



Holistic approach of Unani system of Medicine in Amraaz-e-Wabaaee with respect to COVID-19: An Overview

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Abstract:

Usool-e-sehat (principle of health) within the Unani system of medicine is “agar sehat hai to uski hifazat ki jaay aur agar marz hai to uska azala kiya jaye” (if there is health then preserve it and if there is disease then treat it). Duniya me jab dard/marz aaya to sath me dawa bhi aae (there is medicine for disease during this world, not necessarily known to human). Its treatment depends on the knowledge of human that what proportion he knows health, diseases and its treatment/cure. According to Unani system of Medicine quwwat-e-mudafiat (immunity) is a real mualij (physician) or doctor who helps the quwwat-e-mudafiat to treat the diseases. Different methods like Ilaj bil ghiza (dietotherapy), Ilaj bil tadabeer (regiminal therapy), Ilaj bil dawa (medicines), Ilaj bil yad (surgery), balance in Asbab-e-sittah zarooriya aur ghair zarooriyah. As these help in maintaining mizaj (temperament) and akhlat (humors) which help quwwat-e-mudafat / quwwat-e mudabbirah-e-badan. Person having good quwwat-e-mudafiat have less chances of getting ill as compared to those having weak quwwat-e-mudafiat. Unani System of Medicine provide holistic approach. Asbab-e-sittah zarooriya and ghair zarooriya, ilaj bil ghiza, ilaj bil dawa, ilaj bil tadabeer and ilaj bil yad etc., plays an important role within the enhancement of quwwate mudafiat, prevention and control of diseases. In this paper we will describe/highlight those measures which can be beneficial for quwwat-e-mudafiat and which can be helpful within the management of non-infectious (non communicable diseases or NCDs) and infectious (communicable diseases) specially in reference to COVID-19.

KEYWORDS: Unani System, Asbab-e-sitta Zarooriya, Quwwat-e-Mudafiat, Immunity, COVID-19.

INTRODUCTION:

Duniya me jab dard aaya to sath me dawa bhi aae (there is medicine for disease during this world). This sentence gives us energy to seek out a correct solution of health problem. Treatment of this depends on the knowledge of human that what proportion he knows health, diseases and its treatment/cure? Health depends on number of factors, immunity (Quwwat-e-Mudafiat) is one among them and plays an important role in maintaining health and treatment of diseases. According to great scholar of Unani system of medicine immunity act as the first physician/doctor for health in human body. Physician only help or strengthen the immunity by different methods which treat the disease. According to scholars of Unani medicine there are some aaza-e-raeesa (principle organs) those act as sardar (leader) which governed the body functioning which are as follows:

1. Aza-e-hawanya (qalb or heart)
2. Aza-e-nafsaniya (dimagh or Brain)
3. Aza-e-tabiiya (jigar or liver)
4. Aza-e-tolidiya (khusyaten or testis) in human body

Brain is the leader of aza-e-nafsaniya (nervous system) and it governs gham (sorrow), ghussa (anger), dur (fear), fikr (anxiety), soch (thinking), faisla (decision), khushi (joy) happiness etc. Heart is leader of aza-e-haywaniya (cardio-vascular system) and governs circulatory functions. Liver is leader of aaza-e-tabiiya (gestro intestinal system) and governs digestive function and also produces akhlat. Balance in akhlat leads to health by increasing quwwate-e-mudafiat which struggle against diseases. If these organs are strong and healthy then body also will be healthy. So, always take care of these organs. Tabeebs tried to strengthen these organs and always aim to help immunity. If these organs are qawi (strong) then the immunity will be strong and there will be less chances of communicable and non-communicable diseases and also amraaz-e-wabae e.g. COVID-19.

Falsafa of Sehat-o-Marz (health and disease) in Unani system:

Ibn-e-Sina (Avicenna) described that person whose quwwat-e-mudafiat is weak they are more prone to diseases and have poor prognosis. Such person /individual need more caution and need more enhancement in quwwat-e-mudafiat (**Sina, 1878**).

