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Unani Concept of Prevention and Control of Lifestyle Disorders: A Literature Review

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ABSTRACT

Unani system of medicine approach to the prevention and treatment of the lifestyle and non communicable diseases is aimed at avoiding the accumulation of fasad mada (toxins) through maintaining of asbab e sitta zarooriya (six essential factors). This review was designed with the objectives to translate and compile ancient Unani literature on lifestyle disorders from classical text, to interpret Unani concept of lifestyle disorders and find proper management for lifestyle disorders through Unani system of medicine. The review was carried out from Arabic and Urdu classical texts of Unani medicine and published articles from reputed journals. In various Unani classical texts it have been stated that chronic disorders, which can also be termed as lifestyle disorders, are the conditions which arise from poor management of the asbab e sitta zarooriya (six essential factors) over an extended period. This invariably results in an accumulation of fasad mada (toxins) which is beyond the ability of physics or tabiat to deal with. Unani recognises the importance of identifying a person's risk factors like saman e mufrat (obesity) and interpreting the illness on the basis of the temperamental as well as humoral theory. This allows a targeted approach to deal with the humoral or structural imbalance associated with chronic lifestyle disorders such as Ziabetas shakari (type 2 diabetes mellitus) and Zaghtuddum qavi (hypertension). The matter or madda which is accumulated inside the heart or in the pericardium is mostly fasad rutoobat (morbid fluid) in nature. Excessive accumulation of morbid matter in the pericardium exerts pressure on the heart and prevents proper inbasat (relaxation) and thereby destructing the rooh (vital spirit) which leads to death. Lifestyle modification with asbab e sitta zarooriya (six essential factors) and non essential factors (asbab e ghair zarooriya) provide the ability of physis or tabiat to preserve and restore health.

Keywords: Asbab e sitta zarooriya, Lifestyle disorders, Unani medicine, Fasad mada

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INTRODUCTION

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Lifestyle disease is a group of diseases the onset and progress of which are concerned with lifestyle and behavior factors such as dietary habits, physical activities, rest, smoking, alcohol consumption, etc. Chronic non communicable diseases are rapidly increasing an important global public health problem. The lifestyle related diseases are chronic diseases including diabetes, heart diseases, cancer, and arthritis. It is also non communicable diseases (NCDs) against which worldwide actions are being taken. [1] According to the ancient literature of Unani system of medicine, all the communicable (amraz e muta'ddi) and non communicable (amraz e ghair muta'ddi) are the result of poor management of the six governing factors (asbab e sitta zarooriya), beyond the ability of physis or Tabiat to maintain and restore homeostasis. Unani system of Medicine approach to the prevention and treatment of these lifestyle and non communicable diseases is aimed at avoiding the accumulation of toxins in the first place. [2] Unani medicine strives to find the best possible ways by which a person can lead a healthy life with minimum or zero sickness. Unani system of Medicine lays rules for a balanced lifestyle, which revolves around six essential factors (asbab e Sitta Zarooriya) includes six essential pre requisites which are as follows. [2, 3, 4, 5, 6]

1. Hawa-e-Muheet (Atmospheric air)
2. Makool wa Mashroob (Food and drinks)
3. Harkat wa Sukoon-e-Badani (Physical activity and repose)
4. Harkat wa Sukoon-e-Nafsani (Mental activity and repose)
5. Naum wa Yaqza (Sleep and wakefulness)
6. Ehtibas wa Istifragh (Retention and elimination)

The above six causes (factors) essentially influence each and every human body; therefore they are called Asbab-e-Sitta Zarooriyah. Nobody could escape from these factors so long he is living. [6]

MATERIALS AND METHOD

The literature survey was carried out in the Unani classical text books of Arabic and Urdu. Information was reviewed from unani scholars' articles in the reputed journals.

