A Comprehensive Review of Insomnia and Its Regimenal Management in The Unani System of Medicine

Meraj Meraj 1*, Abdul Rehman M.I. 2*, Naseem Ahmad Khan 3*, Sadique Husain 4*, Noushiba Khan 5

1. PG Scholar, Dept. of ‘Ilaj bi’l Tadhbir (Regimenal Therapy), college of Hakim Syed Ziaul Hasan Government (Autonomous) Unani Medical College & Hospital AVISH Campus, Nehru Nagar Kolar Bypass Road, Behind MANT, Bhopal - 462003 (M.P) India.
2. Assistant Professor, Dept. of ‘Ilaj bi’l Tadhbir (Regimenal Therapy), college of Hakim Syed Ziaul Hasan Government (Autonomous) Unani Medical College & Hospital Bhopal, India.
3. Assistant Professor, Dept. of Munafeul Aza (Physiology), College of Hakim Syed Ziaul Hasan Government (Autonomous) Unani Medical College & Hospital Bhopal, India.
4. Assistant Professor, Dept. of Ilmul Advia (Unani Pharmacology), College of Hakim Syed Ziaul Hasan Government (Autonomous) Unani Medical College & Hospital Bhopal, India.
5. PG Scholar, Dept. of Tahaffuzi Wa Samaji Tibb (Preventive & Social Medicine), College of Hakim Syed Ziaul Hasan Government (Autonomous) Unani Medical College & Hospital Bhopal, India.

Abstract

Objective: The objective of this review is to explore the Regimenal Therapy for the Management of Insomnia in contrast to Unani Classical Literature. Therefore, further clinical studies will be done for its scientific validation.

Data Source: The review data were gathered from peer-reviewed research articles taken from several online resources, including PubMed, Google, and Google Scholar. Keywords including Insomnia, and prevalence of insomnia were part of the online search strategy. Library of Hakim Syed Ziaul Hasan, Bhopal was also accessed for the Unani Classical literature.

Summary: Insomnia is characterized as a persistent difficulty with sleep initiation, duration, consolidation, or quality that occurs despite adequate opportunity and circumstances for sleep, and results in some form of daytime impairment. It is currently a prevalent disease with the incidence varying globally between 10% and 60%. Insomnia is described as Sahar or Bekhaabi in the Unani System of Medicine. Thirty Unani Classical Literature reviewed; 19 were relevant to Insomnia, and 9 were related to Regimenal Therapy. Thirteen therapies explored: Natūl, Ša’ūq, Tadhīn, Hammāmd, Dālq, Ṭiyāddat, Šaβā’l, Ḥamīm, Lakhlakha, Shamīm, Qaṭūr, Nashihq, Pāshoya. These therapies are beneficial for managing Insomnia.

Conclusion: The implication of Regimenal Therapy appears promising and describes its possible uses for Insomnia. Use of regimenal therapies with fewer drugs, which seems to be effective for Insomnia. Further clinical studies are required to scientifically validate the existing Regimenal Therapy about its efficacy and safety.

Keywords: Insomnia, Ilaj bi Tadbeer, Regimenal therapy, Sahar, Unani System of Medicine

Introduction

Sleep is an essential component of human health and well-being and it is a complex biological process. Sleep is needed in the body in a similar manner such as eating and breathing. The Latin word for insomnia is insomnis; is made up of the two words “in” for “not” and “Somnus” for “sleep” which means “no sleep”. Insomnia is not measured by how much or how quickly we sleep; it’s measured by the quality of our sleep and how we feel when we wake up. Even though we sleep for eight hours every night, if we feel sleepy and exhausted throughout the day, we might have insomnia. Simply, insomnia is inadequate sleep quality or quantity when one has an adequate opportunity to sleep. For a diagnosis purpose of insomnia, daytime impairment like fatigue, inability to concentrate, or irritability should also be included. Insomnia is described as Sahar or Bekhaabi in the Unani System of Medicine which is characterized by Sleeplessness or Excessive Awakening. Despite a long history of Regimenal therapy use in the management of insomnia, only a few studies have been conducted. So, our aim for this comprehensive review is to explore the Regimenal Therapy for the Management of Insomnia in contrast to Unani Classic Literature therefore further clinical studies will be done for its scientific validation. This paper systematically describes the definition, causes, symptoms, and complications of Sahar. It is focused on various Regimenal Therapies for the management of Sahar.

