



## Impact of Sahar (Insomnia) on human health and its management through unani approach

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### Abstract

The word Sahar is derived from “Arabic” word which means excessive awakening or sleeplessness. The primary cause of Sahar is the imbalance in the temperament of brain (due to hot and dry temperament) and secondarily due to some other medical condition. Poor health outcomes have been linked to sleep deprivation and poor sleep quality. Lack of sleep denotes a reduction in the regular sleep time due to environmental or psychological reasons. Insomnia is associated with an increased risk of comorbidities like hypertension, heart attack, type 2 diabetes, obesity, anxiety, depression and many more physiological functions. This article will discuss the impact of sleep on human health and its management through unani approach.

**Keywords:** Sahar, mental illness, diabetes, obesity, temperament

### Introduction

The word insomnia is derived from the latin word *insomnis* which is composed of “in” means “not” and “somnus” means “sleep” which means no sleep [1]. or the word sleep is originated from old English word *slep* which means the natural periodic suspension of consciousness during which the powers of the body are restored [2]. In Unani Medicine insomnia is termed as Sahar and its one of the important factor mentioned in six essential factors (Asbāb Sitta Zarūriyya) of life, which works throughout the life in every individual.

#### These essential factors are

1. Hawā’ al-muhit (environmental air)
2. Ma’kul-o-Mashrūb (food and drinks).
3. Harkat-o-Sukūn badnī (bodily movement and repose).
4. Harkat-o-Sukūn nafsānī (psychic movement and repose).
5. Nawm-o-Yaqza (sleep and wakefulness)
6. Istifrāgh wa Ihtibās (evacuation and retention) [3].

In Unani system of medicine sehar (insomnia) can be defined as sleeplessness or awakening that occurs primarily as a result of an imbalance in the temperament of the brain caused by an excess of yaboosat wa hararat and secondary to some other causes such as medical or mental disorders. According to Ibn Sina, excessive awakening is known as sehar [4]. Another eminent scholar Ismail Jurjani says that sleeplessness and excessive awakening are called sehar [5]. As per the concept of Akbar Arzani sehar is bedarie mufrat (prolonged awakening) [6].

#### Etiology

The following etiological factors are involved in the causation of insomnia:

- Imbalance in the temperament of the brain which becomes hot and dry.

- Psychiatric disorders such as depressive illness, any anxiety, and fear and substance misuse [7].
- Excessive intake of meat.
- Emotional disorders.
- Stress.
- Physiological discomfort like indigestion.
- Pain excess amount of yellow and black bile in the body.
- Formation of morbid phlegm.
- High body temperature.
- Environmental condition like noise, light, or extreme temperatures (hot or cold)
- Acidic or alkaline nature of Akhlāt-e-Badan (body humors).
- Harārat wa Yabūsat.
- Aurame Sawdawi or Sartani of brain [8].
- Exaggerates sleeplessness especially in old aged persons brain [9].

#### Risk Factors

- Intake of too much of tea and coffee causes dryness and leads to Sehar.
- when an individual attains the Sin e Sabaa (Adolescence) from sin e Tufoolat (Childhood) there will be evidence of Sehar.

#### Symptoms

- General tiredness.
- Problems with concentration or memory.
- Difficulty falling asleep at night.
- Sleepiness during the day.
- Waking up during the night.
- Waking up too early.
- Rested after a night's sleep, not feeling well
- Daytime tiredness or sleepiness.
- Irritability, depression or anxiety.

- Having trouble remembering, concentrating on duties, or paying attention.
- Increased errors or accidents.
- Ongoing worries about sleep<sup>[10]</sup>.

### Impact on cardiovascular system

Low quality sleep has been linked with health conditions like cardiovascular disease such as heart attack, strokes, high blood pressure, etc. Also, poor sleep is common among those with cardiovascular disease, some research indicates that poor sleep can be a contributing cause. Less than seven hours of sleep every night is associated with a higher risk of developing coronary heart disease and dying from it. Sleep duration greater than nine hours is also correlated with coronary heart disease, as well as stroke and cardiovascular events<sup>[11]</sup>. The American Heart Association has stated that sleep restriction is a risk factor for adverse cardiometabolic profiles and outcomes. The organization recommends healthy sleep habits for ideal cardiac health along with other well-known factors like blood pressure, cholesterol, diet, glucose, weight, smoking, and physical activity<sup>[12]</sup>. The Centers for Disease Control and Prevention has noted that adults who sleep less than 7 hours per day are more likely to have chronic health conditions including heart attack, coronary heart disease, and stroke compared to those with adequate amount of sleep<sup>[13]</sup>.