Samane Mufrat (obesity):

The first reference of Saman-e-mufrat was given by Hippocrates (460). He said that when a person becomes extreme obese, imtila-e-dam (congestion or accumulation of blood) may lead to sudden death because of haemorrhage (due to rupture of vessels) or due to loss of hararat (heat). He further added that obese people have narrow vessels and poor circulations of blood and rooh

(essence). Obese persons are prone to other diseases as well as death because of narrowing of blood vessels. It also produces imtila (blood congestion) as well as prevents tarveeh. [7, 8]

Obesity, particularly if central or trance is an independent risk factor. Obesity can predispose the development of other risk factors, and the greater the degree of overweight, the greater the likelihood of developing other antecedents of atherosclerosis (such as high blood pressure and diabetes) that will increase the probability that heart disease will develop. [9, 10]

According to Unani concept obesity is also known as Samane mufrat. It is a Balghami (Phlegmatic) disease and hence Khilte Balgham predominates in the body of person and is a predisposing factor in causation of obesity. In this condition loss of movements of Aaza (organs) is due to excessive accumulated Balgham and cold temperament, hence the person becomes lazy and dull. This situation is just like Qaidul Badan (arrest of body). Balgham after mixing with blood produces lubrication in its Qiwan (viscosity) causes sluggish flow of the blood. [11, 12, 13]

The ancient Unani scholars like Hippocrates, Galen, Rhazes and Avicena have described the condition Saman-e-mufrat (Obesity) causes as possible complications as paralysis, stroke, narrowing of blood vessels, haemorrhages and sudden death in their compositions; most of these mimic hyperlipidaemia.[7,14,15]

Unani literature clearly stated that asbab (causes) and awwarizat (complications) of Saman-e-mufrat (Obesity).[14,15,16]

Asbab:

1. Khilqi saman-e-mufrit - Hereditary obesity
2. Martoob ghiza -Wet/Moist diet
3. Farhat vorahat-Luxurious lifestyle
4. Kasrat-e-ghiza -Excessive food like fat and meat, excessive sweets and beverages
5. Qillat e riyazat -Lack of exercise
6. Dalak with murattib roghaniyat-Massage with moist oils

Awwarizat:

1. Narrowing of blood vessels
2. Haemorrhages
3. Paralysis
4. Sudden death

The following tadhahir (regimens) and lifestyle modification were described in the Unani classical literature to prevent and control saman e muftrat. [7,14,15]

1. Taqlil -e-ghiza (Low diet)

2. Takan ki ziyadati (Excessive physical effort)
3. Kasrat-e- Riyazat (Excessive exercise)
4. Ishal (Purgation)
5. Idrar-baul (Diuresis)
6. Tareeq (Diaphoresis)
7. Fasd (Venesection)
8. Dalak-e-Khashin (Rough Massage)
9. Hammam-e-Yabis (Dry bath)
10. Massage with Mohalil roganiyat (anti inflammatory oils)
11. Appetite suppressors, e.g. rice of chirchita
12. Nafsiyati Iiaj (psychological treatment)

Ziabetus shakari (Diabetes Mellitus):

As per the WHO, diabetes mellitus (DM) is a heterogeneous metabolic disorder characterized by common features of chronic hyperglycaemia with disturbance of carbohydrate, fat, and protein metabolism. The various classical text books also contain detailed descriptions of this disease, differentiating its distinguished features from other diseases known as tashkhees e fariqa. [17] **Ibn Sina** stated in his book of al qanoon fit tib, the word diabetes is derived from Greek word of, “diabanein” which means to “passing through” or “run through” or “siphon” in reference to the excessive urine produced as a symptom of this disease. It is not a new disease, ancient Greeks and Arabic physicians knew it well. The causes of disease are sue e mizaj wa zauf e kulliya, masana wa jigar (disordered temperament and weakness of kidney, bladder and liver). [17] Excessive and abnormal distribution of free fatty acids and the well known existing co-morbidities / risk factors i.e. obesity, dyslipidemia, gestational diabetes mellitus and especially fatty liver are most common causes for insulin resistance, impaired insulin sensitivity and dysregulated insulin action in the liver and contributes significantly to the pathogenesis of type 2 DM. Attiba (ancient physicians) defined it in their own established language of kulliyat as sue mizaj wa zauf e jigar are the conditions of abnormal energy (heat) generation and utilization and these conditions are also co-existing with so called modern type 2 diabetes mellitus. If we accept this hypothesis then we can vaguely come to the conclusion that Attiba used the terminology of Ziabetas shakari for type 2 diabetes mellitus. However that further needs extensive research studies.

