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Review Article

Role of Asbāb Sitta Ḍarūriyya in the Prevention and Control of Lifestyle Ailments: A Comprehensive Review

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Abstract

Background: Lifestyle diseases stem largely from recurring unhealthy behavioral patterns in daily life, which are developed from unhealthy lifestyle choices that are related to smoking, alcohol intake, drugs, and a sedentary lifestyle. These diseases include, but are not limited to, diabetes, obesity, cardiovascular diseases, and some forms of cancer. Since these diseases are linked to lifestyle and are not passed on by infected people, they are also called non-communicable diseases. The prevalence of lifestyle diseases is rapidly increasing worldwide. According to the WHO, lifestyle-related illnesses have become the primary contributors to global mortality around the world. The rise in prevalence due to sedentary lifestyle, use of tobacco, alcohol, smoking, and poor and unhealthy diet. To prevent such diseases, people are trying to adopt such modalities that can keep them fit and healthy. Unani medical theory attributes these disorders to a disruption in balancing six essential life factors, known as Asbāb Sitta Ḍarūriyya, (Six essential factors) over a long period, which are foundational to maintaining health and preventing disease.

Objective: This review aims to explore the role of Asbāb Sitta Ḍarūriyya in the prevention and control of lifestyle ailments.

Methodology: A systematic review of classical Unani literature and peer-reviewed studies was conducted to analyze the impact of Asbāb Sitta Ḍarūriyya. A search of published articles was performed using PubMed, Scopus, and Web of Science to explore the relationship between Asbāb Sitta Ḍarūriyya and lifestyle diseases.

Result: The findings suggested that optimizing these Asbāb Sitta Ḍarūriyya (six essential factors) contributes significantly to the prevention and management of lifestyle diseases.

Conclusion: The Unani concept of Asbāb Sitta Ḍarūriyya provides a comprehensive and natural approach to managing lifestyle diseases. Incorporating these principles into modern healthcare can offer a sustainable and holistic strategy for disease prevention and management.

Keywords: Asbāb Sitta Ḍarūriyya, Lifestyle, Unani Medicine, prevention and management.

Introduction:

Lifestyle diseases are a group of diseases the onset and progress of which are concerned with unhealthy lifestyle choices and behavior factors such as dietary habits, physical activities, rest, smoking, alcohol consumption, tobacco chewing, etc. Austrian psychologist Alfred Adler was among the first to use the term 'lifestyle', referring to characteristic behavior and choices. (1870-1937), denotes the interests, opinions, behaviors, and behavioral orientations of an individual, group, or culture, and the diseases that arise primarily by the adoption of abnormal lifestyle are supposed to be known as "lifestyle diseases".¹

Lifestyle diseases cannot be passed from one to another; these diseases have a long duration and slow progression

and result from the combination of physiological, environmental, and behavioral factors (WHO). A large share of deaths in India are attributed to such chronic lifestyle conditions, with 61.8% of deaths attributed to this group of diseases. Globally, lifestyle diseases are responsible for around 70% of all deaths, approximately 40 million people dying from these diseases per year.² WHO reported that approximately 43 million people were killed in 2021 due to NCDs.³ and projections of the total number of deaths will increase to 55 million deaths by the year 2030.⁴

Preventive care holds a central role in Unani medical philosophy, through maintaining the balance in Asbāb Sitta Ḍarūriyya, which directly influences health. The Unani scholars believed that the homeostasis of the body depends on the balance of the four humours, and six

essential factors that become a cause of the health and disease. The Scholars considered, lifestyle diseases to be a result of improper management of Asbāb Sitta Ḍarūriyya (Six essential factors) over a prolonged period.^{5, 6} The word “Al-Asbāb” (Cause) refers to the factors that occurring first and thus necessitate the existence or persistence of a certain state of the human body, to generate a new state or to maintain an old state.^{7, 8}

It is emphasized that the Asbāb/causes are responsible for maintaining the changes or prevention in the state of the body, it may be 1. Ḍarūriyya (Essential) and 2. Gair Ḍarūriyya (non-essential).⁹ Asbāb Ḍarūriyya are known as Asbāb Sitta Ḍarūriyya.

