Implication of temperament in Ilāj Bi’l-Ghidhā

Neha Siddiqui, Subia Khursheed and Kehkashan

Abstract

As we all know about the unique concept of USM “Temperament”, and its importance as well. But what are its implications and how one should keep it in mind while dealing with any aspect of the human being is also important. The aspect could be as simple as “the temperament of ages” and as complicated as “the temperament of disease”. By this statement, it also need to be made clear that how temperament is related with each and every facet of human being. Temperament helps in deciding regimens for prevention purpose, advising diet, to stay healthy, advising medicine in case of any disease etc. The modes of treatment described in USM are basically four in number. According to the need they can be applied either singly or in combination. Among them, the one which is most friendly to Ṭabī’at is Ilāj Bi’l-Ghidhā (dieto-therapy). Diet is the basic need of all the living beings in different forms. One should try to keep it Mu’tadil in quality as well as quantity so that moderate and equitable temperament of an individual could be achieved and if lost can be revert back. Qualitative management is suitable to drug administration as by changing the quality of diet, we can change the temperament of the human body. However diet has its specific rules that deal with quantity as well because food may be held back from the patient, reduced, modified, or increased. Hence Ghidhā, by changing its quality and quantity, can be implemented in correcting Sū’a-ṭ-Mizāj. The relation of the temperament and diet on the state of human body (health and/or disease) and its constituents (Umūr Ṭabī’ya) shall further be discussed in this paper.

Keywords: Temperament, Ilāj Bi’l-Ghidhā, Ṭabī’at

Introduction

The Greeks studied the human body in terms of its structure and function. For this purpose they categorized all human beings into four types of Mizāj. When they discussed the compositions of human body, seven prime factors (Umūr Ṭabī’ya) were introduced upon which the whole body depends. Mizāj ranks second among these factors. Our body works on the basis of these seven fundamentals. No one can escape even a single from these seven fundamentals because these are the basics of life. These are Arkān, Mizāj, Akhlāṭ, ‘A’dā, Arwāḥ, Qawwāl and Af’āl[1]. Mizāj has been explained by each and every Unani physician and it is the most important fundamental concept of Tibb. The most accepted definition of Mizāj was cited by Ibn Sīnā and it has been followed by his predecessors afterwards. Since then, it has been the most followed concept regarding Mizāj. Ibn Sīnā said, the temperament is a quality which is produced by action and reactions of opposite qualities of Anāṣir. Anāṣir corresponds to the elements [2].

What Is Temperament?

Basically, temperament can be perceived as the final combination of elements (Uṣṭuqussūt). We can also state that temperament depends upon the number, ratio and atomic sequence of elements in the compounds. The properties of a compound differ from the properties of elements. The compounds retain their properties until their elemental form is held together, but when chemical combination or chemical disintegration occurs, the properties of the compounds are also affected in proportion to the chemical combination or disintegration. This applies to human temperament as well. Anything that exists, possess physical as well as chemical properties. Therefore, temperament is basically the atomic structure that leads to formation or breakdown of a compound and changes accordingly, and is responsible for the chemical properties that are contained by that compound [3]. So, the temperament is chemical property (or composition) of a compound and if we talk about the temperament of human beings it can be described biochemically. The definition temperament as described by Unani scholars in the past, if perceived in the light of technological advancements which were lacking at that time when it was given, can be logically understood as:
"Temperament is formed as a result of chemical process in which two or more elements are bonded together by different types of chemical bonds according to their valencies and affinity towards each other to form a new compound that have uniform properties throughout" [2].

