Mizaj: Theory of Greko-Arabic Medicine for Health and Disease

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ABSTRACT

Unani Tibb is the knowledge of achieving perfect physical, mental and spiritual health. The primary goals of Tibb-e-Unani (Unani Medicine) are the maintenance of good health and healing of disease. According to the Unani medicine, there are seven important factors responsible for life of humans on earth called as Umoore Tabiyia, Mizaj is one of the those important Umoor and occupies second place next to Arkan, on which health and disease depend. Health is the maintenance of normal mizaj, any change in the mizaj brings about change in the person's state of health. The Descriptions of mizaj by unani physicians are most valuable; they described the concept in details and have given the concept to the best of their knowledge and efforts.

Keywords: Mizaj (Temperament); Akhlat (Humour).

INTRODUCTION

In nature no two things, however allied in origin and structure, resemble each other perfectly. This is true of the animate as well as the inanimate creatures and applies most forcibly to that standing puzzle man in whom these diversities or peculiarities, find their most conspicuous embodiment. The name ‘Mizaj’ has been given to certain physical and moral differences in individuals. Every person has a unique Mizaj, which includes his physical characteristics, physiological profile, psychological and emotional status.

The Hippocrates (460-370BC) gave the fundamental principles of Greco-Arab System of Medicine with a belief that the body of the individual is composed of four basic elements, which together, are termed as ‘Anasir-e-Arba’ or Arkan(Elements) comprising earth, water, air and fire. These Anasir-e-Arba possess four different qualities, i.e. hot, cold, dry and wet. The admixture of these four basic elements results in the formation of four biological fluids or Humors viz. Blood (Dam), Phlegm (Balgham), Bile (Safra) and Black bile (Sauda); a right proportion, according to quality and quantity constitutes health and upright proportion and irregular distribution, according to their quantity and quality constitutes disease [1]. When these different Kaifiate Arba (qualities) of Arkan (elements) acts and reacts by their powers, then previous qualities become diminished and a new moderate quality is developed which is known as Mizaj.

Mizaj theory has its roots in the ancient four humors theory. It was the Greek physician Buqrat (Hippocrates 460-370 BC) who systematized and developed it into a medical theory. He believed certain human moods, emotions and behaviors were caused by body fluids (called "Humors"): blood, yellow bile, black bile, and phlegm. Next, Galen (AD 131-200) developed the first typology of Mizaj in his dissertation De temperamentis, and searched for physiological reasons for different behaviors in humans [2].

A lot was done and developed by Hippocrates and Galen, but the Arabs worked more attentively on the theory of mizaj. They were the first to locate relationship between diseases, various humors and the disturbance of mizaj [3].

The Literal Meaning of Mizaj (Temperament)

-The literal meaning of mizaj according to Nafis is "Intermixture" as he says "The word mizaj originated from Arabic word intizaj meaning intermixture" [4].

-Mizaj is derived from Arabic word "mizaj" which means mixing of humors. At other places it is described that mizaj refers to the intermixture of four humors within human body, it is the basis of body. (Lisan-ul-Arab)

- Azmi says "mizaj is an admixture". He writes "mizaj denotes admixture, it is a verb but metaphorically used as tempered (Mamzuj)" [3].

Temperament: Quoting the words of Rudolf E. Siegri, Azmi says:"The Greek used to call the mixture of humors as “krosis” which is derived from “kerannyni” meaning “to mix”. The word kerasis is usually translated as temperament.”
The word "temperament" is derived from the Latin word "tempero" which means "to mix". This word temperament is used in the English language as a synonym of the Arabic word *mizaj*.

Azmi explains further saying, "there is another word constitution which is used as an equivalent of *mizaj*.

This word means the natural condition of the body and mind and when it is used in chemistry, it denotes not only kinds and number of atoms but also the way they are linked. This meaning is fully in accordance with the elemental concept of temperament which I hold correct"[5].

But, Shah has a different opinion, he says, "in modern medicine the terms "constitution" and "temperament" are often used synonymously but not so in the cannon of Avicenna. Constitution is *tabiyat* comprised of seven physical factors, *al umoer al tabaiyah*, of which temperament is one" [2].

The Arab physicians described the concept of *mizaj* in a universal manner as compared to the modern concept of temperament that is limited to the psycho – somatic behavior only. Therefore, the word temperament does not hold the same meaning as *mizaj* meant in Greco Arab medicine rather *mizaj* has broader meaning.

In this regard, Grunner says, "the word temperament is not satisfactory for the Arabic word *mizaj* which contains the idea of mixture so the medieval translators used the word "commixtio" or "complexio" which carry the idea of mixing or blending and weaving. But neither words fit in with modern usage [6].

The Definitions of Mizaj: The physicians of Unani medicine have dealt with Mizaj in detail and they defined it to the best of their knowledge and concepts. The Arab medical authors worked on the theory of most assiduously and its description is found in the Arab medical literature under the heading "mizaj".

Ali Ibn Abbas Majoosi (930-994 AD) has defined the *mizaj*: "All sorts of bodies (light or heavy), which are found in this ever-changing world are formed by four elements (*ustaqussat*) after mixing in different or uniform quantities in accordance with the needs (of the body). As a result of this mixing, one or two qualities become dominant, over the body, and this is called 'mizaj'. It is derived from Arabic word 'imitzaj', meaning 'to mix with each other' [7].

Abu Sehal Mashi describes Mizaj as: "Because there are so many primary components (*ustaqussat*) of the body which are mixed together not in close proximity, it is necessary that the qualities of primary components must be mixed as a whole new qualities arise from inter-mixing of primary components which will be in between the previous qualities, called *mizaj*" [8].

