Mizaj Damvi* (altered sanguineous temperament).

Objective:

To explore the etiopathogenesis, clinical manifestations, and management of hypertension (*Daghṭ al Dam Qawī*) within the framework of Unani medicine, drawing parallels between traditional theories and contemporary biomedical understanding.

Methods:

This study conducted a critical review of classical Unani manuscripts alongside modern clinical literature. Comparative analysis was employed to align traditional etiological constructs like *Muhtariq Sauda* (Combusted Black Bile) and *Salabat-e-Sharaayeen* (Hardening of Arteries) with modern pathology of arteriosclerosis and vascular stiffness.

Results:

Hypertension in Unani medicine is primarily interpreted as an outcome of *Imtila*, resulting from poor lifestyle choices, improper digestion, and accumulation of morbid matter (*fasid maddah*). Management is stratified across four therapeutic modalities:

- *Ilaj bil-Ghiza* (dietotherapy)
- *Ilaj-bit-Tadbeer* (regimenal therapy)
- *Ilaj-bil-Dawa* (pharmacotherapy)
- *Ilaj-bil-Yad* (surgical methods)

These encompass interventions such as Venesection (*Fasd*), Cupping (*Hijamah*), tailored diets, exercise (*Riyazat*), Massage (*Dalak*), and Steam Baths (*Hammam*), aligned with the principles of *Asbab-E-Sitta Zarooriya* (Six essential causes of health).

Conclusion:

Unani medicine offers a holistic and historically rooted approach to understanding and managing hypertension. Its conceptualization of vascular congestion and temperament imbalance complements modern views on blood

pressure dysregulation. Thus, the review provides a deep understanding of the *Unani Concept* of the dreadful disease, *Dagħt al Dam Qawī* (Hypertension), and its effective management.

INTRODUCTION

Hypertension is the condition in which there is persistent, raised pressure in the blood vessels. When the Heart pumps blood, the force exerted by this blood pushes the walls of the blood vessels (specifically, the arteries), and creates blood pressure. The heart pumps blood into the vessels, every time it pumps. The increase in this pressure, in turn, makes the Heart pump Harder¹. Hypertension may increase the susceptibility to develop any heart, kidney or brain disorders and is been accused for being the top-most cause for premature deaths worldwide, with about 1 in 5 women and about 1 in 4 men, in a billion count, with this disease. The developing countries specifically, the middle/ low-income countries tend to have increased risk factors thereby contributing to their increased disease burden in the recent days.¹ Hypertension is a medical condition characterized by persistently elevated blood pressure in the blood vessels². Clinically, it is defined as the level of blood pressure at which the pressure does not reduce unless an intervention is provided, thereby reducing the risk of mortality and morbidity³.

A person is said to be Hypertensive when his/her mean systolic blood pressure is greater than or equal to 140mm Hg and/or mean diastolic blood pressure greater than or equal to 90mm Hg on two or more occasions, and who are not on anti-hypertensive medication. Though there is a reduced cardiovascular risk with a blood pressure of 120/80 mmHg, and this being the optimal blood pressure, 130/85mmHg is still considered to be normal⁴. Hypertension increases the susceptibility in its patients, towards the mortality caused by CHDs.⁵ The Framingham Heart Study of 1961 identified hypertension and hypercholesterolemia as risk factors for coronary heart disease. Although atherosclerosis was first linked to cholesterol in 1950⁶ Chronic cases of Hypertension who aren't on medications, may prognose to serious cardiac ailments like cardiac failure, cardiomegaly, etc., and may even become prone to develop renal failure, aneurysms, stroke, , blindness etc.⁷

Around 2600 BC, Huang Ti, the Chinese Yellow Emperor, made the first known discoveries about hypertension. He observed a correlation between changes in pulse rate and salt intake, and he considered an excessive intake of salt to be dangerous. "The pulse hardens if too much salt is used in food," he said.⁸

Unani System of Medicine (USM) encloses Hypertension under the Broad Term -*Imtila*. The recent terminology for Hypertension is given as *Dagħt al Dam Qawī* in the WHO's Standard Unani Terminology Book, and is defined as a condition with a constant high arterial blood pressure, but it is correlated⁸ with the concept of *Imtila* (Congestion), which is described as an excess in *humours* (body fluids), especially blood in different parts of the body⁹, whose clinical manifestations mimic those of Hypertension, and its atmost cause is traced to be *Sue-Mizaj Damvi* (Altered Sanguineous Temperament).¹⁰ This *sue mizaj*, leads to weakness in arteries, which in turn leads to restricted contractions and relaxations of vessels , becoming a major cause of Hypertension, as it brings excess accumulation of morbid humors in vessels.

