

Review article:

Temperament – an important principle for health preservation in Tibb an-Nabawi and Unani-Tibb

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Abstract:

Many prominent Greco-Arab (Unani-Tibb) physicians contributed to the advancement of medicine with their observations, practice, experience and experiments which gave priority to the preservation of health over the curing of ailments. Tibb an-Nabawi (Prophetic Medicine), the foundation of Islamic medicine placed great emphasis on preventative measures relating to lifestyle incorporating the spiritual, emotional and physical aspects of man. The key component to linking man's inter-relationship with his environment was understood through the concept of temperament. This concept remains at the core of Unani-Tibb up until today in terms of research and practical application within the clinical setting. Central to the understanding of temperament are the associated qualities of heat, cold, moisture and dryness, the combination of which describes each individual's unique constitutional make-up including personality traits, physical appearances and disease predispositions. Historically this formed the basis to the understanding of pathology and up until today it continues to guide physicians on individualized treatment regimes. All classical references of Tibb an-Nabawi attribute the onset of illnesses to the disturbance or imbalance of one's temperament. This paper aims to shed light on the concept of temperament as explained in the classical texts of Tibb an-Nabawi and Unani-Tibb and its practical application for health promotion and disease prevention.

Keywords: Tibb an-Nabawi; Unani-Tibb; temperament; preventative medicine; lifestyle factors

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“It is more important to know what sort of a person has a disease, than to know what sort of disease a person has” – Hippocrates

“The most evenly balanced of all temperaments in the animal kingdom is the temperament of Man

The most evenly balanced of all temperaments in mankind

is the temperament of the believer

The most evenly balanced temperament among the believers

are the temperaments of the Prophets.

The most evenly balanced of temperaments of all the Prophets

are the temperaments of the Messengers of Allah.

And the most evenly balanced of those is the temperament of the Prophet Muhammad (pbuh)” – As Suyuti

Introduction

The World health organisation (WHO) health strategy for traditional medicine 2014-2023 recognises the important role that complementary and alternative medicine (CAM) plays in the healthcare of patients in developing countries¹. CAM refers to a patient-centered and wellness-orientated system of medicine focused on individualized treatment according to lifestyle factors. Unani-Tibb also known as Unani medicine/Greco-Arab medicine or Tibb is a modality of CAM, widely practiced on the Indian sub- continent. Unani-Tibb is based on the teachings of three iconic pioneers of medicine namely; Hippocrates, Galen and Ibn Sina (aka Avicenna)². The traditional Islamic medical knowledge that focused on the Quran teachings and the Sunnah (Prophetic traditions) is called Tibb an-Nabawi written by famous authors like Ibn al-Qayyim al-Jauziyah, Jalalu'd Din as-Suyuti and Imaam Dhahabi, their writings formed the basis to the Islamic medicine of

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today^{3,4}. Tibb an-Nabawi is based on the words and actions of the Prophet Muhammad (pbuh) referring to medical matters with emphasis on preventative measures relating to lifestyle incorporating the spiritual, emotional and physical aspects of man. Temperament describes an individual's unique constitutional make-up including personality traits, physical appearances, emotional attributes, spiritual attributes and disease predispositions. The concept of temperament is an integral component for health preservation in both Unani-Tibb and Tibb an-Nabawi^{2,4}. There is a global revival of Tibb an-Nabawi in terms of research and practice however very little or no emphasis is placed on the basic principles with underpin this system of medicine. In light of the above mentioned this paper aims to shed light on the concept of temperament as highlighted in the classical text of Tibb an-Nabawi and Unani-Tibb. This paper also aims to briefly discuss how the concept of temperament is practically applied by Unani-Tibb practitioners as an indispensable component to all treatment regimes.

