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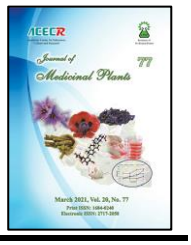

Review Article

Herbal recommendations for treatment of COVID-19 symptoms according to Persian medicine

Hoorieh Mohammadi Kenari[1,2], Bahare Sadat Yousefsani[1,2], Fatemeh Eghbalian[1,2], Ali Ghobadi[1,2], Amir Hossein Jamshidi[1,2], Somaye Mahroozade[1,2,*]

[1] *Research Institute for Islamic and Complementary Medicine, Iran University of Medical Sciences, Tehran, Iran*
[2] *School of Persian Medicine, Iran University of Medical Sciences, Tehran, Iran*

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ABSTRACT

Background: The outbreak of COVID-19 has spread quickly all over the world. Apparently, the uncontrolled increases in the inflammatory and the immune processes are its major pathologies. Therefore, the use of natural plants containing antioxidant factors for the regulation of the immune system can be useful for the inflicted patients. Many epidemic diseases have occurred throughout human history. Persian physicians such as Avicenna offered solutions to these epidemics that were helpful in controlling these diseases. **Objective:** In this study, we introduce the herbs according to traditional Persian medicine's point of view that confirm their having antitussive, antipyretic, anti-viral, anti-inflammatory and antioxidant effects. **Methods:** In this regard, a thorough search was done on the detoxifier and immuno-modulatory plants in the Persian medicine books such as Makhzan-ol Advieh" and "Tohfat ol momenin" and "Qanun fi al tib". Then, the herbs that were effective in fever and pulmonary diseases were browsed and arranged, and their pharmacological properties were also searched in the scientific databases. **Results:** This study examined the antipyretic, antitussive and immune-enhancing properties of the plants cited in Persian medicine books and showed that plants such as orange, sweat lemon, citron, myrtle and lavender have antipyretic, antitussive, anti-inflammatory, antioxidant and antimicrobial properties. **Conclusion:** It seems that the introduced plants could be potential candidates for animal studies and clinical trials. However, more studies are needed to prove their specific effectiveness.

1. Introduction

In December 2019, the emergence of a novel type of coronavirus with the acronym of SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) was confirmed [1]. In the last twenty years, two outbreaks of respiratory illnesses, namely SARS and MERS (Middle East respiratory syndrome coronavirus), have also

* Corresponding author: mahroozade.s@iums.ac.ir

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occurred due to the coronavirus in the world [2]. Although the rate of person-to-person transmission for COVID-19 is higher than that of SARS and MERS, the death rate of this virus is lower than theirs. [3] Furthermore, the incubation period of COVID-19 is longer; it is estimated to be between 2 to 14 days after exposure [4].

COVID-19 was first identified by respiratory symptoms and then other symptoms such as gastrointestinal complications began to be recognized. This virus typically attacks the mammalian respiratory system and can cause a wide range of symptoms from chills, fever, cough, shortness of breath, pneumonia to the severe acute respiratory syndrome, and even death [5]. Stomachache, nausea, vomiting, and diarrhea are other gastrointestinal symptoms. Moreover, kidney failure as well as skin and nervous complications are other symptoms of COVID-19.

The production of reactive oxygen species and reactive nitrogen such as superoxide, nitric oxide, and nitrogen peroxide by phagocytes is one of the mechanisms of the body's immune defense against viruses. Of course, the excessive production of free radicals causes epithelial cell permeability to the virus that is one of the main causes of lung tissue damage in viral diseases such as influenza. The immune system is constantly trying to balance the production of the free radicals and antioxidants in the body [6-7].

According to the clinical symptoms and pathogenesis of ARDS caused by COVID-19, which is responsible for about 3% of patient's death in this disease, uncontrolled increases in the inflammatory and the immune processes are the main pathologies of COVID 19. Therefore, the use of natural plants containing flavonoids and tannins as anti-inflammatory and antioxidant agents, to regulate the immune system, is recommended for these patients [8-9].

