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Concept of temperament in Unani system of medicine: A review

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Abstract

The Mizaj (temperament) is a notion (concept) and a way by which physicians evaluate the deviation of the body or any of its organs from normal homeostasis in comparison to the patient's population, race, and species. Merely, it is the appearance that Unani physicians use to tell whether the whole body or one of its organs has the right temperature and has the right amount of moisture. There is no absolute temperament, that is, there is not one universal temperament to which we compare the health of an individual. Moreover, there is not one temperament that is the best or the optimum for all types of geographical locations. In contemporary stipulations, these impending from Avicenna (Ibn-e-Sina) correspond to the imperative roles of natural balance and environment in the adaptation of the individual through homeostasis and the role of evolution in the adaptation of populations to preserve homeostasis. The Mizaj of an individual is population specific based on the evolution of the population within a particular geographic location. The normal population temperament, which is basically the upper and lower limits of the normal range, is the narrowest of temperaments. The population temperament range is a subtype within the larger range of temperaments and the latter is a sub-type with the human species temperament range. Genders are at variance in their temperaments' ranges. Also, organs of the body vary according to variations.

Keywords: Mizaj, temperament, Unani system of medicine

Introduction

The Unani system of medicine is a comprehensive medical system, which meticulously deals with the states of health and disease. Its holistic approach considers individual in relation to his environment and stresses on health of body, mind and soul. Temperament of a person is given great importance for identifying the most suitable diet and lifestyle for promoting the health of a particular individual. On the basis of Mizaj human beings have been categorized into four qualitative types: Damvi (sanguinous), Sافرavi (bilious), Balghami (phlegmatic), and Saudavi (melancholic) [16].

Every persons and every organ of the body has different Mizaj and also differ from person to person [15].

Mizaj (Temperament) forms the base of diagnosis and treatment in the Unani System of Medicine. Evaluation and classification of various temperaments are based on the intermixture of four akhlat (humours) in the blood in different proportions and thus blood plays an important role in the constitution of Mizaj. Domination of humours e.g., blood, phlegm, bile and black bile in the blood categorizes persons in sanguine, phlegmatic, choleric and melancholic temperaments respectively [20].

Damvi Mizaj (Sanguine temperament)

Persons of this temperament are characterized by well-formed and prominent joints, oval face, more muscular tissues than fat; hairs of head are thick and luxuriant. They are pleasantly warm to touch. Veins are mildly prominent and pulse is full and strong. They have good appetite, balanced and sound sleep, and good faculty of judgment. They get trouble with hot things and feel comfort with cold and dry things and in cold weather. Their digestive power is wonderfully good and appetite keen. An optimistic positive mental outlook, they are persuasive extrovert, have good social skills. They have romantic nature, like to travel, play games and distractions, confident, poised, graceful and enthusiastic [21].

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Signs of the dominance of Blood (Ghalba-e-Dam)

The signs of dominance of blood are very similar to those of quantitative plethora. There is feeling of heaviness of body, especially behind eyes and over the head and temples, Sweet taste in the mouth even without cause. Stretching and yawning are frequent. Excessive tendency to drowsiness and sleep perception is poor and mind dull. Fatigue is felt even without exertion. Tongue is usually red. Boils in the body and ulcers of tongue are common. There is bleeding from the gums, nostrils, and anus because the blood vessels of these parts are easily ruptured. The characteristic dreams of this type of humoral predominance are seeing of red things, flowing of blood and being immersed in blood.

The dominance of blood predisposes them to diseases like Hummyat matbaqa, inflammations, Chronic diarrhea, Bloody diarrhea, Epistaxis, Haemoptysis, Diphtheria, Epilepsy, Gout, Headache, Tonsillitis, Sarsame damvi, Sudaе damvi, Zaghtud dam qawi, Conjunctivitis etc. [21, 22].

Safravi Mizaj (Choleric temperament)

This temperament is marked by a medium stature, sharp angular features, medium/lean built, yellowish complexion, brilliant penetrating eyes, prominent veins and hairy body. Hairs are black, abundant, thick and curly. Pulse is rapid and strong. They feel comfort with cold things and get trouble with hot things. Most suitable season for them is winter. They have good digestion, sharp and quick appetite and sleep is light. They are energetic, bold, daring, and have brilliant intellect but they are impatient, irritable, and short tempered. Often they turned into fearless and rebellious leaders. They have strong inclination to indulge in sexual pleasure. They are indefatigable in their enterprises and most persistent, zealous, passionate and revengeful [21, 23].