Ibn Sina (980-1037 AD) says "The Mizaj is a quality resulting from the interaction of opposite qualities present in elements consisting of minute particles so that most of the particles of each of the elements may touch most of the others. Thus when these particles act and react on one another with their properties, there emerges from their total properties, a uniform quality which is present in all of them. This is the temperament (Mizaj).

Ibn Sina further writes that "Since the primary properties in the aforesaid elements are four namely hotness, coldness, moistness and dryness, it is obvious that the temperaments of the integrating bodies are the products of these very properties" [9].

Ismael Jurjanee writes about *mizaj* that: "When different qualities of elements acts and reacts by their powers then previous qualities become diminished and a new moderate quality is developed which is known as *mizaj*" [10].

Galen (130-200 AD) says that:"Mizaj is a quality produced by action and reaction of opposite qualities of body fluids (Akhat). When these components interact by virtue of their respective powers (qualities) a condition is achieved which is found in equal proportions in all the components of that intermixture; this is called Mizaj" [11].

Ibn-e-Habal Baghdadi states that: "When elements get admixed, most of the elements mix with each other and their various qualities act and react so heat breaks the cold and cold breaks the heat. Similarly dryness try to breaks wetness and wetness try to breaks dryness. Low grade Qualities mix with high grade qualities light weight Particles mix with heavy weight Particles until a new Quality is developed which is equally found in all the components of elements this new and moderate Quality is known as *mizaj*" [12].

Allama Nafees says that: "When elements mix with each other they act and reacts which result in developing a new moderate Quality in between the all four previous Qualities and new Quality is known as *mizaj*" [13].

Gruner says that Arabic word *mizaj* contains the idea of mixture’ medical translators used the word commixtio or complexion which carry the idea of mixing or blending or weaving" [14].

Mehdi Hasan described Mizaj along with the four elements, he says that:

"The four elements are result of four qualities cold, heat, moisture and dryness. Two qualities in combination constitute an element e.g. Cold + Moisture = Water

The ultimate units are pure qualities. These have been identified as follows:

Heat = Oxidation, Moisture = Hydration, Cold = Reduction, &Dryness = Dehydration.

So the Mizaj can be understood by the following examples: Saudavi or Melancholic Mizaj should be interpreted not as cold and dry but in which reduction and dehydration are prepondering" [15].

Taiyyab suggest in "Greco-Arab Medicine" that: "The temperament is a synthetic concept which express the various physical as well as psychological tendencies of the individual in terms of matter and energy i.e. activity as, heat and cold reactivity as dryness and moisture" [16].

Zaidi and Zulkifle writes that:"The temperament is an intrinsic state which enables an individual to survive and to procreate comfortability and is responsible for
distinctive morpho-bio-physio-immuno-psychological identity of an individual." [17]

Kinds of Mizaj: Ibn Nafis says that there are nine kinds of Mizaj; one is mutadil (equable/balanced) and eight kinds are ghair mutadil (inequable/imbalanced).

Mizaj has generally been divided by Unani Physicians into two parts that are follows:

A. Mizaj-e-Motadil (Equable Temperament)
B. Mizaj-e-Ghairy Motadil
(Immoderate temperament) [8]

A. Equable Temperament (Mizaj-e-Motadil): It is again sub-divided into two types:
i. Mutadil Haqiqi (Real equable/Equiponderant)
ii. Mutadil Tibbi (Medical Equable)

Mizaj Mutadil Tibbi is divided into the following eight types:

1. Equable temperament of one species as compared to other species (Mu’tadil nau’i bi’l-qeyas ila-al-kharij): This is a particular Mizaj furnished to a particular species of animal, is normal and most benefitting for that species but is abnormal for other species. As for example the human temperament is most benefitting and normal for human being for the performance of his normal functions, but it will not at all be normal and equable for other species of animal [1].

2. Equable temperament of a member of one species as compared to other members within the species itself (Mu’tadil nau’i bi’l-qeyas ila-al-dakhil): It is that equable temperament, that is furnished to a member of a species, and is most appropriate and best among all the members of that species and has not been furnished to any other member of that species and owing to this particular Mizaj the particular individual possesses the complete potentiality and capacity for performing the required functions of species of man in comparison to all the members of that species. Therefore, Ibn Sina’ says; “This second kind is situated in the middle of the maximum and minimum limits of first kinds. This Mizaj is found in a member of that most Mu’tadil sinf (equable race) who is most Mu’tadil, and he has attained the age when his growth and development has reached to its maximum limit. Although this Mizaj is not Mu’tadil Haqiqi as discussed earlier, and whose existence is impossible, but it is very rare and difficult to be found” [19].

3. Equabile temperament of one race as compared to other races (Mu’tadil sinfi bi’l-qeyas ila-al-kharij): It is a temperament (Mizaj) that is furnished to each of the races (asnaf) of human species, and owing to this Mizaj the required racial functions of each race are performed with almost completeness. There are maximum and minimum limits (range) for this Mizaj also, between which the Mizaj of individual members of that race fluctuates. But this range is narrower than e’tadal nau’i bi’l-qeyas ila-al-kharij. This Mizaj is most benefitting for one race but is not suitable for other races to perform their required racial functions [1].

4. Equable temperament of a member of one race as compared to other members of the same race (Mu’tadil sinfi bi’l-qeyas ila-al-dakhil): This is a Mu’tadil Mizaj (temperament) which is furnished to a member of a race and is not furnished to any other member of that race and is better than all the members of that race. It is also rare and nonexistent.

