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COVID-19 and Possible Management in Unani Medicine: A Review

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ABSTRACT

Background: Coronaviruses belong to the Coronaviridae family in the Nidovirales order. Corona contains crown-like spikes on the virus' outer surface; hence, it has been called a coronavirus. The virus spreads the SARS-CoV and Middle East respiratory coronavirus syndrome (MERS-CoV) faster than its two predecessors, but has lower fatality. The new epidemic's global effect is still unclear. A total of six species have been identified to cause disease in humans. This pandemic is public health emergency of international concern and challenging towards its management and cure. Available information is useful for the possible treatment in USM.

Methods: A bibliographic search was carried out to collect the available information on COVID-19. Contemporary reference books, relevant articles, periodicals, peer reviewed indexed journals, online search and other published works available on Pub Med, Science Direct, and Scopus were searched to retrieve online literature.

Conclusion: There is no special vaccine for this yet. Only supportive therapy is the treatment strategy followed by health professionals. In this regard Unani Medicine plays an important role for the management of COVID-19.

Keywords: COVID-19, SARS-CoV, MERS-CoV, USM, coronavirus, management

INTRODUCTION

Coronavirus disease (COVID-19) is an infectious disease[1] caused by a novel Coronavirus (2019-nCoV), recently officially named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)[2]. Coronaviruses are a large family of viruses which may cause illness in animals or humans. In humans, several coronaviruses are known to cause respiratory infections ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered coronavirus causes coronavirus disease COVID-19. COVID-19 is now a pandemic affecting many countries globally[3]. An outbreak of a mysterious pneumonia characterized by fever, dry cough, and exhaustion, with intermittent gastrointestinal symptoms, occurred in the Huanan Seafood Wholesale Market, in Wuhan, Hubei, China, in late December 2019[4]. The city of Wuhan is a major transport center with a population of over 11 million people[5]. On 31 December, the Wuhan Municipal Health Commission released an warning, the Chinese Center for Disease Control and Prevention (CCDC) sent a rapid response team to Wuhan, and the World Health Organization (WHO) received a notification[6]. From 31 December 2019 through 3 January 2020, a total of 44 case-patients with pneumonia of unknown etiology were reported to WHO by the national authorities in China. During this reported period, the causal agent was not identified. The Huanan Seafood Wholesale Market in Wuhan city was closed on 1 January 2020 for environmental sanitation and disinfection. Market inspection in

expansion to other markets. On 11 and 12 January 2020, WHO received further detailed information from the National Health Commission China that the outbreak is associated with exposures in one seafood market in Wuhan City. The Chinese authorities identified a new type of coronavirus, which was isolated on 7 January 2020. As of 20 January 2020, 282 confirmed cases of 2019-nCoV have been reported from four countries including China (278 cases), Thailand (2 cases), Japan (1 case) and the Republic of Korea (1 case)[7]. On 11 March 2020, WHO declared Novel Coronavirus Disease (COVID-19) outbreak as a pandemic and reiterated the call for countries to take immediate actions and scale up response to treat, detect and reduce transmission to save people's lives[8]. As of 27th April 2020, there have been 2883603 confirmed cases and 198842 deaths worldwide due to Covid -19 as reported by the WHO[9].

First confirmed cases of 2019-nCoV acute respiratory disease in Finland, India and Philippines; all had travel history to Wuhan City[10]. In India, the first case of Covid -19 was a student who returned from Wuhan, China on 30th January 2020[11]. In India, from Jan 30 to 2:00 am CEST, 27 April 2020, there have been 27,892 confirmed cases of COVID-19 with 872 deaths[12].

