

# Concepts, Preventive Measures and Prophylaxis of COVID-19 with Special Reference of Unani Medicine

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## ABSTRACT

Coronavirus disease (COVID-19) is an infectious disease caused by a virus that has been detected recently. Most people infected with COVID-19 suffer from mild to moderate respiratory illness and recover without requiring special treatment. Older age group people and persons with underlying medical conditions such as cardiovascular disease, diabetes, chronic respiratory disease and cancer are more likely to develop serious illness. First case was observed in December 2019 in Wuhan city of China and later on spread all over the world and affected 213 countries. WHO declared it as a pandemic on 11<sup>th</sup> March 2020. The most common COVID-19 symptoms are fever, fatigue and dry cough. Some patients may have pain, congestion in their nose, runny nose, sore throat or diarrhoea. According to Unani Medicine, an epidemic is referred as *Waba*, it spreads only in the place where the natural state of air changes. Aside from isolation and quarantine, preventive measures must be taken during an epidemic. Some drugs are mentioned as preventive measures in various forms must be used during these days such as *Gil-e-armani*, *Sirka*, *Halteet*, *Sibr*, *Loban* etc.

**Keywords:** COVID-19; *Gil-e-armani*; *Halteet*; *Loban*; *Sirka*; *Waba*.

## 1. INTRODUCTION

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) is a new Coronavirus, detected in humans at the end of 2019 with first infection. The emergence of SARS-CoV-2 in China resulted in a huge outbreak, and is currently causing outbreaks in many countries. The spectrum of illness ranges from uncomplicated infections in the upper respiratory tract to severe viral pneumonia with multi-organ failure and death. This may be spread through droplets from asymptomatic or oligo-symptomatic patients and likely by aerosols in health care environments. <sup>[1]</sup>

Corona virus is a member of large family of viruses that may cause animals or humans illness. Numerous Corona Viruses are known to cause human respiratory infections ranging from common cold to more serious illness such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). COVID-19 is the disease most recently

found due to coronavirus. The outbreak started in Wuhan, China, in December 2019, until this new virus and disease became unknown. The incubation period for COVID-19 ranges from 1-14 days, most commonly around five days. [2]

The Covid-19 coronavirus has spread around the world since it was first identified late in 2019 in China, and was declared a pandemic by the World Health Organization on 11<sup>th</sup> March 2020. Differences in research, however, mean the number of cases for certain countries may be understated. [3]

The COVID-19 has affected 213 countries and territories around the world and 2 international conveyances, with 7,222,353 confirmed cases, 409,197 deaths and 3,557,606 recovered cases as of June 09, 2020, 11:24 GMT. In India, 267,614 confirmed cases, 7,481 deaths, 129,226 recovered cases and 130,907 active cases present as of June 09, 2020 at 11:24 GMT. [4] A quarter of the world's population is living under some form of lockdown. That figure rose as India - the second most populous nation in the world- imposed a strict lockdown on its 1.3 billion citizens. [5]

COVID-19 is a transmissible disease that mainly affects the lungs. Smoking impairs lung function making it difficult to treat coronavirus and other diseases for the body. For non-communicable diseases such as cardiovascular disease, cancer, respiratory disease and diabetes, tobacco is a major risk factor, which puts people with these conditions at greater risk for developing severe illness when infected with COVID-19. The most common COVID-19 symptoms are fever, tiredness and dry cough. Some patients may have pain, nasal congestion, runny nose, sore throat or diarrhea. Usually these symptoms are mild and start slowly. Some sick individuals have no symptoms, and do not feel unwell. Most people (about 80%) recover from the disease without any special care. Nearly one out of every six people who get diagnosed with COVID-19, turn out to be critically ill and have difficulty in

breathing. Older people and those with underlying medical conditions such as high blood pressure, heart problems or diabetes are more likely to develop serious illness. [2] The symptoms of depression and anxiety reported in a number of countries with respect to the COVID-19 pandemic are already increasing. A research in Ethiopia in April 2020 revealed a 3-fold rise in the prevalence of symptoms of depression relative to figures from before the epidemic. [6]