Methodology

Several online resources like PubMed, Google, and Google Scholar were explored for the data by using keywords including Insomnia and prevalence of insomnia were part of the online...
search strategy. Online resources are used only for epidemiology and the concept of insomnia in conventional medicine. Library of Hakim Syed Ziaul Hasan, Bhopal was also accessed for the Unani Classical literature. Literature related to Ilāj bi'l Tadbīr (Regimenal Therapy) was included and literature on Ilāj bi'l Taghdhiya (dietotherapy) and Ilāj bi'l Dawā' (pharmacotherapy) was excluded.

**Epidemiology**

Insomnia occasionally affects approximately 30% and is a severe or chronic problem for about 10% of the population. Various studies conducted worldwide have revealed that the prevalence of insomnia is 10%-30% of the population, some even as high as 50%-60%. Insomnia is more common in women, older persons, and those who are struggling financially. An Indian study shows a 15.4% prevalence of Insomnia. Another Study conducted in South India found a prevalence of 18.6% among healthy adults. A study among corporate employees in India identified a 13.8% prevalence of Insomnia. A study in Bengaluru found a 33% prevalence of Insomnia.

**Unani Concept of Insomnia**

*Sahar* (Insomnia) is referred to as “sleeplessness” or “awakening” in the Unani System of Medicine. Ibn Sīnā in his book *ʿAl Qāmūn fil Ṣīb* gave the term excessive awakening for *Sahar* and Ismāʿīl Jurrānī in his book *Dhakhīra Khwarizm Shāhī* described Sahar as excessive awakening and lack of sleep. Akbar Arzānī in his book *Tīb-e-Akbar* stated that *Sahar* is a prolonged awakening (bedariye mufarat). Kahiruddin describes in his book *Bayaz-e-Kabeer* that when sleep and wakefulness are altered, it suggests that there is a predominance of *Yubūsat* (dryness) or *Harārat* (hotness) in the brain. This is contrary to the theory that normal sleep is caused by *Burūdat* (coldness) or in our brains. According to the Unani System of Medicine, health is attributed to the equilibrium of *Akhlāq* (humours), besides this, there are *Asbāb Sittā Darārijīya* (six essential factors) i.e. *Hawā* (Air), *Maʿkult-o-Mashrūbat* (Foods and drinks), *Al-Haraq waʾl Sukūn al-Badānī* (Bodily movement and Repose), *Al-Haraq waʾl Sukūn al-Nafṣānī* (Psychic movement and Repose), *Al-Nawm Waʾl Yaqza* (Sleep and Wakefulness) and *Al-Iḥtiṣāb waʾl Istīfārāg* (Retention and Evacuation). In these six essential factors, *Al-Nawm Waʾl Yaqza* is the fifth factor and the imbalance between them causes a disease which is known as *Sahar*. According to Ibn Sīnā sleep increases the body's strength and restores the *Harārat Ghariziyā* (Innate Heat). Sleep helps in food digestion, absorption, and maturation and transforms it into blood while being awake has the opposite impact on sleep. If wakefulness predominates, it creates *Yubūsat* (Dryness) and *Duʿāf* (Weakness) in the brain which causes Insomnia and disorientation.

**Asbāb (Causes)**

It is primarily caused by an imbalance in the temperament of the brain due to an excess of *Yubūsat* (dryness) or *Harārat* (hotness). However, it can also be caused by other factors such as physical or mental problems. There are three types of causes broadly classified.

**Iktiṭīyārī Asbāb (Voluntary causes)**

These are voluntary and under our control like a busy schedule of work in routine life, low intake of diet (which dries the brain), excessive intake of diet (which produces heaviness in the stomach), and excessive use of hot and dry food materials lead to the formation of hot and dry humour, which is responsible for the causation of insomnia.

**Asbāb Ardīyya (Dependent causes)**

These are temporary in nature and when removed or decreased; sleep is restored such as deep thinking, fear, happiness, stress, depression, sadness, and emotions.