5. Equable temperament of one man as compared to other men (Mu’tadil shakhsi bi’l-qeyas ila-al-kharij): This is a particular Mizaj (temperament) of a person which is most benefitting for himself to perform his normal functions but is not suitable for any other person. Ibn Sina’ says; “Its extent is very narrow in comparison to first and second types of temperaments.” It is that temperament which is furnished to a particular person, due to which he is surviving and healthy. This Mizaj has also extensibility (range) of maximum and minimum limits, between which Mizaj of a person remains fluctuating within normal limits. It should be known that each and every person has got a specific Mizaj (temperament) which is not shared by any other person. (It is why no two persons are alike).

6. Equable temperament of a person as compared to his own temperaments in different states (Mu’tadil shakhsi bi’l-qeyas ila-al-dakhil): This is a particular Mizaj (temperament) which is furnished to a person which is most benefitting for a particular period or state in his life. For example that Mizaj which is furnished to a man in his young age is better for him than old age or which is furnished to him in rabi’ is better than other seasons. The Mizaj of a person remains fluctuating under different conditions. Therefore, the Mizaj of a person is most benefitting for him which is furnished to him at best of his health, best of age and best of the seasons [18].

7. Equable temperament of an organ as compared to other organs of the body (Mu’tadil ‘uzwi bi’l-qeyas ila-al-kharij): Ibn Sina’ says; this is the Mizaj (temperament) which must be furnished to each and every organ of the body. This Mizaj is specific for each organ, and owing to this, one organ or one tissue differs from that of another organ or tissue (the protein of one tissue differs from that of another tissue). For example each of the bones (bony tissue), muscles (muscular tissue), fats (adipose tissue) and a’sab (nervous tissue) are furnished with specific Mizaj which differs from one tissue to another. Furthermore, the Mizaj of muscles is not suitable for bone and vice versa.

8. Equable temperament of an organ as compared to his own temperaments in different states (Mutadil ‘uzwi bi’l-qayas ila-al-dakhil): Ibn Sina says; specific pattern of an organ is the one which lie midway between the
limits, of the seventh pattern and is the most suitable for that organ under its special circumstances \([9,19]\).

B. Immoderate temperament (Mizaj-e-Ghair Motadil or Su-e-mizaj): Azmi states that a temperament which deviates to certain degree from the moderation (Etidal) in the natural temperament is known as immoderate temperament or Mizaj-e-Ghair Motadil” \([9]\).

When a Kaifiyat (quality) is increased from E’tidal (balance) the condition is known as “Mizaj-e- Ghair Mo’tadil” or Sue Mizaj.

Sue Mizaj is of 2 types:

A. Sue Mizaj Sada (simple imbalance mizaj without matter)

B. Sue Mizaj Maddi (imbalance mizaj due to any matter)

Sue Mizaj Sada is of 2 types:

a. Sue Mizaj Mufrad Sada: When one Kaifiyat out of Kaifiate Arba is increased in any compound, it is known as Sue Mizaj Mufrad Sada. It is of 4 types.

b. Sue Mizaj Murakkab Sada: When Mizaj is deviated in two Kaifiyat out of Kaifiaye Arba then it is known as Sue Mizaj Murakkab Sada. It is also of 4 types.

Sue Mizaj Maddi is of 2 types:

a. Sue Mizaj Mufrad Maddi (single-imbalance mizaj due to any matter): Sue Mizaj Mufrad Maddi is the mizaj in which one kaifiyat dominated substance(s) is increased. It is of 4 types.

b. Sue Mizaj Murakkab Maddi (compound imbalance mizaj due to any matter): It is the mizaj in which two Kaifiyat dominated substance(s) increased. It is also of 4 types.

Like this, there are 16 types of Sue Mizaj as:

1. Sue Mizaj Mufrad Sada: Har, Barid, Ratab and Yabis.


Causes of Sue Mizaj

The factors which are responsible for changing the mizaj of human being:

1. Internal Factors (Internal environmental factors): These are the factors which influence the mizaj of human being at the time of its formation and development in the uterus. The foetal development is the outcome of interaction between the gamets (sperm and ova) of the parents. Gamets, undoubtedly, transfer the parental characters to the offspring. Unani physicians are of the opinion that some active forces (Quwwate Mughayyirae Oola and Musawwirah) present in uterus, finalize the morphological and biochemical composition of the foetus in the light of mizaj of the gamets.

Any abnormal change in the Maaddae Manwiah (gamets) may alter the mizaj of the foetus because of which different types of congenital deformities are developed in the foetus. For example, if the semen or gamets is less or more in quantity, foetus will not be developed properly. If Maddae Manwiah is less in quantity any organ maybe smaller in size as "Microcephally". Similarly, if the quantity of Mani is more, any organ of the body may enlarge as "Macrocephally" \([1]\).

There are so many kinds of congenital diseases that develop in child due to any disturbance in the genetic material (chromosomes and genes) in the uterus like, Congenital rubella syndrome; Down's syndrome; Thelassimia; phenylketonurea etc.

2. Acquired factors External Environmental Factors (Iktsiabi Awami): These factors depend upon the environmental conditions in which the man is living. These are of two types i.e. the Asbab-e-Sittah Zaruriyiyah (six essential factors) and the Asbab-e-Ghair Zaruriyiyah (non-essential factors) \([19]\).

A. Asbab-e-Sittah Zaruriyiyah: These six essential causes are:

- Atmospheric air(Hawa- e- Muheet);
- Food and Drink(Makul- wa- Mashrub);
- Physical or Body movement and repos (Harkat wa Sukun badani);
- Mental or Psychic movement and repos (Harkat wa Sukun nafsani);
- Sleep and Wakefulness(Naum- wa- Yaqzah);
- Retention and Depletion(Ehtebas wa Istafqah) \([20]\).

