Review Article

J Babol Univ Med Sci
Vol 20, Issu 7; July 2018. P:63-70

A Review of the Indices of Mizaj-e-Meda (Temperament of Stomach) identification in Persian Medicine

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J Babol Univ Med Sci; 20(7); July 2018; PP: 63-70
Received: Jan 8th 2018, Revised: Mar 14th 2018, Accepted: Apr 10th 2018.

ABSTRACT

BACKGROUND AND OBJECTIVE: Digestive diseases are one of the problems of the health system in the world. From the perspective of Persian medicine, the stomach begins the second stage of digestion and its function plays an important role in human health or illness. The written sources of Persian medicine have been widely used to determine the health of the stomach. The purpose of this study is to summarize indices of Mizaj-e-Meda (Temperament of Stomach) identification to help better diagnose the status of health or illness of stomach.

METHODS: In this review article, 11 valid Iranian medicine sources and scientific databases of Scopus, PubMed, Science Direct, Google Scholar, Elsevier, and web of science as well as Persian indices of SID, Iran Doc, Magiran were searched and the existing views were summarized.

FINDINGS: In the sources of Persian medicine, the indices of different types of Mizaj (temperament) and Su-e-mizaj (abnormal temperament) have been proposed. Seventeen articles on the subject of gastric diseases in Persian medicine were found; one case merely examined gastric symptoms, while others only slightly referred to the indices. Some of the most important indices considered in these sources for identifying the type of Mizaj-e-Meda were the way of digestion, desire for food according to the type of Mizaj (temperament), thirst, appetite, burrow, moisture and taste of the mouth, tongue and mouth condition, flatulence, quality of waste matter, speed of food passage, sour stomach, burning stomach, stomach ache and stomach malmas (touch).

CONCLUTIONS: Persian medicine sources have fully cited gastric indices, which can be used for a more effective diagnose and treatment and even prevention of gastric diseases, and can also be used for designing and validating standard scales for Mizaj-e-Meda (Temperament of Stomach) identification.

KEY WORDS: *Stomach, Su-e-mizaj, Mizaj, Persian medicine.*

Please cite this article as follows:

Parsa E, Mojahedi M, Chaichi Raghimi M, Ilkhani R, Zareiyan A, Mokaberinejad R, Alizadeh Vaghasloo M, Khodadoost M. A Review of the Indices of Mizaj-e-Meda (Temperament of Stomach) identification in Persian Medicine. J Babol Univ Med Sci. 2018;20(7):63-70.

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[DOR: 20.1001.1.15614107.1397.20.7.9.9]
[DOI: 10.18869/acadpub.jbums.20.7.63]

Introduction

Gastrointestinal diseases are one of the leading causes of death and increased health care costs in the United States (1, 2). Gastric cancer is the third leading cause of death in the world (3). Dyspepsia and reflux are one of the most common gastrointestinal diseases that reduce the quality of life and impose heavy economic burden (4). The prevalence of gastric ulcer in the world is 6–15%, but in a study in Iran, this rate is 41%(5). The stomach as one of the most advanced organs in the body has an important function in the digestive process (6). Traditional and complementary medicine has always been considered for choosing a new treatment (7). Proper use of traditional medicine can prevent many of the financial resources of medical institutions from being wasted (8).

Traditional medicine is used as a complementary medicine in Iran, India, Greece and Arab countries (9). In Persian medicine, individual differences have been introduced in different temperaments (Mizaj) (11, 10). Mizaj is a quality that affects physical, mental, and functional properties of the body (12, 13). Each organ has its particular Mizaj and the general Mizaj is the Mizaj of various organs (14,15). In Persian medicine, many prescriptions for preserving health, diagnosis and treatment are based on the Mizaj of individuals (16). In this school, Su-e-mizaj (abnormal temperament) is a condition in which the organ loses its balance, and in this case, the health of the organ or the entire body is impaired (17).