**Asbāb Maraḍiyya (Disease causes)**

There are several diseases responsible for *Sahar* such as *Sāʿī-Mizāj Yābis Sāda* (simple morbid dry temperament) of the brain, *Sāʿī-Mizāj Ḥārr Yābis Sāda* (simple morbid hot and dry temperament) of the brain. *Sawdāʾ Ghayr Ṭabīṭ* (Abnormal black bile) along with *Sāʿī-Mizāj Bārid Yābis Mādūd* (morbid cold and dry temperament associated with substance) of the brain, *Ṣafrāʾ Ghayr Ṭabīṭ* (Abnormal yellow bile) along with *Sāʿī-Mizāj Bārid Yābis Mādūd* of the brain, *Balgham Shor* (saline phlegm) or *Yubūsat* of brain. Many other diseases like fever, pain, indigestion, severe coughing, mania, hysteria, constipation, flatulence, liver disease, jaundice, gout, and prolonged labour also somewhat responsible for insomnia.

**Alamat (Symptoms)**

The most prevalent symptoms of insomnia include thirst, exhaustion, irritability of moods, dry eyes, sensation of burning in the eyes, and tiredness. If *Sāʿī-Mizāj Yābis Sāda* (simple morbid dry temperament) of the brain is the cause, the symptoms present lightness in the head and sensation, dryness of eyes, tongue, and nostrils but no feeling of heatness in the head. *Sāʿī-Mizāj Ḥārr Yābis Sāda* (simple morbid hot and dry temperament) of the brain is the cause, the symptoms may be lightness in the head and sensation, dryness of eyes, tongue, and nostril, feeling of heatness, burning sensation in the head, thirst. If *Balgham Shor* (saline phlegm) is the cause, the symptoms may be wetness of nostrils, eye discharge, heaviness in the head, and sleeplessness.

**Awarizat (Complications)**

Majusi describes in his book *Kamilus Sana* that the complication of *Sahar* is *Duʿfe Nafʾ* (Psychological Impairment), *Duʿfe Ṭabīṭ* (Physical weakness), impaired digestion, and dryness of the body. Razī describes in his books *Kitabul Havi* and *Kitabul Havi* that *Sahar* causes *Tashanuţ* (Spasm), *Junūn* (Mania), and *Ikhīlātāl-ә-Aqīl* (Mental Derangement).

**Usool-İ-Tilāb (Line of Treatment)**

The Line of Treatment for *Sahar* consists of the removal of the cause (predisposing and precipitating factors). *Tanqu'a-İ-Sawdāʾ Ghayr Ṭabīṭ* (cleansing of abnormal black bile), *Tanqu'a-İ-Safrāʾ Ghayr Ṭabīṭ* (cleansing of abnormal yellow bile), *Tanqu'a-İ-Balgham Shor* (cleansing of saline phlegm), *Tarbiṭ-İ-Badan wa Dimāḥ* (moistening of body and brain), *Tarbiṭ-İ-Sāʿī-Mizāj* (moderation of abnormal temperament), *Islahe Hazm* (improve digestion) and reduced of dryness of brain through *İlāj bi'l Tadbīr wa Taghdhiya* and *İlāj bi'l Dawā*.

**İlāj bi'l Tadbīr (Regimenal Therapy)**

*İlāj bi'l Tadbīr* is the modification in *Asbāb Sittā Darārijīya* (Six Essential Factors). This mode of treatment is very efficacious in the prevention and control of *sahar*. Many Unani scholars stated in their literature that *Tarbiṭ-İ-Dimāḥ* is effective management for insomnia. Various *İlāj bi'l Tadbīr* modalities, such as *Nāṭūl Šaʿūt* (Nasal Drops), *Tadbīn* (Oiling), *Hamman* (Therapeutic bath), *Daik* (Therapeutic massage), etc., can be used for *Tarbiṭ-İ-Dimāḥ* (moistening in the brain). Sleep is induced by following regimens that assist in eliminating heat and dryness from the body and brain.
Natūl (Irrigation Therapy)