Coronaviruses belong to the Coronaviridae family in the Nidovirales order. Corona contains crown-like spikes on the virus' outer surface; hence, it has been called a coronavirus. Coronaviruses are minute in size (65–125 nm in diameter) and contain a single stranded RNA as a nucleic material, varying in length from 26 to 32 kb. (Fig 1) The subgroups of the family of coronaviruses are coronavirus alpha (α), beta (β), gamma (ÿ) and delta. Extreme acute respiratory coronavirus syndrome (SARS-CoV), H5N1 influenza A, H1N1 2009, and coronavirus respiratory syndrome of the Middle East (MERS-CoV) cause acute lung injury (ALI) and acute respiratory distress syndrome (ARDS) that leads to pulmonary failure and fatality. Such viruses were thought to infect only animals until a serious acute respiratory syndrome (SARS) outbreak in Guangdong, China, caused by SARS-CoV, 2002[13]. Since the beginning of the 21st century, three coronaviruses have caused disastrous outbreaks of pneumonia in human beings: Severe acute respiratory syndrome coronavirus (SARS -CoV) in 2002 -03 and Middle -East Respiratory Syndrome coronavirus (MERS -CoV) in 2012[11]. SARS coronavirus (SARS-CoV) uses angiotensin-converting enzyme 2 (ACE2) as a receptor and mainly infects ciliated bronchial epithelial cells and type II pneumocytes while MERS-CoV uses dipeptidyl peptidase 4 (DPP4; also known as CD26) as a receptor and infects unciliated bronchial epithelial cells and type II pneumocytes[14]. The World Health Organization (WHO) announced on 11 February 2020 a new name for the 2019-nCoV epidemic: Corona virus disease (COVID-19). As for the virus itself, the International Committee on Virus Taxonomy has renamed 2019-nCoV as a serious acute respiratory syndrome of coronavirus-2, SARS-CoV-2[15].

The COVID-19 virus affects different people in different ways. COVID-19 is a respiratory disease and most infected people will develop mild to moderate symptoms and recover without requiring special treatment. People who have underlying medical conditions and those over 60 years old have a higher risk of developing severe disease and death. Symptoms of COVID-19 includes; Fever, tiredness and dry cough and some other symptoms are Shortness of breath, Aches and pains, sore throat and very few people will report diarrhea, nausea or a runny nose [16]. There is no available vaccine against COVID-19, while previous vaccines or strategies used to develop a vaccine against SARS-CoVcan be effective[13]. The present disease control strategies include reducing secondary infections through early diagnosis and case isolation, providing optimal care for infected patients, and developing

effective diagnostic, preventive and therapeutic strategies[11].

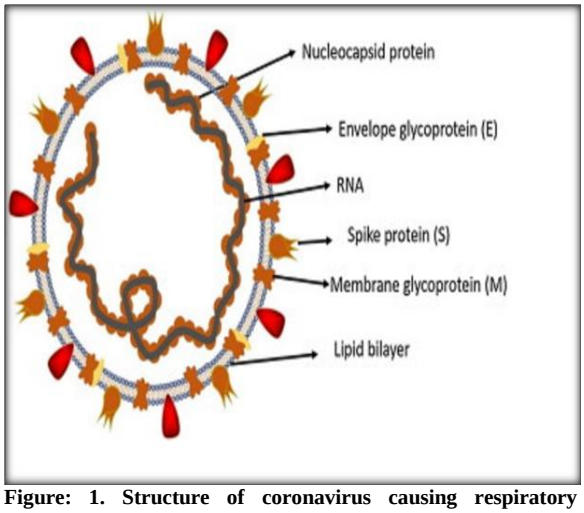

Figure: 1. Structure of coronavirus causing respiratory syndrome.

Unani Concept of Infectious Disease

In Unani Literature concept of infectious disease and epidemics has been stated by many Unani Scholars[17]. Understandably, epidemics and pandemics are not defined as separate entities by Unani medicine and a common word *'waba'* is used for those diseases that affect a wide geographical region[11]. An epidemic is an infection that is created in the air. Rotting of air refers to the change that occurs due to rot in the air and which itself causes rot[18]. It is mentioned by Hakeem Ajmal Khan (1868-1927), in his book *Haziq* that like *Ta'un* (Plague), *Hayda* (Cholera) and other epidemics, which in some days manifests itself as an epidemic, suddenly kills hundreds of people. Modern researchers has proven that colds and flu are sometimes contagious[17]. When the infected air reaches into the body, it is obvious that it enters through respiration. Therefore, its effect on the lungs is more. After reaching lungs through cardiac vessels it reaches throughout the body and all blood becomes infected. Chances of attack of infection are more in those people whose immunity power is weak[18]. The Disease is caused by a toxic effect in the air that enters the body with the breath. It is born from one place and spreads to many places immediately. Older people and children are more prone to this disease than young people. The patient has a sudden onset of fever due to pain in the forehead and back. Some patients have this fever with shivering and some without shivering. There is pain in the eyes and all the muscles in the body and headache occur. There is a sore throat. The voice settles down. There is a felling of heaviness and tension on the chest. There is dry cough, difficulty in breathing. Sometimes vomiting and diarrhea start. The taste in the mouth deteriorates. If the symptoms are severe, the outcome is not good. Sometimes the inflammation of the nose and throat spreads to the airways and cause severe cough and cause pneumonia. The onset of the disease weakens the patient very quickly. The epidemic common cold has more pain and weakness than the normal common cold. Sudden prone to infection; all of a sudden a huge number of population getting infected and suffering from fever are the typical diagnostic symptoms. If the symptoms are not severe and no other disease is associated with the disease, the patient is relieved within a week[17].