Major influences in Islamic Medicine

History recognizes the Islamic empire as the most sophisticated society for approximately 1 millennium before its decline. This is largely due to the great emphasis that Islam places on the acquisition of knowledge. Muslim scholars both translated the works of previous nations and generated new knowledge in several sciences including medicine. From the year 800-1450 Islamic civilization greatly influenced Western science, technology and medicine⁵. Medical science within Islamic history was influenced by the collective knowledge obtained from Persia, India, Syria and Byzantine Rome. The main contribution to Islamic medicine came from the Greeks, the well-known 'Father of Medicine' Hippocrates, Aristotle and Galen³. Ancient Greek literature was well preserved and translated from Latin to Arabic by Persian and Syrian scholars. This included the medical writings of Hippocrates, Aristotle and Galen which later returned to Europe in its original form. This first stage in the development of Islamic medicine extended to the 7th and 8th Century. The second stage was marked by excellence as Islamic physicians contributed valuable medical insights which pioneered new development in medicine⁶.

Many physicians expounded on the work of the Greeks like Al-Razi and the famous Ibn-Sina who wrote "The Canon of Medicine" (Al-Qanoon), which was noted as the foremost medical textbook in the Middle East, North Africa and Europe up until the 17th Century⁷. The Canon was included as part of the Brussel's University syllabus up until 1907 and today it remains the main reference manual for Unani-Tibb practitioners. The Canon is a medical

encyclopedia consisting of five volumes covering the general principles of medicine, detailed anatomy and physiology, multiple diseases of individual organs, characteristics of 760 simple drugs as well as a volume dedicated to formularies⁸. Ibn Sina also known as the 'Prince of Physicians' is noted to be the most outstanding medical scientist and physician of his time. He contributed greatly to human anatomy, physiology, pathology and management of most disorders of the human body. He focused on the history, physical examination and the analysis of signs and symptoms according to the temperament of patients as key components to diagnosis. His treatment regimes included diet, environmental air and breathing, elimination, emotions, and exercise suited to the temperament of the patient. Ibn Sina strongly advocated health preservation through individualized preventative measures which relied on the concept of temperament as a reference point⁹.

The advises of the Prophet (pbuh) as described in Tibb An-Nabawi, followed by that of several early Islamic philosophers in the evolution of Islamic medicine was tremendous in terms principles and practice¹⁰. Tibb an-Nabawi was one of the many popular books written by Jalalu'd Din as-Suyuti. As-Suyuti clearly knew the earlier works of Ibn al-Qayyim al-Jauziyah as he refers to him several times in his book as well as acknowledging the detailed works of Ibn Sina¹¹. The Islamic development of medicine within the context of Tibb An-Nabawi by Ibn al-Qayyim al-Jauziyah and Jalalu'd Din As-Suyuti is a compilation of Qur'anic verses and traditions of the Prophet (pbuh) which focused on the theory and practice of medicine and treatments⁹. Some of the major figures who also greatly contributed to the advancement of Islamic medicine includes Ibn-e-Rushed, Arzani, Ali Ibn Abbas Majoosi and Ismail Jurjani¹².

Preventative Medicine in Tibb an-Nabawi

Modern preventative medicine refers to that branch of knowledge that deals with the protection against microorganisms that may cause physical disease and psychological disease in the individual and society. Islamic legislation supported by Prophetic narrations and Quran injunctions enumerates several methods regarding the eradication of microorganisms by establishing rules pertaining to complete cleanliness of the body, ones clothes and the environment. Health advises according to Prophetic Medicine provides preventative measures for the biochemical, physical, intellectual, emotional and spiritual components of man. Prevention against chronic diseases of lifestyle can be attained in light of the Prophetic advises pertaining to diet, etiquettes of eating, ablution and bathing, prayer and supplication, exercise, fasting, emotions and medical treatments^{3,13}.