**Classification of age**

Ages can be divided into four groups according to Unani system of medicine: Sinn-i-Numū (Sinn-i-Hadāḥat), Sinn-i-Shabāb (Sinn-i-Wuqāfī), Sinn-i-Kuhūlāt (Sinn-i-Inḥiṣāṣ) and Sinn-i-Shaykhkhāṭat. Sinn-i-Numū is a period from birth to thirty years, Sinn-i-Shabāb is from thirty to forty years, Sinn-i-Kuhūlāt from forty to sixty years and Sinn-i-Shaykhkhāṭat from sixty years up to death. Sinn-i-Numū is the growing age where the body continues to grow and has hot and moist temperament. It is further divided into five: Sinn-i-Ṭuḍūlāt (from birth to four years), Sinn-i-Ṣabā (four to nine years), Sinn-i-Tara’ru’ (nine to fourteen years), Sinn-i-Bulīgh/Sinn-i-Riḥāq (fifteen to twenty five years), and Sinn-i-Fatā (twenty five to thirty years). Sinn-i-Shabāb is the age wherein the body becomes fully mature and stable. At this stage of life a person has the best temperament i.e. moderate (Mu’ta’dil) and also the body functions are at their best. In terms of quality the temperament of this age is hot and moist. Sinn-i-Kuhūlāt is the age when the body loses its stability and deterioration starts. Innate heat of the body gradually decreases due to diminution of body fluids specially and the body develops cold and dry temperament. Sinn-i-Shaykhkhāṭat is the last phase of life i.e. the age when body heat decreases to a great extent and the temperament becomes extremely cold and dry due to which person moves slowly towards death [6,5,8,7].

According to Unani concept, these four stages in human life are categorized as under:

<table>
<thead>
<tr>
<th>Period</th>
<th>Title</th>
<th>Name</th>
<th>Years of age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The period of growth</td>
<td>Adolescence</td>
<td>Upto 25 or 30</td>
</tr>
<tr>
<td>2.</td>
<td>The prime of life</td>
<td>Period of beauty</td>
<td>Upto 40</td>
</tr>
<tr>
<td>3.</td>
<td>Elderly life</td>
<td>Period of decline Senescence</td>
<td>Upto 60</td>
</tr>
<tr>
<td>4.</td>
<td>Decrepit age</td>
<td>Senility</td>
<td>To the end of life</td>
</tr>
</tbody>
</table>

In the third period, the best vigour has passed, and the intellectual power begins to decline. In the fourth period, vigour and intellectual power both obviously decline. The period of growth is further subdivided into five stages as tabulated below:

<table>
<thead>
<tr>
<th>First</th>
<th>Infancy</th>
<th>The period before the limbs are fitted for walking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second</td>
<td>Babyhood</td>
<td>The period of formation of teeth. Walking has been learnt, but is not steady. The gums are not full of teeth.</td>
</tr>
<tr>
<td>Third</td>
<td>Childhood</td>
<td>The body shows strength of movement. The teeth are fully out. Pollutions have not yet appeared.</td>
</tr>
<tr>
<td>Fourth</td>
<td>Juvenility (Puberty)</td>
<td>The period up to the development of hair on the face and pubes. Pollutions begin.</td>
</tr>
<tr>
<td>Fifth</td>
<td>Youth</td>
<td>The period up to the limit of growth of the body (to the beginning of adult life). Period of athletic power.</td>
</tr>
</tbody>
</table>

Miṣāj-i-Asnān (Miṣāj-i-A’mār) [4],

1. **Miṣāj Al-Sībiyān** (Temperament during the period of growth): The period of growth is hot

And moist and in this period both Ruṭūbat Gharīzīyya and Harārat Gharīzīyya are dominant.

**Reasons for hotness:** From the age Sinn-i-Ṭuḍūlāt to age Sinn-i-Fatā, the Miṣāj is hot. The reason for this is that the production of heat in terms of calories is greater than Sinn-i-Shabāb and Sinn-i-Kuhūlāt and their metabolic rate is greater than adults and olds. With the advancement of age, the BMR gradually falls and in old age it is very much reduced. Roughly speaking it is inversely proportional to age. The heat (temperature) in children and adults are equal. But the quantity of heat produced in children is greater because their BMR is higher. It is why, Nafīs has said, Miṣāj of children according to the quantity of Harārat Gharīzīyya is the hottest.

**Reasons for coldness:** Nafīs says, the Miṣāj of children is the moistest according to the quantity of Ruṭūbat Gharīzīyya. The reason of temperament of children being moist is that there is domination of Ruṭūbat Gharīzīyya in children in comparison to adults sand it is greater in adults in comparison to old persons.

