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## Investigating the Role of Medicinal Plants in Reducing Stress Caused by COVID-19

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### ABSTRACT

Corona viruses are a large family of viruses that range from causing mild illnesses like the common cold to more severe conditions such as acute respiratory syndrome. A variety of medicinal plants have shown effectiveness in alleviating stress related to COVID-19. These include valerian, lemon balm, lavender, chamomile, borage flower, fennel, ginger, cinnamon, black seed, grapefruit peel, poppy, ginseng, aloe vera, thyme, and sorghum. Through education and cultural integration in this area, clinical trials of these medicinal plants, conducted under the supervision of expert physicians, could significantly contribute to identifying effective medicinal plants and discovering new medicinal resources.

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### Dear Editor,

The novel corona virus was detected for the first time in the city of Wuhan, China (Adedoyin and Soykan, 2023). In a short period of time, this disease became a global emergency. The fear of being infected and quarantine measures drastically changed the daily routine of people's lives (Adedoyin and Soykan, 2023). So far, this virus has spread among birds, mammals and humans (Proal et al., 2023). In fact, Corona is a virus with the largest single-stranded enveloped RNA, 26 to 32 kilobytes long, belonging to the coronaviridae family, which reproduces rapidly by transferring its genome, and of course, its growth depends on other organisms as well. The symptoms of the coronavirus family are similar to colds and acute respiratory diseases and severe infection in the respiratory system (Rezabakhsh et al., 2020). The COVID-19 virus can be transmitted

from animal to human and from human to human through mucous secretions (sneezing and coughing) or physical contact. Among the common symptoms of this virus are cough, sore throat, fever and chills, and sometimes digestive symptoms and loss of sense of smell and taste (Dudani and Saraogi, 2020), diarrhea and acute respiratory symptoms, and in addition to these, coronaviruses also cause shingles infection (Rezabakhsh et al., 2020). The epidemic of COVID-19 caused fundamental changes in the human world at the levels of relationships, jobs, education and health issues (Shevlin et al. 2023). This disease causes many physical problems for sick people. In addition to the body, this disease also affects the soul and spirit of people. Therefore, the negative mental and emotional effects caused by this global problem involve more people in

anxiety, stress, fear, sadness and suffering every day (Shevlin et al. 2023). One of the most important psychological effects of corona is stress. In the conditions of the corona pandemic, with positive training to overcome fear, anxiety, and worry, the pain and suffering caused by the disease can be reduced. Currently, infected patients are treated mainly based on symptoms and there is no effective and approved treatment available to fight COVID-19. As recommended by the World Health Organization and other health authorities, preventive measures such as frequent hand washing, use of disinfectants, social distancing, use of face masks, personal hygiene, early detection, isolation of suspected cases and supportive treatment are being implemented. One of the most important measures to reduce stress caused by COVID-19 is the use of medicinal plants (Houze et al. 2023). In addition to these cases, medicinal plants can be used as an immune system enhancer and also to relax and reduce anxiety and stress (Houze et al. 2023). Treatment is one of the most basic and basic human needs, Iran is considered one of the best regions in the world in terms of climate and the growth of medicinal plants. Medicinal plants have various properties that are used by researchers for a variety of known diseases. In today's world, countries are trying to increase the supply and entry of medicinal plants into their medicine system. According to the statistics of the World Health Organization, 80% of people around the world use herbal medicines for recovery. Medicinal plants are used to treat many diseases, including stress and anxiety, due to their age in human history (Nawrot et al. 2022). Considering the ancient use of medicinal plants in the prevention and treatment of various diseases, the purpose of the letter to the current editor is to review medicinal plants and natural medicines during the outbreak of COVID-19 that are effective on stress. Medicinal plants including valerian, lemon balm, lavender, chamomile, borage flower, fennel, ginger, fennel, cinnamon, black seed, grapefruit (peel), poppy plants, ginseng, aloe vera, thyme, and sorghum have been effective against the stress of COVID-19 (Villena-Tejada et al. 2022; Mathai et al. 2022; Dehghan et al. 2022; Jalali et al. 2021; Shahrajabian et al. 2021). Many trials are underway to discover a drug treatment for COVID-19.

In addition to numerous chemical compounds, plant-based substances offer a range of benefits in the fight against the coronavirus. Research has substantiated the effectiveness of various plants in combating respiratory viruses. Enhancing the immune system, alleviating stress, and leveraging the antiviral properties of medicinal plants can collectively contribute to reducing stress and treating COVID-19.

### Conflict of interest

There is no conflict of interest among the authors

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MP is the single author of the manuscript.

### Ethical considerations

Ethical issues (including plagiarism, misconduct, data fabrication, falsification, double publication or submission, redundancy) have been completely observed by the author.

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