Due to the lack of specific treatment and vaccine for this virus, most of the recommended treatments are based on experiments with similar viral diseases; however, the effects of these therapies are not entirely clear and need further evaluation [10].

The World Health Organization's new approach is applying the ethno-pharmacological heritage such as traditional medicines since they can be helpful in the diagnostic and therapeutic approaches and could reduce the costs [11].

Accordingly, China, as the primary source of this disease in the world, has recommended the use of Traditional Chinese Medicine, in combination with conventional medicine after about ten days of quarantine in Wuhan [12].

Traditional Persian Medicine (TPM) is one of the most important traditional medical systems in the world [13]. More than 10 centuries ago, Avicenna (980-1032 CE), as one of the greatest TPM physicians, and other Persian physicians suggested TPM for the respiratory outbreaks [14-15]. Based on TPM’s point of view, there are many issues involved in controlling epidemics. For example, the responsibility for dealing with the pathogen in the body is the responsibility of the vital force (*Tabiat*), which is known as “Qi” in Chinese medicine. The use of plants that have immuno-modulatory activity is helpful to improve this function. Besides, the use of detoxifying plants helps strengthen the body's ability to fight off diseases by removing waste metabolites and toxins from the body [16-17].

In this study, the immuno-modulatory and detoxifying herbs in the Persian medicine which have antitussive, antipyretic, anti-viral, anti-inflammatory and antioxidant features are introduced along with their specific effects on the various respiratory diseases such as bronchitis, asthma, and pneumonia.

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2. Methods

In this study, the search for detoxifier and immuno-modulatory plants was performed with the keywords "*Teryagh*", "*Padzahr*", "*Mofareh*" and "*Moghavi*" in TPM books such as "*Makhzan-ol Advieh"*, *"Tohfat ol momenin"* and *"Qanun fi al tib"* [14, 18, 19]. Detoxifier plants (*Teryagh*, *Padzahr*) are collected in Table 1 and immuno-modulatory plants (*Mofareh*" and "*Moghavi*) are collected in Table 2. Next, the herbs that were effective in fever and pulmonary diseases were searched by the keywords cough "*Sorfeh*" (i.e. cough), "*Zigh Alnafas*" (i.e. shortness of breath) and "*Tab* and *Homma*" (i.e. fever) (Table 3). Each of these findings was tabulated seperately. The common names, the scientific names, the family names and the parts of the plants were searched and added to the tables. In the end, the plants that in all of the three tables were in common, were arranged in a separate table (Table 4) and their pharmacological properties were also searched in the scientific databases Google Scholar, PubMed, Medline, and Scopus.

Table 1. Plants introduced as detoxifiers

No	Common name	Scientific name	Persian name	Family name	Part used	Ref
1	**Myrtle**	*Myrtus communis* L.	As, Moord	Myrtaceae	Fruit, leaf	18, 19
2	**Citron**	*Citrus medica* L.	Baalang	Rutaceae	Fruit	18
3	**Lavender**	*Lavandula angustifolia* Mill.	Ostokhoddus	Lamiaceae	Aerial part	18, 19
4	**Barberry**	*Berberis vulgaris* L.	Zereshk	Berberidaceae	Fruit, root	14, 18
5	**Anise**	*Pimpinella anisum* L.	Anison	Apiaceae	Fruit	14, 18, 19
6	**German chamomile**	*Matricaria chamomilla* L.	Baboone	Asteraceae	Flower	14, 15, 18
7	**Apple**	*Malus domestica* Borkh.	Sib	Rosaceae	Fruit	14, 15, 19
8	**Jadwar**	*Delphinium denudatum* Wall. ex Hook.f. & Thomson	Jadwar	Ranunculaceae	Root	14, 18, 19
9	**Asafoetida**	*Ferula assa-foetida* L.	Anghozeh	Apiaceae	Gum, Oleoresin	14, 18, 19
10	**Cinnamon**	*Cinnamomum verum* J.Presl	Darchin	Lauraceae	Stem bark	14, 18, 19
11	**Leopard's bane**	*Doronicum grandiflorum* Lam.	Durunaj	Asteraceae	Root	18, 19
12	**Peppermint**	*Mentha x piperita* L.	Sisanbar	Lamiaceae	Aerial parts	14, 18, 19
13	**Turnip**	*Brassica rapa* L.	Shalgham	Brassicaceae	Root	14, 18, 19
14	**Thyme**	*Thymus kotschyanus* Boiss. & Hohen.	Avishan	Lamiaceae	Aerial parts	14, 15, 19
15	**Sandalwood**	*Santalum album* L.	Sandal	Santalaceae	Stem wood	18, 19
16	**Bay laurel**	*Laurus nobilis* L.	Ghar, Barg-e-Boo	Lauraceae	Fruit, leaf	14, 15, 18
17	**Cardamom**	*Elettaria cardamomum* (L.) Maton	Hel	Zingiberaceae	Fruit	14, 15, 18
18	**Saffron**	*Crocus sativus* L.	Zafaran	Iridaceae	Stigma	14, 18, 19
19	**Orange**	*Citrus sinensis* (L.) Osbeck	Porteghal	Rutaceae	Fruit	14, 15, 18
20	**Sweet lemon**	*Citrus limon* (L.) Osbeck	Limu Shirin	Rutaceae	Fruit	14, 18, 19
21	**Bitter orange**	*Citrus x aurantium* L.	Narenj	Rutaceae	Fruit	14, 18, 19