In the Book of Medicine (Kitab al-Tibb) of Sahih al-Bukhari much attention is given to health promotion and disease prevention over curative medicine. The preventative measures in Kitab al-Tibb were considered to be advanced in relation to the scientific findings of that time. The significance of disease prevention and the preservation of health are based on the Prophet (pbuh) words when he said: “There are two gifts of which many men are cheated: health (al-sihhah) and leisure (al-faragh)”. This stresses the fact that mankind should take good care of their health and always strive to remain in a healthy state which will enable them to fulfill their duty towards God during leisure (al-faragh) by acquiring both spiritual and physical knowledge, so that their souls will reach the ultimate goal namely the appreciation of God¹⁴.

The Theory of Humors and Temperament well established in Tibb an-Nabawi

The concept of the four humors also known today as humoral pathology is based on Greek medicine. The ancient Greco-Arab philosophers recognized temperament as an integral part of creation. The concept of temperament is regarded as one of the most important principles in Tibb an-Nabawi¹⁵. The various authors of Tibb an-Nabawi accepted and utilized the humoral understanding of disease. The classification and explanation of disease according to the four humors are deeply ingrained in various forms within Islamic medicine¹⁶. Islamic medicine based the understanding of physiological concepts through the Hippocratic and Galenic concepts of humors, natures and elements. This theory expounded that good health for the body is dependant upon the balancing of humors and disease occurred when this harmony is disturbed¹⁷.

The opening chapter of As-Suyuti’s Tibb an-Nabawi entitled, “The Theory of Medicine” explains the constitution of man consisting of elements, temperaments and humors¹¹. Ibn al-Qayyim provide detailed discussions in his book, “Healing with the Medicine of Prophet” on the importance of understanding the concept of temperament in health, pathology and disease prevention. The key component to linking man’s inter-relationship with his environment was understood through the concept of temperament also known in Arabic as ‘Mizaaj’¹⁸.

Temperament and Humors according to Unani-Tibb

According to Unani-Tibb the constitution of man and all matter in creation are composed of four primary indivisible elements namely fire, water, air and earth¹⁹. These elements have associated compound qualities: fire is hot and dry, air is hot and moist, water is cold and moist, and earth which is cold and dry¹¹. The quality of the temperament is determined by the

mutual interaction of the four primary qualities²⁰. The combination of these elements in a physical entity results in an overall quality, when this quality is in equilibrium it is called temperament. Temperament describes an individual’s unique constitutional make-up including personality traits, physical appearances, emotional attributes, spiritual attributes and disease predispositions. One’s temperament has a direct influence on the state of health and inclinations to certain diseases, this relationship is more pronounced in chronic conditions³. When the temperament is altered or disturbed an imbalance occurs which leads to one or more type/s of illness condition/s²⁰. Every form of living organism or form of matter has a unique temperament that supports the functions and structure of that specific entity. The temperament of the human body is determined by the humors or bodily fluids which consists of a combination of elements²¹.

Humors refers to bodily fluids that are produced through digestion fulfilling the purpose of nutrition, growth, repair, energy production and the preservation of health for the entire human body¹⁷. According to the humoral theory of Hippocrates the body contains four major types of humors namely; blood (hot and moist), phlegm (cold and moist), yellow bile (hot and dry) and black bile (cold and dry). The right proportion of these humors according to quality and quantity ensures homeostasis which constitutes good health whilst incorrect proportions and irregular distributions according to quantity and quality constitute disease²². The temperament of a person is maintained and supported by the humors. Each individual has a unique temperament and likewise has a unique ratio of humors which match the ideal temperament of the individual⁴. The word temperament is often used in a psychological sense however according to the theory of humors it is understood in a biological sense which indicates the dominant quality of an individual with respect to the ratio of humors. When a person is said to have a hot temperament it means that the blood humor is the dominant humor likewise with those that are cold, dry or moist. The four humors are connected to four temperaments namely; Sanguinous (blood-hot and moist), Phlegmatic (phlegm-cold and moist), Bilious (yellow bile-hot and dry) and Melancholic (black bile-cold and dry)¹⁹.