Quwwat-e-mudafiat of host plays great role and importance in maintenance of health and the treatment of diseases (**Rushad, 1987**). Another great Unani scholar, Razi (865–925 CE) described in his book Al-Hawi that people who remain physically active and exercise regularly, they have a lesser susceptibility to wabae amraaz / amraaz-e-wabae (epidemic diseases) (**Razi, 2008**). According to Ibn-e-Sina those patients who have weak constitution and those who are suffering from other diseases are supposed to be more susceptible during epidemics (**Sina, 1878**).

Zakariya Razi advised the basic measures during the wabae amraaz (epidemics);

1. Avoid those places where an epidemic is spread.
2. If the condition becomes difficult and unavoidable, then a person should stay in well-ventilated/airy place, preferably distant from the ground.
3. While interacting with a patient, care should be taken that the air particles may not be directed from a patient towards a healthy person (**Razi, 1991**).
- 4) It is also recommended to avoid unnecessary physical exertion during epidemics, (**Razi, 2008**) (**Sina, 1878**), and have to stay in properly ventilated places with optimum temperature, neither too hot nor too cold (**Rushad, 1987**).

4.5. Dietary modifications

A Great scholar of Unani medicine, Ibn-e-Rushd mentioned in his book *Kitabul Kulliyat* that avoid red meat, sweets, and sweet fruits with high water content during epidemic (**Rushad, 1987**). If meat has to be taken, then it should be that of birds found on mountains may be preferred over terrestrial animal's meat (**Rushad, 1987**). These restrictions were suggested surely because of the zoonotic spread of infections was speculated, and fish and animals living near the ground at low altitudes were more likely to be infected than those living at higher altitudes. It is also advised to individuals to consume citrus fruits, especially grapes, apples, lemons etc. as they contain vitamin C in high concentration; nowadays this is also recommended by modern practitioners. Oxymel prepared with *Arq-e-Gulab* is believed to provide effective protection during epidemics (**Razi, 1991**) (**Rushad, 1987**). Overeating or under-eating both are considered harmful as these both have adverse effects on the bodily constitution. Staying thirsty for more time and repeatedly may be detrimental (**Sina, 1878**).

Concept of infectious diseases and epidemics in Unani system of medicine:

The 'germ theory of disease' was established after the development of the first microscope (**Foster, 1970**). There was no certain reference of microbes in Unani medicine but there was a deep understanding /sense about substances which can causes diseases, that there are some factors which produces amraaz (disease). These substances are called *ajsam-i-khabitha* (literally translated as 'bad substances') by Unani scholars. These can transmit from a diseased person to healthy person, and may cause disease into the healthy person (**Sina, 1878**). A number of Unani scholars advocated about this theory of contagion.

A great Unani physician, *Jalinoos (Galen, 131–199CE)*, said a physician should always know about the changes of the weather and its effects on human and always lookout for the change in weather (**Qadeer, 2001**). In *Kitab fil-Jadari-wa-al-hasbah* (Book on Smallpox and Measles), *Zakariya Razi (865–925 CE)* describes the modes of spread of the two diseases (*jadri, Hasba*) and also described the difference between these diseases and discover that these are different diseases. According to *Ibn Sina (980–1035 CE)* air and water cannot be contaminated without admixture of *ajsam-i-khabitha*. He also stated that the contamination of air and water can also be brought if the dead bodies are not disposed of properly of the individuals who died because of an epidemic (**Sina, 1878**). On the basis of above information, we can conclude that, ancient Unani scholars had deep understanding of microbes at that time which was later proved after the invention of microscope. Now it is proved that many diseases are caused by microbes. Diseases are further classified according to their pathogen such as viral, bacterial, fungal etc.

A Spanish scholar named *Ibn Khatima (1364–1369 CE)* also described the transmission of diseases that it can be transmitted from an infected (diseased) person to a healthy one through the physical contact. In his treatise *Tahsil garaḍ al-qasid fi-tafsil al-maraḍ al-wafid* (succeeding in clarifying pest disease) he stated about his observations during the plague pandemic of the 14th Century that a healthy person became infected when he came in contact with the plague patient and shows the similar symptoms as of the plague patient (**Cambra, 2018**) (**Rehman, 1991**). This suggest that he also had a good understanding of disease transmission.