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3. Results

In TPM textbooks, 21 herbs have been introduced as detoxifiers; Table 1 shows the detailed information.

Furthermore, 31 herbs have been introduced as immune-modulators; Table 2 displays detailed information.

Besides, 29 herbs or fruits can reduce the complications of respiratory disease such as cough, shortness of breath and fever; Table 3 exhibits the details on such herbs.

Table 4 summarizes the commonalities between plants in Tables 1, 2 and 3, which have been shown to have immuno-modulatory and detoxifier effects along with antitussive and antipyretic effects. It seems that these plants, apart from boosting the immune system, can be efficacious in controlling the symptoms of the corona diseases like fever, cough, and shortness of breath. Furthermore, pharmacological studies on these plants were also included.

Table 2. Plants introduced as immune-modulators

No	Common name	Scientific name	Persian name	Family name	Part used	Reference
1	**Myrtle**	*Myrtus communis* L.	As, Moord	Myrtaceae	Fruit, leaf	14, 15, 18
2	**Citron**	*Citrus medica* L.	Baalang	Rutaceae	Fruit	14, 18, 19
3	**Lavender**	*Lavandula angustifolia* Mill.	Ostokhoddus	Lamiaceae	Aerial part	14, 15, 18
4	**Barberry**	*Berberis vulgaris* L.	Zereshk	Berberidaceae	Fruit, root	14, 18, 19
5	**Anise**	*Pimpinella anisum* L.	Anison	Apiaceae	Fruit	14, 18, 19
6	**Apple**	*Malus domestica* Borkh.	Sib	Rosaceae	Fruit	14, 15, 18
7	**Jadwar**	*Delphinium denudatum* Wall. ex Hook.f. & Thomson	Jadwar	Ranunculaceae	Root	14, 15, 18
8	**Cinnamon**	*Cinnamomum verum* J.Presl	Darchin	true cinnamon tree, Ceylon cinnamon tree	Stem bark	14, 18, 19
9	**Peppermint**	*Mentha x piperita* L.	Sisanbar	Lamiaceae	Aerial parts	14, 15, 18
10	**Bay laurel**	*Laurus nobilis* L.	Ghar, Barg-e-Boo	Lauraceae	Fruit, leaf	14, 18, 19
11	**Cardamom**	*Elettaria cardamomum* (L.) Maton	Hel	Zingiberaceae	Fruit	18, 19
12	**Clove**	*Syzygium aromaticum* (L.) Merr. & L.M.Perry	Mikhak-e-Hendi	Myrtaceae	Flower buds	14, 18, 19
13	**Orange**	*Citrus sinensis* (L.) Osbeck	Porteghal	Rutaceae	Fruit	14, 18, 19
14	**Sweet lemon**	*Citrus limon* (L.) Osbeck	Limu Shirin	Rutaceae	Fruit	14, 15, 18
15	**Bitter orange**	*Citrus x aurantium* L.	Narenj	Rutaceae	Fruit	18, 19
16	**Amla**	*Phyllanthus emblica* L.	Amele	Phyllanthaceae	Fruit	14, 15, 18
17	**Lemon balm**	*Melissa officinalis* L.	Vaarang Boo	Lamiaceae	Aerial parts	14, 18, 19
18	**Saffron**	*Crocus sativus* L.	Zafaran	Iridaceae	Stigma	14, 18, 19