The literal meaning of *Imtila* is excess accumulation of *maddha*(humours/ body fluids). The clinical manifestations of this type of imtila are distended and prominent blood vessels, warmth *malmas*(Haar Malmas), a feel of fullness/heaviness in the body, enlargement of the body and general erythema. *Zakariya Razi* clearly describes how increased blood volume leads to increased vascular pressure. He also added that complications of this condition lead to hemorrhage and sudden death.^{11,12,13,14,15}

The philosophical view that disease was caused by plethora, which is an excess in the quantity of blood, formed in the body as a result of undigested foods that have the tendency to become morbid, was given by *Erasistratus*. He also added that this quantitative excess of blood, exerted or transformed its pressure and damaged the arteries. This in turn caused spillage of blood into arteries and therefore, the pneuma carried through the arteries were blocked.¹⁶ Apart from this *sue mizaj damvi*, weakness of arteries causing difficulty in contractions and relaxations of vessels is also a prominent cause of Hypertension explained in Unani as it leads to accumulation of abnormal humors in the vessels. The humour *Sauda*(black bile) which has undergone *ihтираq* (burning/combustion) , and has the quality of *dryness*(*yaboosat*) in it, creates stiffness (*salabath*) *Muhatriqa Sauda* (burnt melanin) which has dryness (*yaboosat*) in it causes stiffness (*salabat*) in vessels which in turn makes the vessel difficult to contract and relax. People with the temperament of Hotness and Dryness (*haar*

yabis mizaj), tend to exert these same effects in anxiety, tension and anger etc, which will in turn lead to *Imtila* or *Daght al Dam Qawī*.^{17,18}

Persistently increased blood pressure in the vessels prognose to a silent cardiovascular risk, whose prevalence is still on the increasing side. Globally, an approximate of 62% of strokes and 49% of cases of CHD are attributable to suboptimal (>115mmHg systolic) blood pressure, and this factor thought to account for more than 7 million deaths annually. Although, the increased systolic blood pressure more than 140mmHg is termed Hypertension, studies and associates have discovered that 59% of CHD burden that is attributed has occurred in people, with a systolic blood pressure less than 145mmHg. Hypertension, being a major public health challenge, becomes the leading risk factor of cardiovascular disorder, with a statistical data of about 20-50% of all deaths, especially in developing countries, like India, where we find socio-economic and epidemiological transitions.¹⁹

WHO states that an estimation of about 1.28 billion adults between the age of 30years-79 years possess the disease, out of which the maximum part i.e., two of three live in low and middle income countries. It also states that 46% of the adults are not aware and diagnosed that they have the condition, as well, only less than half of the adults (42%) are diagnosed and treated for the same. It is also to be noted, that, 1 in 5 adults, (21%), with the condition, have their blood pressure under control. Hypertension stands as a monster in becoming the major cause of premature deaths worldwide. WHO has set a goal, as one of its global targets for non-communicable diseases, to minimize the prevalence of Hypertension by 33% before 2030.²⁰ The age-standardized prevalence of hypertension nationally was 28.1% (95% CI, 27.9%-28.3%) and was higher in urban areas (32.6% [95% CI, 32.2%-33.0%]) relative to rural areas (25.9% [95% CI, 25.7%-26.1%]).²¹

Etiopathogenesis:

The pathophysiology of hypertension, according to the Unani medical system, may be caused by an excess of *Fasid maddha* (morbid matter) that has accumulated in the body's various parts, particularly the blood vessels. The actual cause of this condition is a variety of factors, including prolonged hamam (steam bath), physical inactivity, excessive food intake, excessive alcohol abuse, etc.²² *Imtila* is actually caused by excessive food intake, alcohol consumption, and avoidance of exercise, as well as by physical inactivity, rest, and laziness toward physical tasks, according to Abbas Majoosi, a great Unani scholar and physician. These behaviors result in an excess of *fuzool madha* (metabolic waste products) in the body. Additionally, he notes that *Imtila* is more common among lean individuals and explains that this is because, in comparison to their rate of absorption, lean-built individuals have a very low rate of resolution (*tahleel*) of *fuzool maddha*.²³ Majoosi further adds that the excess accumulation of *fasid Maddha* (morbid Matter) leads to *Sue-Mizaj* (altered Temperament) of blood vessels/ weakness of blood vessels, because of which, their normal contraction and relaxation gets affected, which in turn, ultimately leads to the state of *Imtila*. As well, Majoosi Also mentions one more cause here as *Muhtariq Sauda* (Combusted/burnt black bile), which causes *Salabat* (Stiffness) in the blood vessels, through an increase in the Quality of *Yaboosat* (dryness), obtain through the *Ihtiraq* (combustion/Burning) of *Sauda*. Ibn Sina claims that, throughout digestion,

some superfluity is always left behind and is attempted to be removed by *tabiat* (*physis*). However, the physical evacuation that *physis* achieves is not complete. Therefore, there must always be superfluity left behind after digestion. A significant amount is accumulated as a result of this procedure, which is repeated and continued. *Imtila* is the outcome of this rise in abundance.²⁴

Dryness is the cause of *salabat* (sclerosis) in the *nabz*, which is associated with *nabz sulb* (hardness in pulse), as dryness removes fluid, which promotes artery enlargement. This is observed in arteriosclerosis and aging. The wall's flexibility is reduced during this pulse, which ultimately causes the peripheral resistance to rise and results in hypertension.

Yaboosat results from the conversion of all substances into *Muhtariqe Sauda* and putrefied *Sauda*. According to Raban Tabri, a vessel's *Mizaj* is *Ratab* when it is in normal condition. In hypertension, the initial *Mizaj* of the vessels changes from *Ratab* to *Yabis* and *Yaboosat*; as a result, the vessels develop *Su'e Mizaj Yabis*, or the disease hypertension.