From this perspective, the gastrointestinal tract, especially the stomach, plays a key role in the health of the body (17), and gastrointestinal tract disorder is one of the causes of many diseases in other parts of the body. Therefore, recognizing the health status of stomach as one of the most important organs of the digestive system is very important (18). Different indices have been presented in the sources of Persian medicine for the diagnosis of Mizaj-e-Meda (Temperament of Stomach). So far, no comprehensive study has been conducted to summarize these symptoms from different sources. The present study was conducted to collect and categorize diagnostic indices of different Mizaj (temperaments) of Meda (stomach) for use in related researches and clinical activities of Persian medicine.

Methods

In this review articles, the search was done in the full text of the books Kamil as-Sina at-Tibbiyya (Ali ibn Abbas AhWazi), Tib–e–Akbari (Mir Mohammad Akbar Shāh Arzānī), Eksir–e–Azam (Nazem Jahan Mohammad Azam Khan), Al Qanoon Fil Tib (Ibn Sina), Mansuri-fi-Teb and Alhavi Fi-al-Teb (Muhammad ibn Zakariya al–Razi), Zakhire Kharazmshahi (Esmail Jorjani), Hedayat al-Motealemin Fi-al-Teb (Abobakr Ebn Ahmad Akhaveini), Firdous al-Hikmah (Ali–ibn–Sahl Rabban al–Tabari), Sharh Tashrih al-Qanun (Ibn al-Nafis), Sharh al-asbab wa'l-'alamat (Nafis ibn Avaz Kermani), English databases of Scopus, PubMed, Science Direct, Google Scholar, Elsevier, Web of science, and Persian databases of SID, Iran Doc, and Magiran, without time limit using the Keywords: dry, warm, cold, warm/cold, wet/cold, Mizaj, Temperament, Stomach.

Results

Of 17 review articles in which symptoms of Mizaj and Su-e-mizaj of Meda have been reported, 16 articles with subjects other than Su-e-mizaj of Meda, while presenting their content, provided a brief overview of the symptoms of Su-e-mizaj of Meda. Only in the study of Alizadeh et al., major and minor symptoms were defined for Su-e-mizaj of Meda according to a number of Persian medicine books and scholars' opinions. It was not specified in the article whether the major or minor criterion was based on the books or the opinion of experts, or from which source of Persian medicine this was extracted (19).

In Persian medicine books, various indices are mentioned for determining the general Mizaj and the Mizaj of the organs (20). The most important indices for determination of different types of Mizaj-e-Meda in resources were: digestion type, impressibility of food quality (warmness, coldness, dryness and wetness), thirst, appetite, mouth moisture, mouth taste, tongue and mouth condition, bloating, quality of body wastes, the rate of passage of food through the stomach, sour stomach, burning stomach, stomach ache, and stomach malmas (touch).

Digestion: According to the author of the Eksir (Nazemjahan), a digestion is appropriate when there is no sign of heavy feeling in the stomach, stomach noise, bloating, burrowing with smell or sour, hiccups, and stretched stomach after eating; the food stay in the stomach for a moderate period, sleep is peaceful and is not very light and not very heavy, it is easy for the person to wake up and then sleep, there is no swelling of the eyelids or heavy head, and ultimately a comfortable bowel movement accompanied with a feeling of complete excretion. If the opposite of these signs is the case, there is digestive disturbance (1, 21). In the warm health Mizaj of stomach, there is a good digestion of heavy food (such as kebab), and light and soft food (such as diluted soup) (14, 22–24). Regarding the cold health Mizaj of stomach, Ibn Sina considers that it is associated with digestive defects, except for digestion of soft and light foods (such as diluted soup) (14). Of course, the scholars believe that heavy food (such as kebab) is corrupted in this type of stomachs (25). Moreover, Ibn Sina believes that digestion is good

[DOR: 20.1001.1.15614107.1397.20.7.9.9]
[DOI: 10.18869/acadpub.jbums.20.7.63]

in wet health Mizaj of stomach unless excessive heavy food is consumed (14). In warm Su-e-mizaj of stomach, food decays in stomach and becomes unhealthy, but hard-digesting foods such as beef and cold natured food are better digested in these stomachs (23, 26,27).