Signs of the dominance of Bile (Ghalba-e-Safra)

Yellow colour of eyes and complexion, bitter taste in mouth, rough and dry tongue, excessive thirst, rapid pulse, lack of appetite, nausea with bilious vomiting of green or yellow colour, irritative diarrhoea, frequent attacks of tingling in the skin, feeling of burning and irritation as from hot bath or exposure to sun are signs of predominance of bile. Characteristics dreams of bile are seeing fire and flags of yellow colour. Dominance of safra predisposes them to diseases like Hummae ghib, T.B., Sudaе safravi, Urticaria, Hyperacidity, Erysipelas, Headache, Eyestrain, Hypertension, Stress, and Cardiovascular disorders [16, 23, 24].

Balghami Mizaj (Phlegmatic temperament)

Individuals of this temperament are flaccid, obese with soft and flabby muscles, White complexion, thin and soft hairs. Blood vessels are not prominent and pulse is slow and infrequent. Their movements and activities are sluggish. They feel comfort with hot things and in hot weather. They have round face with full cheeks, large moist eyes, have medium to large frame, more fatty tissue than muscular tissue and bones are well covered. They are calm, have sentimental subjective thinking, emotional, sensitive, tends to be religious, their mind is foggy, and slow. They are sexually frigid and do not get angry easily. Their digestive organs are weak and slow, hence they have less appetite and poor thirst. They are lethargic, dull and take excess sleep. Their memory is poor and power of perception is slow and feeble [24, 25].

Signs of the dominance of phlegm (Ghalba-e-Balgham)

Flabbiness of body, cold and moist skin, excessive salivation and viscid saliva, excessive sleepiness, mental dullness, soft and slow pulse, weak digestion, pale urine and dreams about water, ice, rain denotes excess of phlegm. Dominance of phlegm predisposes them to diseases like Common cold, Ascites, Oedema, Hummae balghami, Pneumonia, Asthma, Paralysis, Obesity, Sarsame balghami etc. [26, 27].

Saudavi Mizaj (Melancholic temperament)

These persons are characterized by lean and thin built, prominent bones, small beady eyes with sunken hollow cheeks and coarse and rough skin. They have dark complexion and profuse body hairs. Hairs are black and thin and have slow growth. Their digestion is weak, appetite irregular, sleep interrupted and often suffers from insomnia. Their touch is dry, leathery and cool. They have sluggish inclination towards sexual activity. They are analytical, detail oriented; retentive faculty of mind is well developed [28].

Signs of the dominance of Sauda (Ghalba-e-Sauda)

Dry and dark skins, anxiety, burning in epigastrium, false appetite, thick and turbid urine, dreams is usually full of anxiety and are often of dark places and fearful objects. Excess of sauda predisposes them to diseases like Leprosy, Hummae ruba, Splenomegaly, Constipation, Anorexia, Arthritis, Neuromuscular and Psychiatric disorders [16, 23, 29].

Itrat *et al.*, reported that People of one type of temperament are prone to a particular group of diseases in different phases of their life and under different climatic conditions due to dominance of particular humor in particular temperament. This susceptibility can be checked by adopting the temperament specific regimens given by Unani physicians. Hence, temperament based preventive approach of Unani medicine can offer a better way for promotion and preservation of health with least cost [16].

Al-Mizaj (Temperament)

After the study of arkan or anasir (the elementary constituents of our body), the Tibbi physicians begin the study of mizaj. It comes on second number in umurtabi'yah. It is also one of the basic and fundamental concepts of Tibb [15].

Mizaj indicates the properties of an unsur (atom), a molecule, a cell, a tissue, an organ and of the organisms as a whole. Each and every atom, molecule (murakkab), khilt (humour), organelle, cell, organ and body as a whole is furnished with a mizaj (equilibrium) upon which their properties, functions and life depends [1].