We are aware of the fact that the total quantity of Ruṭūbat (fluid) in a person weighing 70 kilograms is between 40 litres to 49 litres. It means the total quantity of fluid is 60% of the body weight. But in children and in those tissues which are very active the quantity of fluid is more. Thus in an infant the total quantity of fluid is 75% of the total body weight or more than that. This quantity is further excessive in foetus. And with the advancing age, this quantity gradually reduces. This is the reason as to why the physicians have maintained the temperament of children as Ṭaṭab (moist).

2. **Miṣāj Al-Kuhūl Wa Al-Mashāyihk** (Temperament in old age): Contrary to children, the old persons are the most Bārid and Yābīs (cold and dry) in comparison to all ages. And since the age of Kuhūl is adjoining to the age of Mashāyihk therefore their temperament is also cold and dry. However, they are less cold and dry.

It has already been discussed in Miṣāj al-Sībiyān (period of growth) that with the advancing age the Ruṭūbat and Harārat (BMR) is gradually reduced and this has also been proved by modern investigations. It is why the temperament of Kuhūl and Mashāyihk (old age) has been maintained as cold and dry. However, there is excess of Ruṭūbat Gharība (abnormal metabolic compounds) in Mashāyihk.

3. **Miṣāj Al-Shabāb** (temperament of adults): Since the adults are equal and in between the two limits (child hood and old age) of two qualities (heat and moisture), therefore they are normal among all. It is because with that ratio their Ruṭūbat Gharīzīyya is reduced, with the
same ratio the quantity of Ḥarārat Gharīziyya is also reduced.

From the above account, it is evident that the temperament of adults is in the middle of children and old people. It is also evident from the fact that the BMR of adult is not as higher as the children or as lower as the old people. It is in the middle of the two limits. Likewise the quantity of fluids in the adults is not as greater as children or as lesser as old age. But it is in between the two. It is why the temperament of adults is declared as Muʿtadil (equable).

Importance of Ghidhā in unani medicine

Ghidhā (Diet): The substances, which after administration and Isṭīḥāla (metabolism) become the part of the body or organ, of the human body and provide Badl Mā Yataḥāllal [8]. They contain carbohydrates, proteins, lipids, vitamins, minerals etc [9].

The importance of food and drink for healthy life of an individual and selection of good and nutritional diets for the prevention and treatment of diseases are quoted by various ancient Unani physicians. Hippocrates stated that “let food be your medicine, and medicine be your food”, and “leave your drugs in the chemist’s pot, if you can heal the patient with food” [10]. Other statements of Hippocrates are “the cause of sickness is over eating and the cause of health is eating like a bird”, “take food only when you have desire”, “good wines in the small quantity is the friend of body and apple is the friend of soul” [11]. Avicenna quotes that “stomach is the house of disease and diet is the head of healing” [12]. Aristotle stated that “the persons who takes grapes juice, bread and mutton, doing physical exercise, taking adequate sleep won’t be ill frequently”. Haris bin Kalda quoted that “Anaar (pomegranate) is the best fruit among all the fruits, rose is the best essence among all the essences, and Kasni (Cichorium intybus) is the best vegetable among all the vegetables” [13]. Rāżī quoted that “good nutrition, adequate rest, happiness and best line of treatment are the pillars for curing of diseases”. He also stated that “the amount of desired eatables should be less for a patient”, and “whenever possible, treatment of the diseases should be done by diets, not only by drugs.” [14].

Classification of food (Ghidhā): [5, 14, 15, 16, 17]
1. According to calories
2. According to chyme
3. According to functions

According to production of chyme diet is classified as:

- Ghidhā Latif (easy to digest, low caloric food)
- Ghidhā Muḥawwassīf (moderate)
- Ghidhā Anāṣir (difficult to digest, high caloric food)
- Ghidhā Naʿīr (difficult to digest, low caloric food)
- Ghidhā Ūmmī (fat, high caloric food)

Effect of Ghidhā on Anāṣir (fluids of the body) [3, 18].