## 2. METHODOLOGY

A thorough search from ancient Unani books like *Al-Qanoon fil Tib*, *Kamil-us-Sana'a*, *Kitab-al-Hawi*, *Kitab-al-Kulliyat*, *Kitab-ul-Murshid*, *Kitabul Mukhtarat Fit Tib*, *Tib-e-Akbar* etc. gives details about epidemic diseases. We have used a wide range of different sources to update and curate our database. First, we have used official government sources and peer-reviewed scientific papers that report primary data as the gold standard for data inclusion.

## 3. A BRIEF OVERVIEW OF CORONAVIRUS

### 3.1. Causative agent

Under the broad realm of Riboviria, there are a total of 39 species of coronaviruses, belonging to the Coronaviridae family, suborder Coronavirinae and order Nidovirales. All the SARS-CoV fall under the species severe acute respiratory syndrome-related coronavirus and genus Beta-coronavirus. Most of the species under this head are enzootic and humans are affected by only a few of these species. Seven human CoVs (HCoVs) have been confirmed to date, namely Human coronavirus NL63 (HCoV-NL63) and Human coronavirus 229E (HCoV-229E), belonging to the genus of alpha-coronavirus; whereas Human coronavirus OC43 (HCoV-OC43), Human coronavirus (HCoV-HKU1), SARS-CoV, SARS-CoV-2 and Middle East respiratory syndrome coronavirus (MERS-CoV),

belonging to the genus of beta-coronavirus. Coronavirus strains HCoV-229E, HCoVNL63, HCoV-HKU1 and HCoV-OC43 cause mild respiratory illness in humans. The SARS-CoV-2 is a zoonotic virus that belongs to the Coronaviridae family subgenus Sarbecovirus and mostly resembles a bat coronavirus, with which it shares 96.2% sequence homology, capable of infecting human beings and many animal species. [7,8] It is actually believed that an unidentified intermediate species transmitted SARS-CoV-2 to humans, and then spread from human to human. [9]

### 3.2. Mode of transmission

Restricted information is available about COVID-19 transmission. Transmission has been reported to occur from human to human, and is believed to spread through respiratory droplets that are formed when an infected person coughs, sneezes, or talks. There is no proof that a dog, cat or any pet can transmit COVID-19 until now. [2] Primary cases of COVID-19 have been traced back to the Huanan seafood industry, with secondary cases occurring among nurses and physicians who had close contact with COVID-19 patients at hospital. Furthermore, the disease was reported to many individuals who did not have direct contact with the Huanan seafood industry. [10]

## 4. CONCEPT OF EPIDEMICS IN UNANI MEDICINE

In Unani text book there is no description of coronavirus disease but the concept of *Waba* is very much similar to COVID 19. The term *Waba* in Unani medicine is synonymous with an epidemic which spreads only in the place where the natural state of air changes. Warm and toxic vapours (*bukharat harrah raddiyah*) evaporate as a result of this transition, resulting in plague or other human infectious disease as well as serious and dangerous diseases in animals. Whenever there is an imbalance in the air substance in terms of quantity and quality or it becomes

polluted, it causes a lot of nasty symptoms (*alamat raddiyah*) and diseases in human beings.

According to ancient Unani physicians, *mufsid-e-arzi* and *mufsid hawa*, cannot enter into the human body unless and until the nature of the air (one of the *asbab sittah zarooriya*) alters, and in turn, the temperament of the fundamental component of the human body (*aaaza; akhlat; arwah*) changes. [11]

Often air is putrefied due to the evaporation of toxic vapors from dead bodies or environmental infectious agents (such as putrefied food or drinks). The disorders (*awariz*) are created in the body when such a change occurs in the air. The humours get putrefied too, because of air putrefaction. This putrefaction starts in the humours of the heart, because of the nearness, the air strikes the humour in the heart easily. *Ibn Sina* said epidemics spread from person to person and from city to city 'like a tweet'. [12]

