COVID-19 pandemic: Scope of unani medicine with special reference to unani decoction for NazlaWabai

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Abstract
Novel Coronavirus disease (COVID-19) caused by a newly discovered coronavirus continues to spread globally despite unprecedented social isolation and restrictions resulting in widespread economic decline. Most people infected with the COVID-19 virus experience mild to moderate respiratory illness and recover without requiring special treatment. However, older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. At present, there are no specific vaccines or treatments for COVID-19. However, there are many ongoing clinical trials evaluating potential treatments. In this paper, COVID-19 has been correlated with the NazlaWabai on the basis of description of symptoms specified in Unani classical literature and scope of Unani decoction comprising of Unnab (Ziziphusjujuba), Sapistan (Cordialatifolia) & Behidana (Cydoniaoblonga) has been explored.

Keywords: COVID-19, Unani decoction, NazlaWabai, Unnab, Sapistan, Behidana

1. Introduction
Coronaviruses are a family of viruses that can cause illnesses such as the common cold, severe acute respiratory syndrome (SARS) and Middle East Respiratory Syndrome (MERS). In 2019, a new coronavirus was identified as the cause of a disease outbreak that originated in China. The virus is now known as the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The disease it causes is called coronavirus disease 2019 (COVID-19). In March 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic. Signs and symptoms of coronavirus disease 2019 (COVID-19) may appear two to 14 days after exposure. This time after exposure and before having symptoms is called the incubation period. Common signs and symptoms can include Fever, Cough, and Tiredness etc. Other symptoms can include Shortness of breath or difficulty breathing, Muscle aches, Chills, Sore throat, Loss of taste or smell, Headache & Chest pain. This list is not all inclusive. Other less common symptoms have been reported, such as rash, nausea, vomiting and diarrhoea. Children have similar symptoms to adults and generally have mild illness. The severity of COVID-19 symptoms can range from very mild to severe. Some people may have only a few symptoms, and some people may have no symptoms at all. People who are older or who have existing chronic medical conditions, such as heart disease, lung disease, diabetes, severe obesity, chronic kidney or liver disease, or who have compromised immune systems may be at higher risk of serious illness. This is similar to what is seen with other respiratory illnesses, such as influenza. Some people may experience worsened symptoms, such as worsened shortness of breath and pneumonia, about a week after symptoms start. Infection with the new coronavirus (Severe Acute Respiratory Syndrome Coronavirus 2, or SARS-CoV-2) causes coronavirus disease 2019 (COVID-19). The virus appears to spread easily among people, and more continues to be discovered over time about how it spreads. Data has shown that it spreads from person to person among those in close contact (within about 6 feet, or 2 meters). The virus spreads by respiratory droplets released when someone with the virus coughs, sneezes or talks. These droplets can be inhaled or land in the mouth or nose of a person nearby. It can also spread if a person touches a surface with the virus on it and then touches his or her mouth, nose or eyes, although this isn't considered to be a main way it spreads. Risk factors for COVID-19 appear to include:

- Recent travel from or residence in an area with ongoing community spread of COVID-19 as determined by CDC or WHO.
- Close contact (within 6 feet, or 2 meters) with someone who has COVID-19 for more than 5 minutes or being coughed or sneezed on by an infected person.
1.1 Although most people with COVID-19 have mild to moderate symptoms, the disease can cause severe medical complications and lead to death in some people. Older adults or people with existing chronic medical conditions are at greater risk of becoming seriously ill with COVID-19. Complications can include pneumonia and trouble breathing, several organ failure, heart problems, acute respiratory distress syndrome, blood clots, acute kidney injury, additional viral and bacterial infections.

2. Background

The Unani System of Medicine possesses fundamental principles for all medical fields i.e. physiology, pathology, diagnostics, preventive medicine, pharmacology and therapeutics. The principles related to human biology are the seven natural factors that make up the totality of a human being, viz., Elements (Arkān), Humours (Akhlāq), Temperament (Mizaj), Organs (Aʿza), Pneuma (Arwāb), Faculties (Qawā) and Functions (Aʿfāl). The imbalance in the Temperament and Humours i.e. (Akhlāq) – Blood (Dam), Phlegm (Balgham), Yellow Bile (Ṣafāra) and Black Bile (Sawda) leads to the development of disease. The concept of treatment is based upon the removal of the causative factor (Iṣara-i-Sabab), evacuation of morbid material (Tangiya) and normalization of the morbid temperament (Tiḍl-i-Mizaj). This is achieved as per the principles of Heterotherapy (ʾīlajbiʿ-l-Ḍidd), by using the drugs and diets of opposite temperament, i.e. Drug Treatment (ʾīlajbiʿ-l-Dawa) and Dietary Treatment (ʾīlajbiʿ-l-Ghidha), respectively. The most important principle of Unani Medicine is temperament (Mizaj) which classifies human beings, diet, drugs, etc. into four qualitative types: Hot & Dry, Hot & Wet, Cold & Wet and Cold & Dry. Pathological shift in the temperament causes disease and reversing the abnormal temperament to the normal, by using drugs and diets of opposite temperament cures the disease. In addition, Unani System of Medicine believes that Medicatrix Naturae (Tabīyat) is the supreme power, which controls all the physiological functions of the body and provides resistance against the diseases.