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Table 2. Plants introduced as immune-modulators (Continued)

No	Common name	Scientific name	Persian name	Family name	Part used	Reference
19	**Quince**	*Cydonia oblonga* Mill.	Beh	Rosaceae	Fruit	14, 18, 19
20	**Coriander**	*Coriandrum sativum* L.	Geshniz	Apiaceae	Fruit	14, 18, 19
21	**Pear**	*Pyrus communis* L.	Golabi	Rosaceae	Fruit	14, 18, 19
22	**Oxtongue flower**	*Echium amoenum* Fisch. & C.A.Mey.	Gol-e-Gavzaban	Boraginaceae	Flower	14, 15, 19
23	**Banana**	*Musa x paradisiaca* L.	Moz	Musaceae	Fruit	18, 19
24	**Spearmint**	*Mentha spicata* L.	Na'na'	Lamiaceae	Aerial parts	14, 15, 18
25	**Damask rose**	*Rosa x damascena* Herrm.	Gol-e-Mohammadi	Rosaceae	Flower	14, 15, 18
26	**Chebulic myrobalan**	*Terminalia chebula* Retz.	Halileh-e-Siah	Combretaceae	Fruit	14, 18, 19
27	**Fig**	*Ficus carica* L.	Anjir	Moraceae	Fruit	18, 19
28	**Ginger**	*Zingiber officinale* Roscoe	Zanjabil	Zingiberaceae	Rhizome	14, 18, 19
29	**Mastic**	*Pistacia lentiscus* L.	Mastaki	Anacardiaceae	Oleo-gum-resin	14, 15, 18
30	**White water lily**	*Nymphaea alba* L.	Niloofar-e-Abi-e-Sefid	Nymphaeaceae	Flower	14, 18, 19
31	**Sweet flag**	*Acorus calamus* L.	Akir-e-Torki	Araceae	Rhizome	14, 18, 19

Table 3. Plants effective in respiratory diseases or fever

No	Common name	Scientific name	Persian name	Family name	Part used	Antitussive	Antipyretic	Ref
1	**Myrtle**	*Myrtus communis* L.	As, Moord	Myrtaceae	Fruit, leaf	*	*	14, 18, 19
2	**Citron**	*Citrus medica* L.	Baalang	Rutaceae	Fruit	*		14, 18, 19
3	**Lavender**	*Lavandula angustifolia* Mill.	Ostokhoddus	Lamiaceae	Aerial part	*		14, 18, 19
4	**Anise**	*Pimpinella anisum* L.	Anison	Apiaceae	Fruit	*		14, 15, 18, 19
5	**Common polypody**	*Polypodium vulgare* L.	Besfayej	Polypodiaceae	Rhizome	*		14, 18, 19
6	**Thyme**	*Thymus kotschyanus* Boiss. & Hohen.	Avishan	Lamiaceae	Aerial parts	*		14, 15, 18, 19
7	**Apple**	*Malus domestica* Borkh.	Sib	Rosaceae	Fruit	*		14, 18, 19
8	**Jadwar**	*Delphinium denudatum* Wall. ex Hook.f. & Thomson	Jadwar	Ranunculaceae	Root		*	14, 18, 19
9	**Lemon balm**	*Melissa officinalis* L.	Vaarang Boo	Lamiaceae	Aerial part		*	14, 15, 18

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Table 3. Plants effective in respiratory diseases or fever (Continued)