Deterioration of air condition (quality) does not cause serious contagious diseases in humans, although it affects only to those persons whose body contains such distorted humours that are willing to accept all air effects. When a man inhales the polluted air and it enters, the body takes on the temperament of that air because of its appearance, thus causing serious and fatal diseases. [13]

Six essential factors of life/ *Asbab-e-sitta zarooriya* have the greatest impact on wellbeing. All six factors should be in proper balance, imbalance in any factor can produce disease in the human body. Six essential lifestyle factors are

- *Hawa* (Air)
- *Makoolat-o-Mashroobat* (Food and Drinks)
- *Harkat-o-Sukoon-e-Badani* (Bodily Movements and Repose)
- *Harkat-o-Sukoon-e-Nafsani* (Psychic Movements and Repose)
- *Naum-o-Yaqza* (Sleep and Wakefulness)
- *Ahtebas-o-Istefragh* (Retention and Excretion) [14]

Alteration or contamination in the essence of air is known as *Hawa-e-Mukaddar* (contaminated air) and *Hawa-e-Wabaiya* (epidemic air). This contributes to *Ruh's* mal-temperament and is responsible for morbidity or mortality of a significant number of individuals. This situation persists until the air is purified. [15]

*Zakariya Razi* (Rhazes) emphasized this fact and said that 'there will always be something common in epidemic patients, whether it's a place, food, drink or history of travelling. *Razi* have also reported that, during epidemics, conjunctivitis is more common. [16]

Symptoms of *Humma-e-Wabaiya* are fever that is mild to moderate typically rises at night, burning sensation and assertiveness along with breathlessness, dry and coated tongue with loss of appetite, dry cough, pain in upper part of stomach, polydipsia, nausea, fatigue, lack of sleep, often red rashes develop over the skin that subside quickly. Symptoms of *Humma-e-Wabaiya* and covid-19 look very much similar. [12,17,18]

## 5. PREVENTIVE MEASURES

### 5.1. General Prophylaxis

Unani philosophers especially Hippocrates and Rhazes have discussed all aspects of air, air pollution, air born diseases, endemics and epidemics etc. as well as their preventive measures in their literatures. During epidemic Rhazes advised: "If air is contaminated and its odor is changed with prevalence of chickenpox, measles and plague, then people should reside in houses away from this air e.g. in houses surrounded by buildings and should spray *Sirka* (Vinegar) and fumigate with leaves of *Saad* (Nut Grass), *Aas* (Myrtle) and *Loban* (Frankincense/Aromatic Resin) as well as *Sirka* (Vinegar) and *Halteet* (*Ferula asafetida*) should be included in foods and drinks." The spray of *Sirka* (Vinegar) along with *Halteet* and frequent use of *Roghan Gao* (*Ghee*) in diet and its massage on body is also very beneficial in epidemics. [16,19-21]

## 5.2. Local Prophylaxis

### 5.2.1. Medicated water

Use of medicated water (vinegar added water) is very beneficial and recommended for regular basis in epidemics. Add little amount of vinegar in water in this way that the taste of vinegar is not felt very much and drink it regularly. If vinegar is not available then use boiled water for drinking purpose. [20]

### 5.2.2. Gargle

Warm saline or medicated water are used for gargles (*gharghara*) and mouth rinses (*mazmaza*) to cleanse the mouth and throat thoroughly. It cleans the oral cavity, pharynx and tonsillar area which are likely to coat the mucosa as biofilm and induce additional immunomodulatory, antioxidant and antimicrobial benefits. The paramount role of host mucosal immunity in controlling infectious agents is well known. *Namak-e-taam* (Common salt), *Shahad* (Honey), *Toot Siyah* (*Morus indica*), *Zaj-abyaz* (Alum) etc are used with water for this purpose. [20,22]