2.1 As per the Unani classical text, COVID-19 may be correlated to NazlaWabai on the basis of description of symptoms specified in Unani classical literature In the translated version of Najeel Ab Al Samargandi’s book Al Asbab AlAlamat i.e. Sharah Asbab translated by Allama NafeesInn Auz Kirmani, it is stated that the Nazla Wabai is a type of Nazla-e-Harr and sometimes spread as epidemic and spread very quickly from one place to another. Patients in the initial stage complain of generalised weakness and malaise with fever. Later on, complain of sore throat with nasal discharges and irritation. Accompanied severe lethargy and malaise are the special features. Author suggested decoction of Unnab (Ziziphusjujuba) (5 pieces), Sapistan (Cordialatifolia) (9 pieces) & Behidana (Cydoniaoblonga) (3 gms) is useful in NazlaWabai.

2.2 Hakim Ajmal Khan stated in his book Hazīq that NazlaWabai spreads because of the contaminated air which enters the body while inhalation and it spreads from one place to another very quickly. Elderly and children are affected most. Symptoms include fever & malaise, sore throat, chest heaviness, dry cough, breathlessness etc. sometimes, vomiting and diarrhoea may be there. In severe cases, pneumonitis develops, which complicates and condition deteriorates. If the disease does not complicate, patients recovers in one week time.

2.3 Allama Kabiruddin stated in his book Al-akseer that decoction of Unnab (Ziziphusjujuba) (5 pieces), Sapistan (Cordialatifolia) (9 pieces) &Behidana (Cydoniaoblonga) (3 gms) is beneficial in Nazla-o-ZukamHarr.

2.4 Unnab (Ziziphusjujuba): It has Mulattif (Demulcent), Musakkin Hararat (Febrifuge), Mulayyin-e-Sadr, Munafiss-e-Balgham (Expectorant), Mushīl-e-Balgham (Phlegmopurge) Masafī-e-Khoon (Blood Purifier), Daf-e-Saal (Antitussive) etc. properties. It is used in Nazla-e-Harr (Coryza and Catarrh), Suual (Cough), Amraz-e-Khuushoanat-e-Halq (Irritation of throat), Amraz-e-Safrawiyah (Bilious disorders) for e.g. Urticaria, Bilious diarrhoea, various skin disorders because of blood purification property and Damvi-Safrawi Bukhar (Bilious& sanguineous fevers) [6, 9]. The herbs have been reported to have Antiviral, Antimicrobial, Antioxidant and Anti-inflammatory properties [10, 11, 12, 13].

2.5 Sapistan (Cordialatifolia): It has Munafis-e-Balgham (Expectorant), Mazliq (Lubricant), Musakkin-e-Safra (Bilious soothing) properties. It is used in SualYabis (Dry Cough), Nazla-e-Harr (Coryza and Catarrh), Khushoonaat-e-Halqwa Seena (Irritation of throat & Chest), Sozish-e-Safrawi Wooni Bukhar (Burning sensation in bilious& sanguineous fevers) [7, 9]. The herbs have been reported to have Antiviral, Antimicrobial and Anti-inflammatory activities [14, 15, 16, 17].

2.6 Behidana (Cydoniaoblonga): It has Mulatīf (Demulcent), Musakkin Hararat (Febrifuge), Daf-e-Suulhrar(Antitussive), Daf-e-Nazla properties. It is used in Nazla-e-Harr (Coryza and Catarrh), Amraz-e-Khuushoanat-e-Halq. Qarha-e-Ama, Humzea-e-Meda and Zaheer [8, 9]. The herbs have been reported to have Antiviral, Antimicrobial, Antioxidant, Anti-inflammatory, Immuno-modulatory and cardio-protective activities [18-25].

2.7 In the guidelines for Unani practitioners and Advisory issued by Ministry of AYUSH, Govt. of India for management of COVID-19, it has been mentioned that a decoction of Unnab (Ziziphusjujuba) (5 pieces), Sapistan (Cordialatifolia) (9 pieces) & Behidana (Cydoniaoblonga) (3-5 gms) in water (Boil these in 250 ml water- boil it till it remains half-filter it-keep in a glass bottle and use it lukewarm) can be taken twice a day for 14 days for preventative and prophylactic uses.

3. Conclusion

As per the Unani classical literature, the Unani drugs mentioned in this paper have potential in the cases of NazlaWabai which may be the nearest term for the COVID-19 as per the signs and symptoms of the disease. The decoction has been reported to have anti-oxidant, immunomodulatory, anti-allergic, smooth muscle relaxant and anti-influenza activities (Advisory by Ministry of AYUSH, Govt. of India). Decoction of Unnab (Ziziphusjujuba) (5 pieces), Sapistan (Cordialatifolia) (9 pieces) & Behidana (Cydoniaoblonga) (3-5 gms) may be administered as adjuvant in the mild cases of COVID-19 and further clinical trials/studies may be carried out to prove the actual efficacy of the said herbs in the management of COVID-19 pandemic.

4. References

2. Anonymous. Unani Medicine- The science of health and