Natūl is a classical and active therapy inīlaj bi‘l Tadbīr which is described as the pouring or dripping of medicated decoction or warm water on desired organs. Ibn Sinā stated in his book “Al Qānūn fīl Ṭibb”, Natūl with Ravghan-i-Nilofar and with a decoction of satar (Zaria multiflora), baboona (Matricaria chamomilla Linn), and aqhwān on every evening are helpful for insomnia.2,17 Azam Khan advised in his book “Alakaseer” that Natūl on the head with decoction of banafsha (Viola odorata Linn), nilofar (Nymphaea alba Linn), gul-i-shurkh (Rosa damascena), takhm-i-kahu kofta (Lactuca sativa Linn), kishneez sabz (Coriandrum sativum Linn), and aqhwān on the head, Natūl on the head with a decoction of kashk jau (Hordeum vulgare), baboona (Matricaria chamomilla Linn), and aqhwān in every evening and Natūl with aab-i-shibṣ sabz (Anethum graveolens) is useful in insomnia.17 Ḩisma‘il Jurjānī has mentioned in his book Dhakhīra Khwarzim Shāhī that Natūl with baboona (Matricaria chamomilla Linn), and kashk jau (Hordeum vulgare) every evening and he also stated that use of Murāṭṭib Natūl has a significant result for insomnia.13 Natūl with decoction of banafsha (Viola odorata Linn) or nilofar (Nymphaea alba Linn) or bārg kahu (Lactuca sativa Linn), kishneez sabz (Coriandrum sativum Linn), khashkhash (Papaver somniferum Linn) and with decoction of baboona (Matricaria chamomilla Linn) or kashk jau (Hordeum vulgare) is applicable for insomnia.16

Ṣa‘ūṭ (Nasal Drops)

Oily or watery medications that are dropped into the nose. Ravghaniyat of nilofar (Nymphaea alba Linn)2 and baboona (Matricaria chamomilla Linn)17 are used as Sa‘ūṭ for inducing sleep.

Tadhīn (Oiling)

Applying oil over the part of the body is termed Tadhīn (Oiling). For this purpose, Ibn Sinā and Azam khan have mentioned in their books that the application of Ravghaniyat of khashkhash (Papaver somniferum Linn), kahu (Lactuca sativa) on the forehead, Ravghaniyat of labab-i-saba kahu (Lactuca sativa), Maghz takhm-i-kadu sheerin (Cucurbita maxima), badam sheerin (Prunus dulcis)17,19, and banafsha (Viola odorata Linn) over the scalp17, and Salkhiya, Abyoon and zafran (Crocus sativus) mixed in ravghan-i-gul on the nose is recommended for treating in insomnia.2 Another Unani Physicians Ḩisma‘il Jurjānī in his book Dhakhīra Khwarzim Shāhī mentioned that the application of Ravghaniyat of banafsha (Viola odorata Linn), nilofar (Nymphaea alba Linn), and Maghz kadoo sheerin (Cucurbita maxima) on the head and every evening on the soles, umbilicus, anus, and nose. Ravghaniyat of khashkhash (Papaver somniferum Linn) and kahu (Lactuca sativa) on the forehead and temporal region is used for the prevention and treatment of insomnia.13

Ḥammām (Therapeutic bath / Turkish bath)

A Ḥammām is a kind of bathing where users can freely perspire in three rooms that are gradually heated up. The first room is the Bārid Ṭaṭāb followed by the Ḥār Ṭaṭāb room, and the last being the Ḥār Yābis room. Mohammad bin Zakariya in his book “Ḡina Munā” and Ḩisma‘il Jurjānī have stated that Ḥammām is useful for sleep,12,13 Avicenna and Azam khan recommended sweet and lukewarm water for insomnics.2,17

Dalk (Therapeutic Massage)

The affected region of the body is rubbed with hands using medicated oil with a variety of techniques that result in physiological and psychological therapeutic effects on the body and in disease conditions. Dalk with Ravghaniyat of Nilofar (Nymphaea alba Linn)2, qinnab (Cannabis sativa Linn), banafsha (Viola odorata Linn), and badam (Prunus dulcis) is used as dalk on the sole. Dalk with khashkhash safed (Papaver somniferum Linn) and takhm-i-qinnab (Cannabis sativa Linn) (each 2 tola) mixed in sheerah gau over the soles17 and Ravghaniyat of khashkhash (Papaver somniferum Linn), kahu (Lactuca sativa Linn) over the forehead and temporal region are worthy.17 Dalk with Cow’s ghee or Ravghani-i-badam (Prunus dulcis)12, and dalk with Ravghani-i-badam (Prunus dulcis) wa ravghan-i-kaddu (Cucurbita maxima) like murattīb ravghan on palms and soles induces sleep.17 Massage the head with Ravghaniyat of kaddu, badam, khashkhash, or sheer-i-dukhtar (each in equal quantity) or only with ravghan-i-banafsha18 and massage with ravghan-i-labab-i-saba and ravghan-i-kahu (each equal quantity) is worthwhile for Sahar.14 Massage with ravghan which contains khashkhash (Papaver somniferum Linn) and bahroj (Pinus longifolia) recommended for insomnia.12