### 5.2.3. Steam Inhalation with Arq-e-ajeeb

Steam inhalation and hot fomentation with *Arq-e-ajeeb* provides satisfactory clinical relief in nasal and throat congestion and broncho-constriction. Its role in improving nasal conditioning, improving nasal mucus velocity, reducing congestion and inflammation has been reported in several clinical studies. Constituents of *Arq-e-ajeeb* are *Kafoor* (Camphor), *Jauhar-e-Pudina* (Menthol) and *jauhar-e-ajwain* (Thymol). [23]

### 5.2.4. Nasal drops (Saoot)

Unani Medicine recommends the use of drugs in the nostrils to protect the respiratory tract from pathogen entry, this is known as *Saoot*. *Ibn Habal Baghdadi*, a well known physician recommended that *Sirka* (vinegar) and *Gil-e-armani* (Arminina) are beneficial for this purpose. [22]

### 5.3. Systemic prophylaxis

Several drugs described in Unani Medicine are used in clinical practice during epidemics such as *Sibr* (*Alove barbadensis*), *Zafran* (*Crocus sativus*) and *Murr* (*Commiphora myrrh*). Galen and Rofas, great physicians of their times have advocated the use of these drugs with *Sharab-e-rehani* in epidemics. There is a

compound comprising all three aforementioned drugs known as *tiryag-e-wabai* which has been used in epidemics by Unani physicians. According to Galen, *Gil-e-armani* (Arminina) and *Tiryag-e-kabeer* have similar effects as that of *Tiryag-e-wabai*. Moreover, for strengthening immunity, *Khameera Marwareed* is used. [14,16,20,22]

Table 1: Details about drugs used in epidemics [22,24,25]

Unani Name	Botanical/common Name	Part used	Mijaz (Temperament)	Doses	Af'aal (Action)
<i>Sirka</i> (Vinegar)	Acetic Acid	Whole	<i>Barid</i> (cold)	17-52g	<i>Mujaffif</i> (Siccative), <i>Mulattif</i> (Demulcent), <i>Qaate</i>
<i>Saad</i> (Nut Grass)	<i>Cyperus rotundus</i>	Root	<i>Haar</i> (hot) <i>yabis</i> (dry)	5-7g	<i>Mufarreh o muqawwi-e-qalb</i> (Exhilarant), <i>Muqawwi-e-dimagh</i> (Brain Tonic), <i>Muqawwi-e-aasab</i> (Nervine Tonic)
<i>Aas</i> (Myrtle)	<i>Myrtus communis</i>	Fruit	<i>Barid</i> (cold) <i>yabis</i> (dry)	3-5g	<i>Qabiz</i> (Astringent), <i>Habis</i> (Haemostatic), <i>Muqawwi-e-qalb</i> (Cardio-tonic)
<i>Loban</i> (Aromatic Resin)	<i>Styrax benzoin</i>	Gum	<i>Haar</i> (hot) <i>yabis</i> (dry)	1-3g	<i>Daaf-e-taffun</i> (Antiseptic), <i>Muhallil</i> (Resolvent)
<i>Halteet</i>	<i>Ferula asafetida</i>	Latex	<i>Haar</i> (hot) <i>yabis</i> (dry)	0.5-1g	<i>Muharrik-e-aasab</i> (Nervine tonic), <i>Daaf-e-taffun</i> (Antiseptic)
<i>Roghan Gao</i>	<i>Ghee</i>	Fat	<i>Haar</i> (hot) <i>ratab</i> (wet)	24 g	<i>Munaqqi-e-dimagh</i> (Brain Tonic), <i>Musammin-e-badan</i> (General adepogenous), <i>Daaf-e-yaboosat</i>
<i>Namak-e-taam</i>	Common salt	Salt	<i>Haar</i> (hot) <i>yabis</i> (dry)	0.5-1g	<i>Jaali</i> (Detergent), <i>Qaate balgham</i> , <i>Mufateh masamaat-e-jild</i> (Deobstruent)
<i>Asl/ Shahad</i>	Honey	Floral nectar	<i>Haar</i> (hot) <i>yabis</i> (dry)	12-24 g	<i>Naafe Amraz-e-balghami</i>
<i>Toot Siyah</i>	<i>Morus indica</i>	Fruit	<i>Barid</i> (cold) <i>ratab</i> (wet)	2 g	<i>Raade mawad</i> (Repellent), <i>Mulattif</i> (Demulscent), <i>Mufatteh</i> (Deobstruent)
<i>Zaj-e-abyad</i>	Alum	Mineral origin	<i>Barid</i> (cold) <i>yabis</i> (dry)	125-250mg	<i>Qabiz</i> (Astringent), <i>Habis</i> (Haemostatic), <i>Daaf-e-taaffun</i> (Antiseptic)
<i>Sibr</i>	<i>Alove barbadensis</i>	Pulp	<i>Haar</i> (hot) <i>yabis</i> (dry)	7-10g	<i>Mushil</i> (Purgative), <i>Musaffi-e-dam</i> (Blood purifier), <i>Muhallil</i> (Resolvent)
<i>Zafran</i>	<i>Crocus sativus</i>	Stigma	<i>Haar</i> (hot) <i>yabis</i> (dry)	0.5-1g	<i>Mufarreh o muqawwi-e-qalb</i> (Exhilarant), <i>Muqawwi-e-aasab</i> (Nervine Tonic), <i>Daaf-e-taaffun</i> (Antiseptic)
<i>Murr</i>	<i>Commiphora myrrh</i>	Gum	<i>Haar</i> (hot) <i>yabis</i> (dry)	1-2g	<i>Daaf-e-taaffun</i> (Antiseptic), <i>Munaffis-e-balgham</i> (Expectorants), <i>Mujaffif</i> (Absorbent)
<i>Gil-e-armani</i>	<i>Arminina bole</i>	Soil	<i>Barid</i> (cold) <i>yabis</i> (dry)	5-7g	<i>Habis</i> (Haemostatic), <i>Mufarreh o muqawwi-e-qalb</i> (Exhilarant), <i>Daaf-e-taaffun</i> (Antiseptic)

