



Unveiling *Siman-i-Mufrit* (Obesity): Unani Perspective and Role of *Hammam-i-Bukhari* in its management

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Abstract

Obesity is a major health concern globally & is the most common nutritional disorder defined as an excessive buildup of adipose tissue in the body. Unani medicine provides a unique perspective on obesity, defining it as '*Siman-i-mufrit*' which is increased *Ratubat* & *Barudat*, causing imbalance and building up of morbid stuff such as *Madda-i-balghamiya* (*Shehmi madda*) & *Akhlat* in body and offering treatment based on *Sue Mizaj Barid Ratab*. One of the most well-known *tadbeer* that has been detailed for treating *siman-i-mufrat* in the Unani System of Medicine is *Hammam-i-Bukhari*, a form of *Hammam*. In order to burn off excess calories stored in the body and get rid of *Madda-i-Balghamiya* causing *Sue Mizaj Barid*, *Kasrat-i-Istifragh* by *Hammam-e-Bukhari* has been recommended.

Keywords: *Siman-i-Mufrit*, *Obesity*, *Sue Mizaj Barid*, *Unani Medicine*, *Ilaj bit Tadbeer*, *Hammam-i-Bukhari*

Introduction

Obesity is defined as a 10–20% increase in body weight over normal that results from an excessive buildup of fat. The global illness burden now ranks obesity as the sixth most prevalent cause.¹ WHO draws a clear distinction between obesity and overweight by describing Overweight as a condition of excessive fat deposits and Obesity as a chronic complex disease defined by excessive fat deposits that can impair health. Obesity can lead to increased risk of type 2 diabetes and heart disease, it can affect bone health and reproduction, it increases the risk of certain cancers. Obesity influences the quality of living, such as sleeping or moving.² It is a significant public health concern since it is linked to rising health and societal expenditures. The disease's frequency is steadily rising over the world, particularly in low and middle-income countries. Millions of individuals around the world are expected to be affected over the next two decades.³ Obesity is becoming as a major health issue in India. According to the National Family Health Survey, 12.1% of men and 14.8% of women in India are

fat or overweight⁴. Obesity is a pathological condition caused by fat cell proliferation and enlargement. Like hypertension and atherosclerosis, it is considered a chronic condition caused by an imbalance between the energy taken in food and the energy expended. The excess energy is deposited in fat cells, which grow in size and/or number. The clinical difficulties associated with obesity are caused by either the weight or mass of the additional fat or by the increased production of free fatty acids and many peptides from enlarged fat cells.⁵ Obesity is a positive risk factor in the development of hypertension, diabetes, gall bladder disorders, and coronary heart diseases, as well as certain forms of cancers, particularly hormonally associated and large bowel cancer.⁶ At least 2.8 million adult deaths can be caused by obesity annually. In addition, obesity and overweight account for 44% of diabetes cases, 23% of cases of ischemic heart disease, and between 7 and 41% of cases of certain cancers³. There are also other related disorders that, while not usually deadly, cause a lot of morbidity in the population, such as varicose veins,

abdominal hernias, osteoarthritis of the knees, hips, and lumbar spine, as well as psychological pressures, especially during adolescence. It may reduce fertility. It shortens life expectancy⁷. The diagnosis of overweight and obesity is made by measuring people's weight and height and by calculating the body mass index (BMI): weight (kg)/height² (m²). The body mass index is a surrogate marker of fatness and additional measurements, such as the waist circumference, can help the diagnosis of obesity.

The BMI categories for defining obesity vary by age and gender in infants, children and adolescents. For adults, WHO defines overweight and obesity as follows:

Overweight is a BMI greater than or equal to 25; and

Obesity is a BMI greater than or equal to 30.