METHODOLOGY

The present review was prepared to analyze the information and possible treatment regarding COVID-19 in Unani System of Medicine. For that purpose authors search Unani books, contemporary text, indexed articles, search in the internet, WHO reports, after that conclusions have been drawn.

Management in Unani Medicine: In light of the above-summarized information, Covid-19 symptoms are closely resembled with *nazla-e-wabaiya* as mentioned in Unani books[11]. As a preventive measures during the epidemic period tea should be used every day and caution in diet, eating less than hunger, preventing constipation and staying in the fresh air to keep clothes clean protect against the attack of this disease. In case of illness lay the patient comfortably in a separate room. Initially, feed the patient *Qurs Mulayyin* (4 tab) with warm water to cleanse the stomach and

intestine. So that two or three stool can come and clean the stomach. After that *Bahidana* (*Cydonia oblonga*) 3gm, *Unnab* (*Zizyphus jujube*) 5 pieces, *Sapistan* (*Cordia latifolia*) 9 pieces, boil it in water and mix it with 24 ml *Sharbat-e-Banafsha* and drink it with warm water in the morning and evening time. For fever *Khaksi* (*Sisymbrium altissimum*) sprinkle in the same *Nuskha* (Prescription). Do *Pashoya* (Foot bath) to relieve body pain and headache. For *Pashoya* (Foot bath) take *Gul-e-Banafsha* (*Violoa odorata*) 12gm, *Iklil-ul-Malik* (*Trigonella uncata*) 12 gm, *Gul-e-Babuna* (*Anthemis nobilis*) 12 gm, *Marzanjosh* (*Oliganum vulgare*) 12 gm, *Gul-e- Khatmi* (*Althaea officinalis*) 12 gm, *Bidi ke patte* (*Nicotiana tabacum*) 60 gm and all ingredient boil in 10 liters of water and after boiling keep the patient's feet dipped in this warm water for 2 minutes. Then dry it and wrap it in the bed. If cough is severe then instead of 24 ml *Sharbat-e-Banafsha* take *Khashkhash* (*Papaver somniferm*) 24 gm or *Sharbat-e-Ajaz* 24 ml mix in that *Nuskha*. For strength wrap *Khameera Gaozaban* 12 gm, in one piece of *Warq-e-Nuqra* or *Khameera Gaozaban Jawahar Wala* 5 gm and take this with the *Nuskha* mentioned above. Other time for coughing give this *Nuskha;* in 12 ml water or 144 ml *Arq-e-Gauzaban* mix *Laooq Sapistan* 12 ml and *Laooq Motadil* 12 ml and boil it, after boiling warm your nose and head by steam. If there is pain along with cough then finely grind the *Zafran* (*Crocus sativus*) 1 gm and *Sibr* (*Aloe barbadensis*) 1 gm in *Qairooti Arad Krisna* 12 gm and make *Dimad* (Paste) and warm the chest with cotton wool[17]. Some compound formulation useful in Nazla-o-Zukam (Catarrh and Coryza) as mentioned in Table. (Table 1).