The food that is eaten eventually becomes part of the body by acted upon by digestive and transformative faculties of the body. This food provides the body with all of its elemental requirements. Our body, in fact each and every cell needs a specific amount of these elements to function normally. A physiological quantity of these elements maintain the health of a person and prevents from disease. E.g. human body needs 15 mg per day of iron on an average (the quantity differs in different ages and sex). Iron is involved in a lot of functions in the body such as in the production of blood, as a component of certain proteins and enzymes etc. If the quantity of iron is low, it can affect blood synthesis, respiration, metabolism etc. The higher amounts can also lead to pathological disturbances. Therefore, a specific quantity of elements such as sodium, potassium, calcium, iron etc. is required in the body. This requirement is met by the diet we take in the form of food. As the food we take become part of the body by transforming its temperament, consistency and colour (which is accomplished by several powers of the body), that is why the food should be in proper quality and quantity so as to maintain health and ratio of elements (Anāṣir) in the body.

Effect of Ghidhā on Akhlāṭ (fluids of the body) [3, 18].

It is mentioned in Unani Ţībīth that Akhlāṭ are formed in the body from the food that we take. The food particles that are ingested after going through the process of digestion in stomach and intestine, goes to the liver. In liver, Ṭaba’ī Akhlāṭ are formed as a result of metabolism and several chemical reactions. “These Akhlāṭ, when present in normal quantity and quality, maintain health. And when the ratio of

According to production of chyme due to metabolism of...
their quality and quantity deviates from the normal range, it causes disease”, as stated by Bugrāt and Jalānūs, the great Unani philosophers of their times. Therefore, Akhlāṭ needs to be in proportion to maintain health and Ghidhā plays a very important role in the formation of Akhlāṭ. So Ghidhā holds the utmost importance in maintaining the physiological functions of the body and causation of disease by affecting the composition of Akhlāṭ.

Effect of Ghidhā on Mizāj [3, 18].
It has already been stated how Ghidhā affects the composition of Anāṣir and Akhlāṭ in the body. Effect of Ghidhā on Mizāj can be understood in two ways:

1. It is now clear that Mizāj is formed as a result of combination of different elements. Most of the elements present in our body are not present in elemental form rather in the form of compounds. Elements possess quality (Kayfiyat) and compounds possess temperament (Mizāj). When elements combine with each other to form any compound, that compound acquires a specific temperament. Human body is made up of numerous of such compounds and these compounds form the temperament of human body as a whole. When the quantity and quality of Anāṣir deviates, it causes changes in the temperament as well (Su-i-Mizāj). Su-i-Mizāj is one of the causes of disease. Hence, a specific temperament is required for the maintenance of health and prevention from disease. Temperament depends on the combination of elements and elements are provided by the food we take. Therefore Ghidhā plays an important role in maintaining the overall temperament of the body.

2. It is written in several Unani manuscripts that Mizāj is formed the prevalence of Akhlāṭ in the body i.e. Dam, Balgham, Şafrā and Sawdā. The most prevalent Khilṭ out of these exerts its effects on the body and forms the Mizāj of the body. Akhlāṭ, as already stated, are formed as result of digestion and metabolism of Ghidhā in the liver. Therefore Mizāj is also formed indirectly by the Ghidhā, which is important in maintaining the states of the body i.e. health and disease.

Implication of Ghidhā according to Mizāj
It is now clear that how Ghidhā is important in terms of formation of Anāṣir (elements), Akhlāṭ (fluids) and eventually Mizāj (temperament). The ages are divided by Unani scholars in different groups and each age group has a specific temperament. This temperament has to be maintained so as to prevent Su-i-Mizāj to occur. The specific temperament of these age groups is necessary to maintain the health and for the preservation of health and prevention of occurrence of the disease. And this temperament can be regulated by implementing different Ghidhā in different age groups according to their nutritional requirements. The Ghidhā that should be implemented in different age groups so as to maintain the temperament and lead a healthy life and perform the required functions of every age group is being listed below:

Broadly age can be divided into four groups according to the difference in nutritional requirement with respect to the Mizāj:

Table 3: Implication of Ghidhā according to Mizāj [19].