In the Unani system of medicine epidemics are referred as *amraz-e-wabae (waba)*. It is believed that *amraaz-e-wabae* spread by contagion or *ajsam-i-khabitha* if they are present in water or air (**Sina, 1878**). In *Kitab al-Mansoori* (Book dedicated to Caliph Mansoor), *Zakariya Razi (865–925 CE)* stated that most of the *amraaz-e-wabae* (epidemics) spread in the autumn season especially if the previous summer season was moist, and the wind is tranquil (**Razi, 1991**). The direction of winds plays a significant role in the spread of the *amraaz-e-wabae* (epidemics).

In *Kitab al-Mukhtarat fil-Tib* (The Book on Choice of Medicine) *Ibn Hubal Baghdadi (1121–1213 CE)* mentioned that *catarrhal illnesses* will occur in abundance if the southern winds are replaced by northern winds (**Baghdadi, 2004**)

Zakariya Razi stated in his book *Kitab al-Hawi* in volume 15th that the northern winds are colder and the southern winds are warmer, thus this change in temperature makes people more susceptible to respiratory infections (**Razi, 2008**).

According to *Zakariya Razi* patients of epidemics may always have something common like place, food, drink or travel history (**Razi, 2008**).

An Arabian scholar *Ibn Khatib (1313–1374 CE)* during the 14th-century plague pandemic stressed that "most of the people who come in contact with a plague victim will die". He stated that "epidemic disease spreads through clothes, utensils and jewelry" (**Rehman, 1991**) (**Ober, et al., 1982**)

According to Ibn Sina (980–1035 CE) Amraaz-e-Wabae (epidemic) spread from one person to another rapidly and can transmit to one city to another like a message (Sina, 1878).

Zakariya Razi also stressed on the transmission of wabae amraaz (epidemics) through fomites. Similarly, we can conclude that the above statement favours the idea of social distancing and isolation to prevent the spread of amraaz-e-wabae (epidemics). As we can see in current pandemic, COVID-19, social distancing and quarantine (isolation) are two most important methods being used to prevent the spread of the pandemic. These two methods are very similar to the idea of prevention of spread of amraaz-e-wabae (epidemic), as suggested by Zakariya Razi.

Najeebuddin Samarqandi (d. 1222 CE) a Persian scholar in 13th-century, in his book Al-asbab wa-Alamat (the book of causes and symptoms) mentioned about a type of epidemic influenza. In Sharah Asbab (translated version of Al-asbab wa-Alamat) the disease is mentioned by the name of Nazla-e-Wabaiya (epidemic influenza) in the chapter on Anaf al-Anza (Influenza). According to Samarqandi initial symptoms of Nazla-e-Wabaiya (epidemic influenza) are fever, sneezing, sore throat, nasal irritation and malaise. Specifically, weakness sets early in the disease. Zakariya Razi also positions that a patient of nazla-e-wabaiya may also have cough, diarrhea, delirium pleurisy and pneumonia. According to him presence of pleurisy and pneumonia worsens the prognosis (Samarqandi, 2010).

It is very much clear from the above discussion that despite the unavailability of proper tools and despite of the inability to observe microbes, the Unani scholars had certain / great knowledge regarding the causation of disease, spread of epidemics, their transmission and prevention of it. Thus, their views could be studied further in the modern time and could be proven helpful in the current world to deal with the spread of pandemics and epidemics and thus the Unani System of Medicine could play a significant role in combating the current health problems of the ongoing epidemic (COVID-19).

Envision and observations closely resemble the contemporary knowledge of infections, which reinforce the fact that Unani system of medicine can play a significant role in combating current health problems.