The role of Temperament in Healthcare

The four temperaments or personality types has been utilized for over 2000 thousand years to improve health, relationships and career choices. Determining your temperament and achieving your ideal balance allows you to use your strengths and overcome your vulnerabilities in terms of health and character²³. Temperament is directly connected to the health or

disease of the body, diet, medication, seasons and prophylactic measures. All the various physiological and pathological functions within the body are said to be related to temperaments. Health is achieved by maintaining the normal temperament within cells, tissues, organs and the entire body hence maintaining the ideal temperament ensures homeostasis in the internal environment of the cells and the body. The four temperamental types all have unique characteristics relating to the physiological profile, psychological and emotional states which can be scientifically observed^{2,4}.

Re-interpreting the philosophical insights relating to temperament in terms of quantifiable scientific laws has led to research within many disciplines like genetics, physiology, biochemistry, enzymology, endocrinology and thermodynamics amongst others²⁵. The internal physiological status of humans affects their behavioral patterns and social interaction. Energy levels and decision making are important aspects in lives of individuals in relation to achieving lifelong goals. According to the theory of humors, temperament is pivotal in diagnosis and management of individuals according to their unique constitution. In therapeutics consideration should be given to emotions, behaviors, habits, lifestyles, occupations, weather and environments which all relates to the temperament of the individual. The four distinct temperamental personality types possess typical characteristics which reflects their physiological and psychological status, their susceptibility within a social, environmental and other health factors including their ability to adapt to world around them²⁶. Every individual has a unique temperament which reacts to various internal and external stimuli like drugs, climate, food, emotions and body reactions²⁷. All the well known physicians of Greek medicine like Ibn-e-Rushed, Arzani, Jalinoos, Zakaria Razi, Ali Ibn Abbas Majoosi, Ismail Jurjani and Ibn Sina explained various effective parameters that guides physicians to the exact temperament of the patient¹².

Lifestyle Factors and Temperament

The approach towards health and its preservation should be individualistic and based on temperament. Health maintenance and disease prevention can be improved when linking it to the specific constitutional type of person, knowing how to eat, live and medicate properly¹⁹. Hippocrates emphasized that all living organisms grew at the expense of their environment, using what was needed and expelling that which was unnecessary. The progression of Greek medicine linked six lifestyle factors as strong influences on the temperament of the individual. These factors when in harmony with the temperament promote good health and facilitates efficient healing. When these lifestyle factors are not well managed inline with

ones temperament it creates an internal environment conducive to illnesses. The six lifestyle factors are food and drink, environmental air and breathing, movement and rest, sleep and wakefulness, emotions and elimination and retention²⁸. The concept of temperament does not negate microbes as causative agents in disease instead it explains that the activating factor to microorganisms defeating bodily defenses is due to the imbalanced temperament²⁰.

Healthy Living guidelines for each Temperament

Below are the four temperamental body types with associated elements, qualities and humor. Identification of the differences between the four temperaments includes physical observational features, skin texture and temperature, speech, appetite, sleep patterns, methods of learning, mental activity, personality traits, emotional and behavioral tendencies as well as possible disease predispositions with common associated signs and symptoms. An over accumulation of the dominant quality associated with a temperament will produce negative effects, therefore an important guideline for the maintenance and preservation of health is to follow a lifestyle program suited to the temperament^{2,4,15,21}.

1) Sanguinous temperament (element-air / quality-hot and moist / humor-blood)

Features: Oval face with reddish complexion, deep-set almond-shaped eyes with prominent capillaries, small chin and small lips, moderate frame with more muscular tissue than fat, solid shape, shapely legs and arms, joints are well formed and prominent, a macho stride (gait), hairs of the head are thick and oily, early hair recession in some men, skin is warm somewhat moist and soft to the touch with veins that are apparent. Their speech is clear, moderate to loud and they judge by feeling, they have a strong sense of smell and taste (preferred sense of perception), most effective method of learning is via flow charts whilst looking for the source of information. They incline to a moderate to active lifestyle with good stamina and physical endurance. They have healthy appetites with moderate to excessive thirst, balanced and sound sleep of up to 7 hours with a rare tendency to insomnia, a good faculty of judgment, an overall optimistic and positive mental outlook, they are persuasive, a natural extrovert with good social skills. They enjoy traveling and discovering new destinations, they have a playful disposition and they are easily distracted. They are confident, self-motivated and enthusiastic. Elimination- bowel habits are regular, stool is soft, urine often golden yellow and they perspire easily. Menstruation tends to be painful^{2,4,15,19,20,21,23,28}.

