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Short Communication

# The Usefulness of Medicinal Herbs in the Treatment of Diseases

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Medicinal plants as foodstuffs participants in diet are achievement attractiveness to human everywhere in the world, because of occurrence of an enormous quantity of beneficial and safeties from constituents which every day are discovered by progressive performances or even by using it in treatments of several diseases or Alonso as traditional curative. Despite using synthetic drugs for treating diseases, the well-practiced data of herbal medicine is played very vital rules in this field, due to the side effects of synthetic products as drugs.

Rendering to the evaluations of the World Health Organization (WHO) about 80% of the world inhabitants is principally reliant on congenital procedures of curative and healing which castoff experiential and observed familiarity established on the practice of medicinal herbals [1]. While from 35000 up to 70000 species of plants are used for therapeutic purposes in the world [2].

Several Plants are used for the treatment of general debility, nausea, gonorrhoea, malaria, intermittent fever, dyspepsia, diarrhea, colic, paralysis, bronchitis, cough, epilepsy [3-5]. People are infected with many chest diseases due to different types of microbes, one of which is currently the Coronavirus, which has spread like an epidemic all over the world, where coronaviruses such as (SARS-CoV-2) are culpable for many chest diseases such as severe acute respiratory syndrome. Many medicinal herbs prevented and treated many chest diseases and had effective and satisfactory effects. Herbs are considered a wealth because they contain a huge number of vital compounds which are effective against various types of pathogenic microbes. In December 2019, the severe acute respiratory syndrome coronavirus (SARS-CoV-2) came back again, a recently regarded as a responsible agent of the in-progress pandemic, which is called coronavirus disease 2019 or COVID-19. Moreover, many previously published or literature has emerged in studies as scientific research publications for studies that were comprehensive on the effect of medicinal herbs on the Coronavirus, these studies may include silico methods such as using a computer for data analysis tools., network analysis tools, data mining, databases, pharmacophores, machine learning, quantitative structureactivity relationships, approaches homology molecular modeling. Unwell, no confirmed anti-viral agents were discovered for this renewed virus, despite many attempts to discover biological compounds that are effective against this type of viruses, but with the presence of many medicinal plants with biological efficacy against viruses, it is possible, by focusing on experimental investigations in the presence of advanced technologies, to lead to the discovery of a safe for human and antiviral drug for this type of virus. And as many analyzes confirmed through the beneficial and safe effects of many medicinal plants after their use, such as Nigella sativa L, which had a positive effect against asthma, type 2 diabetes, high blood pressure (hypertension), hyperlipidemia and obesity as well. This plant is considered safe as mentioned from clinical studies on this plant, that is, by orally taking 5 grams of its oil oral daily for a period of several weeks, up to 12 weeks [6-11].

Also mentioned by one of the previous studies of the symptoms of people infected with the Coronavirus, where their different symptoms appeared, ranging from severe to mild, that the most common fever was about 98% of them, while 76% of the symp-

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toms of those infected were coughing, 44% had muscle pain, 28% of them had sputum production and 8% had a headache. The most dangerous was due to the activity of the virus by attacking the alveolar-epithelial cells, where the patient suffers from progressive respiratory failures, which are leads to fatal cases; this damage is initiated by the Receptor-Binding Domain (RBD) attachment of the virus to the receptor on the respiratory tract, known as the angiotensin-converting enzyme-2 (ACE2) receptor. Humans have many ACE2 receptors in their respiratory tracts, which increase their susceptibility to COVID-19 is molecular mechanism that may partly explain why the incidence rate of this disease is increasing rapidly [12,13].

And several medicinal plants have an important and effective role to increase protection or reduce infection with the Coronavirus, and these plants have vital active ingredients against microbes and work to expand the respiratory tract, also work to reduce angiotensin II receptor type 1 (AT1), which meaning this mechanism action by blocking the angiotensin II from binding with AT1 or reduced the number of angiotensin II that could bind with AT1, Therefore, this will leads to preventing of the binding process occurred in the inefficiency of the blood vessel to constrict, a reduction in renal and another tissue perfusion, and will result toward a decrease in blood pressure [14]. Such medicinal plants curcumin, and from these data, there is a significant probability that the performance of curcumin to inhibit COVID-19 might make a highly sensitive person become infected with SARS-CoV-2 and ultimately will be confirmed as a worse affected case.