Health protecting drugs in Unani System of Medicine

There are numbers of drugs which are mentioned by Unani scholars which may be used as health protecting drugs during Amraaz-e-Wabae (epidemic). There are of two types of such drugs:

1. Advia Mufradah (single herbs)
2. Advia Murakkaba (compound formulations).

1. Advia Mufradah (single herbs) there are some Advia Mufradah which are used as health protecting drugs during epidemic periods:

1. Imli (*Tamarindus indica*)
2. Revand chini (*Rheum australe*)
3. Gul-e-banafsha (*Viola odorata*)
4. Halela (*Terminalia chebula*)
5. Amaltas (*Cassia fistula*)
6. Turanjabeen (*Alhagi pseudalhagi*)
7. Aab-e-anar (*Punica granatum*)
8. Vinegar

Vinegar may also be taken orally, as a part of diet or with salad, etc. (Razi, 1991).

Effects of some important Unani drugs are as follows:

1. Gul Banafsha (*Viola odorata*) acts as Anti-microbial, anti-fungal (Rushad, 1987).
2. Halela (*Terminalia chebula*) acts as Antimicrobial (Rushad, 1987)
3. Arq-e-Gulab (*Rosa damascena*) acts as Antioxidant (Razi, 1991)
4. Anar juice (*Punica granatum extract*) is antimicrobial, anti-viral, antioxidant (Rushad, 1987)
5. Toot Siyah (*Morus nigra*), orally and locally (as gargle) act as anti-inflammatory, anti-microbial, (Razi, 1991)
6. Zafran (*Crocus sativus*) act as immunomodulator, anti-inflammatory (Rushad, 1987) (Zeinali, et al., 2019)
7. Amaltash (*Cassia fistula*) act as Immunomodulator, antioxidant, hepatoprotective (Rushad, 1987) (Rahmani, 2015)
8. Sirka (vinegar) (Acetic acid) act as antimicrobial, antiobesity, antioxidant (Razi, 1991)

According to Ibn Rushd, these drugs have a cleansing effect on body humors (Rushad, 1987).

As the dosage and dosing pattern of these drugs is not specified in classical textbooks of Unani medicine, we may suggest that these drugs should be used according to the guidelines of Unani pharmacopeias (Anonymous, 2009).

2. Advia Murakkaba (compound formulations).

There are also some Advia Murakkaba (compound formulations) which are also prescribed during epidemics. Ibn Rushd (1126–1198 CE) has given a description about a medicine, which he prepared and made a curious claim that, “whoever has used this formulation during an epidemic remained protected from it”.

The composition of this preparation is as follows:

Za'fran (*Crocus sativus*) two parts

Murr makki (*Commiphora myrrha*) one part,

Sibr (Aloe vera) (*Aloe barbadensis*) one part

The drugs should be finely powdered and taken in a dose of 2.4 g per day (Rushad, 1987).

Gargling with decoction of Sumaq (*Rhus coriaria*), Rub-e-toot (*Morus nigra*), Rub-e-jauz (*Juglans regia*) and Arq-e-Gulab (*Rosa damascena*) is beneficial in respiratory disorder (specially in upper respiratory problems) during epidemics.

Pouring of Roghan Badam in ear, nose, gargle and Laqlakha (steam-inhalation) with butter/Kulzum/Amrit Dhara also beneficial to prevent infection of these organs.

During epidemics for the protection of respiratory tract gargling before sleeping is advised (Razi, 1991).

Unani compound drugs which are immunostimulants

Khamirahjat eg. khamirah marwareed, abresham, abresham hakim arshad wala, gauzzaban ambari Jawahar wala,

Triyaqiyyat eg. Tiryaaq wabaae, samaniya, Farooq

Mufarrehaat eg Mufarreah azam, mufarreah shaikhur Rais,

Muqawwi aza-e-tanaffus eg. Laooqat , laooq badam, laooq katan, laooq khayar shambar, lakhlakhah (steam inhalation with medicines which have volatile oil)sharbat unnab,

Very much importance is given to the environment (air, water, soil,) and personal hygiene in unani because these are the primary medium which facilitates the spread of infections. Before the age of chemical purification Unani physicians employed medicinal herbs for the purification and sanitization of surroundings during amraaz-e-wabaae (epidemics) in different forms as decoction, distillates of herbs etc.

Medicines prescribed for sanitization of environment during epidemics or Sanitization of surroundings

or

Medicines used for purification of environment / surroundings during epidemics.