B. Asbab-e-Ghair Zaruriyiyah: The non-essential causes are:

- Age(Umr);
- Sex (Gins);
- Habitat(Maskan wa Balad);
- Habits(Adaat); Occupation (Sana’t)

Other remote causes (Umoor-e-baeeda)

Razi, while discussing the factors influencing the temperament, says that age, dwelling and diet play a very important role in the change of Mizaj” \([21]\).

Ibn Rushd was also agreed about the effects of environmental factors on human Mizaj. He says that there may be variations in Mizaj due to external factors like the occupation and dietary habits \([22]\). Bhika and Haq explain "At birth when functional causes affect particular qualities, then changes occur partially or totally, temporarily or permanently. Naturally, hereditary factors play a vital role. Environmental factors do not contribute in the formation of a person’s mizaj, but influence it overtime” \([23]\).

Thus, we can say that apart from genetic influences the ultimate physiological and anatomical set up of an individual is also influenced by external factors.

Age: Age of an individual is the factor which influences the mizaj directly. Every person has specific mizaj in different phases of life which is responsible for health and diseases of an individual. Because of abnormal changes in this mizaj, so many diseases may develop in the body \([9]\).

Air (Wind): It is one of the most important external environmental factors, responsible for influencing mizaj of an individual. Although there are so many kinds of winds blow in the atmosphere, but, only four winds i.e. Northerly (cold dry), Southerly (hot moist), Easterly (equable mizaj) and Westerly (cold dry or near to equable) are of great importance from medical point of view. Because of having their specific mizaj, each wind is suitable for the person having opposite mizaj and harmful or not suitable for the persons having same mizaj as that of the wind and may cause diseases
in the body accordingly. Northerly wind having cold &
dry mizaj may cause diseases having cold & dry mizaj.
Same like this, remaining winds tend to develop the
diseases having same mizaj as that of the winds [9].

Season: It is also an important factor which may affect
the mizaj of human being. There are four types of
seasons in the year. Each season has its specific Mizaj
because of which it affects the mizaj of an individual. If
the mizaj of human being and season become same,
diseases having same mizaj as that of the season and of
human being may be developed. That's why; Dam
(blood) related diseases occur in Rabi; diseases related to
Safra develop in the Saif (Summer) and diseases related to
Sauda prevail in the Kharif, while Balghami
diseases occur in the Winter season. The diseases
occurring in the end and in the beginnings of the season are
related with both pre and proceeding season [9].

Habitat (residence/country/city): Habitat of an
inhabitant exerts its effect directly on human life by its
specific mizaj. For example, Northern countries with
cold and dry mizaj, Southern countries with hot and
moist, Eastern countries with Mo’tadil mizaj and
Western countries with Mo’tadil mail ba Rutoobat
(moderate tilt toward rutoobat) which is similar to the
mizaj of Mosame Kharif. Because of specific Mizaj
(mizaj/ climate) of habitat, some specific diseases,
related to the mizaj of the same, are developed. For
example, Inhabitants of hot places are generally of soft
and delicate constitution of body, complexion of the
skin becomes rough and cracked. Their brain tends to
become dry, because of which mizaj of inhabitants of these
places become dry, as a result their skin becomes rough and cracked. Their brain tends to
be dry, because of which so many abnormal
consequences may develop in the form of diseases.

Residents of high altitudes are generally brave, strong
and long lived. It is because of pure air having cold
mizaj which is present at these places [9].

Habit is also an important factor to change the mizaj of
human being:
If a person adopts a habit for a long period, it will act
like a Mizaje Tabai for him, because Aaadat (habit)
considered as Tabia te Saniah.

Aadat of a person may be of so many kinds; for
example, the person who is habitual to work in heat or
hot environment like Black smith or the people who
work before heat and fire in a factory or other places do
not get trouble from heat, but when they go to the cold
places or come in contact of cold air they will be
affected from cold mizaj or environment.

These people are more prone to develop hot diseases
and have more capability to tolerate the heat.
Similarly, inhabitants of northern countries and the
people whose occupation is related to water like
fisherman, washer man, sailor etc. are not affected by
cold mizaj. These people are more susceptible to
develop cold diseases in comparison to hot diseases.

These diseases may be treated easily because the mizaj
of the diseases is similar to the mizaj of the body [9].

Besides these two examples there are so many types of
habits found in persons for example,
- Habit of eating of cold and hot food
- Habit of eating in specific time
- Habit of bathing
- Habit of sleep and wakefulness
- Habit of coitus.

- Habit of Istifragh (elimination) etc.

Occupation: It is an important external environmental
factor responsible for influencing the mizaj of a person.

For example, if a person is involved in such occupation
in which he has to face heat or fire; in this condition he
develops dryness (Mizaje Yabis) in his body because of
which he will be more prone to develop dry diseases.
Similarly, if a person adopts such profession in which
buroodat and rutoobat are in excess amount like
fishery, sailing, washing of clothes etc, he will be more
susceptible to develop diseases of cold and moist mizaj
[9].