The following lifestyle factors are best suited for the Sanguine temperament for health preservation:

Environmental air and breathing: Avoid prolonged periods in humid conditions. Keep cool in hot weather and warm in wet weather. They can tolerate cold conditions. They should take precautions during the spring season.

Food and drink: They should consume more protein and less carbohydrates, as well as more fruit and vegetables. They should ensure that their fat intake is minimal. They should preferably drink cool water and avoid excessive sugar, rich fatty foods and excess meat consumption. Seafood is better suited for them. Moderation in eating habits is essential to avoid metabolic illnesses. Intermittent fasting programs are highly recommended.

Movement and rest: Light weight training, brisk walking, jogging and aerobics for 15-30 minutes daily are suitable activities for this temperament. Proper rest between exercise sessions are crucial to avoid soft tissue injuries. They should avoid strenuous exercise for prolonged periods.

Sleep and wakefulness: 6-7 hour of sound sleep is essential for this temperament. Sleeping less than 5 hours or more than 8 hours will be harmful. Oversleeping or sleeping after sunrise (early mornings) could be harmful. Afternoon naps are beneficial.

Emotions: Excessive excitement, worry, anger or emotional excesses are detrimental to them. Relaxation techniques like deep breathing exercises, meditation and visualization are beneficial.

Elimination: A generous consumption of fruit and vegetables is important in order to maintain regular bowel habits. Adequate water intake is needed to maintain optimum kidney function. Wet cupping once per season or donating blood twice a year (preferably in spring or summer) is recommended^{2,4,15,19,20,21,23,28}.

Common signs/symptoms and disease predispositions: Congestive headache, dizziness, vertigo, oversleeping, hemiplegia (right side paralysis), facial paralysis (towards left), syncope, high blood pressure, aneurysm, pleurisy, weakness of the heart (palpitations), irritable bowel syndrome, anal prolapse, dysentery, diabetes, urinary tract infection, cystitis, dysuria, leucorrhoea, dysmenorrhoea, gonorrhoea, inflammation of the ovaries and fallopian tubes, endometriosis, uremia, gout, diabetes, high cholesterol, reduced intestinal motility, respiratory catarrh, asthma, genito-urinary disorders, hypersensitivity and capillary congestion amongst others^{2,4,15,19,20,21,23,28}.

2) Bilious temperament (element-fire / quality-hot and dry / humor-yellow bile)

Features: Square-shaped face with flushed complexion, straight eyebrows, sharp angular

features, broad strong jaw, wide forehead with a straight hairline, hair is thin and oily, eyes are penetrating and small to moderate in size with a yellowish tint, lean to medium body built, firm stride (gait), skin texture is warm and dry with prominent veins. They are very active, enthusiastic, precise and orderly. They sleep sound but light, 5-6 hours is sufficient for them. Good appetite with excessive thirst and they become irritable if they delay meals. Their speech is sharp and loud, they are talkative, they perceive by sight and judge by intuition, they look at the bigger picture, they are sharp minded, outspoken, a natural born leader, extrovert, very resourceful, brilliant intellect, they are dominant, impatient, irritable and short tempered. They can be fearless and rebellious. Elimination- stool is soft and loose, urine dark yellow, perspire easily. Menstruation tends to be excessive^{2,4,15,19,20,21,23,28}.