Mizaj (Temperament) is defined as the new state of a matter, having quality different from that present in the elements or compounds before coming into imtizaj (intermixture or chemical combinations), which results from the action and reaction among the contrary qualities and power present in the minute particles (atoms) of different elements (or molecules of different compounds), when they are combined together, the resultant new quality, a uniform state or the state of equilibrium emerging after the combination of more than one elements is called mizaj (temperament) [16].

Hence, mizaj indicates:

- The principles of chemical combination of different elements (or compounds) to form a new compound, having new properties altogether different from those of the elements (or compounds) possessed by them previous to coming into combination (imtizaj).

- Mizaj indicates the state of equilibrium in a compound with respect to required number of atoms and molecules of different elements, and their ratio to that particular compound; and the state of homeostasis in a cell (rutubat ustaqussiah), or in the entire body (rutubat tajawif) upon which depends the life of the cell and the entire organism [15].

Mizaj (Temperament) and Khawas (Properties) of Compounds

As the properties of a particular 'unsur (element) is based on its surat-nau'iyah (specific form), so the properties of a compound also depends upon its surat-nau'iyah. Thus, the minutest change in the surat-nau'iyah of a compound alters its properties altogether. Ibn Sina describes this surat-nau'iyah as under: "surat-nau'iyah is a thing which develops after mizaj (imtizaj-chemical combination). This is when 'anasir (elements) combine together and after their combination a thing (compound) is formed having the ability of becoming a nau' (species); and attaining a new and additional surat-nau'iyah from among the 'anasir (elements) which come into combination [25].

This surat-nau'iyah (specific form) is not the name of kayfiyat awaliyah (primary qualities), nor it is the name of that mizaj (equilibrium) which develops after combination of 'anasir (elements), but it is a kamal (completeness) which is achieved by unsur, according to its ability, after mizaj. This surat which is developed in a compound after mizaj (imtizaj), often its kamal is that it gets acted upon by others (infi'al min al-ghayr), and often its kamal is that it acts upon others (fi'l fi'l-ghayr) [26].

Compounds in the Human Body Formed After Imtizaj Al-'Anasir, and Their Classification

When the atoms of 'anasir-al-insaniyah (human elements) combine together, monomers are formed; when the monomers combine with micro-molecules formation of biological macro-molecules takes place which participate in the formation of akhlat (humours) [15].

Furthermore, when these macro-molecules combine together organelles of the cell are formed which combine to constitute the cells the structural and functional unit of a'za' mufradah combine together a'za' murakkabah or a'za' aliyah (organs) are formed; and a'za' murakkabah constitute the whole body. Ibn Sina has pointed out towards this very fact:

"Organs are those bodies which are formed after primary combinations of akhlat mahmudah (good humours) as akhlat are those bodies which are formed after primary combination of arkan." [25]

Therefore, arkan (elements) are the remote principles ('awamil ba'idah) for the human body. They are the proximate principles for our akhlat (humours), which is a mixture of various compounds which are formed from the primary combinations of arkan. In this way the proximate principles of the body are those compounds which constitute akhlat. In other words the proximate principles of our body are akhlat. Thus from 'anasir to complete human body various stages are seen: 'Anasir-various compounds (constituents of akhlat)-a'za' mufradah-a'za' murakkabah-human body [26].

Classification of Mizaj

According to Ala-al-Din Qarshi (Ibn Nafis) there are nine kinds of mizaj (temperaments). One is mu'tadil (equable-normal) and eight kinds are ghayr mu'tadil (inequable or

imbalanced) [15].

Mizaj Mu'tadil (equable or normal temperament)

Mizaj mu'tadil is of two kinds:

- Mu'tadil haqiqi (real equitable or equiponderent)
- Mu'tadil Tibbi (Tibbi equable or normal) [26].

Mu'tadil Haqiqi

This mizaj is one wherein the contrary qualities and quantity of all the participating elements in a compound are equal. This is however, nonexistent in the external world. Therefore, Tibb has nothing to do with this temperament [15].

Mu'tadil Tibbi

This mizaj is one wherein the contrary qualities and quantity of participating 'anasir (elements) in a compound are not equal but are just and perfectly balanced (homeostatic) according to the required properties and functions of that compound. Therefore, Ibn Nafis says; the word mu'tadil is not the derivative of word ta'adul but it comes from the root 'adl fi'l-qismat, which stands for justice in normal distribution. Hence, we are concerned here with mu' tadil Tibbi (Tibbi normal) [26].