Table 1. Some Compound Formulation prescribed in Unani medicine for *Nazla-o-Zukam* (Catarrh and Coryza)

Formulation	Dose	Action
Habb-e-Kuchla[19]	250 mg	*Nazla Barida Muzmina* (Chronic Cold Catarrh)
Habb-e-Tatura[19]	250 mg	*Nazla* (Catarrh)
Habb-e-Barmak[20]	1-3 gm	*Nazla Muzmin* (Chronic Catarrh)
Habb-e-Baqla[20]	1-3 gm	*Nazla* (Catarrh)
Habb-e-Afyun[20]	125-250 mg	*Nazla* (Catarrh)
Itrifal Muqawwi-e-Dimagh[20]	5-10 gm	*Nazla Muzmin* (Chronic Catarrh)
Habb-e-Nazla[21]	Two pills	*Nazla* (Catarrh)
Itrifal Mulayyan[21]	10 gm	*Nazla* (Catarrh)
Itrifal Zamani[21]	5-10 gm	*Nazla* (Catarrh)
Araq-e-Ajeeb [22]	2-5 drops	*Nazla* (Catarrh)
Laooq-e-Nazli[22]	5-10 gm	*Nazla* (Catarrh), *Zukam* (Coryza)
Laooq–e–Sapistan[22]	10-20 gm	*Nazla* (Catarrh), *Zukam* (Coryza)
Laooq-e-Shamoon[22]	5-10 gm	*Nazla* (Catarrh), *Zukam* (Coryza)
Laooq-e-Khiyarshambar[22]	10-20 gm	*Nazla* (Catarrh), *Zukam* (Coryza)
Itrifal-e-Sana[23]	10 gm	*Nazla Muzmin* (Chronic Catarrh)
Itrifal Kishneezi[24]	9-12 gm	*Nazla* (Catarrh)
Barshasha[24]	0.5 - 2 gm	*Nazla* (Catarrh), *Zukam* (Coryza)
Tiryaq-e-Nazla[24]	9-12 gm	*Nazla* (Catarrh)
Habb-e-Rahat[24]	1-2 Pills	*Nazla* (Catarrh)
Habb-e-Lubb-ul-Khaskhash[24]	1 Pills	*Nazla* (Catarrh), *Zukam* (Coryza)
Dayaqooza[24]	7-12 gm	*Nazla* (Catarrh)
Sharbat-e-Faryadras[24]	24 ml	*Nazla* (Catarrh)
Tiryaq-e-Sual[24]	1 Pills	*Zukam* (Coryza)

DISCUSSION

Across the world, whole world is suffering from the Covid 19 epidemic. Immunity of the body plays an important role in preserving optimal health. We all know that prevention is better than cure. While there is no medicine or vaccine is available for COVID-19 as of now, it will be good to take preventive measures which boost our immunity in these times[25]. In Unani System of medicine there is not only mention about the epidemic disease but also mention the cause, symptoms, possible treatment and preventive measures for the disease. Because the disease appeared in the form of an epidemic, so it is important to know the concept of Unani theories. Due to the air become toxic or infected it goes to the human body through respiration and cause disease. Due to this many people dies

day by day. That's why we have to follow guidelines for preventive health measures and boosting immunity with special reference to respiratory health and purify the air. In the USM (Unani System of Medicine) there is many preventive measures are discussed in the literature by which we can live safe and many treatments are there by which treatment is possible for this epidemic disease. A good thing is that precautionary measures mentioned by the MoHFW (Ministry of Health and Family Welfare) are the same as mentioned in USM. In USM, secession is described as an important role in the management of epidemic disease.

CONCLUSION

In the present review we show the effect of COVID 19 and management of this disease with the Unani System of Medicine. From above information it is concluded that Unani medicine is useful in the management of this disease. It is necessary to follow these guidelines of MoHFW and for the preventive measure use the Unani medicine for treatment. For more accurate result there is immense need for the research in those drugs which are mentioned for the treatment of this disease. Further study is required to proof these evidence based treatment which Unani scholars have told many years ago to scientifically research to show the scientific treatment.

