

## Role on Traditional Medicines Plant Prevention for Novel Coronavirus Pneumonia Covid-19 Pandemic Narrative Review

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### ABSTRACT

Traditional medicines are used to unfairness an expansive number of complicatedness. On the other hand, the pharmacological outline of the majority remedy is inadequately understood. Coronavirus Disease 2019 (COVID-19) has become a most important healthiness difficulty cause harsh sensitive respiratory virus in human being. It has increased quickly approximately the world because it's primary recognition in Wuhan, China, in December 2019. The causative virus is called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and the World Health Organization named the new spate disease Coronavirus Disease (COVID-19).

The aim of this review significant of traditional medicines prevention for novel coronavirus pneumonia (COVID-19) The incidence of COVID-19 continues to amplify with more than three million confirmed cases and over 1,426,823 (November 27,2020 WHO report) deaths international. There is at present no explicit treatment or vaccine against COVID-19. As a result, in the nonattendance of pharmaceutical intervention, the achievement of safety measures and disinfected measures will be necessary to manage and to reduce human conduction of the virus.

The use traditional medicines strength contains a position in the action and indicative running of patients with COVID-19. It was inevitable at as long as an impression of the close by verification and lifelong trial connecting to the effects of COVID-19 handling. Traditional medicine has a long history which is created by summarizing the valuable understanding of thoughtful life, maintain health, and combating disease accumulate in everyday life, construction, and medical practice.

**Keywords:** COVID-19, (SARS-CoV-2); Medication

### INTRODUCTION

Traditional medicine has very important huge role in the treatment of several types of diseases in the world. At the current time, the WHO is running with a number of investigate institute approximately the globe to select traditional medicine plant with prospective make use for the management of COVID-19 following being investigate for scientific effectiveness and protection [1]. The WHO has be functioning with country to guarantee the safest and the majority efficient use of traditional medicines, and it will maintain to provide hold up in explore the remuneration of traditional medicines in the anticipation, manage, different viral infection [1]. At present, medicinal plants such as *Artemisia annua* are being considered as possible

treatments for COVID-19, but they should be tested for efficacy and possible side effects [2]. Traditional medicine need to be vigorously investigated to avoid put the lives of people in danger during the period of this pandemic and further Medicinal plants request date support to the starting point of human being civilization [3-5]. Traditional Chinese Medicine includes herbal medication and acupuncture, works to keep away from, and action of infection by make better the protected system [6,7]. If Chinese herbs use correctly, there will be no adverse reaction [8-10]. At this time no successful action against coronavirus disease 2020 (COVID-19). The best assortment of intervention target the disease is unidentified. For that reason, confirmation beginning randomized proscribed trial to hold precise action touching COVID-19 is immediately desirable. Seven

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**Received date:** February 01, 2021; **Accepted date:** February 15, 2021; **Published date:** February 22, 2021

**Citation:** Abera MW (2021) Role on Traditional Medicines Plant Prevention for Novel Coronavirus Pneumonia Covid-19 Pandemic Narrative Review. J Clin Exp Pharmacol. 11:281.

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coronaviruses are identified to communicate a disease to human, three of them are severe, specifically, SARS (severe acute respiratory syndrome, China, 2002), MERS (Middle East respiratory syndrome, Saudi Arabia, 2012), and SARS-CoV-2 (2019–2020).

## METHODS

### Search Strategy

A systematic literature search was then carried out by author, by pointed the subsequent electronic bibliographic database English databases and Complementary Medicine Database, and Cochrane Register of Controlled Trials. Chinese databases: Chinese National Knowledge Infrastructure Database, Chinese Science and Technique Journals Database, Chinese Biomedical Literature Database. Chinese medicine OR Traditional Chinese Medicine OR Chinese herbal medicine OR Chinese herbal drug OR Hindawi Publishing Corporation. Korean databases: Korean Association of Medical Journal database, Korean Medical database Research Information Service System (RISS), and OASIS database.

### Screening and criteria

Screening of search outputs was performed in two stages. First, the title and abstract of identified journal articles/ theses was overviewed. Thereafter suitable articles/theses were downloaded and critically inspected for inclusion in the review. Literature screening was based on the following inclusion and exclusion criteria.

#### Inclusion criteria

Published and unpublished ethno-botanical and ethno medicinal surveys reporting on anti COVID-19 plant/s, conducted world

#### Exclusion criteria

The following types of research data were excluded from analysis: Data from review articles, chronological documents or investigational studies; Data from published and unpublished ethno-botanical and ethno-medicinal surveys lacking information on anyone of the following: study areas/localities, informant's involvement, scientific plant names, and not reporting information about medicinal plants; Data from non-open access journal articles or partially accessed (abstract only) articles.

### The objective of the review article

The main objectives of this review article from searching description review of important studies search were conducted to recognize papers published till November 28, 2020 and introduce important medicinal herbs and plants with antiviral activities against SARS and Covid-19.