Classification of temperament according to age: The
process of aging and change in temperament depends
on Rutubat ghariziyah (protoplasm). It is a kind of khilt
or fluid which is established and maintains the internal
environment of the cells, i.e. mizaj depends upon this
rutubat it is also responsible for binding of organelles
together. If this rutubat disappear or vanish, the
particles of the organs are shattered. Unani physicians
have divided the entire span of life into four phases
according to the quantity of rutubat ghariziyah present
in the body. These are known as asnan arba (four
periods).

a). Sin-e-namu [period of growth and development]: It
extends from birth to the age of twenty five and their
temperament is haar ratab.
b). Sin-e-shabab or waqif [manhood], which lasts up to
about Thirty five to forty years. And their Mizaj is
mutadil.
c). Sin-e-kaubah (Aetus verelis): From forty to sixty
years. The Mizaj during this phase tends to become
harid yabis.
d). Sin-e- shaikhubhat [Senility/old age] during which
the vital centre’s become progressively weak until
death and their Mizaj extreme harid – yabis.

An organism can exist only when it responds to
environmental changes which demands respective
adaptation. Each animal or organism, as a part of
nature, is a complex and integral system, whose
internal forces work so long as it exist, are equilibrated
at every moment according to age with the external
forces of the surrounding medium Thus, life is a long
series of equilibration with the external environment.
These countless equilibrations of organism are manifested in the organism's diverse reactions to the influence of agents of the surrounding world. From the findings of this study, it may be concluded that temperamental changes occur from birth to end of life because it is necessary for existence of life. The physiological conditions and requirements there under do not remains static throughout the entire span of life, they do vary so does the temperament also varies [24]. Determination of Human Mizaj: The Mizaji is among one of the basics or fundamentals of Unani system of medicine. For a particular species the Mizaj is specific, lying in a particular range of maximum-minimum limit within which the Mizaj for all members of that species is confined. The etidal or equilibrium of this distinct Mizaj i.e. maintenance of constant internal environment (homeostasis) in different individuals leads to a healthy body i.e. normal body functions. Any derangement of Mizaj from etadal or imbalance of normal Mizaj results in su-e-mizaj which causes deranged body functions i.e. diseases. Thus, it becomes necessary to ascertain some parameters to diagnose the human Mizaj. Determination of Mizaj in healthy or diseased state is very important. For this purpose, Unani physicians have described several parameters for determination of Mizaj. These parameters are known as the “Determinants of Mizaj”. Almost all prominent Unani scholars described these determinants. However the most acceptable and appropriate determinants have been given by Ibn-e-Sina (980-1037 AD) in his famous book Al-Qanoon-fil-Tib; that are ten in number and are applied and used universally for the assessment of Mizaj [1, 9]. They are known as AJNAS-E-ASHRA shows in table no. 1:

Classification of Mizaj according to humours
The human body, as Greco-Arab system of Medicine quote, comprises four body fluids namely –Dam (blood), Balgham (phlegm), Safra (yellow bile) and Sauda (black bile), constituted by initiation of different proportion of all four arkan. Dam is hot and wet in temperament, Balgham is cold and wet, Safra is hot and dry and Sauda is cold and dry. The Mizaj of a man is characterized both by the fluid element and its physiological and physiognomic effects, and it is expressed by the preponderance of a particular khilt present in his body. Thus a man may be Damvi (sanguineous), Balghami (phlegmatic), Safravi (choleric) or Saudavi (melancholic) in nature according to the preponderance of dam, balgham, safra or sauda respectively.

The characteristic features of four types of Mizajs are as follows:

1. Sanguine Temperament (Damvi Mizaj): These people have hot and moist temperament, tall, strong and muscular body, broad chest, large and strong bones and well-formed joints, reddish complexion, thick, black and straight hair which shows rapid growth, mildly prominent veins, full and strong pulse. According to Ibn Sina they have slight feeling of heaviness in their body especially at the base of the eyes, head and temple. They get troubled with hot environment and food. They feel comfortable with cold and dry things and like cold weather [9, 25]. Their digestive power is wonderfully good; the appetite keen, sleep sound, excreted urine is concentrated and in moderate quantity, physical activity and speech are average, psychological aggressiveness and psychic condition comes on easily and easily lost, mental condition is good, in dream red object are seen frequently and the general health is remarkably sound. The sanguineous individual looks everything from the bright side. He is optimistic and is always sure of success. He is extrovert and makes acquaintance with other people [17].

2. Choleric Temperament (Safravi Mizaj): These peoples have hot and dry temperament, a medium stature, thin and hairy body, moderate musculature, deficient fat, well-formed and prominent joints, yellowish complexion, thick, curly, black, rough and abundant hairs, prominent Veins, strong and rapid pulse. They pass fiery and yellow urine. Sometimes, they feel sensation of pain and pricks over the body [1, 9]. They feel comfortable with cold things and get troubled with hot things. Their most suitable weather is winter. The bilious (safravi) temperament manifested a short response delay, but the response is sustained for a relatively longer time. Their digestive organs are active, appetite is good and sleep is light and often disturbed. According to Ahmad, these people are proud, revengeful, shrewd, and zealous and get angry quickly. They are also energetic and intelligent individuals with a strong inclination to indulge in sexual pleasure.

3. Phlegmatic Temperament (Balghami Mizaj): They have cold and moist temperament, flaccid and obese body built with soft and flabby muscles, flat chest, large and not well formed joints, whitish complexion, thin, straight, brownish or whitish hairs which shows slow growth, not prominent blood vessels, soft, slow and infrequent pulse. Their urine is colourless and more in quantity. They experience excessive heaviness of the body. Their movements and activities are sluggish. Their functions like digestion, appetite and thirst are poor, sleep is excessive, memory is bad and irretentive and their power of imagination and perception is slow and feeble. These people feel comfortable with the use of hot and dry things and in hot weather. They are sexually frigid and also do not get angry easily [19, 22]. The phlegmatic (Balghami) temperament is characterized by a longer response delay but the response is also short-lived.