For children, age needs to be considered when defining overweight and obesity.²

Table 1: WHO classification of Obesity based on BMI²

Classification	B.M.I (kg/m ²)	Risk of co-morbidities
Underweight	<18.50	Low
Normal	18.50-24.99	Average
Overweight	≥ 25.00	
Preobese	25.00-29.99	Increased
Class 1 obesity	30.00-34.99	Moderate
Class 2 obesity	35.00-39.99	Severe
Class 3/ morbid obesity	≥40.00	Very severe

Concept of Obesity in Unani System of Medicine

Obesity is derived from the Latin term, "obedere", which means to devour and refers to "very fat" in English. In Unani medicine, obesity is known as Siman-i-Mufrit which denotes excessive fat, while farbahi (a Persian word) indicates Motapa (obesity). Being a phlegmatic (Balghami) ailment, here, Khilte Balgham is prevalent in the human body and contributes to obesity. Under this situation, the person becomes lazy and dull because of the excessive accumulation of Balgham (fat) and cold temperament, which results in the Aaza's (organs') lack of mobility. This condition is similar to Qaidul Badan. After combining with blood, Balgham produces lubrication in its Qiwan (viscosity). Because of Burudat-e-Mizaj (cold temperament), fat accumulation suppresses Hararat-e-Ghariziya, the body's natural heat. As a result, the distribution of Hararat-e-Ghariziya throughout the body is not equal.⁸ In Siman Mufrit, Hararat-e-Ghariziya is severely compromised due to increased Buroodat (coldness), and in turn causes vasoconstriction that may result in early death in individuals with this infirmity. Furthermore, a decrease in Hararat-e Ghariziya itself might increase vascular tightness and hinder the spread of Ruh in the body, which increases the risk of death in advanced stages of the illness⁹.

Buqrat (Hippocrates) (460 BC) was the first physician who first wrote about obesity and its potential adverse effects in his well known book "Fusool-e-Buqratia," which

included cardiovascular issues, comas, and abrupt death.⁸

Rufas (98- 117AD) further added to Hippocrates and stated that in addition to infertility and unexpected death, it may result in problems including epilepsy, dyspnea, hemiplegia, and syncope in their advanced stages¹⁰.

Ali Bin Rabban Tabri (847-861 AD) in his renowned book, Firdous-al-Hikmat has discussed the etiology and pathophysiology of Siman-e-Mufrit, specifically stating that a sedentary lifestyle and excessive eating are the main causes of obesity¹¹.

Zakariya Razi (Rhazes: 860-925 AD) explained that Tar ghiza (oily food) is the cause of obesity and defined the term "central obesity," classified obesity into Maqami (Local) and Umoomi (General) and providing separate treatments for each. He explained that local or central obesity is the result of Shahem being deposited in particular organs, such as the protrusion of the abdomen due to fat deposition, while general obesity refers to the generalized deposition of fat throughout the body.¹²

Ibne Sina (Avicenna: 980-1037 AD) has explained the idea of end organ damage in obesity. According to his statement, individuals who are fat have a higher risk of developing illnesses because their Hararat Ghariziya weakens as a result of Sue Mizaj Barid and constriction of vessels (Tangi Urooq). This decreases the amount of "Ruh (Pneuma)" that reaches the organs, ultimately leading to organ damage and death¹³.

Ibne Nafis (1207- 1288 AD), has discussed the correlation between morbid obesity and cardiovascular and cerebrovascular disorders in his book¹⁴.

Daud Antaki (1541-1599AD) discussed in his book Tazkira-Uolul-Albab, the complications and treatments associated with obesity¹⁵.

Etiology according to Unani system of Medicine

•Bārid mizāj (cold temperament): People with Bārid mizāj are prone to become obese. The oily components of dam (blood) have a tendency to accumulate as shahm (fat) because of barīd mizāj (cool temperament). As khilt-i-balgham, is more common in the bodies of Bārid mizāj people, it is thought to be a predisposing factor in the development of siman mufrit (obesity)¹⁶.

•Varāsatī and Khalqī Asbāb (Hereditary and Congenital causes): Individuals with a family history of obesity are at greater risk to develop obesity¹⁷.