## RESULT AND DISSCUSSION

### Coronavirus disease 2019 (COVID-19)

Coronavirus disease 2019 (COVID-19) is a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). COVID-19 has quickly multiply internationally because an epidemic first report in Wuhan in December 2019. As confirmed by the World Health Organization (WHO) on March 11, COVID-19 is a “public fitness crisis of worldwide apprehension,” and the pestilence is congestion health concern facilities worldwide [2]. There is currently no effective treatment against COVID-19. The most favourable set of antiviral agents and intervention target the disease is anonymous. For that reason, high-quality confirmation from randomized controlled trials to sustain choice with suggestion to the action of COVID-19 is instantly desirable. The globe is intimately surveillance the epidemic of respiratory disease connected with the novel beta coronavirus SARS-CoV-2. The most important gear was reported in Wuhan, Hubei Province, China [11]. At first time 2019-nCoV, sequencing show that at the moment with authority name SARS-CoV-2 is 80–89% similar to bat severe acute respiratory condition connected coronaviruses found in Chinese horseshoe bats [12,13].

In addition, it is in relation to 79% similar to strict acute respiratory disease coronavirus (SARS-CoV) and 50% connected to Middle East respiratory condition coronavirus (MERS-CoV). The last two coronaviruses have their direct establishment from civets and camels, correspondingly [14,15]. Even though it is undecided how COVID-19 spread starting animal to human occur, epidemiological learning recommended an go-between wild animal host sold in the Huanan Seafood Wholesale Market [16]. At present, at the same time human to human spread is positive, the means of spread remains controversial [12,17,18]. Even though it is probable that COVID-19 transmission is first and foremost *via* droplet and fomite get in touch with, airborne transmission procedures cannot yet be disqualified. Spread *via* the faecal-oral route remnants an option as SARS-CoV-2 RNA, but not live virus, has been detect in stool [19]. Molecularly, similar to SARS-CoV, the SARS-CoV-2 virus likely uses ACE-2 as admittance receptor, which is extremely articulated in the lung and gastrointestinal area [20–12].

### SARS-corona virus-2 and COVID-19

Corona viruses are sphere-shaped surround constructive sense RNA viruses from Coronaviridae family and order Nidovirales. This virus's disease is largely dispersed with diverse mammalian variety counting human being. even though the majority of the corona virus infection are associated with tender clinical symptom in human being, on the other hand, two beta coronaviruses are responsible for two severe epidemics; severe acute respiratory syndrome corona virus (SARS-CoV) emerge in November 2002 in Guangdong, China and middle east respiratory syndrome corona virus (MERS-CoV) originate in 2012 in Saudi Arabia [13]. For the period of last two decades, in cooperation the viral disease are explanation to result in >10,000 growing cases with elevated short-lived disappeared rates i.e., 10% for SARS-CoV and for MERS-CoV [22]. In December 2019, successions of ruthless pneumonia belongings appear due to mysterious source of disease in Wuhan [22]. In the show

heritable series psychoanalysis, it was understand that this stern and communicable disease is due to a novel corona virus species, create from bat, which was at the moment named as 2019 novel corona virus (2019-nCoV).

Human being [seventh member of the corona virus associations, this virus diseased is also call as SARS-CoV-2 due to its similarity to SARSCoV in hereditary structure. COVID-19, infectious viral disease cause by SARS-CoV-2 virus, is a severe disease of the respiratory area which have an effect on collectively the upper respiratory tract together with throat, nose and sinuses and lower respiratory tract, i.e., windpipe and lungs, of a person.

### Traditional medicinal Plants treat antiviral

Traditional medicinal originate that 15 compound specifically, Numerous studies introduce quercetin, as antioxidant flavonoids in both fruits and vegetables with incredible antiviral actions which may authority SARS-CoV as soon as sophisticated with intention cells and fundamental agent of URT1 [22].

The most significant plant variety as management medicine for respiratory diseases are antiviral activities are shown in Table 1.

### Medicinal Plants with treatment against coronavirus disease

There is currently no effective treatment beside coronavirus disease 2019 (COVID-19). The most favorable selection of interventions targeting the virus is unknown. For that reason, confirmation from randomized controlled trials (RCTs) to preserve precise treatment against COVID-19 is urgently needed. The create use of Chinese herbal medicines (CHMs) might have a responsibility in the treatment and symptomatic management of patients with COVID-19. It was aimed at providing an overview of the available verification and continuing trials with reference to the effects of CHMs for the management of COVID-19