4. Melancholic Temperament (Saudavi Mizaj): They have cold and dry temperament. They are characterized by lean and thin built with narrow chest, coarse and rough skin. Body hairs are profuse and the complexion is dark. Hairs are black, thin but have slow growth. According to Ahmad, the blood vessels are narrow and pulse is slow. Their digestion is weak and
has irregular appetite. They have interrupted sleep and often suffer from insomnia. Their sense is acute and excellent memory. Hock observed that the individuals of this temperament are irresolute, reserved, despondent without courage, slow and awkward. He further writes, "The melancholic is a man of missed opportunities." They show sluggish inclination towards sexual activity. They experience excess of evil thought and anxieties. The melancholic temperament exhibit along response delay and the response is sustained at length, if not, seemingly permanently [9,17],

**Relationship between Diseases and Mizaj**: There is a close relationship between mizaj and diseases. People of one type of mizaj may be prone to develop a particular group of diseases in different stages of life and under different climatic conditions. For example, a person of cold mizaj is generally prone to obesity and of hot mizaj is prone to acute fever, heat stroke, dehydration, hypertension etc.

**Diseases Associated with Sue Mizaj** (Table no. 2 & 3) [7,9,1021,26,27,28]

### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Damavdi</th>
<th>Safravi</th>
<th>Balghami</th>
<th>Saudavi</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Touch</td>
<td>Moderately Soft</td>
<td>Dry</td>
<td>Soft</td>
<td>Dry</td>
</tr>
<tr>
<td>ii) Temperature</td>
<td>Warm</td>
<td>Warm</td>
<td>Cold</td>
<td>Cold</td>
</tr>
</tbody>
</table>

### (2) LAHM-WA-SHAHM (Muscles and Fat)

<table>
<thead>
<tr>
<th>Body Built</th>
<th>Muscular Muscles are fully developed &amp; strong</th>
<th>Moderately muscular &amp; less</th>
<th>Fatty Muscles are moderately developed/ large joint</th>
<th>Lack of fat &amp; muscle Muscles are under developed</th>
</tr>
</thead>
</table>

### (3) SHAIR (Hairs)

<table>
<thead>
<tr>
<th>i) Texture</th>
<th>Thick &amp; lustrous</th>
<th>Thick &amp; curly</th>
<th>Thin &amp; straight</th>
<th>Straight &amp; coarse</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii) Growth &amp; Distribution</td>
<td>Rapid average</td>
<td>Rapidly profuse</td>
<td>Slow Scanty</td>
<td>Rapid Excessive</td>
</tr>
<tr>
<td>iii) Colour</td>
<td>Blackish</td>
<td>Black</td>
<td>Brownish</td>
<td>Black &amp; White</td>
</tr>
</tbody>
</table>

### (4) LON-E-BADAN (Body Complexion)

<table>
<thead>
<tr>
<th>Complexion</th>
<th>Reddish</th>
<th>Yellowish</th>
<th>Whitish</th>
<th>Blackish</th>
</tr>
</thead>
</table>

### (5) HAYAT-E-AZA (Physique)

<table>
<thead>
<tr>
<th>i) Built</th>
<th>Muscular &amp; firm</th>
<th>Slim &amp; firm</th>
<th>Fatty &amp; flabby</th>
<th>Lean &amp; thin</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii) Chest</td>
<td>Broad</td>
<td>Wide</td>
<td>Flat</td>
<td>Narrow</td>
</tr>
<tr>
<td>iii) Height</td>
<td>Tall</td>
<td>Medium</td>
<td>Short</td>
<td>Short</td>
</tr>
<tr>
<td>iv) Blood vessels</td>
<td>Mild prominent</td>
<td>More prominent</td>
<td>Not prominent</td>
<td>Narrow</td>
</tr>
</tbody>
</table>

### (6) KAIFIAT-E-INFAL (Responsiveness of organs)

<table>
<thead>
<tr>
<th>i) Tolerate well</th>
<th>Dryness</th>
<th>Cold</th>
<th>Heat</th>
<th>Dampness</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii) Remains well in</td>
<td>Spring</td>
<td>Winter</td>
<td>Summer</td>
<td>Autumn</td>
</tr>
</tbody>
</table>

### (7) AFAL-E-AZA (Functions of the body organs)

<table>
<thead>
<tr>
<th>i) Digestion</th>
<th>Average</th>
<th>Strong</th>
<th>Poor</th>
<th>Irregular</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii) Appetite</td>
<td>Normal</td>
<td>Increased</td>
<td>Less</td>
<td>False</td>
</tr>
<tr>
<td>iii) Taste</td>
<td>Sweet</td>
<td>Bitter</td>
<td>Normal</td>
<td>Sour/normal</td>
</tr>
<tr>
<td>iv) Thirst</td>
<td>Normal</td>
<td>Increased</td>
<td>Decreased</td>
<td>Low</td>
</tr>
<tr>
<td>v) Salivation</td>
<td>Moderate</td>
<td>Decreased</td>
<td>Increased</td>
<td>Low</td>
</tr>
<tr>
<td>vi) Voice</td>
<td>High</td>
<td>Medium</td>
<td>Slow</td>
<td>Slow</td>
</tr>
</tbody>
</table>