Riyādat (Exercise)

Riyādat is a voluntary movement with the purpose of Tanqāyya-i-Mawad (evacuation of waste material) for an individual. It plays an important role in maintaining good health and prevention of diseases. Ibn Sinā and Azam khan have stated that Riyādat helps in inducing sleep.2,17

Ṭīlā (Liniments)

An oily or watery preparation used topically on a particular part of the body is called Ṭīlā. Ṭīlā with Qurs-i-Musallas mixed in aab-i-kishneeze sabz (Coriandrum sativum Linn)17 is beneficial for insomnia. Qurs zafran prepared in usara khashkhash (Papaver somniferum Linn) or in the decoction of gulah (Rosa damascena) with khashkhash (Papaver somniferum Linn) or kahu (Lactuca sativa Linn)2 is applied as Ṭīlā. Gul-i-banafsha (Viola odorata Linn), nilofar (Nymphaea alba Linn), takhm kahu (Lactuca sativa Linn) (each 10.5 masha), gule khatmi safed (Althea officinalis) 14 masha, post khashkhash (Papaver somniferum Linn), beekh luftah (Atropa belladonna) (each 7 masha) make powder and mix in aab-i-kahu (Lactuca sativa Linn)17 are applied over the forehead. Post khashkhash (Papaver somniferum Linn) and beekh-i-bahroj and with post khashkhash (Papaver somniferum Linn) and luftah (Atropa belladonna)17 are used as Ṭīlā on the temporal region. Ṭīlā with qurs munawwim barid, with kahu (Lactuca sativa Linn), luftah (Atropa belladonna), bazuziyan (Hyoscyamus niger), afjoon (Papaver somniferum Linn) (each 3.5 masha) are prepared in the decoction of khashkhas (Papaver somniferum Linn) and with aabe shibṣ sabz (Anethum graveolens) are auspicious for insomnia.17

Ḍimād (Poultice)

It is a semisolid preparation applied externally. Ibn Sinā and Azam khan advised that Ḍimād on the forehead with baboona (Matricaria chamomilla Linn), meethelahi2,17, usna (Cyperus scariosus)17 and with Ḍimād-i-khawabawar or almunawwim (Both are compound preparation)14 are helpful for insomnia. Make a fine powder of takhm nilofar (Nymphaea alba Linn) 3 masha, takhm kahu (Lactuca sativa Linn) 3 masha, takhm khrufa (Portulaca oleracea) 3 masha, sandal safed (Santalum album) 3 masha, kafoor 1 tola, afjoon (Papaver somniferum) 4 surkh, zafran (Crocus sativus) 4 surkh and mix it in ravghan-i-gul 6 masha and kishneez sabz (Coriandrum sativum) 2 tola is used as Ḍimād over the head and with khashkhash (Papaver somniferum Linn) prepared in aab-i-banafsha (Viola odorata Linn)12 over the head remove excessive heat and induce sleep. According to Ibn-i-Masowiya Ḍimād with khas (Chrysopogon zizanioides) is useful for insomnia.2,17
Lakhkakha (Inhalation of vapour arising from fragrant drugs)

It is an aromatic-based preparation of water or oily drugs, which are kept in a wide-mouth container and allowed to be inhaled through the nose. Hkm Azam khan advises that Lakhkakha of aab-i-barg kahu (Lactuca sativa), aab-i-kineez sabz (Coriandum sativum), sheera tukhm-i-khashkhash (Papaver somniferum Linn) and Raghvan-i-nilofar is beneficial in insomnia16-17.