Imtila can have both inherent and extrinsic factors.

External factors:²⁵

1. When the body receives more moisture from food than it needs, matter accumulates and interferes with the function of enzymes.
2. Regularly taking baths, particularly after meals.
3. Insufficient exercise.
4. Insufficient evacuation.
5. Odd eating patterns.

The aforementioned elements hinder the body's ability to properly metabolize its materials.

Internal factors:²⁵

1. Inadequate digestion results in incorrect dietary use.
2. Poor impulsive control.
3. A strong capacity for retention, allowing humors to stay in the body for extended periods.
4. The excretory ducts becoming smaller.

The elements listed above cause the body to accumulate too much matter, or *Imtila*.

Ibn Rushd in *Kitab ul Kulliyat* described *Imtila* by *hasbul auiyya* as a state in which the body experiences tension (*Tamaddud*) due to an increase in blood volume.²⁶

Imtila bahasbul auiyya is the term used by Rhazes to describe the state that occurs in blood vessels when there is an elevated amount of pneuma (*rooh*) and Humour (*Akhlat*). Tension and gas are produced by the increased volume of blood in the blood vessel lumen.²⁷

According to *Majoosi*, it is the accumulation of superfluous substances in pulsing or stagnant vessels that exceeds their capacity. This causes tension (*Tanav*) and *tamadud* in the lumen of the vessels, which causes them to distend by filling them with too much blood and pneuma (*rooh*).²⁸ *Imtila-ba-hasbul auiya* can be defined as anything that raises both cardiac output and venous return. The rise in cardiac output, or venous return, is the opposite of *Imtila-ba-hasbul auiya* in Unani and modern medicine.²⁹ Ibn-e-Abbas stated that the pressure tension of *Bukhara-e-dukhania* (CO₂) in the blood is the reason why the *qiwwam ud dam* (viscosity of blood) of venous blood is higher than that of arterial blood. *Daght al Dam Qawī* (hypertension) and *Imtila* (congestion) can be divided into two varieties under the heading of *Imtila* in the Unani medical system because they are deemed equal based on clinical criteria. The first is "*Imtila ba hasbul auiya*," in which blood pressure rises as a result of an increase in blood volume. "*Imtila ba Hasbul Quwa*" is the second, and it has an excessive amount of disturbed humors, both in terms of quantity and quality.^{30,31}

According to Unani medicine, *Imtila*'s clinical signs and symptoms include headache, ocular congestion, facial puffiness, lethargy, flushing, restlessness, and epistaxis, among other things.^{32,33} Severe immaturity might result in bleeding, apoplexy, or even unexpected death.³⁴

- Abnormal Excess in Quantity of Humours
- *Imtila-ba-hasbul Auiya*
- *Imtila-ba-hasbul Auiya*

Classification: Table 1

CATEGORY	SYSTOLIC PRESSURE, mm Hg	DIASTOLIC PRESSURE, mm Hg
Optimal	<120	<80
Normal	<130	<85
High normal	130-139	85-89
Hypertension		
Stage 1(mild)	140-159	90-99
Stage 2 (moderate)	160-179	100-109
Stage 3 (severe)	≥180	≥110
Isolated systolic hypertension	≥140	<90

Mild, moderate, and severe hypertension are the classifications used by the British Hypertension Society.

- **Mild hypertension** is defined as having a systolic blood pressure between 140–159 mm Hg and a diastolic blood pressure between 90–99 mm Hg.
- **Moderate hypertension** is defined as having a systolic blood pressure of 160–179 mm Hg and a diastolic blood pressure of 100–109 mm Hg.
- **Severe hypertension** is defined as having a systolic blood pressure of 180 mm Hg or higher and a diastolic blood pressure of 110 mm Hg or higher.

Guideline Similarities	2017 ACC/AHA	2023 ESH
Accurate Blood Pressure Measurement	Office-based BP measurements and use of validated, cuffed devices and home/ambulatory BP monitoring are recommended prior to diagnosing hypertension.	
Cardiovascular Risk Calculator for Treatment Thresholds	Pooled Cohort Equation and SCORE2/SCORE2-OP provide estimates for 10-year risk of fatal and non-fatal cardiovascular events and should be used to guide treatment decisions.	
Initial Pharmacotherapy Recommendations	Initial therapeutic choices include ACE inhibitors, angiotensin-receptor blockers, thiazide or thiazide-like diuretics, and calcium channel blockers. Single pill combination therapy is a first-line strategy for many patients.	
Guideline Differences	2017 ACC/AHA	2023 ESH
Hypertension Definition	≥ 130/80	≥ 140/90
Normal BP Ranges (mmHg)	Normal: < 120/80 Elevated: 120-129/<80	Optimal: < 120/80 Normal: 120-129/80-84 High-Normal: 130-139/85-89
Hypertensive BP Ranges (mmHg)	Hypertension Stage 1: 130-139/80-89 Hypertension Stage 2: ≥ 140/90	Hypertension Grade 1: 140-159/90-99 Hypertension Grade 2: 160-179/100-109 Hypertension Grade 3: ≥ 180/110
BP Targets for Treatment		
18 – 64 years (mmHg)	< 130/80	< 130/80
65-79 years (mmHg)	< 130/80	< 140/80*
≥ 80 years (mmHg)	< 130/80	140-150/<80
Pharmacotherapy	Initial therapy with beta-blockers reserved for specific conditions including ischemic heart disease or heart failure	Beta blockers included as first-line therapy for hypertension.