Kermani writes in Sharh al-asbab that in cold Su-e-mizaj of stomach (26, 28), the foods get sour in the stomach, digestion is poor and only soft and light foods are digestible (214, 21, 28). Ahwazi noted in Kamil as-Sina that if cold natured food enters the stomach with cold Su-e-mizaj, the food does not change for digestion. A heavy feeling after consumption of heavy food is also a sign of cold Su-e-mizaj of stomach (27). In the wet Su-e-mizaj of stomach, the patient feels he / she would vomit if he / she moves (14,24) and benefits from eating little food (29). There is an incomplete digestion in wet and dry Su-e-mizaj of stomach (27). In sanguine material Su-e-mizaj of stomach, food becomes corrupt material (26, 28). In the melancholic material Su-e-mizaj of stomach, digestion is strong (23, 26), and in phlegmatic and choleric material Su-e-mizaj of stomach, digestion is poor (26, 28).

Impressibility of food quality: According to Al Qanoon Fil Tib (Ibn Sina), in the warm health Mizaj of stomach, the consumption of warm natured foods such as honey, sweets, and spices is better, but in cold health Mizaj of stomach, the consumption of cold natured foods is recommended (14), and the person tends to consume cold natured food, but he / she gets injured when he / she consumes it (23). In wet health Mizaj of stomach, it is better to eat wet natured food and in dry health Mizaj of stomach, it is better to eat dry natured food (14). In the warm Su-e-mizaj of stomach, the person profits from cold natured and heavy foods (21, 24, 26), and enjoys cold water and cold things, and in case of stomachache, the pain is relieved by eating cold natured food. In the cold Su-e-mizaj of stomach, the stomach benefits from the warm natured food, and in case of stomachache, the pain is relieved by using warm natured food and even the placement of a warm object on the stomach. In the melancholic material Su-e-mizaj of stomach, there is a sense of pleasure with the consumption of water and cold natured foods, and cold objects from outside on the stomach can improve symptoms (27). In the wet Su-e-mizaj of stomach, there is hatred of wet natured food and benefit from dry natured food (14, 26, 29).

A person with dry Su-e-mizaj of stomach benefits from wet natured food and hates dry natured food (21, 26). In phlegmatic material Su-e-mizaj of stomach, there is a tendency for spicy foods and reluctance for the foods that produce a high amount of nutrients (food richness), and their consumption causes constipation, bloating, and nausea (14, 27). In phlegmatic material Su-e-mizaj of stomach, the person benefits from placement of a warm object on the stomach (27). In choleric material Su-e-mizaj of stomach, there is reluctance for dry natured food and benefit for wet natured food, and the patient benefits from the placement of a warm object on the stomach and the consumption of warm natured food and spicy (harif) food (27). People who have warm or cold health Mizaj of stomach have a tendency to things that are close to their health Mizaj. For example, people with warm health Mizaj have a tendency for warm natured food and vice versa. People who have warm and cold Su-e-mizaj tend to have their opposite, that is, a person who has warm Su-e-mizaj of stomach tend to have cold natured food (23).

In the book Kholasa't ol Hikma, Aghili Khorasani mentions that any type of Mizaj that wants to maintain its health must remain in that Mizaj, and thus, the consumed food must be the same type as the original Mizaj of the body, and he argues that a person with warm Mizaj who has warm stomach and consumes cold natured food, after the completion of various stages of digestion, the resulting phlegm tends to warmness, which is similar to the Mizaj of that person, and vice versa (30).