Mizaj Ashraf (Noblest Temperament)

This fact has now been established that the mizaj (temperament) of each and every species is normal and most appropriate with respect to the required functions of that species. But if all the species of animals are compared with respect to their required functions it will be found that the functions required from a man are the noblest than those of the required functions of other species. Therefore, the inference could easily be drawn that the temperament of human being is ashraf (noblest) of all the species of animals. Each of them is, however, normal in mizaj (temperament) with respect to his own required functions. It is why the man is called as ashraf al makhluqat (noblest of all creatures). And it is why Ibn Sina says; "In the case of man He has bestowed upon him the most befitting mizaj (temperament) possible of all in the world as well as the quwa (faculties) corresponding to all the active and passive states of man.

Nafis argues that the human mizaj (temperament) is ashraf owing to the fact that his temperament is related to nafs natiqah (speaking psyche) which is the noblest and complete of all psyches. The man is called al-haywan al-natiq [30].

Basis of the Bodily Temperament

When different 'anasir al-insaniyah (human elements) undergo different types of imtizaj (chemical combinations) various compounds of specific surat nau'iyah (molecular structures) and mizaj are produced. These compounds constitute the akhlat al-badan (fluids of the body-humours); when these compounds combine together biological molecules are developed. And combination of these biochemical molecules gives birth to organelles and kahliyat (cells)-the structural and functional units of a'za' mufradah (tissues). Thus, our body is an aggregate of about 100 trillion cells organized into different functional structures (tissues and organs). These cells, the intercellular spaces, body cavities and various vessels and channels passing through the tissues and organs are filled with fluids known as akhlat (humours). These fluids according to their locations have been divided by Abu Sahl Masihi, the teacher of Ibn Sina, into three categories [15, 22].

- Rutubat ustaqussiyah-which is located into the cells-the intracellular fluid. Also known as rutubat gharizyah or rutubat jauharyah by the Tibbi physicians.
- Rutubat tajawif-the intercellular, transcellular or tissue fluid.
- Rutubat'urup-the vascular fluid i.e. blood etc.

Thus, rutubat ustaqussiyah makes the internal environment of the cells, and the internal environment (milieu interieur) of the entire body is determined by rutubat tajawif (tissue fluid) as well as rutubat 'uruq.

The above akhlat or rutubat (fluids) which make the internal environment of the cells as well as of the whole body are composed of water, electrolytes, proteins, fats, carbohydrates, vitamins and gases (proximate principles of the body). These constituents of akhlat determine the kayfiyat (quality-composition) of various akhlat. Thus, different kinds of akhlat possess specific quality and quantity. This state of equilibrium or homeostasis is known as mizaj of akhlat (humours)^[15].

There is specific mizaj (homeostasis) of akhlat for cells of each tissue of the body and therefore the mizaj of one tissue is different from that of another. It is why one tissue differs from the other. Likewise, rutubat tajawif of the body also possess a specific and fixed state of mizaj (homeostasis) upon which is based the mizaj of the entire body. This could be understood from the fact that rutubat tajawif circulates through the entire body with the help of blood and other vessels. Therefore, all cells of the body are bathed into rutubat tajawif and necessarily remain in the same environment-same conditions. In other words the internal environment of the body always remains the same. There is exchange of materials between rutubat ustaqussiyah and rutubat tajawif through the cell membrane but the kammiyat (quantity) and kayfiyat (quality) of the fluid in the cells fluctuates within certain and specific limits. This fluctuation does not exceed the normal limits of the specific mizaj (homeostasis) of the particular cell and to the abnormal level or to the extent of altering the mizaj (homeostatic condition) of the cell. However if due to any cause the quality and quantity of humours within the cells is altered the equilibrium is disturbed and thereby the mizaj of particular cell or tissue is deranged. This condition is known as sua'l-mizaj^[1].

If this sua'l-mizaj of a particular cell or tissue is detected in its initial stage, particularly when changes in the biological molecules are taking place and before the symptoms of the disease are manifest or the sua'l-mizaj becomes advance to the extent of causing the death of the cells or affecting the vital organs and systems, the treatment is much more easier^[26].