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REFERENCES

1. WHO. Coronavirus. Available from: https://www.who.int/health-topics/coronavirus#tab=tab_1 Accessed on 26-04-2020.
2. Markotić A, Kuzman I. The third coronavirus epidemic in the third millennium: what's next?. Croatian Medical Journal. 2020 Feb;61(1):1.
3. WHO. COVID-19. Available from: https://www.who.int/news-room/q-a-detail/q-a-coronaviruses. Accesed on 28-04-2020.
4. Yi-Chi W, Ching-Sung C, Yu-Jiun C. The outbreak of COVID-19: An overview. Journal of the Chinese Medical Association. 2020;83(3):217-220.
5. Lu H, Stratton CW, Tang YW. Outbreak of Pneumonia of Unknown Etiology in Wuhan China: the Mystery and the Miracle. Journal of Medical Virology. 2020; 92:401-402.
6. Surveillances V. The epidemiological characteristics of an outbreak of 2019 novel coronavirus diseases (COVID-19)—China, 2020. China CDC Weekly. 2020;2(8):113-22.
7. WHO. Novel Coronavirus (2019-nCoV) Situation report-1. Available from: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200121-sitrep-1-2019-ncov.pdf?sfvrsn=20a99c10_4. Accessed on 28-04-2020.
8. WHO. Coronavirus Disease (COVID-19). Available from: https://www.who.int/india/emergencies/novel-coronavirus-2019. Accessed on 28-04-2020.
9. WHO. Coronavirus disease (COVID-19) Pandemic. https://www.who.int/emergencies/diseases/novel-coronavirus-2019 Accesed on 28-04-2020.
10. WHO. Novel Coronavirus (2019-nCoV) Situation report-10. Available from: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200130-sitrep-10-ncov.pdf?sfvrsn=d0b2e480_2. Accesed on 28-04-2020.
11. S. Nikhat and M. Fazil, Overview of Covid-19; its prevention and management in the light of Unani medicine, Science of the Total Environment (2020), https://doi.org/10.1016/j.scitotenv.2020.138859.
12. WHO. Available from: https://covid19.who.int/region/searo/country/in. Accsesed on 28-04-2020.
13. Shereen MA, Khan S, Kazmi A, Bashir N, Siddique R. COVID-19 infection: origin, transmission, and characteristics of human coronaviruses. Journal of Advanced Research. 2020;24:91-98.

14. Cui J, Li F, Shi ZL. Origin and evolution of pathogenic coronaviruses. Nature reviews Microbiology. 2019 Mar;17(3):181-92.
15. Lai CC, Shih TP, Ko WC, Tang HJ, Hsueh PR. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and corona virus disease-2019 (COVID-19): the epidemic and the challenges. International journal of antimicrobial agents. 2020 Feb 17:105924.
16. WHO. Coronavirus. https://www.who.int/health-topics/coronavirus#tab=tab_3. Accesed on 28-04-2020.
17. Khan MHA. Haziq. Lahore: Nadeem Younus Printers; YNM. p. 52.
18. Kabeeruddin M. Waba. In: Moalejat Shreh Asbab (Urdu Translation). Part III and IV. New Delhi: Idara Kitabus Shifa; 2009. p. 502.
19. Anonymous. National Formulary of Unani Medicine. Part. II. Vol. I. New Delhi: CCRUM Ministry of Health and Family Welfare, (Dept. of AYUSH); 2007. pp. 14,26.
20. Anonymous. National Formulary of Unani Medicine. Part. IV. New Delhi: The Controller of Publications; 2006. pp. 10,27,30,64.
21. Anonymous. National Formulary of Unani Medicine. Part. V. New Delhi: CCRUM (Ministry of Health & Family Welfare); 2008. pp. 15,70,71.
22. Anonymous. The Unani Pharmacopoeia of India. Part. II. Vol. I. New Delhi: CCRUM; 2009. p. 5,45,47,50,55.
23. No TitleAnonymous. The Unani Pharmacopoeia of India. Part. II. Vol. II. New Delhi: CCRUM; 2010. p. 48.
24. Kabeeruddin M. Bayaz-e-Kabeer. Vol. II. New Delhi: Idara Kitabus Shifa; 2014. p. 13,17,20,48,57,118,211.
25. Immunity Boosting AYUSH advisory. Available from: https://www.mohfw.gov.in/pdf/ImmunityBoostingAYUSHAdvisory.pdf. Accessed on 02-05-2020.

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