* Target < 130/80 if tolerated

Table 2: Similarities and Differences Between ACC/AHA and ESH Guidelines on Hypertension.

Courtesy of Vemu PL, Yang E, Ebinger J. ACC = American College of Cardiology; ACE = angiotensin-converting enzyme; AHA = American Heart Association; BP = blood pressure; ESH = European Society of

Hypertension; SCORE2 = Systematic Coronary Risk Evaluation 2; SCORE2-OP = Systematic Coronary Risk Evaluation 2–Older Persons.

The two main kinds of hypertension identified by contemporary medical science are primary (essential) and secondary. Only 5–10% of instances of hypertension are secondary, whereas 90–95% of cases are primary.

In addition to genetics and other unchangeable factors, a poor lifestyle—which includes the most frequently linked modifiable factors like obesity, physical inactivity or sedentary lifestyle, unhealthy eating habits, particularly excessive salt intake, smoking, alcohol consumption, etc.—is the main predisposing or etiological factor for primary hypertension.

Secondary hypertension's etiology is derived from its correlation with other illnesses, such as endocrine disorders and chronic renal disease.^{35,36}

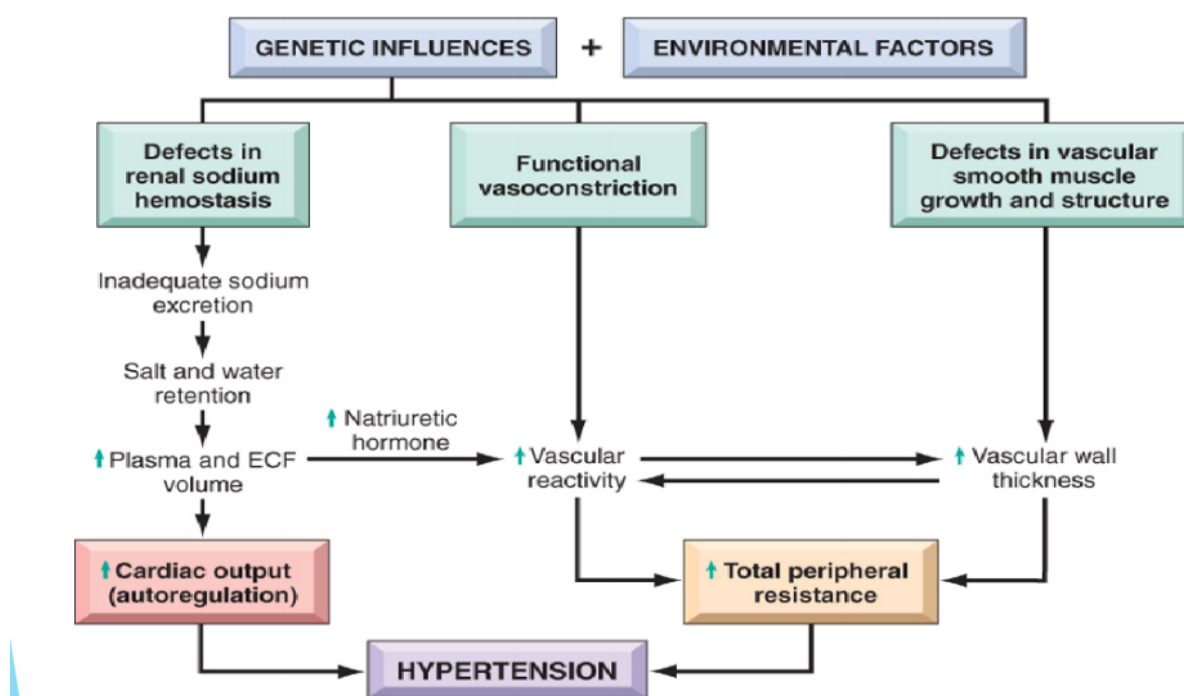


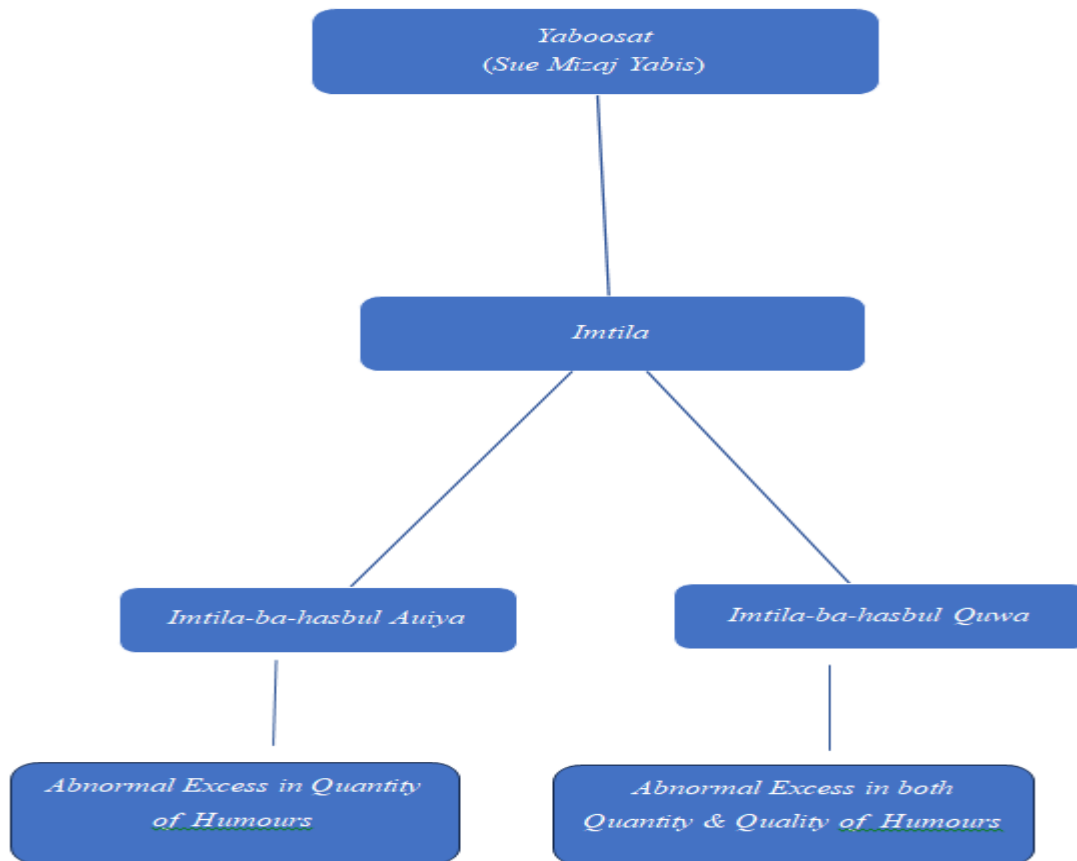
Fig I: Pathophysiology of hypertension (Chisolm, 2017, p. 15).

Imtila was categorized by Unani doctors into two groups:

1. *Imtila-ba-hasbul Quwa*

2. *Imtila-ba-hasbul Auiya*

- **Imtila-ba-hasbul Auiya** refers to a situation in which the quantity of humors is elevated to the point where blood vessels enlarge and become overfull, but the quality of humors and vital forces (*Akhlat wa Arwah*) is normal. There is always a chance that physical activity could burst blood vessels in these situations, releasing humors that could lead to hypoxia/ischemia, *sara* (epilepsy), or *sakta* (apoplexy). Venesection (*Fasd*) is the appropriate treatment for this kind of overabundance.^{37,38} Razi stated that even though humor has increased, the ratio remains the same before and after *Imtila*.³⁹