Alamath (symptoms) of Ziabetas Shakari described in various classical Unani literature [17, 18]

1. Excessive thirst

2. Frequency of urination
3. Dribbling of urine
4. Urine appears white, losing its consistency to resemble like water
5. Excessive micturition without burning sensation
6. Incontinence of urine

Awwarizat (complications) of Ziabetas Shakari are especially enumerated by ancient Unani physicians: [17, 19]

1. Zooban (emaciation of the body), develops due to excessive dehydration of the body which cannot overcome by intake of water.
2. Collapse of the sexual functions and diabetic gangrene.
3. Zof e badan (general debility)

Asbab e mui'ddha (predisposing factors) [20, 21, 22, 23]

1. Overweight and obesity
2. Unhealthy diet eg: fat and fast food
3. Physical inactivity
4. High blood pressure
5. Impaired glucose tolerance (IGT)
6. Poor nutrition during pregnancy
7. Family history of diabetes
8. Increasing age
9. History of gestational diabetes,
10. Polycystic ovarian syndrome

Mattaqaddam e Ziabetus shakari (Prevention and control of DM)

Greco-Arab and Islamic healers treated patients through a scheme starting with physiotherapy and diet; if this failed, drugs were used. Rhazes's treatment scheme started with diet therapy, he noted that if the physician is able to treat with foodstuffs, not medication, then he has succeeded.[24]In classical Unani literature, ancient physicians clearly mentioned variety of ghiza (food) for Ziabetas Shakari; Amla (Indian goose berry), Jamoon, Angoor (unripe grapes juice), anar (sour pomegranate), milk, fresh fish ,teetar ,margabe ,seekh kabab, Pears , dried fruits , goat milk ,cheese with milk, fresh vegetables, barley water, oily extract of astringent fruits, rube hamaz, and curd.[17,18]People with diabetes should be prescribed and encouraged to incorporate regular exercise as a key part of their treatment plan. Physical activity can help people with diabetes achieve a variety of goals, including increased cardiorespiratory fitness, increased vigour,

improved glycaemic control, decreased insulin resistance, improved lipid profile, blood pressure reduction, and maintenance of weight loss.[23,25] **Ibne Nafees** a famous Unani philosopher mentioned that “No alternative of riyazat present in the tibb”.

Falij (Paralysis)

Rabban Tabri (780-850AD) proposed that falij (paralysis) is caused by an obstruction in any part of the brain (stroke). Obstruction of hassasa (sensory) and moharrika (motor) pathway of the brain by laisdar balgham (thick phlegm) causes stroke. [26]

Stroke does not occur at random and there are risk factors which precede stroke by several years. These risk factors can be broadly divided into modifiable and non-modifiable risk factors. Nonmodifiable risk factors include age, sex, race/ethnicity, and family history. Major modifiable risk factors include hypertension, cardiac disease, diabetes, hyperlipidemia, carotid stenosis, cigarette smoking, alcohol intake, and sedentary lifestyle. Prevention of these risk factors remains an important approach to substantially reducing the incidence, recurrence, disability, and mortality of stroke. [27]

Zaghtuddum qawi (Hypertension):

Hypertension is the single most important and prevalent modifiable risk factor for stroke. Hypertension contributes to 60% of all strokes. [2, 10] Rhazi stated, accumulation of normal or abnormal fluids in the vesseles causes imtila ba hasbul auyiya means there is increase in blood volume resulting in urooqi tamaddud (vascular tension) causes vascular pressure. Razi have been written in his writings urooqi tamaddud causes;

1. Heaviness of head
2. Visual disturbances
3. Khafqan (palpitation)
4. Rupture of minute blood vessels

He described the haemorrhage and sudden death as the complications of hypertension. He has also advised rest, light diet and prevention of heavy work as regimens. [28] Lifestyle change includes diet, mainly eating more fruits and vegetables and consuming less salt, in addition to weight reduction, aerobic activities and moderation of alcohol consumption are the best ways of modification of pre hypertension (systolic blood pressure 120-139mmHg and diastolic blood pressure 80-90 mmHg).[20,29] Fruits and vegetables enrich sources of potassium, magnesium and fibre and dairy products are an important source of calcium. 6 g sodium chloride (salt) or less than 6g a day was recommended for hypertensive. [20]