Thirst: The tendency to water is moderate in health Mizaj, and if it is less or more than the usual health Mizaj of a person, it can be regarded as an indicator of Su-e-mizaj (21). According to Razi, in the book Mansuri-fi-Teb, there is increased thirst in warm health Mizaj (25), and there is little thirst in wet health Mizaj (14, 23 – 25). In the dry health Mizaj of the stomach, there is a lot of thirst that can be quenched with a little water and the person may have a feeling of bloating if too much water is consumed (14, 23, 24). In warm Su-e-mizaj of stomach, there is a lot of thirst (14, 21, 26, and 28), and he / she tends to have cold water (23). There is little thirst in cold and wet Su-e-mizaj of stomach (14, 24, 29). In the book Tib–e–Akbari, Arzani mentions that there is a lot of thirst for dry Su-e-mizaj of stomach (14). The dryness of the tongue is also a sign of the diagnosis of this Su-e-mizaj (26, 28). There is thirst in melancholic material Su-e-mizaj of stomach (14, 23, 26). Ibn Sina believes that the thirst of melancholic material is not quenched by warm water, but is quenched with cold water (14, 23).

Also if thirst is accompanied by vomiting, it is a sign of melancholic material (14). According to Ibn Sina in the book al-Qanun, there is a kind of thirst for some kinds of phlegmatic material Su-e-mizaj of stomach and this kind of thirst is quenched with warm water (14, 26). In choleric material Su-e-mizaj of stomach, the mouth is dry (23) and the level of thirst is low (23, 27). In the studied sources, there was no mention to the definition of ordinary thirst and its excessive type (pathological) and also the method for calculating the level of thirst.

Appetite: This feature is one of the most important diagnostic indicators of Persian medicine (32). Of

[DOR: 20.1001.1.15614107.1397.20.7.9.9]
[DOI: 10.18869/acadpub.jbums.20.7.63]

course, no specific definition of appetite has been mentioned in the sources of the study. Appetite for food means the person's desire to eat, which completes the digestion of the nutrition process (33). From the perspective of Persian medicine, appetite is of two types: true and false. True appetite has the following symptoms: light abdomen from below the chest to the navel, weak pulse, sharpness of the senses, especially hearing and vision, reduced movement of the body, unwillingness to sleep, reduced saliva, exiting of the previous food waste, lack of taste of the previous food in burp and lack of thirst (34). In the Book Masaleh Al-Abdan Wa Al-Anfos, Balqi has defined false appetite as the appetite that is based on the habit, not the needs of the body (35).

Appetite is poor in the warm health Mizaj of stomach (14) and it increases with cold water (24), and in cold health Mizaj of stomach, appetite is strong but the digestion power is lower than the ingested food (25). Ibn Sina mentioned in the book al-Qanun that in the warm Su-e-mizaj of stomach, despite the good digestion, appetite is poor. Moreover, the hunger in the warm Su-e-mizaj of stomach is in such a way that the person cannot wait to eat, and he / she may sometimes faint if hunger lasts (14). In cold Su-e-mizaj of stomach, appetite is strong despite the weakness of digestion (14, 21, 26). In the book Tib–e–Akbari, Arzani considers the appetite of the wet Su-e-mizaj of stomach to be poor and the appetite of the dry Su-e-mizaj of stomach to be strong (26). In the sanguine material Su-e-mizaj of stomach, appetite is moderate. In melancholic material Su-e-mizaj of stomach, despite the strong digestion, appetite is poor (21, 23, and 26). In the phlegmatic material Su-e-mizaj of stomach, appetite is poor (14, 21, 26, and 28). In the choleric material Su-e-mizaj of stomach, despite the weak digestion, appetite is strong (14, 28).

Burp: In the book Tib–e–Akbari, Arzani considers burp as the air that exits the mouth with a noise (26). Modern medicine considers the beginning of the mechanism of burp as the accumulation of air in the stomach, which increases the volume and stimulation of the receptors of the stomach. The resulting neural reflex makes the esophagus loose, and the upward movement of the air causes a burp (36). In the cold health Mizaj, the burp is sour (23, 25). In the warm Su-e-mizaj of stomach, the burp is smoky with low vapor (21), or burp with the smell of rotten fish (37). Sour burp, if accompanied by bitter mouth and thirst, and the person tends to be in cold weather, this is a symptom of warm Su-e-mizaj of stomach (23). Most sources consider sour burp as a symptom of cold Su-e-mizaj of stomach (14, 24, 28, 29, 39); Ahwazi emphasized that if cold Su-e-mizaj of stomach is severe, sour burp does not happen because the food is not changed (27). In the sanguine and melancholic material Su-e-mizaj of stomach, there is painful burp (27). According to Jorjani in the book Zakhire Kharazmshahi, the burp with melancholic material is usually smelly with the smell of rotten fish (23), and the burp with phlegmatic and choleric material is sour (21, 23, 27).