Asbāb Sitta Ḍarūriyya are six essential causes/factors from which nobody could escape during his lifetime, and are essential for maintaining physical, mental, social and spiritual health which include air, foods and drink, bodily movement and repose, psychic movement and repose, sleep and wakefulness, retention and evacuation, Imbalance in any or all of these factors may lead to various disease condition.⁷

Ali Ibn-e-Abbas Majusi (930- 994) was the first person who described Asbāb Sitta Ḍarūriyya (Six essential factors) with this title in his famous book “Kamilus-Sanaa”, but he did not mention the sequence as presented in today’s textbook.¹⁰

Avicenna (980-1037) was the first person who described these factors as “Asbāb Sitta Ḍarūriyya” in an organized way and explained it as “Al-ahwalilabdan wa-alhafizah liha ma Darooriyah la yatati lil-insani-al tafsi anha filhayatihi wama gair darooriya wal-darooriya sittat-alajnas”⁸. “Nobody could escape from these factors so long as he is living.”^{8, 9}

Asbāb Sitta Ḍarūriyya (Six essential factors) are as follows:

1. Hawā-e-Muheet (Atmospheric Air)
2. Ma’kulāt-o-Mashrūbāt (Food and drinks)
3. Al-Ḥaraka wa’l Sukūn al-Badanī (Bodily movement and Repose)
4. Al-Ḥaraka wa’l Sukūn al-Nafsānī (Psychic movement and repose)
5. Al-Nawm wa’l Yaqza (Sleep and wakefulness)
6. Al-Ihtibās wa’l Istifrāgh (Retention and evacuation).



Asbāb Sitta Ḍarūriyya are efficient in the Prevention and control of lifestyle diseases according to Unani physician; the imbalance in Asbāb Sitta Ḍarūriyya (six essential factors) results in the alteration in Mizaj, which leads to disease. For example, Excessive intake of fat and lack of physical activity may lead to the change of mizaj from

1. Al-Hawā-e-Muheet (Atmospheric air):

Air has priority over all six essential factors; without air, we cannot imagine the existence of life.¹³ Air performs the function of Ta'adeel-e-Rooh at the time of inspiration by exchanging the air. Simultaneously, it also works as Tanqiya-e-Rooh at the time of expiration.^{14, 15} the normal changes in air are the seasonal changes because in every season the air changes into another temperament (Mizaj). That's why Most of the airborne diseases are caused by seasonal or natural changes and environmental pollution of the air.¹⁶ Changes in the character of atmospheric air produce changes to the human body. Polluted air induces putrefaction in humours. Therefore, together, climate change, air pollution, and non-communicable diseases represent one of the most serious threats to global health. The World Health Organization (WHO) has identified climate change as one of the greatest health threats of the 21st century and air pollution as the single largest environmental health risk.¹⁷ the connection between local air pollution sources and the emissions that drive climate change is very clear. A study shows that human life needs fresh and pure air to perform normal physiological functions and to maintain health. We can control and prevent most of the chronic lifestyle diseases through the strengthening of Rooh, through fresh and pure air.