The following lifestyle factors are best suited for the Bilious temperament for health preservation:

Environmental air and breathing: Increased heat affects them the most, excess sun exposure/hot climate should be avoided. They work well in cool, fresh and properly ventilated environments. Summer has a drastic effect on them.

Food and drink: They should avoid excess salt, salty foods, fats, fried foods, vinegar, sour/fermented food, hot spices and red meat intake. They should include more milk, dairy products, ice cold drinks, fruit and vegetables. They should ensure adequate to extra water intake. They should eat slow and not eat whilst working.

Movement and rest: They should avoid strenuous exercise and they should manage their heat levels well (via diet and other lifestyle factors as recommended), time of exercise should be early in the morning or late in the evening to avoid the midday heat. Proper rest and adequate hydration after exercise are essential.

Sleep and wakefulness: A good night sleep for 6-7 hours is essential, 1 hour rest/nap after lunch is beneficial especially during summer. They are prone to insomnia especially during periods of over working.

Emotions: Extreme emotions of anger, irritability, excessive speech, and suppression of anger are most harmful for this kind of temperament. Meditation and breathing exercise in a natural environment is beneficial especially at the time of emotional turmoil.

Elimination: 2-3 liters of water is essential to eliminate heat and toxins especially in summer and spring. Cupping, massage and hydrotherapy are beneficial. Laxatives should be considered^{2,4,15,19,20,21,23,28}.

Common signs/symptoms and disease predispositions: Bilious headache, stress and

anxiety, chronic fatigue syndrome, migraines, dizziness, mania, heart palpitations, cardiomegaly, bronchitis, cough, hay fever, gastritis, vomiting, nausea, dysentery, hepatitis, jaundice, nephritic and nephrotic syndrome, menorrhagia, erectile dysfunction and premature ejaculation, fevers, infections, rashes, urticaria, hyperacidity, eyestrain, hypertension and cardiovascular disorders amongst others^{2,4,15,19,20,21,23,28}.

3) Phlegmatic temperament (element-water / quality-cold and moist / humor-phlegm)

Features: They have round faces with full cheeks, large watery eyes, have medium to large frame, more fatty tissue than muscular tissue, they have a youthful build, bones are well covered and they have a slow gait. Veins are less visible and they have delicate soft, cool and moist skin. They speak slow with a soft tone, they perceive by touch and judge by demonstration, they learn hands on looking for reliable repetition. They have slow steady appetites with a low level of thirst and they can skip meals. They need at least 8 hours of sleep and they do tend to oversleep. They are introverts, calm, accommodating, patient, good listeners, shy, self-contained, indecisive, have sentimental subjective thinking, emotional, sensitive and cool minded. Elimination- stool tends to be thick and sticky, their urine is transparent to light yellow and they have a low level of perspiration. Menstruation tends to be low in quantity and frequency^{2,4,15,19,20,21,23,28}.

Environmental air and breathing: Cold and wet environment affects them negatively. Air conditioners and exposure to coastal areas for prolonged periods should be avoided. Winter has a drastic effect on them.

Food and drink: Dairy products, refined carbohydrates, ice-cold drinks, creamy rich foods should be avoided or consumed in small amounts. Gluten could affect their digestion negatively. They digest meat easily however they should consume more chicken and fish than meat, they should include more hot and spicy foods in their diet.

Movement and rest: A sedentary lifestyle and oversleeping is harmful to them. Unnecessary resting/napping during day time especially one hour before sunset should be avoided. They should indulge in more strenuous exercise for longer duration. Aerobics, long distance running or weight training is beneficial for them.

Sleep and wakefulness: Sleep for 7-8 hours is sufficient, more than this will harm them and cause lethargy. Less than 6 hours will affect their mood and productivity. They should rise early in the morning and avoid over sleeping especially after sunrise.

Emotions: Fear, shyness, depression and self-pity are the emotional excesses for this temperament. Counselling, breathing exercises and prayer medicine are essential during emotional distress.