**Tiryag-e-kabeer:** It is well known compound Unani formulation used in epidemics. It is used 1.5-4.5 g twice daily.

**Tiryag-e-wabai:** It is a compound formulation used as a prophylaxis in *wabai amraz* (epidemics). Take all three ingredients (*Sibr*, *Zafran* and *Murr*) in the equal quantity and make fine powder with *arq-e-qulab* (Rose water) in *kharal* and form small size tablets similar to Bengal gram. The dosage is 2-3 tablets once a day.

**Khameera Marwareed:** It is a potent compound formulation used as an immunomodulator, brain and cardio tonic in Unani System of Medicine. In terms of

weakness it is really useful. The dose is 3-5g once a day. [22,23]

## 6. CONCLUSION

The recently developed coronavirus SARS-CoV-2 is closely linked to the precursor SARS-CoV. SARS-CoV is now a pandemic which is known as emergency for global public health. It is important to learn and educate the mass to obey the instructions provided by the authorities and to avoid any social gatherings. Additionally, take prophylactic measures at individual and community level to avoid the spread of this disease globally. Some measures are very important for preventing the spread of *Waba*

(epidemic) like purification of surroundings using Unani drugs as fumigants, or sprays such as *sirka*, *loban* etc, local prophylaxis such as the use of medicated water, gargle, steam inhalation etc. on daily basis for a long period of time and use of immunomodulator drugs and drugs that are beneficial for everyday use in *Waba* such as, *sibr*, *zafran*, *Khameera marwareed* etc.