### Impact on Mental health

Sleep problems have frequently been regarded as a symptom of mental illness rather than a cause. Evidence suggests, however, that they are both a cause and a symptom of mental illness. Sleep deprivation causes depression. Some studies have also found a link between sleep deprivation and anxiety, post-traumatic stress disorder, and suicide. Sleep disorders can increase the risk of psychosis and make psychotic episodes more severe<sup>[14]</sup>.

### Anxiety

The relationship between sleep and anxiety appears to be bidirectional, as it is with many other psychological conditions. People who suffer from anxiety have more sleep disturbances, but sleep deprivation can also contribute to anxiety symptoms. This can become a vicious cycle, perpetuating both the sleep and anxiety problems. Sleep deprivation is not only a common symptom of post-traumatic stress disorder (PTSD), affecting 80% to 90% of people with the condition, but it is also thought to play a role in the disorder's development and maintenance. Even otherwise healthy people, however, can suffer from the negative mental health effects of lack of sleep. One study, for example, discovered that acute sleep deprivation increased anxiety and distress in healthy adults<sup>[15]</sup>.

### Effect at workplace

Lack of sleep or sleep disorder have serious consequences for productivity, safety, health, and quality of life. Poor sleep effects the cost of businesses directly through lost productivity, compromised physical or emotional health, impaired cognition, accident rates and absences, and indirectly through such factors as poor morale, poor social relationships and depression. A number of steps that businesses can take to improve employees' sleep and their health and ultimately, their productivity are offered<sup>[16]</sup>.

### Lack of sleep contributes to obesity

Sleep deprivation can cause an imbalance in several hormones that are important in weight gain. Sleep deprivation raises the hunger hormone (ghrelin) while decreasing leptin (the fullness hormone), resulting in an increased feeling of hunger and desire for high-calorie foods. Lack of sleep is also associated with higher levels of cortisol and lower levels of growth hormone, both of which are associated with obesity. People who do not get enough sleep may feel sleepy and fatigued during the day, and they may exercise less. Obesity can also lead to poor sleep quality. Overweight or obese people are more likely to suffer from obstructive sleep apnea, gastroesophageal reflux disease (GERD), depression, asthma, and osteoarthritis, all of which can interfere with a good night's sleep<sup>[17]</sup>. Prolonged, complete sleep deprivation increased both food intake and energy expenditure, resulting in weight loss and, eventually, death<sup>[18]</sup>. Short sleep duration is linked to an increased risk of obesity, with various studies reporting a 45-55% increase. Other aspects of sleep health, such as daytime napping, sleep timing, sleep variability, and low sleep efficiency, have been linked to obesity<sup>[19]</sup>.

### Type 2 diabetes

It has been proposed that people who have short-term sleep restrictions process glucose more slowly than people who get a full 8 hours of sleep, increasing the risk of developing type 2 diabetes<sup>[20]</sup>. Poor sleep quality has been linked to high blood sugar levels in diabetic and prediabetic patients, but the cause is unknown. Researchers believe that sleep deprivation affects insulin, cortisol, and oxidative stress, all of which affect blood sugar levels. Sleep deprivation can raise ghrelin levels while decreasing leptin levels. People who do not get enough sleep are more likely to crave food to compensate for their lack of energy. This practise can cause blood sugar to rise, putting them at risk of obesity and diabetes<sup>[21]</sup>.

A study of over 1400 people published in 2005 found that people who slept for a few hours every night were more likely to have type 2 diabetes<sup>[22]</sup>. The direction of cause and effect between insufficient sleep and diabetes is not clear, though, because this study was purely correlational. The authors point to an earlier study which showed that experimental rather than habitual restriction of sleep resulted in impaired glucose tolerance (IGT)<sup>[23]</sup>.