No	Common name	Scientific name	Persian name	Family name	Part used	Antitussive	Antipyretic	Ref
10	**Sweet lemon**	*Citrus limon* (L.) Osbeck	Limu Shirin	Rutaceae	Fruit	-	*	14, 18, 19
11	**Quince**	*Cydonia oblonga* Mill	Beh	Rosaceae	Fruit	*	-	14, 15, 18, 19
12	**Oxtongue flower**	*Echium amoenum* Fisch. & C.A.Mey.	Gol-e-Gavzaban	Boraginaceae	Flower	-	*	14, 15, 18, 19
13	**Damask rose**	*Rosa x damascena* Herrm.	Gol-e-Mohammadi	Rosaceae	Flower	-	*	14, 18, 19
14	**Fig**	*Ficus carica* L.	Anjir	Moraceae	Fruit	*	-	18, 19
15	**Mastic**	*Pistacia lentiscus* L.	Mastaki	Anacardiaceae	Oleo gum-resin	*	-	14, 15, 19
16	**White water lily**	*Nymphaea alba* L.	Niloofar-e-Abi-e-Sefid	Nymphaeaceae	Flower	*	*	18, 19
17	**Mango**	*Mangifera indica* L.	Anbeh	Anacardiaceae	Fruit	*	-	18, 19
18	**Sweet violet**	*Viola odorata* L.	Banafshe-e-Moattar	Violaceae	Flower	*	*	14, 18, 19
19	**Camel's-thorn**	*Alhagi persarum* Boiss. & Buhse	Taranjebin	Fabaceae	Manna	*	*	14, 18, 19
20	**Hollyhock**	*Alcea digitata* Alef.	Khatmi	Malvaceae	Flower	*	-	14, 18, 19
21	**Licorice**	*Glycyrrhiza glabra* L.	Shirin Bayan	Fabaceae	Root	*	-	14, 18, 19
22	**Barley**	*Hordeum vulgare* L.	Jo	Poaceae	Seed	*	*	14, 18, 19
23	**Lentil**	*Lens culinaris* Medik.	Adas	Fabaceae	Seed	*	*	14, 18, 19
24	**Jujube**	*Ziziphus jujube* Mill.	Annab	Rhamnaceae	Fruit	*	-	14, 18, 19
25	**Pistachio**	*Pistacia vera* L.	Pesteh	Anacardiaceae	Seed	*	-	14, 18, 19
26	**Tragacanth**	*Astracantha gummifera* (Labill.) Podlech	Katira	Fabaceae	Gum	*	-	14, 18, 19
27	**Chopchini**	*Smilax china* L.	Chobe Chini	Smilacaceae	Root	-	*	14, 18, 19
28	**Willow**	*Salix* spp.	Bid	Salicaceae	Leaf, bark	-	*	14, 18, 19
29	**Bitter orange**	*Citrus x aurantium* L.	Narenj	Rutaceae	Fruit	*	-	14, 18, 19

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Table 4. Potential candidate plants in COVID-19 symptoms

No	Scientific name	Antimicrobial	Antiviral	Antipyretic	Antitussive	Immuno-modulatory	Anti-inflammatory	Detoxifier	Antioxidant
1	***Myrtus communis* L.**	20*	21	22	23	24	25	20	26
2	***Citrus medica* L.**	27	28	29	30	28	28	31	29
3	***Lavandula angustifolia* Mill.**	32	33	34	35	36	37	38	37
4	***Pimpinella anisum* L.**	39	40	-	41	42	43	42	44
5	***Malus domestica* Borkh.**	45	46, 47	-	-	-	48	49	50
6	***Delphinium denudatum* Wall. ex Hook.f. & Thomson**	51	-	51	-	51	51, 52	51	52
7	***Citrus limon* (L.) Osbeck**	53	54	53	55	56	57	58	53
8	***Citrus x aurantium* L.**	59	-	-	60, 61	61	59, 61	-	59, 61, 62

* Reference number

4. Discussion

M. Walsh in his systematic review which included 64 studies, demonstrated the effectiveness of herbs in controlling COVID symptoms. The effects of herbal medicine against viral infection and respiratory system disorders have been explained in previous researches. In this research, many plants based on TPM were introduced. While there are proofs that these herbs can be effective against the COVID-19 across the globe, there is need for research on the combined impacts of these plants and the modern phytotherapy [63].