- **Imtila-ba-hasbul quwa**: Another name for *Imtila-ba-hasbul-kaifiyat* is *Imtila-ba-hasbul-quwa*. The problems with *Imtila-ba-hasbul quwa* stem not only from a general excess of humors but also from their aberrant character. Due to their morbid nature, such humors overpower the body's energy and resist the third and coction stages of digestion. Individuals with *Imtila-ba-hasbul quwa* are more vulnerable to infection.^{37,38,40,41}



Clinical Manifestations:

Imtila is characterized by a headache, congested eyes, pulsatile arteries, facial puffiness, heaviness in the head, restlessness, yawning, dark-colored, turbid urine, lethargy, flushing of the face, and warmth of the body without any apparent external reason.^{37,38,40} However, a number of Unani doctors have reported cases of apoplexy, palpitations, vertigo, and giddiness, among other conditions, and have identified *Imtila* as a contributing factor in all of these cases. According to Ibn e Rushd, *Imtila ba hasbul au'iyya* is characterized by a decrease in hunger, weakness in the body, and difficulties moving, all of which eventually contribute to a reduction in the body's vital faculties. He went on to say that the symptoms of this type of *imtila* are comparable to those of *Ghalba-e-dam* (excess blood volume). *Nabz-e azeem* (Hypervolumic pulse), vascular engorgement, head and eye heaviness, impaired attention, redness of the complexion, and epistaxis are observed in this condition.⁴² Ibn-e-Sina lists additional features in addition to the ones listed above, including tightness of skin, weariness, reduced vision, fullness of pulse, and dreams indicating fatigue or body heaviness. He explains that *Imtila ba hasbul Quwa* experiences similar symptoms, although they are less severe and intense.⁴³ Majoosi describes the following features: the body appears enlarged in all dimensions, with conspicuous, swollen, and stretched vessels; upon probing, the body is red and warm.⁴⁴ Moreover, some of the characteristics listed in Unani classical literature^{45,46} include yawning, facial puffiness, redness over the face and tongue, bleeding from the anal orifice, sweet taste in the mouth, and heaviness over the temporal area.