Saliva: Like other indicators in the studied resources, there is no specific criteria for determining the natural level of saliva, or lower or higher than normal level. From the perspective of the sources studied, there is a slight dryness of mouth and lack of saliva in warm Su-e-mizaj of stomach (26, 38), and saliva only increases when the person is hungry (14, 23, and 26). Ibn Sina has added that this condition can be resolved if the person eats and is not hungry anymore (14). In the warm Su-e-mizaj of stomach, there is also smelly saliva (14, 21, 24, 27). Excessive amount of saliva is a symptom of cold Su-e-mizaj of stomach (38).

In the wet Su-e-mizaj of stomach, saliva is abundant (14, 26, 28), and dryness of tongue and mouth is observed in dry Su-e-mizaj of stomach (14). In sanguine and melancholic material Su-e-mizaj of stomach, there is an increase in saliva, especially when the person is hungry (26). According to Ahwazi in Kamil as-Sina, smelly saliva is a symptom of sanguine and melancholic material Su-e-mizaj of stomach (27). In melancholic material Su-e-mizaj of stomach, there is dryness of the tongue (21, 28), and the mouth is also dry (38). There is excessive saliva with foam in phlegmatic material Su-e-mizaj of stomach (14). Dry mouth is one of the symptoms of choleric material Su-e-mizaj of stomach (21, 23).

Taste of the mouth: In Al Qanoon Fil Tib, Ibn Sina considers bitter mouth a symptom of warm Su-e-mizaj of stomach and sour mouth a symptom of cold Su-e-mizaj of stomach; but it should be borne in mind that, if the coldness of the Su-e-mizaj of stomach gets too high, the consumed food does not change and the mouth does not become sour (14).

Ibn Sina mentions that mouth taste is bitter in melancholic material Su-e-mizaj of stomach, and is sometimes salty and sometimes sour in phlegmatic material Su-e-mizaj of stomach (14). Ahwazi also mentions the sour mouth as a symptom of choleric material Su-e-mizaj of stomach (27).

Tongue characteristic: Persian medicine considers a special place for tongue in the diagnosis of diseases. From this perspective, many diseases of the stomach can be diagnosed according to the size, dryness and moisture content of the tongue, and various types of tongue and saliva state (39). According to the theory of Ibn Sina, there is a feeling of warmth in the mouth in warm Su-e-mizaj of stomach, white tongue is observed in wet Su-e-mizaj of stomach, and severe redness and rigidity of the tongue is observed in the warm sanguine material Su-e-mizaj of stomach. In the warm melancholic material Su-e-mizaj of stomach, there is

[DOR: 20.1001.1.15614107.1397.20.7.9.9]
[DOI: 10.18869/acadpub.jbums.20.7.63]

yellowness of the tongue (14); a very red and black tongue is also observed in the warm material Su-e-mizaj of stomach (37). In the cold phlegmatic material Su-e-mizaj of stomach, a milky white color is observed. In the cold choleric material Su-e-mizaj of stomach, the tongue tends to black (14).