<table>
<thead>
<tr>
<th>Age</th>
<th>Functional requirement according to Mizāj</th>
<th>Nutritional requirement according to Mizāj</th>
</tr>
</thead>
<tbody>
<tr>
<td>School going age</td>
<td>Foods that build body mass and give mental strength.</td>
<td>Focus on protein and calories more. Fruits vegetables and whole grains are also critical.</td>
</tr>
<tr>
<td>College going age</td>
<td>Foods that give energy without weight gains and maintain the shape and mass of the body.</td>
<td>Focus on calcium, folate and iron. Foods such as milk, lentils, spinach, black beans, chickpeas, prunes,</td>
</tr>
<tr>
<td>Professional age</td>
<td>According to the profession whether it requires mental work or field work.</td>
<td>Focus on less calories and more magnesium and anti-oxidants. Include vitamin C and E as well.</td>
</tr>
<tr>
<td>Retirement</td>
<td>Psychological stability as depression and anxiety due to loneliness is common.</td>
<td>Focus on sweet potato, green vegetables and carrots.</td>
</tr>
</tbody>
</table>

Implication of Ghidhā in Fuṣūl Arba’a
According to Unani system of medicine, there are four seasonal changes annually. The four seasons are called as Fuṣūl Arba’a which are as follows: Faṣl-i-Rabī (cold and wet climatic temperament), Faṣl-i-Kharīf (hot and wet climatic temperament), Faṣl-i-Shaṭf (hot and dry climatic temperament) and Faṣl-i-Shiḍah (cold and dry climatic temperament). All these seasons have temperament of their own and these seasons implement changes on human body as well as they are one of the co-efficient factors. To maintain the temperament of human body under the influence of these seasons, the Ghidhā should be implemented likewise, both quantitatively and qualitatively. By controlling the quantity and quality of Ghidhā, we can maintain the temperament of human body as equable in spite of the action of the temperament of seasons on the human body. The Ghidhā that should be implemented in different seasons is described in the tabulated form below:

Table 4: Implication of Ghidhā in Fuṣūl Arba’a [20].

<table>
<thead>
<tr>
<th>Name of the seasons</th>
<th>Temperament of the seasons</th>
<th>Advisable diet (Ghidhā)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faṣl-i-Rabī (Spring)</td>
<td>Cold and wet</td>
<td>Reduce the intake of sour flavours and increase sweet and pungent flavours as this facilitates the liver to regulate the vital energy throughout the body. Examples of recommended foods for the spring include onions, leeks, leaf mustard, wheat, dates, cilantro, mushrooms, spinach and bamboo shoots. In addition, uncooked, frozen and fried foods should only be taken in moderation.</td>
</tr>
<tr>
<td>Faṣl-i-Kharīf (Autumn)</td>
<td>Hot and wet</td>
<td>Beneficial foods for this are lily bulb, white fungus, nuts or seeds, pear, lotus root, pumpkin, honey, soy milk and dairy products. It is advisable to eat more food with sour flavours and reduce pungent flavours as such things like onion, ginger and peppers induce perspiration, while sour foods like pineapple, apple, grapefruit and lemon have...</td>
</tr>
</tbody>
</table>
It is advisable to eat more food with pungent flavours and reduce bitter flavours; this enhances the lung and maintains the normal sweating mechanism in summer. Some foods are recommended for keeping the body cool and balanced, such as bitter gourd, watermelon, strawberries, tomatoes, beans, cucumber, wax gourd, lotus root, lotus seed, Job’s tears, bean sprouts, duck and fish. Too many greasy, raw and frozen foods can damage the digestive system and lead to a poor appetite, diarrhoea or stomach upset, hence should be avoided.

It is advisable to eat more food with bitter flavours while reducing salty flavours so as to promote a healthy heart and reduce the workload of the kidney. Foods with bitter flavours include apricot, asparagus, celery, coffee, tea, grapefruit, hops, kohlrabi, lettuce, radish leaves, kale, vinegar and wine. Energizing herbs such as ginseng, wolfberry, angelica, rhemnaian root, astragals and medicinal mushrooms can be used.

Importance of Ghidhā in treatment
The eradication of disease and restoration of health can be achieved in three ways according to Unani system of medicine:

a. Ilāj Bi’l-Ghidhā (Diet-o-therapy)
b. Ilāj Bi’l-Tadbīr (Regimenal Therapy)
c. Ilāj Bi’l-Dawā’ (Pharmacotherapy)

Ilāj Bi’l-Ghidhā (Diet-o-therapy): According to Unani philosophy, the cause of a disease may one or more of the three i.e.