Complications

Sudden death, apoplexy, and Haemorrhage may be caused by severe *imtila*.⁴⁷ Blood that has gone *fasid*, or deranged, flows toward the nose and the rectum, according to Aristotle.⁴⁸ Razi explains that *Imtila ba hasbul Auiya* indicates an increase in blood volume that causes *urooqi tamaddud* (vascular tension) and an increase in vascular pressure that causes headaches, blurred vision, and the potential for tiny blood vessels to burst. Due to the increased blood volume, these individuals are more likely to experience epistaxis and hemoptysis, which can cause abrupt death. He added that *Imtila* contributes to *khafqan*, or elevated heart rate.⁴⁹ According to Ibn Sina, if the *Imtila* is oriented toward the heart, the patient may suffocate from the *Imtila Tajaweefil Qalb* (congestive heart failure).^{50,51} According to Majoosi, the phrase "*Imtila ba hasbul Auiya*" refers to the distension and tension

(*tanav and tamaddud*) of the vessels caused by an accumulation of substance in them that is both moving and stagnant (*mutaharrik and sakin*). This kind of imtila is typically brought on by a buildup of blood and spirit (*khoon and rooh*).⁵²

Prevention And Control:

The following strategies are advised by the WHO for the prevention of hypertension:

1. Primary prevention

a. Population strategy

b. High-risk strategy

2. Secondary prevention

Primary prevention:

a) All interventions aimed at lowering the likelihood of disease onset in a population are considered primary preventive. Two complementary approaches to the prevention of hypertension have been advocated by the World Health Organization:⁵³

- **Population strategy:** Regardless of a person's level of risk, the population approach targets the entire population. The population approach notion stems from the observation that a population's average blood pressure can be reduced by even a modest amount, which can lead to a significant decrease in the occurrence of cardiovascular problems like heart attack and stroke. The following non-pharmacotherapeutic interventions—diet, weight loss, exercise promotion, behavioral modifications, health education, and self-care—are the foundation of this multifactorial approach.
- **High-risk strategy:** Primary prevention also includes this. "To prevent the attainment of levels of blood pressure at which the institution of treatment would be considered" is the stated goal of this strategy. This strategy is suitable if the risk factors are extremely uncommon in the population. As a form of treatment, Razi has also suggested rest, a low-fat diet, and avoiding strenuous work.⁴⁹

Secondary prevention:

The aim of secondary prevention is to identify and manage elevated blood pressure in those who are impacted. Contemporary anti-hypertensive medication therapy can successfully lower elevated blood pressure and, in turn, reduce the excess risk of morbidity and death from renal, cerebrovascular, and coronary heart disease. Early case detection, treatment, and patient compliance are essential control measures.⁵⁴

Management:

Ancient historical records as far back as in 2600 BC report that acupuncture, venesection and bleeding by leeches were the sole means of treating what was called 'hard pulse disease'.⁵⁵

Daght al Dam Qawī (Hypertension) Management Strategy in the Unani medical system consists of four main therapeutic modalities, as same as for other diseases, viz:

1. *Ilaj bil-Ghiza* (Dietotherapy)

2. *Ilaj-bit-Tadbeer* (Regimenal therapy)

3. *Ilaj-bil-Dawa* (Pharmacotherapy)

4. *Ilaj-bil-Yad* (Surgery).^{56,57, 58}

Ilaj-bit-Tadbeer and *Ilaj-bil-Ghiza* are connected to *Asbab-e-Sitta Zarooriya* (six essential reasons) through these therapy approaches. "Ilaj-bit-Tadbeer wa Taghziya" refers to any alteration or modification made to these *Asbab-e-Sitta Zarooriya* with the intention of treating or preventing an illness (Regimental Therapy and Dietotherapy). Like *Ilaj-bil-Dawa* (pharmacotherapy), these therapies operate on the tenets of *Ilaj-bil-Zid* (heterotherapy/antagonist treatment). In addition to *Ilaj-bil-Zid*, however, various other dietary rules, such as fasting or taking less food, are also taken into consideration in *Ilaj-bil-Ghiza*.⁵⁹

The six fundamental reasons for health that are required for a healthy body to survive are at the center of the *Asbab-e-Sitta Zarooriya* philosophy:

- **Hawa** (Air)
- **Makool-o-Mashroob** (Food & Drink)
- **Harkat-o-Sukoon Badni** (Body Movements and Rest)
- **Harkat-o-Sukoon Nafsanī** (Psychic Movements and Rest)
- **Naum-o-Yaqza** (Sleep and Wakefulness)
- **Ehtebas-wa-Istafragh** (Retention and Evacuation)

These six important causes or factors preserve a suitable ecological balance between the environment and the body and encourage a healthy lifestyle.^{60,61}

Blood pressure can be lowered by making lifestyle changes such as controlling salt intake, cutting back on alcohol, quitting smoking, improving obesity, exercising, and eating a diet high in fruits and vegetables. In cases of hypertension, appropriate non-pharmacological therapy may reduce the requirement for pharmaceuticals.^{62,63}

Ilaj bil-Ghiza (Dietotherapy)

The Unani medical system explains how to maintain excellent health through a thorough classification of diet. Based on this classification, we can think of the following diet types based on dairy products, fruits, and vegetables:

1. **Fruits** are an example of *Ghiza-e-Lateef Saaleh-ul-Kaimoos Qaleel-ut-Taghziya*.
2. **Indian Cottage Cheese** is an example of *Ghiza-e-Kaseef Saaleh-ul-Kaimoos Qaleel-ut-Taghziya*.
3. **Turnip** is an example of a vegetable in *Ghiza-e-Motadil Saaleh-ul-Kaimoos Qaleel-ut-Taghziya*.
4. **Cabbage** is an example of a vegetable in *Ghiza-e-Motadil Raddi-ul-Kaimoos Qaleel-ut-Taghziya*.^{64,65}

Ilaj-bil-Dawa (Pharmacotherapy):

Daght al Dam Qawī (high blood pressure) can be effectively treated with a number of Unani medications. Medications with the following characteristics may be used in order to lower raised blood pressure and alleviate symptoms, if present.