Elimination: Saunas (hydrotherapy) and sweating (heat therapy) are beneficial. Sweating should never be suppressed. Cupping therapy, purgatives and laxatives are also beneficial^{2,4,15,19,20,21,23,28}.

Common signs/symptoms and disease predispositions:

They are naturally predisposed to phlegm related conditions, asthma, wet coughs, sinusitis, tonsillitis, phlegm congestion, water retention, oedema, slow digestion, weight gain and obesity, metabolic syndrome, poor venous circulation, tendency towards depression, phlegmatic headache, sneezing, migraine, weak memory, epilepsy, oversleeping, infantile convulsions, bradycardia, low blood pressure, dyspepsia, diarrhoea, cholera, sluggish liver, anaemia, impotence, inadequate erection, bedwetting, weakness of the kidneys and bladder, leucorrhoea, amenorrhoea, prolapse of the uterus, arthritis and sciatica amongst others^{2,4,15,19,20,21,23,28}.

4) Melancholic temperament (element-earth / quality-cold and dry / humor-black bile)

Features: They have oblong/oval faces, small active shallow-set eyes, bony cheeks, arched eyebrows, high forehead and hair recession at the temples in men, they have less body and facial hairs of all temperamental types, a thin and bony frame, delicate, slender, elongated build with a quick and anxious gait. They have a rough, cold and dry skin with noticeable veins. Their speech is fast, less vocal and soft, they perceive by sound and judge by adequacy and explanation, always looking for details and authority in knowledge. Their appetites are variable or poor. They have difficulty in falling asleep and tend towards insomnia. They are analytical, detail oriented, their retentive faculty of mind is well developed; they tend to be perfectionists, they are practically efficient and dependable. They are thoughtful, logical, analytical, tendency to be fearful, insecure, anxious, introverts with a restless, philosophical and enquiring mind. They are naturally very imaginative and creative. Elimination- hard and dark stool, prone to constipation, moderate to excessive urine and low perspiration. Menstruation tends to be irregular, low in quantity with clots^{2,4,15,19,20,21,23,28}.

Environmental air and breathing: Prolong exposure to cold and dry air affects them negatively. Excessive exposure to air conditioners harms them. They should take caution in dry weather conditions like Autumn. Humid and coastal areas are beneficial for their health.

Food and drink: They should avoid cold food

(refrigerated/frozen), excessive beans, nuts, astringent foods and rancid fats which are harmful to them even in small quantities. They should consume less carbohydrates and more protein, fats, fruit and vegetables. White flour and gluten has a negative impact on their digestion. Excessive tea, coffee, soured and artificially flavoured drinks should be avoided.

Movement and rest: Light to moderate exercise for short periods are best suited for them like brisk walking and jogging. Walking for 15 minutes after dinner facilitates good digestion.

Sleep and wakefulness: Early to bed for 6-8 hours is best suited for them. They are prone to insomnia and often struggle to fall asleep. They often find it difficult to rise early especially before sunset. A 15-30 minutes break/nap after lunch is beneficial.

Emotions: Feelings of loneliness, grief, depression, and being overly philosophical may have a negative impact especially if prolonged, unresolved or excessive.

Elimination: They should prevent dryness by applying moisturizers on their skin. Drink at least 2 litres of water daily. Excessive white flour products can lead to irregular bowel movements. Bodily wastes like urine and stool should never be suppressed. Heating baths (hydrotherapy), cupping therapy (dry/flash/slide), massage (heat therapy) are recommended. Laxatives/purgatives are essential^{2,4,15,19,20,21,23,28}.

Common signs/symptoms and disease predisposition: melancholic headache, melancholia, insomnia, angina, thrombosis, embolism, arteriosclerosis, infarction, dry cough, asthma (dry), pneumonia, gastritis, hyperacidity, constipation, piles, flatulence, colic pain, kidney stones, hysteria, psoriasis, cracked skin, gout, anorexia, anaemia, poor appetite, colon and gas related ailments, wasting, dehydration, osteoarthritis, neuromuscular disorders, and anxiety amongst others^{2,4,15,19,20,21,23,28}.