2. Ma'kūlāt-o-Mashrūbāt (Food and Drinks):

Foods and drinks are placed in second place after air because their importance is less than air but above all the factors. Every individual differs in bodily conditions, temperament, age, dietary patterns, habitat, etc. Foods change the state of the body their quality (quality of becoming hot or cold when it enters the human body) and quantity, as regards amount, an excess food produces indigestion, obstruction, and then putrefaction of humours and always leads to cold and moist in effect which further becomes the cause of obesity and coronary heart diseases. If the quantity of food falls short, it causes emaciation. The role of behavioral and dietary risk factors in lifestyle diseases is now well recognized.¹⁸ To obtain good health practices and prevent diseases, it is necessary to understand links in the relationship between food, and lifestyle diseases, It was recently shown that the origin of these DRCDs (Diet-related chronic diseases), is multifactorial and may result from at least 10 different deregulated metabolic parameters, including antioxidant status, acid-base imbalance, increased inflammatory status, impaired carbohydrate/lipid/carbon metabolism, impaired functioning of neurons and DNA transcription, hypertension, and/or modified digestive microflora.¹⁹

A clear difference has been given in the Unani classical text between diet and drugs. Diet means when the substances administered into the body are affected by

normal to cold, which is the main cause of the development of obesity. Obesity is a major risk for developing diabetes, stroke, and coronary heart disease, and is a major contributor to the onset and progression of chronic lifestyle diseases^{11, 12}

the body (metabolism) and break into constituents. Their constituents can give a replacement of different parts of the body such as carbohydrates, protein, fat, vitamins, minerals, etc. The best diet according to Unani physicians is one in which the nutritional value and the quality and quantity is believed to ensure physical fitness by strengthening tabi'at.

On the other hand, drug is the substance which acts due to its quality (Kaifiyat) and establishes its effect, finally, eliminated by the body, and does not become a part of body, such as Mako (Solanum nigrum), Kasni (Cichorium intybus), Aftimoon (Cuscuta reflexa), Afsanteen (Artemesia absinthium) etc. due to its anti-inflammatory property reduce inflammation and then eliminated by the body.^{14, 20, 21} Now a days, traditional good quality and low-calorie diets have been swiftly replaced by high-fat, energy-dense diets. Unani scholars explain detailed about dietary habits, Jalinoos suggested that four conditions should be kept in mind while making eating or drinking habits:

- Time of the food
- Type of food
- Quantity of the food
- The temperament of the food. (Jamil, 2006), (Tabri, 2010)

Water does not nourish the body but it carries the food, rectifies the food, and a sufficient amount of water is needed to maintain proper metabolic activities of the body.

It has been very successful in identifying the appropriate food for different individuals according to their temperament, seasons, climate, age, etc. When a disease occurs, Ilaj-bil-Ghiza (Dieto-therapy) is one of the key principles of treatment used in unani medicine to treat the patient. The first step of the management of every disease is either by administration of specific diets or by regulating the quality and/or quantity of food. In recent years, public awareness of the health benefits of functional food and nutraceuticals has been expanded in the prevention of the risk of developing diseases and improvement in overall health. Identifying the appropriate food has been very successful in unani medicine with the unani principle of diet. Specific dietary regimens are recommended for the individuals according to their temperament. Proper diets are assumed to produce good humours while improper ones produce bad humours.²² one can control and prevent most of the life style diseases through maintaining, good quality food, water, and dietary habits in his daily life.

3. Al-Ḥaraka wa'l Sukūn al-Badani (Bodily movement and Repose):

Physical activity is an important element in the prevention and management of many diseases like diabetes, Hypertension, and Obesity in all its stages. Large and well-planned studies have established the importance of exercise. One has to do 30-40 minutes of aerobic exercise and resistance exercise 5 Days a week and preferably all 7 days.²³ Available experience and scientific evidence shows that regular physical activity provide people, a wide range of physical, social and mental health benefits.²⁴

According to Unani scholars' movement is essential for human being, it produces heat in the body and supports vital heat to perform better body functions. Physis acts on ingested nutriment in the body and makes them capable of producing heat, in this process some waste substances are also produced, movements expel them out because they are harmful to the body and vital heat. Movement is described according to its effects on the human body as Shadid (vigorous), Da'if (weak), Qalil (short duration), and Kathir (prolonged duration).^{25, 21}

The rest always produces cooling and moistening effects on the body because vital heat does not excite during rest. Therefore, excessive rest produces Burudat (cooling) and may be responsible for the suppression of essential heat and affect the actions of Physis.²⁶

The one most important fact is that excessive viscosity of Maddah (humours/Balgham) produces hindrance in the action of Physis and also affects vital heat, which is the tool for Physis, so with the help of movements or exercise we can help the Physis to decrease the viscosity and abnormal quantity of that Maddah for the proper functions of Physis.