The interest of medicinal plant products is used as conventional medicine for many types of diseases caused by microbes such as viral diseases. Hence, these benefits must be researched to find and identify biological compounds that are effective against microbes such as viruses and bacteria etc.

Among the plants whose medicinal value is no less than curcumin is the role of *Nigella sativa* or Black Cumin Seeds, Cuminum, Cyminum Seeds. The chemical compound 1-(2-ethyl, 6- heptyl) phenol (EHP), which was extracted from cumin seeds using benzene as a solvent, was used in the laboratory as an anti-fungal and had impressive results [14].

The seed of *Nigella sativa* plants is known in Libya by Kammon Asad. While other places are known by numerous names such as black cumin in English and black caraway seeds in the USA [15]. As

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cumin seeds have been used since ancient times in Libya to treat many diseases such as cough, bronchitis, asthma, hypertension, diabetes, fever, anorexia, eczema, rheumatism, dyspepsia, skin diseases, headache expectorant, sedative, carminative, diuretic, thermogenic, sudoriferous and as aromatic additives to foods, loaves of bread and sweets.

As well, many recent kinds of research on it revealed the biological activity of the role of this plant, such as antiviral activity against cytomegalovirus, anti-dermatophyte, antibacterial activity [16,17, 18].

## **Bibliography**

- 1. Murkas S., *et al.* "Medicinal plants in tropical countries". *Thieme* (2005): 168.
- 2. Aschwanden C. "Herbs for health, but how safe is they". *Bulletin of the World Health Organization* 79.7 (2001).
- Nadkarni AK. "Indian materia medica". Popular Prakashan (1954): 1221-1224.
- 4. Rastogi RP and Mehrotra BN. "Compendium of Indian Medicinal plants". Lucknow: CDRI and New Delhi (1984): 648-650.
- 5. Rastogi RP and Mehrotra BN. "Compendium of Indian Medicinal plants". Lucknow: CDRI and New Delhi 1 (1993): 417.
- He T and Xu X. "The influence of Nigella sativa for asthma control: A meta-analysis". *American Journal of Emergency Medicine* 30.3 (2019): 589-593.
- 7. Sahebkar A., *et al.* "A systematic review and meta-analysis of randomized controlled trials investigating the effects of supplementation with Nigella sativa (black seed) on blood pressure". *Journal of Hypertension* 34.11 (2016): 2127-2135.
- Namazi N., et al. "The effects of Nigella sativa L. on obesity: A systematic review and meta-analysis". Journal of Ethnopharmacology 219 (2018): 173-181.
- 9. Daryabeygi-Khotbehsara R., *et al.* "Nigella sativa improves glucose homeostasis and serum lipids in type 2 diabetes: A systematic review and meta-analysis". *Complementary Therapies in Medicine* 35 (2017): 6-13.
- Sahebkar A., *et al.* "Nigella sativa (black seed) effects on plasma lipid concentrations in humans: A systematic review and meta-analysis of randomized placebo-controlled trials". *Pharmacological Research* 106 (2016): 37-50.

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- 11. Therapeutic Research Center. The Natural Medicines Research Collaboration (2020).
- C Huang., *et al.* "Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China". *Lancet* 395.10223 (2020): 497-506.
- Y Ren., *et al.* "Receptor recognition by the novel coronavirus from Wuhan: an analysis based on decade-long structural studies of SARS coronavirus". *Journal of Virology* 94.7 (2020): 1-9.
- 14. Mekawey AAI., *et al.* "Fungal Activity and Chemical composition of seed extracts of Cuminum cyminum. Al-Azhar Bulletin of Science- Basic science Sector". Proceeding of the 6th Al-Azhar International Scientific Conference (2008): 261-272.
- 15. Khan MA. "Chemical composition, and medicinal properties of Nigella sativa Linn". *Inflame pharmacology* 7 (1999): 13-35.
- 16. Hosseinzadeh H., *et al.* "Antibacterial activity of total extracts and essential oil of Nigella sativa L. seeds in mice". *Pharmacology Online* 2 (2007): 429-435.
- 17. Aljabre SH., *et al.* "Antidermatophyte the activity of ether extract of Nigella sativa and its active principle, thymoquinone". *Journal of Ethnopharmacology* 101 (2005): 116-119.
- Salem ML and Hossain MS. "Protective effect of black seed oil from Nigella sativa against murine cytomegalovirus infection". *International Journal of Immunopharmacology* 22 (2000): 729-740.

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