1. Spray of Sirka (Acetic acid) is used as antimicrobial. (Razi, 2008)
2. Dhooni of Kudur is used to sanitize the air as it air born bacterial infection. (Rushad, 1987)
3. Kafoor (*Cinnamomum*) Insecticidal, acaricidal (Sina, 1878) (Fu, et al., 2015) (Kim, et al., 2007)
4. Sandal (*Santalum album*) Insecticide. (Sina, 1878) (Kim, et al., 2016)
5. Loban (*Styrax benzoin*) Reduction of air-borne bacteria (Sina, 1878) (Bhatwalkara, et al., 2019)
6. Zanjabeel (*Zingiber Officinalis*)
7. Neem (*Azadirachta indica*)

According to Razi (865–925 CE), those people are lesser susceptible to epidemic diseases who remain physically active and exercise regularly (Razi, 2008)

Many Unani scholar always thought about environment and they gave impotence of its purity to prevent the air borne diseases. And taken more care during epidemics because it is the primary medium for the spread of infections. Before the time of chemical purification Unani physicians used herbal drugs for the purification of environment. Among them some drugs are loban, neem, gandhak, etc.

Environment of home and working places should be free from Ajsaam Khabesa for this purpose Homes should be sprayed with following medicines

1. Diluted vinegar
2. Arq-e-Gulab (*Rosa damascena Herrm*), sandal (*Santalum album L.*) and kafoor.

If there is smell in air, then ignite/burn(Dhooni) different herbs like Qust (*Saussurea costus*), kundur (*Boswellia serrata*), ood (*Paeonia emodi*), Murr (*Commiphora myrrha*) tulsi, ajwayan etc (Rushad, 1987) (Nikhat, et al., 2020).

According to Zakariya Razi, some drugs having a volatile / aromatic oil can destroy infectious agents and should be used during epidemics in different forms (Nikhat, et al., 2020)

Possible approach for prevention and management of COVID-19 in the light of Unani medicine

Or

General preventive measures during epidemics and Pandemic (COVID-19)

The aim of all preventive measures for epidemic diseases are collectively for the improvement of immunity, inhibition of spread of infection, maintain hygiene and anti-septic measures and promotion of general health.

In light of the above discussion, the symptoms of of nazla-e-wabaiya described in Unani books closely resemble to the symptoms of COVID-19. Fever, malaise, cough, etc. are the initial symptoms, which may be associated with diarrhea (Rio, et al., 2020). In case of nazla-e-wabaiya similar symptoms have been described by Unani scholars (Samarqandi, 2010).

According to Ibn Sina (980–1035 CE) the person who has weak constitution or diseases they are more susceptible to epidemic diseases and having a poor prognosis (Sina, 1878). Besides, the modes of transmission of infection, importance of quarantine and air purification have also been outlined in sufficient detail (Rushad, 1987).

We suggest the following preventive measures and management options in the light of Unani medicine on the basis of above information:

Loban (Styrax benzoates), Sandroos (Hymenaea verrucosa), Rose water, Vinegar, Za'fran (Crocus sativus), etc. has aromatic property which provides a relaxing fragrance and are also said to have a clearing effect on microbes (Razi, 1991).

Though the experimental effects of most drugs are not available as yet, but as they have a long antiquity of cultural use, so their importance cannot be denied shortly. In the future, herbal drugs may potentially provide a cost-effective and safer alternative to chemical disinfectants (Bhatwalkara, et al., 2019).

Conclusion: There are numbers of ways for the control, prevention and treatment of diseases in unani system of medicine. The primary aim of tabeebs is to remove the cause of diseases and to enhance the quwwat-e-mudafiat by diet, tadabeer, medicine etc. It is easy to enhance the immunity by adopting the simple thing or by modifying our daily routine as diet on time, according to age, gender, season, temperament of individuals etc. adequate and purified water and fluid, personal and social hygiene, adequate sleep on time (maintain ratoobat in body), walking and physical activities, relaxation of mind etc. these are very simple but very important as these help in balancing of physiological functions of body and may help in prevention of amraaz-e-wabae that also include covid-19 also.

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