Shamūm (Inhalation)

The drug that is sniffed and its volatile constituents reach to nose is called Shamūm (inhalation). Post khashkhash (Papaver somniferum Linn), beekh-i-babroj, bed mushk (Salix caprea Linn) is moisten with arq-i-gulab, and Zafran (Crocus sativus) is mixed in raghvan-i-banafsah are used in Shamūm. Usna (Cyperus scariosus)13, Banafsha (Viola odorata Linn), nilofar (Nymphaea alba Linn)12,16 and barq-i-tulsi (Ocimum tenuilorum)14 are commonly used as Shamūm in insomnia.

Qatūr (Drops)

Pouring down drop by drop water or oily medicine into the nose or ear is called Qatūr. Ibn Sinā and Ismā`il Jurjānī have mentioned in their literature that Taqteer with raghvan-i-nilofar2 and with luke warm raghvan-i-banafsah, raghvan-i-nilofar13, raghvan-i-Maghz kaddu sheerin (Cucurbita maxima)13-16 in ear and Qatūr with raghvan-i-baboona and raghvan-i-aqhwān17 in the nose is used for the management of insomnia. Hkm Azam khan recommended that Qatūr with Raghvan-i-kaddu (Cucurbita maxima) with sheer-i-zan or sheerah-i-khashkhash (Papaver somniferum Linn) in sheerah-i-gau mixed in raghvan-i-kaddu (Cucurbita maxima) is implied for insomnia17.

Nashūq (Liquid Snuf)

The drug is sniffed into the nose is called Nashūq. It may be wetary preparation or in powdered form. Ravghaniyat of Nilofar, naqhwān, lersa (Iris ensata Thunb) is sniffed and zafran (Crocus sativus)2, baboona (Matricaria chamomilla Linn) or aqhwān16 are also used as Nashūq for insomnia.

Pāshoya (Foot bath)

Immersing of the foot in medicated decoction is called Pāshoya. Azam khan stated that Pāshoaya is advantageous for insomnia17,19.

Result

A total of 30 Unani Classical Literature were reviewed 19 Unani Classical Literature were Found relevant to Insomnia and 9 Classical Literature were found related to Regimenal Therapy for the Management of Insomnia. After exploring Unani Classical Literature, it is found that thirteen Regimenal Therapies i.e. Naṭāl (Irrigation), Saʿūt (Nasal Drops), Tadhīn (Oiling), Hammām (Turkish bath), Dak (Therapeutic Massage), Riyādat (exercise), Tīlāʾ (liniments), Dimād (Poultice), Lakhkakha (inhalation of vapour arising from fragrant drugs), Shamām (Inhalation), Qatūr (Drops), Nashūq (Liquid Snuf), Pāshoya (Foot bath), etc are beneficial for the management of Insomnia.

Discussion

Unani Classical literature was explored for the Regimenal Therapy in the Management of Insomnia. A total of 30 Unani classical texts were explored, finding 19 relevant to insomnia and 9 related to regimen therapy. This review has led to the identification of 13 regimen therapies for managing insomnia. Among these therapies, various modalities such as Naṭāl (Irrigation), Saʿūt (Nasal Drops), Tadhīn, Hammām (Turkish bath), Dak (Massage), Riyādat (exercise), Tīlāʾ (liniments), Dimād (Poultice), Lakhkakha (inhalation of vapour arising from fragrant drugs), Shamām, Qatūr, Nashūq, etc., have been mentioned. The concept of “Sahar” in Unani medicine, which likely refers to the pre-dawn period, seems to have been analyzed extensively. This analysis includes its definition, causes, and Regimenal management, indicating that Unani scholars historically treated insomnia with care and attention to detail. Despite the limitations of their time, they recorded their knowledge and practices in classical literature. Moreover, the mention of ongoing research studies by academic institutions suggests a growing interest in scientifically validating the efficacy and safety of these regimen therapies for managing insomnia. This underscores the potential for integrating traditional Unani practices with modern scientific methods to improve healthcare outcomes.

Conclusion

The prevalence of insomnia is rising worldwide, because of lifestyle and bad habits. Considering the adverse effects of conventional medicine, it can be inferred that the Unani treatment uses an efficient treatment approach that is affordable and has minimal health risks. The exploration of Unani classical literature for regimen therapy in managing insomnia highlights the rich heritage of traditional medicine and calls for further scientific investigation to validate its effectiveness and safety in contemporary medical practice.

Acknowledgment

None

Conflict of Interest

No conflict of interest

References