The beneficial effects of physical activity are reduced central adiposity, improved blood glucose levels, lipids levels, and blood pressure, and desirable change in muscle mass.²⁰ Therefore, balanced rest and movement exert optimistic effects on individual health.

4. Al-Haraka wa'l Sukun al-Nafsani (Psychic movement and Repose):

Harkat-wa-Sakoon-e- Nafsani are the important characteristics of human beings that differentiate them from the rest of the animals. It has been placed at 4th position in *Asbāb Sitta Ḍarūriyya* by unani scholars. This is a very essential factor of life, whole body feels like dead inside without these factors.²⁷

It is acknowledged that physical performance may be determined by mental factors, a psychologically balanced person shows positive effects on physical health. Some specific emotions appear to be associated with some patterns of activity of the brain, like fear is associated with amygdala activity, and basal ganglia activity and subgenual cingulate activity are related to happiness and sadness, respectively.^{28, 29}

Buqrat (Hippocrates: 460–370 BC) is usually regarded as the one who introduced the concept of psychiatric illness. Excessive Sukoon-e-Nafsani disturbance in sleep and

excessive wakefulness also lead to psychological disorders. Likewise, the accumulation of mawad (morbid materials) which is supposed to be habitually evacuated from the body paves the way to psychological illness. Failure to maintain balance between Harakat-wa-Sukoon-e-Nafsani results in disability of Quwate Nafsaniya (mental power) which leads to diseases such as Nisyan (Dementia), Melancholia, Mania, Kaboos, Junoon, Ishq, senile dementia, Alzheimer's, hysteria, delirium, schizophrenia, neurotic disorder, phobia disorder, anxiety, depression and psychosexual dysfunctions.³⁰

Unani physicians also have an opinion that certain diseases and mental disorders may occur due to emotional strain and maladjustment. Ibn-e Sina was the first to provide the relationship between psychology and medicine.^{24, 31}

There are some psychological factors that affect vital heat. Physis moves the vital heat and pneuma, interior or exterior of the body, according to the different psychological conditions. Sudden movement of vital heat towards the exterior of the body is seen in anger or extreme excitement. While slow movement of vital heat toward the exterior of the body is seen in lazzat (happiness). There are also some factors which move the vital heat and pneuma towards the interior of the body, e.g. fear and sadness.³²

The emotional state of a person plays an important role in health maintenance because negative emotions make a person physically sick, and positive emotions boost the immune system. Therefore, balance with emotions, psychic rest, and movement is essential for the restoration or preservation of existing health.

5. Al-Nawm wa'l Yaqza (Sleep and Wakefulness):

Naum wa yaqza (Sleep and wakefulness) is the fifth important entity of these six factors. Any derangement in the functioning of the factor may lead to excess or deprivation in sleep and wakefulness. Naum (Sleep) is an essential function that allows our body and mind to rejuvenate, making us refreshed and attentive when we wake up. Healthy sleep also helps the body remain healthy and stay away from diseases. Without enough sleep, the brain cannot work properly, this can impair our capability to converge, think clearly, and process memories.³³ During sleep, free radicals are scavenged from the body, which are produced during awakening by physical and mental exertion, moreover, ratubat and barudat are regained, and hence sleep rejuvenates the body and refreshes. Normal sleep is because of ratoobat wa baroodat, i.e., wetness and coldness in our brain, and if there is a derangement of balance in sleep and wakefulness, it implies the predominance of yaboosat wa hararat, i.e., dryness and hotness pervasive in the brain.