Rutubat tajawif and rutubat uruq which make the internal environment of the whole body have also a fixed mizaj (homeostasis) fluctuating within certain maximum and minimum limits. This intermixture or mizaj or homeostasis in the internal environment of the body is specific for each species of animal and differs from one species to other. And there is specific range for each species in which mizaj of each and every individual of the species is confined. Also it is specific for each member of a particular species which ranges within certain maximum and minimum limits. Owing to this the mizaj (temperament) of one person differs from that of another^[25].

Mizaj Al-Ajnas

According to Tibb-e-Unani the mizaj of women is cold in comparison to men. The reason is that the Basal Metabolic

Rate in women is lower than the men and with the result the production of heat in terms of calories is lesser than men. It is why women are said as barid in comparison to men^[15].

So far the other quality of rutubat is concerned the Tibbi physicians have maintained that the temperament of women is ratab. This apparently does not seem correct because the quantity of rutubat in women is 10% less than men. The persons who are fatty are less moist and those who are contains more fat, contain less water; and since women contain more fat than men, therefore, they contain less water. Thus, on this criterion the temperament of women cannot be maintained as moist. But this fact should also be taken into account that the physicians have included the fat also into rutubat and since the fat produces softness and smoothness in the body and that women contains more fat hence they are softer^[11].

Mizaj Al-Sinat

As diverse geographical conditions such as regions, countries, cities and different habitant are exert their effects on the temperament of man, the physicians maintain that different occupations also influence the human temperament. Thus, such occupations in which one is encountered with heat and dryness such as a glass factory, metal factories etc his temperament is likely become hot and dry. On the contrary those who are continuously exposed to the cold and moisture such as Dhobi are prone to become cold and moist^[15].

Mizaj Ghair Moatadil

We know that mizaj of cells and tissue depends upon the equilibrium in the specific quantity and quality of ratuba Ustuqsuia or rutubat ghareezia of the cells, or in the other words it depends upon the specific homeostasis within the internal environment of the cells. Likewise, Mizaj (Temperament) of the entire body is based on equilibrium in the specific quality and quantity of Ratubat-e-Tajaweef and Ratubate urooq, or in the other words it depends upon the specific equilibrium in the internal environment of the body. Thus, any disturbance in the quantity and quality of Ratubat Ustuqtsia (internal environment of the cells) or disturbance in the homeostatic condition of the protoplasm of the cell causes Su al Mizaj (Abnormal temperament) of the cells or tissue locally. And any disturbance in the quality and quantity of Ratubate Tajaweef or Ratubate Urooq or disturbance in the homeostatic condition of the body, causes Sue mizaj of the entire body. This is general derangement in the temperament. But from the above account it should not be miss understood that local Sue Mizaj is always a localized phenomenon and cannot cause general sue Mizaj and vice versa. It could very well be understood from the effect that each functional structure under the guidance of Tabbiyat provides its share in the maintenance of Motadil Mizaj in the internal environment in the cells, tissue and entire body. Thus each cell benefits from E'tadal al Mizaj of the internal environment of the body and in terms each contributes its share towards maintenance of this Mizaj. Thus there is harmonious relationship between the mizaj of the cells and Mizaj of the entire body which is controlled by the Tabbiyat (Physis). The effect of the local Sue Mizaj on the general temperament depends upon the types of cells or the tissue involved thus, if the cells or tissues belong to an Uzu raees(vital organ) the extent of the general Mizaj being affected is much more marked. This further affects other cells and tissues and a vicious circle is established when one or more functional system are affected

they lose their ability to function. This affects all the cells of the body. Extreme dysfunction of any integrated system leading to gross disturbance in the normal Mizaj leads to death, and moderate derangement leads to sickness example when any Sue Mizaj occurs in the endocrine events it affects in the Mizaj of entire body and nearly all the cells of the body are affected and the disease thus developed often leads to death^[15,30].

Conclusion

The physical state, heat, and water are three criteria that can describe the conditions of a biological entity- organs, structures, biochemical compounds, liquids, and such. The combinations of the three physical characteristics of the four elements give rise to the temperaments. Abnormal temperament, called dystemperament, occurs when the body or its organs deviate in one or two of the temperamental qualities. Here is where the Unani physician has to determine the qualitative deviation (i.e., which quality is affected, the heat or the hydration) and amount of deviation (the quantity). The physician's assessment of deviation will determine the types of medication to use and their potency.

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