### (8) FUZLAT-E-BADAN (Excreta of the body)

<table>
<thead>
<tr>
<th>i) Urine Colour</th>
<th>Normal/Reddish</th>
<th>Yellowish</th>
<th>Whitish</th>
<th>Darkish/Blackish</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii) Urine Concent.</td>
<td>Concentrated</td>
<td>Dilute</td>
<td>Turbid</td>
<td>Turbid</td>
</tr>
<tr>
<td>iii) Urine Quantity</td>
<td>Moderate</td>
<td>Less</td>
<td>More</td>
<td>Less</td>
</tr>
<tr>
<td>iv) Stool Consistency</td>
<td>Semi Solid</td>
<td>Loose</td>
<td>Constipated</td>
<td>Constipated</td>
</tr>
<tr>
<td>v) Stool Quantity</td>
<td>Voluminous</td>
<td>Less amount</td>
<td>Voluminous</td>
<td>Less amount</td>
</tr>
<tr>
<td>vi) StoolColour</td>
<td>Brownish</td>
<td>Yellowish</td>
<td>Whitish</td>
<td>Blackish</td>
</tr>
</tbody>
</table>

### (9) NOM-WA-YAQQA (Sleep and Wakefulness)

<table>
<thead>
<tr>
<th>Sleep</th>
<th>Average</th>
<th>Less</th>
<th>Excessive</th>
<th>Less &amp; Disrupted</th>
</tr>
</thead>
</table>

### (10) INFALAT-E-NAFSANIA (Psychic reactions)

<table>
<thead>
<tr>
<th>i) Response</th>
<th>Aggressive</th>
<th>Brave</th>
<th>Weak</th>
<th>Coward</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii) Angers /Joy</td>
<td>Easily come easily lost</td>
<td>Frequent, severe &amp; Persist for long time</td>
<td>Comes hardly easily lost</td>
<td>Infrequent but persists</td>
</tr>
<tr>
<td>iii) Mental Alertness</td>
<td>Enthusiastic prepared</td>
<td>Reactive provoked</td>
<td>Dull sluggish</td>
<td>Deep thinking</td>
</tr>
</tbody>
</table>

### (4) Memory

<table>
<thead>
<tr>
<th>Excellent, Long term Retention</th>
<th>Good, Short term Retention</th>
<th>Not good, can not retention for Long time</th>
<th>Not good but excellent retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>v) Behavior</td>
<td>Cheerful</td>
<td>Angry/Loose temper easily</td>
<td>Calm, Quick</td>
</tr>
<tr>
<td>vi) Decision Taking Power</td>
<td>Bold</td>
<td>Quick</td>
<td>Hesitate</td>
</tr>
<tr>
<td>vii) Dream</td>
<td>Blood, red object</td>
<td>Five red or yellow object</td>
<td>White cold object</td>
</tr>
</tbody>
</table>