Yaqza (awakening) is a condition in which rooh-e-nafsani (neural pathway) enables the badan-e-insane (human body) to perform physical activity and make the sensory organs functional to perceive and be aware. During this phase, due to physical activities energy is utilized; as a result this hararat-e-gharizia (innate heat)

and ratubate-badania (body fluid) get debilitated leading to exhaustion, lethargy, and dryness.^{34, 35}

The imbalance between these two conditions leads to a disease state known as Sehar (Insomnia), and Insomnia leads to imbalance in other components of Asbāb Sitta Ḍarūriyya known as Harkat wa sakoon-e badani (Bodily movement and Repose) and Harkat-wa Sakoon-e Nafsani (Psychic movement and Repose). We find that Sleep and wakefulness are an indispensable factors of life. Concluded that normal physical and psychosocial functions depend on adequate sleep and wakefulness.³⁶

6. Al-Iḥtibās wa'l Istifrāgh (Retention and evacuation):

Iḥtibās means retention of necessary nutrients, minerals, water, and electrolytes in the body, while Istifrāgh means evacuation of morbid materials to clean the body, which are harmful to the body. There are two types of Iḥtibās wa'l Istifrāgh 1- Tabaie (Normal) and 2- Ghair Tabaie (Abnormal). To maintain a harmonic and synchronized habitat, certain beneficial end products of metabolism are retained in the body while harmful ones are expelled. Tabi'at gets rid of waste products by natural means which are micturition, defecation, menstruation, diaphoresis, sebum secretion, mucus secretion, etc. On the other hand, useful products should be retained in the body as they are required to provide nutrition and to run main physiological functions normally.

According to the Unani concept retention and deposition of Fuzalat (Morbid materials) increase in Rutubat-e-Ghariba, which decreases Hararat-e-Ghariziya, and weakens Tabi'at, as well as causes Sudda (Obstruction) in normal passage e.g. intestinal obstruction, renal stones, etc. And it will lead to several other disease conditions as Amraz-e-sue mizaj (e.g. infection, decrement in hararat ghariziya), Amraz-e-sue tarkeeb (e.g. embolism, paralysis), Amraz-e-tafarruk ittesal (e.g. rupture of vessels), Amraz-e-murakkabah (e.g. inflammation, abscesses).³⁷

The most common example of abnormal Iḥtibās in daily life is acute or chronic constipation while the most common example of abnormal Istifrāgh is diarrhea, menstrual bleeding and vomiting. Therefore, if retention and evacuation are balanced and take place at the proper time through proper channels regularly, they are beneficial in maintaining health and well-being; otherwise, both are harmful.

Discussion:

The Unani system of medicine exerts a major influence on preventing the onset and development of several diseases of lifestyle by making modifications in "Asbāb Sitta Ḍarūriyya". By keeping the demand for a healthy life, there is a need to raise awareness about the role of Asbāb Sitta Ḍarūriyya in the maintenance of human health, and prevention of diseases. If a balance in Asbāb Sitta Ḍarūriyya is maintained, many lifestyle diseases could be prevented to a large extent. The up-keeping of these six essentials of life is supposed to be the key to the maintenance of Tabi'at and hence essential for the restoration and preservation of healthy life.

Conclusion:

With the above discussions, it is clear that Asbāb Sitta Ḍarūriyya (six essential factors) are directly or indirectly responsible for preventing or transitioning existing health and well-being. Imbalance in these factors may predispose the majority of chronic and lifestyle diseases. The extensive exploration of classical Unani literature reveals the role of Asbāb Sitta Ḍarūriyya in addressing lifestyle diseases, their prevention, and management. The conclusion is drawn from the above discussion that Asbāb Sitta Ḍarūriyya offers a holistic framework for managing lifestyle diseases by addressing environmental, physical, and psychological determinants. Future research should focus on clinical validation and integrating these practices into public health policies.

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