According to Razi:

Riyazat (exercise) stimulates innate heat and mature the thick morbid matters after that eliminate it proper outlet. Riyazat enhances arterial blood supply and nutrition to affected part of the muscles. Physical activity can help people to achieve a variety of goals, including increased cardio respiratory fitness, increased vigour, improved glycaemic control, decreased insulin resistance, improved lipid profile, blood pressure reduction, and maintenance of weight loss. Following preventive strategies mentioned in Razi's writings to prevent amraz e qalb.

1. Avoid constipation
2. Avoid any strenuous work and provide mental relaxation
3. Light morning walking

Wajul mufasil (Pain in joints):

Ancient Unani physicians used the term "wajul mufasil" broadly for pain in joints or arthritis. Wajaul mufasil is caused by ghair thabayee balgham (phlegm), khoon (blood), safra (yellow bile) and sauda (black bile). [17]Wajul mufasil is caused by abnormal collection of humour in the affected joints. Sometimes khilte damvi, sometimes safravi, sometimes saudawi, but for the most part is caused by balgham or sometimes the humour is of a compound nature. [18]

The Mada (Substance) causing Wajaul Mufasil accumulates in the joints due to the weakness of the joint called as zauf-e-mufasil. [30]

Asbab e mu'dda (predisposing factors):

1. Giving up the exercise (Tarke Riyazat)
2. Weakness of stomach (Zaufe M'ada) leading to the absorption of impaired matter
3. Derangement (Su-e-Tarteeb)
4. Sedentary lifestyle
5. Regular and excessive use of alcohol
6. Excessive coitus and exercise after meals
7. Cold and catarrh

Mataqaddam e wajul mufasil (Prevention of arthritis):

Ilaj bil ghiza, ilaj bil tadhabir and ilaj bil dawa were recommended in the classical text for prevention and control of wajul mufasil. Ilaj bil ghiza: Razi recommended fresh vegetables and fruits as ghiza e dawa for wajul mufasil. Further he advised all meat harmful for wajul mufasil. Ilaj bil tadhabir: Riyazat e modhadil (moderate exercise) and dalak e roghaniyat (oil massage) have been recommended in unnani classical literature for the management and prevention of wajul mufasil. Hijamah (cupping), fasd (venesection) and irsal e alaq (leech therapy) have been recommended for wajul mufasil e damavi. Ilaj bil dawa: The principle of treatment aims at

restoring the normal temperament, and correcting the imbalance in the khilth (humour) through diversion of morbid matter and istifaraah (evacuation of morbid matter). A large number of single drugs i.e Surinjan (Colchium luteum), Bozidan (Tanacetum umbelliferum), Asgandh (Withania somnifera), Baboona (Matricaria chamomilla), Sibr (Aloe barabdenis), and compound preparations for internal as well as external applications i.e Habbe surinjan, Roghan baboona, Safoof e surinjan, Hab e Asghand, Zimad e auja have been mentioned in classical Unani literature to manage wajul mufasil. [31-34]

Amraz e Mashaikh (Old age related disorders):

According to Unani concept, the physiology of old age is described meticulously in terms of basic fundamentals like temperament, humours, faculties etc. The temperament of elderly persons is described as cold and dry and the proportion of humours in them is considered much different from those of children and any young people. [35] In human lifespan Tahleele rutoobate ghareeziya (dissolution of natural body fluids) by hararate ghareeziya (innate heat) takes place gradually. Over a period, the quantity of rutoobate ghareeziya decreases due to increased tahleel of rutoobate ghareeziya. Decrease in hararate ghareeziya changes the mizaj relatively to barid. Gradual increase in buroodat with age results in decline of quwa (faculties), which in turn affects afa'al (functions) of the body. As all quwa require hararat for performing afa'al, depravity of akhlat or dryness process gradually goes on until it reaches the climax.i.e. death. [36] Tahallul arise from internal as well as external causes. Of the external causes, atmospheric air (exposure to freezing cold or hot winds) causes tahallul in the rutoobat. The internal causes are hararate Ghareeziya (innate heat), which causes tahallul of the rutoobat (fluids) and hararate ghareeba (extrinsic heat) generated within us from various foods and through other agents which cause taa'ffun (putrefaction) in the rutoobat. [11, 36] Health is maintained by homeostasis of body fluids and temperament and derangement in these either qualitatively or quantitatively leads to different diseases. The mechanism of homeostasis becomes weak as the age advances due to decline in quwat wa affal, hence leads to various age related diseases and disorders in Mashaikh (old age).