Mufarad Adviya (Single Drugs)^{66,67}

Drug Name	Scientific Name	Activity	Reference
<i>Parsioshan</i>	(<i>Adiantum capillus</i>)	Antioxidant, Hypcholesterolemic effect.	Dehdari S, Hajimehdiipoor H. Medicinal Properties of <i>Adiantum capillus-veneris</i> Linn. in Traditional Medicine and Modern Phytotherapy: A Review

	veneris Linn.)		Article. Iran J Public Health. 2018 Feb;47(2):188-197. PMID: 29445628; PMCID: PMC5810381.
<i>Siyah filfil</i>	(Piper nigrum)	Antioxidant activity, cardioprotective	Ashokkumar, K., Murugan, M., Dhanya, M.K. <i>et al.</i> Phytochemistry and therapeutic potential of black pepper [<i>Piper nigrum</i> (L.)] essential oil and piperine: a review. <i>Clin Phytosci</i> 7, 52
<i>Asrol</i>	(Rauwolfia serpentina)	Antihypertensive, Antiarrhythmic Activity Sedative and Tranquilizing Effects , Cardioprotective Effects Vasodilation	Nitish Kumar Raghav, N. Ramasamy, Soujanya Mukherjee, Anil Kumar, Anilkumar Shinde, Munesh Mani, Sanmati Kumar Jain, Rajnandan Borah, & Ekta Pandey. (2024). An In-depth review on Phytochemistry and Pharmacological significance of Rauwolfia serpentina. <i>Revista Electronica De Veterinaria</i> , 25(2), 716-726.
<i>Sankhaholi</i>	(Evolvulus alsinoides)	Antihyperlipidemic Activity, Antioxidant activity, Antihypertensive Activity Cardioprotective Property	Kathirvel, Bharathi; Kalibulla, Syed I.I; Shanmugam, Velayuthaprabhu2; Arumugam, Vijaya A.. A review on the pharmacological properties of Evolvulus alsinoides (Linn). Journal of Indian System of Medicine 9(3):p 153-160, Jul–Sep 2021.
<i>Kishneez</i>	(Coriandrum sativum)	Hypolipidemic Activity Antioxidant and Anti-Atherogenic Properties Antihypertensive Potential Antiarrhythmic Activity	Mahleyuddin NN, Moshawih S, Ming LC, Zulkifly HH, Kifli N, Loy MJ, Sarker MMR, Al-Worafi YM, Goh BH, Thuraisingam S, Goh HP. <i>Coriandrum sativum</i> L.: A Review on Ethnopharmacology, Phytochemistry, and Cardiovascular Benefits. <i>Molecules</i> . 2021 Dec 30;27(1):209. doi: 10.3390/molecules27010209. PMID: 35011441; PMCID: PMC8747064.
<i>Tukhm-e-Kahu</i>	(Lactuca sativa)	Cardio-Protective Effect Antioxidant properties	Shi M, Gu J, Wu H, Rauf A, Emran TB, Khan Z, Mitra S, Aljohani ASM, Alhumaydhi FA, Al-Awthan YS, Bahattab O, Thiruvengadam M, Suleria HAR. Phytochemicals, Nutrition, Metabolism, Bioavailability, and Health Benefits in Lettuce-A Comprehensive Review. <i>Antioxidants</i> (Basel). 2022 Jun 13;11(6):1158. doi: 10.3390/antiox11061158. PMID: 35740055; PMCID: PMC9219965.
<i>Sandal safaid</i>	(Santalum album)	Antihyperlipidemic effect, Cardioprotective activity Antioxidant efficacy	Kumar, Rakesh & Anjum, Nishat & Tripathi, Yogesh. (2015). Phytochemistry and Pharmacology of Santalum album L.: A Review. <i>World Journal of Pharmaceutical Research</i> . 4. 1842-1876.
<i>Abresham</i>	(Silk cocoon)	Cardioprotective activity Antioxidant Activity Anti-hyperlipidemic activity	Biganeh H, Kabiri M, Zeynalpourfattahi Y, Costa Brancalhão RM, Karimi M, Shams Ardekani MR, Rahimi R. <i>Bombyx mori</i> cocoon as a promising pharmacological agent: A review of ethnopharmacology, chemistry, and biological activities. <i>Heliyon</i> . 2022 Sep 1;8(9):e10496. doi:

			10.1016/j.heliyon.2022.e10496. PMID: 36105465; PMCID: PMC9465338.
<i>Lahsun</i>	<i>Allium sativum</i>	Hypocholesterolaemic action, Hypotensive effect, Antiplatelet aggregation activity	Singh, Vinay & Singh, Dinesh. (2008). Pharmacological Effects of Garlic (<i>Allium sativum</i> L.). Annual Review of Biomedical Sciences. 10. 10.5016/1806-8774.2008.v10p6.