•Rāhat (excessive rest and lack of exercise).

•Sarwat wa Ghina (luxurious lifestyle)¹¹.

•Excessive consumption of alcohol, especially after meals¹⁰.

Symptoms and Signs

The usual signs and symptoms of Siman Mufrit are:

1. Lethargy
2. Sue Tanaffus

3. Is'haal (diarrhoea)
4. Khafqan (Palpitation)
5. Zeeq un Nafs
6. Usre Tanaffus (breathlessness)
7. Zoof' bah (Loss of libido) and
8. Tahabbuj (Puffiness of face)⁹.

Complications:

Patient may have complications of -

- Concealed hemorrhage,
- Narrowing of vessels (Tangi-e-Urooq),
- Gashi (syncope),
- Falij (Hemiplegia),
- Sakta (stroke),
- Loss of libido (Shahwat ki kami),
- Uqr (infertility) and even sudden death ^{3,9}
- Cardiovascular: Hypertension, Dyslipidaemia, Coagulopathy etc
- Endocrine: Type 2 diabetes, PCOS.
- Gastrointestinal: Gallstone, hepatomegaly (Izm-e-kabid), Colon cancer.
- Musculoskeletal: Osteoarthritis, Back pain etc.
- Psychosocial: Eating disorders, Depression etc.
- Pulmonary: Obstructive sleep apnea
- Renal: Renal cancer, Glomerulosclerosis¹⁸

Management -

The incidence of obesity is rising significantly, but there is currently no effective treatment for the condition in the modern medical system except Bariatric surgery which is invasive, expensive and has numerous adverse effects. Many medications have been developed in contemporary medicine, but their ability to treat obesity has been limited by their negative effects. In order to treat these challenging disorders and their dangerous consequences, there is an increasing need to find and create an alternative anti-obesity medication that is safe, effective, well-tolerated, and requires little to no pharmacological intervention. Numerous medications are used in the Unani medical System to manage Simane Mufrit, although there is a gap in the treatment of illness by changing Asbab-e-Sitta Zarooriya, or treating it using Tadabeer (regimens). Ilaj Bil Ghiza (Dietotherapy), Ilaj Bit Tadbeer (Regimenal Therapy) & Ilaj-bil-Dawa (Pharmacotherapy) make up the management of Simane Mufrit. As Obesity develops due to *Sue mizaj Barid* therefore, principal of treatment includes mainly-

1. Taqleel-e-Ghiza (Diet Control)
2. Tahleel-e-Balgham (Resolving Madda-e-Balghamiya)

Obesity is caused by an imbalance between daily energy intake and expenditure. Excess energy from meals is

retained in the body as adipose tissue or fat, leading to obesity. To rectify this imbalance, reduce daily calorie intake significantly while maintaining daily activities. Taqleel-e-Ghiza (diet control) can help reach the goal of overcoming the condition.¹⁹

For resolving Madda-e-Balghamiya, Hammam-e-Bukhari (Steam bath) is the most effective form of therapy. Steam is passed through the entire body in this type of Hammam ²⁰. Hammam-e-Bukhari is used to expel out Madda-e-Balghamia (Shahmi Madda) through sweating in the body that is responsible for obesity²¹.

Using vapor or steam instead of water during hammam is recommended for those with a phlegmatic temperament and those who do not exercise. This promotes fluid dissolution and eliminates toxins through sweat.²² Hammam-e-Bukhari or Steam therapy is recommended as a stand-alone treatment for obesity or in conjunction with other therapies because it causes the body to heat up to the appropriate temperature, akin to a fever, increases metabolic rate and the consumption of stored calories, and acts as a powerful detoxifier by inducing perspiration.^{23,24} Those who are obese must take their baths without food.²⁵ When taken during a fast, it results in tahleel (dissolution) of ratoobat asliya (natural fluids), which makes badal ma tahallul (substitute for replenishment) unavailable and causes dryness, thereby causing leanness in obese people.^{26,27}