Table 1. Symptoms of health Mizaj; Al Qanoon Fil Tib (14), Zakhire Kharazmshahi (23), Mansuri-fi-Teb (22), Sharh Tashrih al-Qanun (24)

Type of Mizaj Index	Non-moderate health Mizaj of stomach			
	Warm	Cold	Wet	Dry
Digestion quality	Good digestion of heavy food and decay of soft food (14, 23, 24, 25) Good digestion of heavy foods, such as beef, ducks, and light foods such as chicken and milk (14)	Digestion failure, except for soft and light foods (14) The desire for food more than digestibility (23, 25) Decay of heavy and thick foods in the stomach (25)	Good digestion, except when eating too much heavy food (14)	
Acceptance and tendency to certain foods (benefits and harms of qualities)	Tendency to warm natured food (14) Hatred for warm natured food and the tendency to sour natured food (24)	The tendency to cold natured food (14) The tendency to cold natured food and harmful consumption (23, 25)	The tendency to high-moisture foods (14, 23) Desire for dry natured food(24) The lack of desire for water (but if he / she drinks more water than dry Mizaj, it may be more harmful)(24)	The tendency to dry natured foods (14, 24) The tendency to dry natured foods and harm in the high consumption of them (23) Profit from a small amount of water (24) Harm (stomach heaviness) due to high water intake (24)
Appetite	Poor appetite that improves with cold water (24) Appetite for sour and cold natured food (24)	Strong appetite (14) Appetite for food more than digestibility (23,25)		
Thirst	Excessive thirst (25)		A little thirst (14,23, 24, 25) Lack of the feeling of bloating after eating too much water (14)	Excessive thirst (25) Excessive thirst, thirst quenching with a little water and a feeling of bloating after eating too much water (14,23,24)
Burp		Sour burp (23, 25)		
Quality of waste matter			Wet waste matter (25)	Dry waste matter (25)
Nausea			Getting the feeling of nausea and vomiting rapidly (25)	

Bloating: It is a common complaint of gastrointestinal tract and is referred to as abdominal distension and swelling (40). About 10 to 30% of people in the society suffer from bloating (40). Bloating is observed in cold simple and material Su-e-mizaj of stomach (26). In these cases, pain and traction start after consumption of food, which is due to bloating and excessive air in the stomach (24). The excessive bowel sounds is a common symptom of wet Su-e-mizaj of stomach (14). Tib–e–Akbari states that there is bloating in the phlegmatic and choleric material Su-e-mizaj of stomach (26). Ibn Sina describes the bloating characteristic of phlegmatic material Su-e-mizaj of stomach as occurring after eating heavy food that can only be resolved by burp (14). Arzani considers the bloating in choleric material Su-e-mizaj of stomach in a way that one hears bowel sounds if the hand is pulled onto the stomach (26).

Urine: According to Ahwazi, urine is diluted and smooth in simple Su-e-mizaj of stomach, while thick urine indicates cold and warm material Su-e-mizaj of stomach (27).

Quality of waste matter: Constipation is a symptom of warm Su-e-mizaj of stomach (28). In cold Su-e-mizaj of stomach, waste matter is soft and swollen (21, 26, and 28), and undigested food particles are present (21). In the wet Su-e-mizaj of stomach, waste matter is soft (26) and diarrhea occurs by any simple cause (28). There is constipation in the dry Su-e-mizaj of stomach (21, 26).

Decline (enhedar): The fall of food from the upper part of the stomach is called decline (26). Of course, it seems that in some sources, the departure of food from the stomach was intended by the author. The duration for food to stay moderate in healthy stomachs is eight hours (21). In cold simple or material Su-e-mizaj of stomach, the food exits the stomach later (26). In the wet Su-e-mizaj of stomach, the stomach passes through the stomach rapidly (26, 28).

Sour stomach: In studied sources, there is no specific index and definition of sour stomach, but this index is often referred to as a method for diagnosis. Arzani has mentioned sour stomach in cold material Su-e-mizaj of stomach (26).