Prevention or delaying of aging:

Maintaining of six essential factors (asbab e sitta zarooriya) lead to prevention and delaying of aging. Diet is an important component of these essential factors. The Unani system of medicine believes that a physician is not the healer but an assistant to nature Tabiyat (physique) of the body, which is the true healer hence the diet should be in accordance with it. According to the digestion and physical strength of the old people, they should be served with small amount of food at a time and thus fed two or three times a day. [5] In old age there is dominancy of buroodat and yaboosat,

therefore musakkin aur murattib (soothing of cold and moisture) diet should be advocated for elderly people. [36]Moistening and warming foods and drinks were recommended by ancient unani physicians. People should avoid any heavy food which produces black bile and phlegm and similarly avoid any hot, pungent, and desiccant food, such as kawa-mikh (some kind of sauce and pickles) through advancing age. Olive oil, vinegar, and garlic are useful to old person. Preserved ginger, and other hot type of preserves are suitable for them. These should, however, be taken in quantity which (merely) warms the body and aids digestion but not in a quantity which produce dryness. Food such as meat-soup prepared with Roman wheat and barley is good for elderly. [5, 11, 35, 37, 38] Riyazath e modhadil (Moderate exercise) and har hammam and (Warm bath) remove free radicals and provide fresh mind and soul. Reconstruction of homeostasis causes reserve of every organ system of elders. We can delay or prevent aging and age related disorders through modification of our personal habits and lifestyle.

Amraz e gurda (Kidney diseases):

Prevalence of kidney diseases is largely unknown. Chronic kidney disease of multi-factorial origin is an environmentally acquired, occupational disease in which the cause is still not understood. Consumption of polluted water seems to be the underlying reason. Recognized causes of CKD worldwide include diabetes mellitus, hypertension, glomerulonephritis, obstructive uropathy, and congenital diseases such as polycystic kidney disease. Various toxins and environmental factors such as heavy metals, plant toxins, and high ambient temperatures are potential causes for kidney damage. **Soo e mizaj e gurda wa masana** (disordered temperament of kidney and bladder) is main causative factor for weakness of kidney and bladder (**Zof - e - gurda wa masana**). Asbab e sitta zarooriya are six essential factors operating life in a customary way. Makhoolath wa mashroobath (food and drink) is an important component among the six essential factors.

Cancer (Sartan):

Unani physicians have been mentioned in their writings, Sartan has been defined as a type of warm e sulb (hard swelling) due to abnormal production of sauda (black bile).

Hifz e mataqattam of Sartan (Prevention and control of cancer):

Ancient unani physicians pursued following four basic principles to prevent and control sartan:

1. Ilaj bil ghiza: Razi has been advised ghiza e latheef (light diet) and easily digestible diet. Eg: Kaddu, Kurfa Maul jubn and Maul shagheer.
2. Ilaj bil dawa: Munzij aur mushil e sauda
3. Ilaj bil tadhabeer:: Exercise advisable

4. Ilaj bil yad: Removal of the affected part of the organ Eg; In sartan e pistan (breast cancer) removed whole breast in the affected site in the early stage of the disease.

CONCLUSION:

The Unani system of medicine believes that a physician is not the healer but an assistant to nature Tabiyat (physique) of the body, which is the true healer hence the asbab e sitta zarooriya should be in accordance with it. We can take preventive measures to modify the modifiable risk factors and change them. Modifiable risk factor assessment is an important step towards understanding the origin of a disease and helps in formulating appropriate preventive strategies. Modifiable risk factors stick with lifestyle in this 21st century. Therefore modifying the lifestyle through maintaining of the asbab e sitta zarooriya prevents and controls all the non communicable and lifestyle disorders.

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