Steam is adjusted to maintain a temperature of 100-120 °F inside the cabinet. The application period can range from 10 to 20 minutes or longer, depending on the patient's perspiration rate.²⁸ By heating the patient's body both internally and outwardly, a steam bath increases endogenous warmth and drives out the "coldness" that is causing the illness.²⁹

Possible Mechanism of Action of Hammam-e-Bukhari in Siman-e-Mufrit (Obesity) -

The potential mechanism of action of Hammām is believed to be due to its three special qualities of -

Tahleel - which is the process of removing waste and morbid matter from the body using heat from Hammām

Taqtee - Hot water also aids in Taqtee, which is releasing morbid matter in organ's interstitial spaces

Talteef - is the property of warm water used in steam bath reacting with the body's Quwwat Tabiya (natural faculty) to divide morbid matter into smaller parts¹⁹.

Zakariya Razi suggests this regimen for the management of obesity in his book Al-Hawi Fit Tib. Specifically, Balghami Madda is expelled from the body through perspiration in a hammam by opening the pores of skin. Additionally, it accomplishes Nuzj in Mawad and expels it outside the body.³⁰

Clinical Researches showing the benefits of Steam baths for Obesity

Some clinical studies have also demonstrated the effect of steam baths on total weight loss.

The study conducted on 12 athletes to study the acute effect of steam bath at the temperature of 56 °C for 18

minutes significantly reduces the total body weight and body water in high muscle mass male athletes.³¹

Ansari et al. conducted an observational study on 30 obese patients to evaluate the efficacy of Tareeq via steam bath. The study found that 14 sittings of 30 minutes each, scheduled as 8, 4, and 2 sittings in the first, second, and third months, had no significant influence on body weight.³²

Discussion

The Unani approach to obesity, known as Siman-i-Mufrit, provides a comprehensive alternative to modern medical therapies by focusing on imbalances in body humors and temperaments as the main reasons. Unlike Western medicine's caloric-focused approach, Unani medicine relates obesity to an excess of cold and phlegmatic elements, notably Balgham (phlegm), which causes lethargy, poor circulation, and other systemic issues. This framework sees obesity as an imbalance in Sue Mizaj Barid (cold temperament), and addressing not only physical symptoms but also lifestyle and dietary influences. This unique perspective is consistent with integrative techniques that take into account psychological and lifestyle aspects, implying that obesity is more than a purely physiological issue.

Hammam-i-Bukhari, a steam bath therapy that stimulates sweating to evacuate excess phlegm and enhance circulation, is essential in the Unani treatment of obesity. This approach, which could serve as a non-invasive alternative or supplement to traditional treatments, has some concepts with modern thermogenic therapies, which use heat to promote metabolic processes. Clinical studies on steam baths show encouraging results for short-term weight loss and metabolic enhancement, making Hammam-i-Bukhari a potentially beneficial tool for people looking for natural, non-pharmacological ways to manage obesity.

In light of rising obesity rates and the limitations of conventional therapies, there is potential for integrating Unani treatments like Hammam-i-Bukhari into broader healthcare strategies. By combining Unani methods with contemporary practices, healthcare providers may offer a more personalized, comprehensive approach to obesity management, supporting long-term health and wellness through both traditional and modern techniques.

Conclusion

In conclusion, this review paper underscores the Unani medical perspective on obesity, or Siman-i-Mufrit, highlighting it as a condition of humoral imbalance, particularly linked to a cold and phlegmatic temperament. Unani treatments, such as Hammam-i-Bukhari (steam therapy), offer a holistic, non-invasive approach to obesity management, emphasizing detoxification, improved circulation, and the balancing of body humors. While modern treatments often rely on pharmacological or surgical interventions, Unani medicine provides alternative, complementary options that may enhance weight management and overall health with fewer adverse effects. Integrating these traditional

methods with contemporary approaches could offer a more comprehensive and personalized solution to the global obesity challenge.

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