

Letter to editor

The Importance of Herbal Medicines Consumption in COVID-19 Epidemic

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Received: 22.02.2021; Accepted: 05.03.2021

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Coronavirus disease 2019 (COVID-19) that has emerged in Wuhan, China, is caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV2). SARS-CoV2 has spread throughout the world rapidly, leading to severe lung inflammation, and acute respiratory distress syndrome (ARDS)(1). Many patients with COVID-19 have good prognoses, but there are patients with serious forms of the disease and death (2).

The latest World Health Organization (WHO) report, up to the May, 2021, indicates that 160 million cases and 3.4 million people have died of the SARS-CoV2 infection. There are currently no effective antiviral drugs developed against SARS-CoV2(3).

WHO has identified certain herbal and traditional medicines for COVID-19 that have particular significance and many benefits. Therefore, it is very important to investigate their efficiency and safety through precise clinical trials. Moreover, their potential side effects should also be tested.

WHO is cooperating with several research institutions to find medicinal plants derivatives for COVID-19 therapies and maintain its support of countries as they consider the function of traditional health practitioners in the prevention, control, and early diagnosis of coronavirus. As attempts are under way

to discover treatments for COVID-19, the use of herbal medicine products to prevent and treat COVID-19 must be insistently investigated (4).

Regarding the epidemic conditions, the use of herbal medicines, especially anti-inflammatory and antiviral herbal drugs, is recommended for the following reasons:

1. Access to hospital facilities and medical cares because of the large number of COVID-19 cases, especially in remote villages and areas is limited. According to WHO global pulse survey, 90% of countries are characterized by disorders in fundamental health services since COVID-19 pandemic (5). Therefore, prescription of herbal medicines for these peoples can be effective.

2. Patients with mild forms of COVID-19 do not require hospitalization, and the use of herbal remedies can help treat their symptoms. A recent study on 262 patients with COVID-19 showed that 73.3% had a mild form of the SARS-CoV-2 infection (6).

3. Some people do not have symptoms of COVID-19 and may even die without diagnosing that they have been infected by SARS-CoV2. Therefore, persistent consumption of safe and useful herbal medicines during the COVID-19 outbreak can be beneficial. It seems that only a few people develop severe COVID-19. Many infected people may show only nonspecific symptoms such as fever, cough and dyspnea, but the

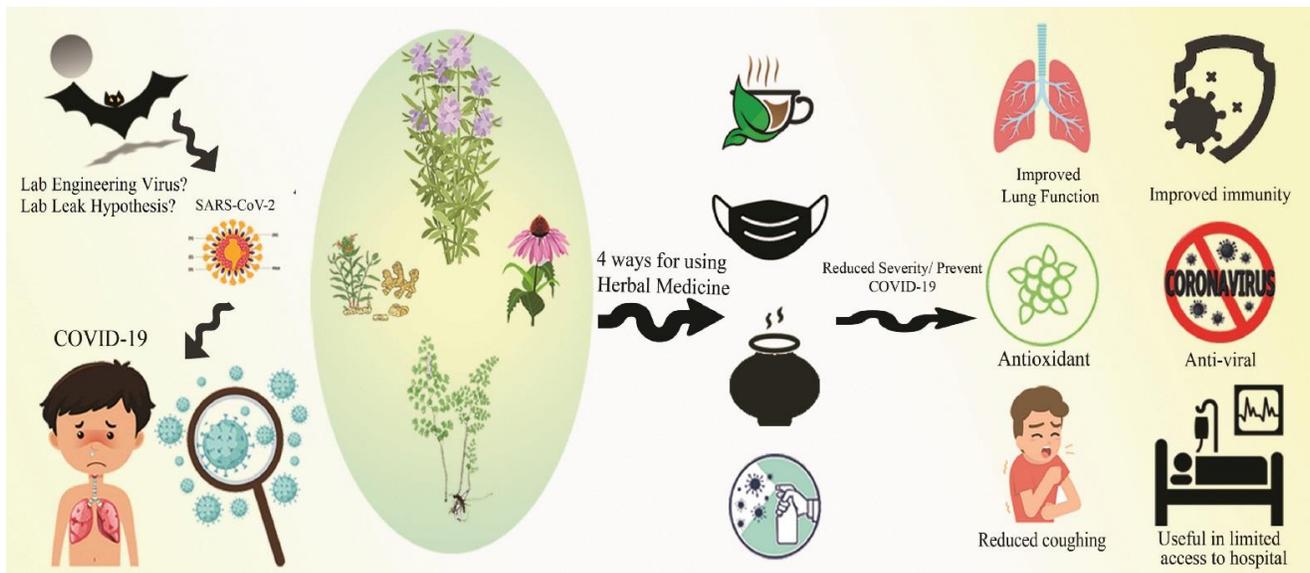


Figure 1. Ways of Using Herbal Medicines for the Prevention and Management of COVID-19 Symptoms.

rest of the infected people may be asymptomatic initially or completely remain asymptomatic (7).

4. In patients with comorbidities severe immune suppression leads to a worsening of their underlying disease. Hence, strong immunosuppressive drugs should not be used to relieve inflammation caused by SARS-CoV-2 infection. Therefore, medicinal plants that have weak immune suppressant properties can be beneficial for these patients.

5. Taking herbal medicines could prevent coinfection in patients with COVID-19. Practically, co-infection is common between SARS-CoV2 infected people. Clinicians are not able to rule out co-infection with other respiratory pathogens when confirming SARS-CoV2 infection. Furthermore, they cannot rule out COVID-19 by confront non-SARS-CoV2 respiratory pathogens (8).

6. Medicinal plants can be used in a several routes to combat microbes, including the SARS-CoV2.

6.1. Using foods and herbs as diet or supplements in order to hinder infection and improve immunity;

6.2. Using them as antiviral agents by coating on masks;

6.3. Using them as air-disinfectants (essential oil) to stop aerosol transmission;

6.4. Using them as surface disinfectant agents (9).

7. Herbal Remedies advantages, including the ease of production development(9), low cost, and easy

availability as well as consumption make them good candidates for use in the SARS-CoV2 epidemic. Regarding to the high cost and unavailability of some common COVID-19 drugs, the use of herbal remedies can be very beneficial for treatment of mild cases. Nevertheless, the potential interests of herbal remedies could be due to the confidence built in patients after using them, efficacy, safety, and low costs (10).

8. The stability of natural substances and medicinal plants in human gastrointestinal tract is hardly a subject. The low pH of gastric juice, digestive enzymes, and gut microbiome do not have significant effects on the bioavailability of plants in comparison with to antibody and other prophylactics. This advantage prioritizes oral consumption (9).

However, it should be noted that the arbitrary use of medicinal plants without investigating their efficacy and safety through precise clinical trials can pose a risk. Finally, the design of several clinical trials for the prevention and treatment of COVID-19 with herbal medicines is suggested.

Acknowledgment

The authors thank Bita Abd-Nikfarjam for her contribution to the artistic design and preparation of the graphical abstract.

Conflict of Interest

The authors declare that there is no conflict of interest.

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