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### REFERENCES

1. Salzberger B, Glück T, Ehrenstein B. Successful containment of COVID-19: the WHO-Report on the COVID-19 outbreak in China. Springer 2020 March 17; 48:151–153. <https://doi.org/10.1007/s15010-020-01409-4>
2. Detail Question and Answers on COVID-19 for Public. Available from: <https://www.mohfw.gov.in/> Accessed on 08-05-2020.
3. The Guardian. Available from: <https://www.theguardian.com/world/2020/may/16/coronavirus-world-map-which-countries-have-the-most-cases-and-deaths> Accessed on 17-05-2020.
4. Worldometer. Available from: <https://www.worldometers.info/coronavirus> Accessed on 09-06-2020.
5. BBC news. Available from: <https://www.bbc.com/news/coronavirus> Accessed on 08-05-2020.
6. WHO. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen> Accessed on 15-05-2020.
7. Lu R, Zhao X, Li J, et al. Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. The Lancet 2020 Feb 22;395(10224):565-74. [https://doi.org/10.1016/S0140-6736\(20\)30251-8](https://doi.org/10.1016/S0140-6736(20)30251-8)
8. Chan JF, Kok KH, Zhu Z, et al. Genomic characterization of the 2019 novel human-pathogenic coronavirus isolated from a patient with atypical pneumonia after visiting Wuhan. Emerging microbes & infections 2020 Jan 1;9(1):221-36. <https://doi.org/10.1080/22221751.2020.1719902>
9. Vellingiri B, Jayaramayya K, Iyer M, et al. COVID-19: A promising cure for the global panic. Science of the Total Environment 2020 Apr 4:138277. <https://doi.org/10.1016/j.scitotenv.2020.138277>
10. Peeri NC, Shrestha N, Rahman MS, et al. The SARS, MERS and novel coronavirus (COVID-19) epidemics, the newest and biggest global health threats: what lessons have we learned?. International journal of epidemiology 2020 Feb 22. <https://doi.org/10.1093/ije/dyaa033>
11. Majoosi AI. Kamil us Sana (Urdu translation by Qantoori GH). Lucknow: Matba Munshi Naval Kishore; 2010. pp 53,228.
12. Sina I. Al Qanoon Fil Tibb (Urdu Translation by Qantoori GH). Vol 3. New Delhi: Idara kitabul Shifa; YNM. pp 1205-1208.
13. Azmi AA. Basic Concept of Unani Medicine – A Critical Study. 1st ed. New Delhi: Department of History of Medicine, Faculty of Medicine, Jamia Hamdard; 1995. pp 107-109.
14. Jamil AW. Tauzihaat Asbab-e-Sitta Zarooriya. New Delhi: Bharat Offset Printers; 2006. pp 51, 63, 65,127.
15. Kirmani NI. Kulliyat-e-Nafeesi (Urdu translation by Hakim Kabiruddin). Lahore: Matbua'ate Sulaimani; 1994. pp 32, 84, 188, 189, 214, 234.
16. Razi Z. Al-Hawi (Urdu translation by CCRUM). Vol 15. New Delhi: CCRUM, Ministry of Health and family welfare, Govt. of India; 2008. pp 114-156.
17. Kabirudin HM. Hummiyat-e-Qanoon (Urdu translation). Vol 2. New Delhi: CCRUM; 2009. pp 39-47.
18. Khan MA. Al Akseer (Urdu translation by Kabeeruddin M). Vol 2. New Delhi: Ejaz publication house; 2003. pp 916-20.
19. Razi Z. Kitab ul Murshid. New Delhi: Taraqqi Urdu Bureau; 2000. pp 37-44, 103-112.

20. Khan MA. Akseer Azam. New Delhi: Idara Kitabul Shifa; 2011. pp 916-920.
  21. Arzani HA. Tib e Akbar (Urdu translation by Hakim Mohammad Hussain). New Delhi: Idara Kitabul Shifa; 2005. pp 673-674.
  22. Baghdadi IH. Kitabul Mukhtarat Fit Tib (Urdu Translation). Vol 1 & 2. New Delhi: CCRUM; 2005. pp 108-114.
  23. Kabiruddin AM. Bayaz-e-Kabir. Vol 2. New Delhi: Idara Kitabul Shifa; 2010. pp 20-21,75-76,136-137.
  24. Hakeem MA. Bustanul Mufaradat. New Delhi: Idara Kitabul Shifa; 2002. Pp 335,384.
  25. Usmani MI. Tanqeehul Mufradat. New Delhi: Famous Offset Press; 2007. pp 96,109,115,150,221.
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