Murakkab Adviya (Compound Drugs)

- *Khamira Abresham Sada*
- *Qurs Dawa us Shifa*
- *Sharbat Bazoori Moatadil*
- *Khamira Sandal*, etc.

Ilaj-bit-Tadbeer (Regimenal therapy)

Some of the important and effective regimental therapies addressing Hypertension includes:

- ✓ **Fasd (Venesection)**
- ✓ **Hijamah (Cupping)**
- ✓ **Riyazat (Exercise)**
- ✓ **Dalak (Massage)**
- ✓ **Hamam (Steam)**

Fasd (Venesection):

This therapy is a kind of *Istafragh* (Evacuation) in which the vein is gently punctured or severed in order to accomplish bloodletting. When treating *Imtila-e-Damvi* (blood congestion), it is highly helpful.⁶⁸ Venesection of the basilic vein (*Varid-e-Basaleeq*) has been proven to be helpful in hypertension (*Ḍaghṭ al Dam Qawī*).⁶⁹

Hijamah (Cupping Therapy)

Wet cupping can be applied bilaterally above the head of the 12th rib on the back, at the triangular region formed by the border of the ilium, spine, and sacrum on the level of L2 to L3, and around the neck lateral to the cervical spine on C3 and C4 level.⁷⁰

Riyazath (Exercise):

This therapy is crucial for distracting from and removing morbid issues. Exercise, or *riyazat*, is used to treat and prevent a variety of illnesses. It also soothes anxiety, sleeplessness, sadness, and other related symptoms. It also speeds up metabolism, flushes out waste products from the body, tones the organs, and preserves or increases the body's flexibility.⁷¹ Frequent exercise is seen to be a curative therapy for hypertension individuals because it increases arterial dilatation, which lowers blood pressure.⁷²

Dalak (Massage):

Using hands, the body's surface is massaged in this regime. It improves blood flow and eventually gets rid of waste, which helps the body become more detoxified. Because of the striking similarities between this therapy's functions and those of *Riyazat* (exercise), it is regarded as a form of *Riyazat*.⁷³ Certain behavioural tactics, such

as massage therapy and relaxation techniques, have been demonstrated to be beneficial in reducing stress, which in turn lowers blood pressure. In their study, Mohebbi Z et al. discovered that back massage is useful in lowering blood pressure⁷⁴

Hamмам (Steam bath, Turkish bath, Sauna):

Exercise, a healthy diet, and a Hammam all work to strengthen immunity. Contemporary practices like aromatherapy, saunas, and spas are all similar to hammas.⁷⁵ According to a study by Mathieu Gayda et al., saunas can help control hypertension. Total vascular resistance was shown to decrease as a result of the sauna both during the process and even two hours after the heat exposure.⁷⁶ In their research, H. J. Winterfeld et al. discovered that walking or running in addition to a sauna considerably lowers hypertension.⁷⁷

CONCLUSION

Every element mentioned in Unani literature causes blood pressure to rise. It is clear from the foregoing explanation provided by Unani doctors that primary hypertension is a **damwi illness**. Three fundamental characteristics are also mentioned in Unani literature that are present in contemporary medicine: increased blood volume, increased blood viscosity, and arterial hardening and thickening (arteriosclerosis).

It may be inferred that the Unani scholars primarily characterized this illness in relation to **Imtila** and **Tasalub-e-Sharaeen** (arteriosclerosis). It is undeniable, however, that they were aware of some of the extracardiac and intracardiac complications of hypertension, including **angina pectoris**, **cardiac hypertrophy and dilatation**, **paralysis**, **apoplexy**, **per rectal hemorrhage**, and **epistaxis**.

We can conclude that harmony between **Asbab-e-Sitta Zarooriya** (Six Essential Causes) and the body will create a good, healthy lifestyle after analyzing Unani literature and contemporary medical research.

In addition, non-pharmacological treatments for **Daght al Dam Qawī** (hypertension) prevention and control include **Ilaj-bil-Ghiza** (dietotherapy) and **Ilaj-bit-Tadbeer** (regimenal therapy). Reducing salt consumption and switching to a diet high in fruits and vegetables helps lower blood pressure in **Ilaj-bil-Ghiza** (dietotherapy). Procedures like **Fasd** (Venesection), **Hijamah** (Cupping), **Riyazat** (Exercise), **Dalak** (Massage), and **Hammam** (Steam bath/Turkish bath) are useful in managing hypertension in **Ilaj-bit-Tadbeer** (regimenal therapy).

The **Unani System of Medicine** never fails to provide its basic concepts (**Kulliyat**) to understand and treat any disease. It always stands ahead in providing a wide range of treatment modalities for all types of illnesses. Likewise, the concept of hypertension is clearly correlated and explained under the umbrella of **Imtila**, with all its treatment options mentioned clearly and optimally.

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