The patients with COVID-19 show respiratory symptoms such as cough and lung damages in CT scan as well as some other symptoms such as myalgia, fatigue, fever, and digestive symptoms like diarrhea. There is not a specific medication currently available for the treatment [64, 65]. Thus, the number of patients and deaths is growing exponentially every day around the globe. It appears then that the main therapeutic measure against COVID-19 is supportive care.

One of the principal causes of staying safe against an epidemic is to have a good immune system; in other words, if the patients have a good immune system, a large percentage of them evince only mild symptoms. Studies have revealed that patients with immune system disorders such as those who are treated with chemotherapy and immunosuppressive drugs are at a higher risk of COVID-19 infection [66]. In a nutshell, any factor that can boost the immune system will reduce the incidence of the symptoms.

When faced with a new disease, especially an epidemic disease for which no specific treatment is known yet, using complementary medicine like TPM along with new medical methods can

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help us overcome the disease. TPM has been used to control infectious and epidemic diseases for thousands of years [14]. Therefore, some plants with immuno-modulatory, anti-inflammatory and detoxifying effects can improve body resistance to pathogens. In the present paper, the detoxifier plants are displayed in Table 1 and immuno-modulatory plants are exhibited in Table 2. The plants in these two tables can be regarded as good choices for disease prevention. It is also expected that if someone has symptoms of the disease and consume these plants, will not enter the severe phase of the disease.

In the traditional medicine literature, several plants have been considered for the treatment of cough, shortness of breath, or fever. These plants were introduced in Table 3. Many plants, especially aromatic plants, are known for their antibacterial, antifungal and antiviral properties [67]. Antimicrobial and especially antiviral effects of plants are really important in the prevention and treatment of COVID-19. The plants included in Table 4 have these effects. For example, antiviral and antimicrobial effects of *Myrtus communis*, *Citrus medica*, *Lavandula angustifolia*, *Pimpinella anisum*, *Citrus limon*, and *Malus domestica* have been proven in some studies which are mentioned in Table 4. Antiviral effects of *Delphinium denudatum* and *Citrus x aurantium* have not been evaluated yet; however, valuable findings have been documented on the antifungal effects of *Delphinium denudatum* and further studies are warranted for the evaluation of their specific antiviral effects [68]. All in all, they are viable options at the beginning of the symptoms of the disease, especially in the mild to moderate cases. The benefits of these plants in strengthening the digestive system and improving the gastrointestinal symptoms of this disease also are amongst the benefits of their consumptions [69]. *Citrus x aurantium*, by relaxing the bronchial muscle, can be the best option for the patients with moderate to severe symptoms of shortness in breath. Previous studies on COVID-19 have demonstrated that oxygen free radicals are one of the most important causes of respiratory complications like shortness of breath due to elimination of the phospholipid layer of the cell membranes [71, 72]. Many plants, especially fruits and vegetables, are valuable sources of antioxidants [73, 74]. They also have anti-inflammatory properties that may be good for COVID-19 symptoms.

The plants in Table 4 can be used as nutraceuticals or functional foods. For example, *Citrus medica*, *Malus domestica*, *Citrus limon*, and *Citrus x aurantium*, *Myrtus communis* can be used as nutrients and *Lavandula angustifolia*, *Pimpinella anisum* and *Delphinium denudatum* can be used as herbal tea in the daily diet for people with or at risk for COVID-19 as a complementary treatment. Therefore, it seems reasonable to suggest the use of these plants to the general public. However, clinical trials of any of these proposed plants may be necessary to prove their effectiveness in the prevention or treatment of COVID-19.