- Sū’-i-Mizāj
- Sū’-i-Tarkīb
- Tafarruq-i-Ittiṣāl

Sū’-i-Mizāj is an important factor in causation of diseases. Other than that, it should also be noted that usually, any disease involves more than one of the causes or at times all of the three and Sū’-i-Mizāj is always, usually one of them. Therefore, a disease cannot occur without Sū’-i-Mizāj. As Ghidhā is responsible for the formation of Akhlāt and hence Mizāj in the body. Hence Ghidhā, by changing its quality and quantity, can also be implemented in correcting the Mizāj in case of the occurrence of the disease. [1]

Correction of Mizāj through Ghidhā [21]
Qualitative management is suitable to drug administration as by changing the quality of diet, we can change the temperament of the human body. However diet has its specific rules that deal with quantity as well because food may be held back from the patient, reduced, modified, or increased.

The physician may hold off the food from the patient when the purpose is to busy the body system with the digestion of humours or to reduce it to preserve the power by bringing power from the ingested food and reducing the system’s investment in digesting large quantities of food. Attention is always aimed at the more important of two issues, which is the power when it is too weak and the disease when it is very strong.

Food is reduced from two aspects: quality and quantity, and a third if you combine the two. The difference between quality and quantity is that the food can be of large quantity but low quality, such as leafy vegetables and fruits. Some food in low quantity has high nutritious value like eggs. Sometimes, we need to decrease the quality and increase the quantity if the appetite is dominant and there are raw humours in the vessels. Therefore, we satisfy the appetite by filling up the stomach and protect the vessels from new humours until the existing humours are digested, and also for other reasons. In other situations, we need to increase the quality and decrease the quantity, such as strengthening the power when the stomach digestion is weak and cannot digest large amounts of food. Food reduction and stoppage are important in acute diseases. In chronic diseases, food is reduced as well, but less than in acute diseases because we focus more on the strengthening of “power” because we are aware that the patient's healing crisis and recovery are distant; therefore, if the power is not preserved it will not last to reach the crisis and digest the humors that take a long time. However, acute diseases have a proximate healing crisis, and we expect that the “power” will not fail before reaching the crisis; if we fear that then we start reducing the amount of food. In the early stages of the disease symptoms, we give food that is strengthening to the “power,” but when the disease worsens and symptoms increase, we need to reduce the food quantity according to our confidence in what we mentioned above.

There are two other aspects to the choice of food. These are

a. Speed of absorption, fast (as in wine) or slow (such as roasted and fried foods); and
b. The consistency and stickiness of the materials it generates in the blood. Meats of pig (pork) and calves (veal) produce heavy and thick substances that take a long time to break down, while the nutrients of wine and figs produce the opposite.

We are in need of quickly digested and absorbed food if we want to prevent the total collapse of the power and revive it, especially if the time is short and does not allow for slow digestion. We usually avoid following a slow-digested food with a fast-digested one so that they do not mix, as has been explained before. Also, we avoid eating dense food when sure of the existence of an obstruction. However, we prefer good, nutritious and slow digested food when we want to strengthen an individual and prepare them for heavy exercise and choose light food for those whose skin pores get easily blocked.

Conclusion
We cannot separate temperament from anything, be it the characters/personality of an individual, health, disease or even treatment. Likewise Ghidhā also holds an utmost importance in Unani system of medicine. Apart from providing Badl Mā Yatahālal for the body, it is an effective way of keeping the temperament equable (in the maintenance of Mizāj Mu’adil Tibbi). The two important features of Ghidhā are its Kamiyat and Kayīyat (quantity and quality) and both of them together or singly can be regulated according to the need of the hour. Therefore, Ghidhā when altered in quality and quantity can maintain the equable temperament or even revert it back in case of Su’ Mizāj i.e. disease.

Future prospects
There is a hype of fitness these days. Every other person
strives to be fit and healthy in terms of the body shape. A lot of diets are also being popular for such purpose such as keto-diet, the paleo-diet etc. Temperament play a very imperative role in the implication of such diets. After determining the temperament of the individual, the diet should also be consequently implemented according to its quality so that the temperament of the individual is maintained at its moderation and does not deviate so as to cause Su’ Mizāj.

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