**Table no.1 Characteristics of Different Temperament**
### Table no. 2 Diseases Associated with Sue Mizaj

<table>
<thead>
<tr>
<th>Sue Mizaj Har Sada</th>
<th>Sue Mizaj Barid Sada</th>
<th>Sue Mizaj Ratab</th>
<th>Sue Mizaj Yabis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hummae Yaum</td>
<td>Istitqatatabi (Asicitus)</td>
<td>Hummae Balghamiah</td>
<td>Humme Rubo</td>
</tr>
<tr>
<td>Hummae Shamia</td>
<td>Simane Mufrit</td>
<td>Hummae Mukhtalifah</td>
<td>Laghi</td>
</tr>
<tr>
<td>Hummae Mathbaqa</td>
<td>Buhtus Saat (hoarseness of voice)</td>
<td>Lazziness</td>
<td>Asthma</td>
</tr>
<tr>
<td>Diabetes (Ziabitus)</td>
<td>Hummae Balghamiah and mukhtalifah are more common in the person having sue mizaj barid</td>
<td>Buhtus Saat (Hoarseness of voice)</td>
<td>Anemia</td>
</tr>
<tr>
<td>Shakiri</td>
<td>Body ache</td>
<td>Increased sleep</td>
<td>Bodyache</td>
</tr>
<tr>
<td>Headache</td>
<td>Body ache</td>
<td>Chest pain</td>
<td>Zo‘fe Aaza</td>
</tr>
<tr>
<td>Heat stroke</td>
<td>Wajaul Mukassir</td>
<td>Zo‘fe hazm (Dysplesia)</td>
<td>Male and female infertility</td>
</tr>
<tr>
<td>Body ache</td>
<td>Wajaul Khadri</td>
<td>General weakness</td>
<td>Ikhtilate Aql, fear</td>
</tr>
<tr>
<td>Chest Pain</td>
<td>Weakness of the body more common</td>
<td>Prolonged fevers</td>
<td>Chest Pain</td>
</tr>
<tr>
<td>Male and Female infertility</td>
<td>Anosmia</td>
<td>Diarrhoea</td>
<td>Fasaade Zikr</td>
</tr>
<tr>
<td>Weakness in the Organs or body</td>
<td>Cough and Common cold</td>
<td>Piles</td>
<td>Suda‘e yabis</td>
</tr>
<tr>
<td>Increased thirst</td>
<td>Asthma</td>
<td>Dysmenorrhoea</td>
<td>Suda‘e Jimaee (headache due to Coitus)</td>
</tr>
<tr>
<td>Insomnia</td>
<td>Chest pain</td>
<td>Ulcers</td>
<td>Fasaadus saut</td>
</tr>
<tr>
<td>Onset of senility occurs rapidly due to increased dispersion of fluid</td>
<td>Joul Qah</td>
<td>Fistulae</td>
<td>Thin and cracked skin</td>
</tr>
<tr>
<td>Complexity of Skin &amp; hair becomes black</td>
<td>Looseness of bowl</td>
<td>Epilepsy</td>
<td></td>
</tr>
<tr>
<td>Weak digestion</td>
<td>Conjunctivitis</td>
<td>Stomatitis</td>
<td></td>
</tr>
<tr>
<td>Sudae Shirki Medi Har</td>
<td>General weakness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Earache</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Erysipelas</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inflammatory conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sudae Safrawi (Bilious headache)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Usrul Bala’q (Dysphagia) due to Safra</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dawar (Vertigo)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Darde Meda (Safrawi)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Har Ratab</td>
<td>Barid Yabis</td>
<td>Barid Ratab</td>
<td>Barid Yabis</td>
</tr>
<tr>
<td>Humayyot</td>
<td>Hummae Ghib</td>
<td>Common cold</td>
<td>Malancholia</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>Hummae Matbaqa</td>
<td>Pneumonia</td>
<td>Common cold</td>
</tr>
<tr>
<td>Bloody diarrhoea</td>
<td>Hummae Diq (TB)</td>
<td>Zatuljan’b (Pleuritis)</td>
<td>Asthma</td>
</tr>
<tr>
<td>Epistaxis</td>
<td>Haemoptysis</td>
<td>Hoarseness of voice</td>
<td>Piles</td>
</tr>
<tr>
<td>Inflammatory diseases and boils</td>
<td>Ulcers in lung</td>
<td>Throat pain</td>
<td>Ulcer in lungs</td>
</tr>
<tr>
<td>Paralysis</td>
<td>Epilepsy</td>
<td>Chest pain</td>
<td>Frequent cough</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>Loose motion</td>
<td>Back ache</td>
<td>Irritation in the eyes</td>
</tr>
<tr>
<td>Deafness</td>
<td>Looseness of bowel</td>
<td>Nervine diseases like</td>
<td>Constipation</td>
</tr>
<tr>
<td>Diseases in the eyes as false membrane is formed in eye</td>
<td>Conjunctivitis</td>
<td>Paralysis</td>
<td>Increased urination</td>
</tr>
<tr>
<td>Headache develops frequently</td>
<td>General weakness</td>
<td>Bell’s palsy</td>
<td>Female infertility</td>
</tr>
<tr>
<td>Digestion becomes weak (indigestion)</td>
<td>Earache</td>
<td>Isterkha</td>
<td>Severe labour pains</td>
</tr>
<tr>
<td>Gout</td>
<td>Erysipelas</td>
<td>Ikhtilaj</td>
<td>Frequent vomiting</td>
</tr>
<tr>
<td>Itching</td>
<td>Inflammatory conditions</td>
<td>Tashannuj</td>
<td>Dawar</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>Sudae Safrawi (Bilious headache)</td>
<td>Dribbling of urine</td>
<td>Jumood</td>
</tr>
<tr>
<td>Insomnia</td>
<td>Usrul Bala’q (Dysphagia) due to Safra</td>
<td>Secretion from eyes, nose</td>
<td>Fasaade Filr</td>
</tr>
<tr>
<td>Piles</td>
<td>Dawar (Vertigo)</td>
<td>Sudae Balghami</td>
<td>Qutrub (Type of mania)</td>
</tr>
<tr>
<td>Decreased appetite</td>
<td>Darde Meda (Safrawi)</td>
<td>Sarsame Balghami (Lisurghus)</td>
<td>Epilepsy</td>
</tr>
<tr>
<td>Asthma with cough</td>
<td></td>
<td>Dawar (Vertigo)</td>
<td>Saktah</td>
</tr>
<tr>
<td>Falghamooni (Sarsame Damvi)</td>
<td></td>
<td>Coma</td>
<td>Darde me’da</td>
</tr>
<tr>
<td>Dawar (Vertigo)</td>
<td></td>
<td>Fasaade Zikr</td>
<td>Usrul bala</td>
</tr>
<tr>
<td>Sakta</td>
<td></td>
<td>Epilepsy</td>
<td>Insomnia</td>
</tr>
<tr>
<td>Usrul Bala (Difficulty in swallowing)</td>
<td></td>
<td>Saktah</td>
<td>Cancer</td>
</tr>
<tr>
<td>Sudae Damvi</td>
<td></td>
<td>Tamaddud</td>
<td>Qooba</td>
</tr>
<tr>
<td>Zaghtud Dam Qawi (HT)</td>
<td></td>
<td>Kuaz (Tetanus)</td>
<td>Dry eczema</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Siqlul Lisan</td>
<td>Irregular fever</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Usrul Bala’q (Difficulty in Swallowing)</td>
<td>Hummae ruba (Quartern fever)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fasaadus Saut</td>
<td>Dysurea</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Asthma</td>
<td>Spleenomegal y</td>
</tr>
</tbody>
</table>

### Table no. 3 Diseases Associated with Sue Mizaj
CONCLUSION

Mizaj is a quality of an internal resultant of various body composition reactions, occurs in each and every cell of the body. It is a unique, suitable, perfect and benefiting to that body according to its requirements, and it is represented morphologically, physiologically, psychologically, and pathologically. Mizaj of each and every individual varies widely as per composition as well as other surrounding factors and circumstances. Normal mizaj is defined as a condition in which a person survives comfortably with all signs of healthy life.

Mizaj of the body fluctuate within between certain minimum and maximum normal range according to the composition (quantity as well as quality), age of the body and environmental in which he reside.

From all these definitions it is proved that the Mizaj is a new quality which developed after inter mixing of the properties of particles of the elements which gives a new state to the compounds. For the formation of Mizaj it is necessary that different elements get combine together and form a new compound.

REFERENCES