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Burning stomach: In the book Tib – e – Akbari, Arzani associates burning stomach with the presence of heavy food in the stomach or the presence of excessive moisture in the stomach or the pouring of the choleric material into the stomach. In order to differentiate the causes of burning stomach, Arzani states that if burning stomach occurs after consuming heavy food and is relieved with hunger, its due to the weakness and disability of the stomach to digest food, if burning stomach is caused by moisture, the cause should be found in moisture and extra materials in the stomach, and if burning stomach is caused by hunger and improves with food consumption, especially fatty foods, it is a sign of the presence and pouring of choleric material into the stomach, which leads to burning stomach. Arzani considers burning stomach a sign of cold and choleric material Su-e-mizaj of stomach (26). There is also burning stomach in melancholic material Su-e-mizaj of stomach, which is eliminated with the consumption of food (23).

Stomachache: Sometimes in Persian medicine, pain and contraction of the stomach are attributed to the air in the stomach. If the stomachache and heaviness of stomach occur simultaneously, it is a sign of excess stomach filling. However, if the pain is with stomach burning, it shows that there are a variety of abnormal, sour, harsh, infectious or bitter phlegm in the stomach that are actually signs of material Su-e-mizaj of stomach (1). From the perspective of Ibn Sina, pain is seen in both cold and warm Su-e-mizaj of stomach, but it is more in warm Su-e-mizaj of stomach (14).

Stomach touch (malmas): Warmness is felt by a person who has a moderate temperature (21) when he/she touches the stomach area in warm Su-e-mizaj of stomach, and the same person feels coldness in cold Su-e-mizaj of stomach (21, 26, 28).

Discussion

Recently, attention to the individual characteristics of humans, both physically and mentally, has led to the emergence of sciences such as Pharmacogenomics, Nutrigenomics, Radiogenomics, and Clinomics, under the general title of Personalized Medicine, which focuses on the specific characteristics of each individual in diagnosis and treatment; these differences, though newly proposed in common medicine, have been considered for thousands of years in the medical schools of ancient civilization (16). Persian medicine, like many medical schools, has placed the main focus of diagnosis and treatment on the basis of individual differences (41). In this study, indices of Mizaj-e-Meda (Temperament of Stomach) identification were extracted and categorized from written sources of Persian medicine. In the mentioned sources, the methods and procedures of examination have not been specified for some indices such as thirst, appetite, touch, decline and tongue characteristics, though there is a fairly complete agreement between written sources on how to relate them to Mizaj-e-Meda.

There are also disagreements in symptoms of health Mizaj and Su-e-mizaj conditions, for example, in terms of warm health Mizaj, both the tendency to warm natured food and the hatred of warm natured food are mentioned. Moreover, there are some controversies between sources of Persian medicine regarding the impressibility of food quality. This point is expressed in Kholasa't ol Hikma in detail, and Aghili Khorasani has argued in this regard; therefore, given the importance of this index among other indices and the clarity of its definition among the public, it is suggested that a separate study be conducted on this subject, and subsequently, field research be carried out using volunteers whose Mizaj-e-Meda has been diagnosed by a team of Iranian medical experts to specify the precise position of this index in determining the coldness, warmness, dryness and wetness of the stomach. Furthermore, to apply the diagnosis of Persian medicine practically, there should be a unified approach to the definitions, and as far as possible, definitions of Persian medicine and modern medicine should be used simultaneously to achieve a complete and practical definition.

In addition, considering that indices of Mizaj-e-Meda have been described qualitatively and sometimes without specific definitions in Persian medicine sources, it sometimes leads to disagreement between the scholars in defining the index and the way of associating the index with Mizaj-e-Meda and ultimately causing discrepancy between them in determining Mizaj-e-Meda. It is suggested that in future researches, while explaining the definition, evaluation method and the method of reasoning the indices of Mizaj-e-Meda, the diagnostic stability and agreement between Persian medicine experts in determining Mizaj-e-Meda should also be explained. Moreover, standard tools need to be designed and validated for the development of systematic education and research on stomach diseases in Persian medicine.

Acknowledgment

Hereby, we would like to thank the Library Administrators, Mr. Farahani and Ms. Ezzi.

[DOR: 20.1001.1.15614107.1397.20.7.9.9]
[DOI: 10.18869/acadpub.jbums.20.7.63]

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