5. Conclusion

Due to the rapid outbreak of COVID-19 disease, there is a significant need for preventive policies. Studies on the complementary medicine can be based on two themes: disease prevention in the general population and treatment of symptoms in the patient population. The plants which were introduced and examined in the present study can be used for both prevention and treatment. We suggest conducting clinical trials assessing the effectiveness of the herbs and fruits introduced in this study. By designing studies that

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investigate effects of intake of these plants (individually or in combination) as the treatment regimen of the patients with COVID-19, we can better understand the effectiveness of these plants.

Author contributions

H. MK. and S. M. were the guarantor of integrity of the entire study and contributed to the study concepts and design; A. Gh., BS. Y., and F. E. contributed to the literature search and data collection; all the authors contributed to the manuscript preparation and then discussed, edited and approved the final manuscript.

Conflict of interest

The authors declare that there is no conflict of interest.

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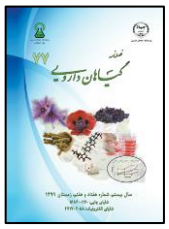

مقاله مروری

توصیه‌های گیاهی برای درمان علایم COVID-19 بر مبنای طب ایرانی

حوریه محمدی کناری[۲،۱]، بهاره السادات یوسف‌ثانی[۲،۱]، فاطمه اقبالیان[۲،۱]، علی قبادی[۲،۱]، امیرحسین جمشیدی[۲،۱]، سمیه ماهروزاده[۲،۱،*]

[۱] موسسه مطالعات تاریخ پزشکی، طب اسلامی و مکمل، دانشگاه علوم پزشکی ایران، تهران، ایران

[۲] دانشکده طب ایرانی، دانشگاه علوم پزشکی ایران، تهران، ایران

اطلاعات مقاله

گل‌واژگان:
ویروس کرونا
طب سنتی ایرانی
داروهای گیاهی
تریاق
تنظیم‌کننده سیستم ایمنی

چکیده

مقدمه: شیوع COVID-19 به سرعت در سراسر جهان گسترش یافته است. افزایش بی‌رویه فرآیندهای التهابی از آسیب‌های عمده این بیماری است. بنابراین، استفاده از گیاهان حاوی عوامل آنتی‌اکسیدانی برای تنظیم سیستم ایمنی بدن می‌تواند در این بیماری مفید باشد. در گذشته بسیاری از بیماری‌های اپیدمیک رخ می‌داد و اطبای طب سنتی مانند ابن سینا برای این همه‌گیری‌ها راهکارهایی ارائه می‌دادند که در کنترل این بیماری‌ها مفید بوده است. **هدف:** در این مطالعه، گیاهان مؤثر بر همه‌گیری بیماری‌های تنفسی را با توجه به دیدگاه طب ایرانی معرفی می‌کنیم که مطالعات امروزی تأثیر آنها را به عنوان ضدسرفه، ضدتب، ضدویروسی، ضدالتهابی و آنتی‌اکسیدان تأیید می‌کنند. **روش بررسی:** جستجوی کاملی از گیاهان تنظیم‌کننده سیستم ایمنی و تریاق در کتاب‌های طب ایرانی نظیر مخزن الادویه، تحفه المومنین و قانون در طب انجام شد. همچنین گیاهانی که در تب و بیماری‌های ریوی مؤثر بودند جمع‌آوری شد و خواص دارویی آنها در پایگاه‌های داده‌های علمی جستجو شد. **نتایج:** این مطالعه خواص ضدتب و ضدسرفه و تقویت سیستم ایمنی گیاهان به دست آمده بر اساس کتب طب ایرانی را بررسی کرده و نشان داد گیاهانی مانند نارنج، لیموشیرین، بالنگ، مورد، اسطوخودوس، دارای خواص ضدتب، ضدسرفه، ضدالتهاب، آنتی‌اکسیدان و ضدمیکروب هستند. **نتیجه‌گیری:** به نظر می‌رسد که گیاهان موجود در این مقاله می‌توانند در بهبود علایم بیماری کرونا مؤثر باشند، که برای اثبات اثربخشی خاص آن‌ها، مطالعات بیشتری لازم است.

* نویسنده مسؤول: mahroozade.s@iums.ac.ir

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