| Plant name                       | Mechanism  |
|----------------------------------|--|
| Maca ( <i>Lepidium meyenii</i> ) | It has antiviral activities against both Flu-A and Flu-B viruses Dell Valle  |
| Eucalyptus camaldulensis Dehn    | It has considerable antimicrobial activity, and its increase in combinations with antivirals and extracts of <i>Annona senegalensis</i> and <i>Psidium guajava</i>   |
| <i>Betula papyrifera</i>         | Methanolic plant extract of <i>Betula papyrifera</i> was proved for antiviral activity against coronavirus BCoV, Coronaviridae. The 80% methanolic extract fraction showed significant antimicrobial activity. |
| <i>Zanthoxylum piperitum</i>     | Its leaf extract has antiviral activities against influenza A/WS/33, A/PR/8, and B/Lee/40 viruses  |

|   |   |
|---|---|
| Sunflower ( <i>Helianthus annuus</i> L.)  | Flowers and seeds extracts of sunflower may treat different human infectious diseases   |
| <i>Codonopsis lanceolata</i>  | The important phytochemical in the leaves are chlorogenic acid, luteolin, benzoic acid and apigenin which may be helpful against infectious diseases.   |
| <i>Verbascum pterocalycinum</i> var. <i>mutense</i> Hub.-Mor.                                   | The isolated saponins can be considered as potential drug in treatment of infected diseases.  |
| <i>Limonium densiflorum</i>   | Flavonoids and saponins are the major classes of natural products in shoot extracts which may have antiviral activities.  |
| <i>Robinia pseudoacacia</i> cv. <i>idaho</i>  | Its natural compounds in traditional Chinese medicine can be considered as antiviral therapeutics   |
| <i>Isatidis Radix</i>   | Its derived glucosinolate isomers and components like progoitrin, goitrin, epigoitrin and epiprogoitrin have antiviral potency and may contribute for influence virus infection   |
| Licorice ( <i>Glycyrrhiza uralensis</i> Fisch.)   | It inhibits pathogenic H5N1 influenza through its antioxidant activities. It has several antiviral components against infections. It is also against and SARS coronavirus.  |
| <i>Houttuynia cordata</i> Thunb.  | Its antiviral activities extract such as quercetin, quercetrin and cinanserin has antiviral activities and effects on murine coronavirus and dengue virus infection   |
| <i>Isatis indigotica</i> Fort.  | Indigotica Fort. Isatindigoticamides A and B exhibited antiviral activities   |
| <i>Toona sinensis</i> Roem  | TSL-1 which is an extract from its tender leaf has an evident effect against SARS-CoV   |
| Compounds of <i>A. annua</i> , <i>L. radiata</i> , <i>P. lingua</i> , and <i>L. aggregata</i>   | Herbal extracts and the compound lycorine can be use as a treatment of SARS-CoV   |
| <i>Fructus arctii</i> Arctigenin  | Inhibits viral replication. Arctigenin also exhibit hemagglutination inhibition   |
| Sinupret, a herbal medicinal product made from Gentian root, Primula flower, Elder flower, herb | Concentration-dependent antiviral activity (EC50 betwee 13.8 and 124.8 µg/ml) is against RNA and DNA viruses independent of a viral envelope, so it is a good treatment of acute and chronic rhiosinusitis and respiratory viral infections |

|  |  |
|--|--|
| Plant kingdom like Clusiaceae, Umbelliferae and Rutaceae | They contain coumarin which has antiviral activity against a wide range of viruses, especially influenza viruses |
|--|--|

**Table 1:** Plants with antiviral activities.

The current review, we have discuss for a short time about i) possible herbs that have antiviral and resistant stimulant property that can help in struggle against COVID-19, ii) shows potential phytochemicals that can be used for the development of expectations medication and vaccine against SARS-CoV-2 infections, iii) summarize active antimicrobial biochemical that can be useful in controlling COVID-19 spread by being an active components of sanitizers, personal protective equipments (PPE's) and antimicrobial materials/surfaces.

These reviews give you an idea about the curative possible of a lot of traditional medicinal plants that can be used by confined group of people (2020) reported the network pharmacology analysis predicted that the universal *in vivo* roles of 25 herbal plants were related to regulating viral infection, immune inflammation reactions, and hypoxia response.

## CONCLUSION

TCM has accumulated thousand-of-years' experience in the action of pandemic and endemic diseases. Make available that corresponding and substitute treatment are still without delay needed for the management of patients with SARS-CoV-2 infectivity, experiences in TCM is certainly worth learning. Fighting in opposition to current epidemics also provide a chance to test the true value of TCM in treat up-and-coming infectious diseases. Randomized, double-blind and a placebo-controlled reading is the best way to make available the most reliable proof for a therapy, including TCM.

## ACKNOWLEDGEMENTS

We thank for sharing information Professor Berhanu Debela head of department of forestry, Professor Yibltal Tigabu, Full Professor Abay Banthun, Debre Tabor University staff their knowledge of medicinal plants for their support during review time.

## AVAILABILITY OF DATA AND MATERIALS

All data pertaining to this review articles or manuscript and the supporting files. All data generated or analyzed during this review articles are included in this published article.

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