### Overall impact

- Excessive Sahar has the ability to weaken the Rooh by producing Tahallul in the body and weakening the Qalb through Tahleel. Sahar Shadeedh prevents food and drink from entering Nuzj and reduces the body's Quwwat; it also dries up the body and damages the Sehat. Those who are prone to Melancholia experience a melancholic attack quickly after undergoing Sehar<sup>[24]</sup>.
- Haraarat and Sehar will prevent complete digestion. It is also known as the worst thing to produce Thajfeef e Badan, and Sehar quickly emaciates the Jism in the long run<sup>[25]</sup>.
- Sahar also has a strong influence on the production of brain complications. Sehar is said to be harmful to the brain, and thus Sehar will induce Sara and Thashannuj in the human body<sup>[26]</sup>.
- It also quickly leads to Sarsaam<sup>[26]</sup>.

- Subaari (a type of madness) and suda are caused by Sehar Thaweel and excessive Sehar causes Nisyaan <sup>[27]</sup>.
- Haraarat and Sehar will prevent complete digestion. It is also known as the worst thing to produce Thajfeef e Badan, and Sehar quickly emaciates the Jism in the long run <sup>[28]</sup>.

### Usool-e-Ilaj (Principle of Treatment)

In Unani system of medicine, the treatment is based on Correction of temperament and dryness of brain by following three modalities:

- Ilaj Bil Tadabeer (regimenal therapy).
- Ilaj Bil Ghiza (dieto- therapy).
- Ilaj Bil Dawa (pharmacotherapy) <sup>[29]</sup>.

### Ilaj bil tadabeer

#### Riyazat (Exercise)

It is crucial for maintaining good health and treating sahar (insomnia) <sup>[30]</sup>.

### Hammam (Turkish bath)

It is also may be beneficial if performed after digestion of food <sup>[31]</sup>.

### Natūl (irrigation)

Ancient unani physicians used this regimen in the treatment of sahar with joshanda of Banafsha, Kishneez sabz, Poste khashkhash, Neelofer, Barge Kahoo for moistening the brain <sup>[32]</sup>.

### Ilaj bil Ghiza

According to Ibn Sina, Yaboosat is the most common cause and martooob Ghiza should take the lead in managing it (the diet which provide moisture in body). He continued by saying that the aforementioned treatment will work if the condition is acute, caused by Yaboosat sada (dryness without matter), or Yaboosat e maddi, but at a smaller degree and of lower quality. Istifragh should be administered, but, if it is persistent and caused by Raddi Ghair Tabai Sauda (bad melancholic morbid matter) (evacuation) <sup>[33]</sup>. Yaboosath is the most common cause of Sehar, treatment should focus on reducing Yaboosath. As a result, the affected person must use Ghiza Murattib and Hammam Mo'tadil. Wetness is produced in the brain by foods such as chicken, young pigeons, and young goats. If the above management is not successful, the individual is no longer in the Mo'tadil Mizaj and is under the control of Yaboosath or bad Akhlaath (Abnormal humours arisen by the Hammam) <sup>[34]</sup>.

**Ilaj bil Dawa:** Mukhaddiraath and Shamoom Munawwim can also be used to treat insomnia. People suffering from excessive Sehar should wash their faces with Joshanda of the Safarjil and take Post e Khashkhash internally. In Sehar, Qurs e Zafran and Kalkalaanj Akbar are also be effective <sup>[35]</sup>.

### Conclusion

We concluded that insomnia is defined as excessive awakening and is caused by a variety of factors such as Imbalance in the brain's temperament, which becomes hot and dry, emotional disorders, stress, the formation of morbid phlegm, environmental conditions such as noise, light, or extreme temperatures, and so on. Sleep deprivation has a

variety of negative effects on health. Low quality sleep has been linked to health problems such as cardiovascular disease, heart attacks, strokes, high blood pressure, and so on. Sleep and anxiety appear to have a bidirectional relationship, as do many other psychological conditions. Sleep deprivation can lead to hormonal imbalances that contribute to weight gain. High blood sugar levels in diabetic and prediabetic patients have been linked to poor sleep quality, but the cause is unknown.

Sahar (insomnia) is an issue that is becoming more prevalent. Dryness and heat in the organs (particularly the brain) cause the dissolution of the body's normal humours and the formation of abnormal humours such as morbid phlegm, bilious humour, and melancholic humour. Diet and various regimes such as dalak, riyazat can be used to treat brain dryness. Unani medicine rich in single unani drugs, compound formulations, and local application of roghaniyat, zamaad, dalak and riyazat may be very effective in the treatment of sahar (insomnia).

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