The role of Temperament in Preventative Medicine

In recent years the insights of Greek medicine has shifted from the fields of philosophy and psychology and moved into the realm of modern scientific research with focus on physiology, pathology and disease prevention in terms of quantifiable results²⁹. Re-interpreting the philosophical insights relating to temperament in terms of quantifiable scientific laws has led to research within many disciplines like genetics, physiology, biochemistry, enzymology, endocrinology and thermodynamics amongst others²⁵.

A study done on 148 healthy volunteers aimed to provide scientific validation on the correlation of

temperament and body mass index. The results showed statistically significant differences between phlegmatic (more prone to weight gain and obesity) and bilious temperaments. This suggests that the knowledge of temperaments can be employed as an early detection tool for those prone to diseases of lifestyle like obesity³⁰.

A study on the effect of temperament on the menstrual cycle conducted on 294 patients showed a clear relationship between the frequency of menstruation and the temperament of participants²⁴. A similar study looked at pre-menstrual syndrome (PMS) and the temperaments of different patients in terms of the common PMS symptoms like irritability, malaise, headaches, colon spasm, frequency of micturition, feeling of fullness in the breasts and abdomen, oedema of the face and feet, short tempered nature, acne and depression. This study concluded that a close relationship exists between the PMS symptoms experienced and the temperament of the participants²⁶.

A study which categorised patients according to blood groups and temperaments suggests that a relationship exist between blood types and temperamental types. The follow-up study which focused on blood groups and the temperaments of blood donors and their recipients for blood transfusions hypothesised that cross matching temperaments would lessen the ill effects commonly experienced after blood transfusions like jaundice, haemolysis of red blood cells, itching and skin rashes³¹.

Clinical observational studies undertaken at the University of the Western Cape (South Africa) suggests a significant percentage (66% to 100%) correlation between patient temperaments and diagnosed clinical disorders in those patients. Clinical disorders assessed included asthma, hypertension, drug addiction, diabetes, HIV/AIDS, psoriasis, stress, eczema, menstrual disorders, menopause and arthritis. In a similar open pilot study at the Nelson Mandela School of Medicine at the University of Natal, the association between temperament and type 2 diabetes mellitus showed significant correlation for 89% of patients however questions pertaining to standardisation of the temperamental questionnaire used in these studies necessitates the need for further research to confirm these results³².

The Department of Medicine at the Majeedia Hospital, Hamdard University conducted a study on chronic bronchitis in light of the various associated risk factors like smoking, exposure to dust and smoke occurring as specific occupational hazards, general atmospheric pollution, infections, socioeconomic status, past history of respiratory illness and family history of respiratory disease. The study revealed that

80% of the clinically diagnosed patients with chronic bronchitis were of the phlegmatic temperament³³.

The concept of temperament can be clinically significant due to its potential in predicting disease predispositions based on morphological, physiological and psychological characteristics. This has relevance to chronic lifestyle disease prevention for obesity, diabetes and coronary artery disease as early detection can provide intervention and modification in terms of diet, exercise, emotions and the elimination of bodily wastes³⁴.

Conclusion

Today, modern medicine is more focused on preventative than curative medicine due to the

global escalation of chronic diseases of lifestyle. Healthy lifestyle programs are linked to better health outcomes. Unani-Tibb alongside other traditional medical systems like Tibb an-Nabawi has highlighted the maintenance of health as one of its main objectives. For both these systems, knowing one's individual constitutional nature understood through the concept of temperament is the first step towards a path of health and healing. The knowledge of temperament guides individuals on how to stay healthy and prevent diseases that they may be predisposed to. Due to the increase in research on temperament in terms of quantifiable scientific laws this concept may contribute to lessen the burden of chronic disease of lifestyle.

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