

Harmful and Beneficial Effect of Senna Makki in COVID-19

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Abstract

The outbreak of the unconventional coronavirus (SARS-CoV-2) on account that December 2019 has created an extraordinary state. Senna is a type of plant in the tropics. Senna, the sienna's, is a huge variety of blossoming plants in the vegetable family (Fabaceae, subfamily *Caesalpinioideae*, clan Cassia). As It is a brand new variation of a deadly disease remedy alternatives aren't simplest confined however require painstaking trials to verify their effectiveness. Due to the lack of information in lots of growing international locations, humans have begun out the usage of herbal medications, used for numerous different diseases, to fight COVID-19. Misleading data on social media regarding "Senna Makki" has gone microorganism in the Asian nation. However, consumption of bush Makki isn't suggested as a treatment possibility for COVID-19 thanks to its several harmful associated side-effects. Though its use in different diseases is evident, trials to verify its effectiveness against COVID-19 got to be prioritized because the public has started consuming bush Makki in high doses and while not monitoring prescript.

Keywords: COVID-19, SARS-COV-1, SARS-COV2, Medicinal plants.

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INTRODUCTION

The Coronavirus sickness 2019 (COVID-19) could be a severe acute metabolic process syndrome caused by coronavirus a pair of (SARS-CoV-2). COVID-19 was declared a world wide pandemic all around the world on the eleventh of March 2020 by the planet health organization (WHO) [1]. Senna, the sienna's, is a huge variety of blossoming plants in the vegetable family (Fabaceae, subfamily *Caesalpinioideae*, clan Cassia). This different class is local all through the jungles, with few species in mild areas. The quantity of species is assessed to be from around 260 to 350. The sort species for the class is Sienna Alexandrina. Around 50 types of Sana are known in development.). Senna is a type of plant in the tropics [3]. The leaves of the Senna plant have been used for a laxative action by pediatricians, pediatric surgeons, and pediatric gastroenterologists [4].

The severe acute metabolic process syndrome Coronavirus a pair of (SARS-CoV-2) originated within the town of metropolis in China, wherever the primary case of COVID-19 was reported in Gregorian calendar month 2019 [2]. However, because of its fast

transmission, SARS-CoV-2 was able to unfold its roots to alternative neighboring countries as well. USA, Brazil, India, Russia, Republic of South Africa, Peru, and Mexico. one among the potential causes for such fast transmission to alternative countries was frequent domestic and international travel. It's been well established that COVID-19 spreads through metabolic process droplets from associate degree infected person, once the person coughs, sneezes or speaks, or by touching a contaminated surface then touching the eyes, mouth, or nose, before laundry hands. The most common symptoms of COVID-19, shortness of breath, weariness including fever, cough, fatigue or myalgia and atypical symptoms include hemoptysis, diarrhea, headache and sputum. [2] Other symptoms include lymphocytopenia and all patients had pneumonia which can cause COVID-19. The complete sequence of SARS-2 has been obtained and disease can be diagnosed by RT-PCR and sample is collected from either lower or upper respiratory tract or by counting the total number of leukocyte and lymphocytes [3, 4].

In December 2019, a pandemic of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infections occurred in Wuhan, Hubei Province,

China, and spread across China and beyond. On February 12, 2020, the WHO officially named the disease caused by the novel coronavirus as Coronavirus Disease 2019 (COVID-19). It is estimated that in 70% of patients the disease is asymptomatic or with very mild symptoms, while the remaining 30% of patients suffer from a respiratory syndrome associated with high fever and cough. In some cases, this may progress to

respiratory failure and the patient may require ICU admission [5]. There is no specific antiviral treatment recommended for COVID-19, and no vaccine is currently available. Symptomatic treatment is encouraged and for patients with respiratory impairments, oxygen therapy is effective pharmacologic treatment against COVID-19 [17, 36].



Fig 1: A) Senna makki plant; B) Senna makki leaves; C) Senna makki powder [5, 29]

COVID- 19 AND MYTHS

As the COVID-19 virus is novel there have been myriad ambiguities relating to potential cure and treatment, and lots of researchers worldwide square measure in a constant struggle to see a treatment for this virus [8]. To date, there's no immunizing agent offered for COVID-19, and several treatment choices square measure being checked out the several treatment choices square measure being checked out by the researchers and aid staff thanks to huge panic, shock, and concern created among the general public, people

native to central and northern components of Sudan and Sinai and is cultivated beside the watercourse river, whereas *Cassia Angustifolia* is native to an African country and Southern Arabia, and is cultivated within the North-West of Pakistan and the Southern Republic of India [9]. The type of bush that herbalists use in Indo-Pak and Arabian countries is *Cassia angustifolia*, which is listed under the name of "Senna Makki" [22].

Use and mode of action of Senna Makki [15]



The United States Food and drug administration (FDA) has allowed Senna Makki to be used as an over counter drug. It is used for digestive disorders, such as chronic constipation, hemorrhoids, irritable bowel syndrome, weight loss, and for other illnesses, such as depression, asthma, eczema, and other

dermatological conditions [15]. Senna Makki is known for its strong laxative effect and is most commonly used in the treatment of chronic constipation. It contains anthracenes, derivatives, such as sennosides, which on hydrolysis by bacterial enzymes in the gut, release

glycines of three types; namely anthraquinones, anthrathralls. Oxanthones These glycines are the

active part of sennoside and cause laxative action by influencing the transport of water and electrolytes [11].

CHEMICAL COMPOSITION OF SANNA MAKKI:

CHEMICAL CONSTITUENTS	
1. Rhein	6. Kaempferol
2. Aloe-emodin	7. Isorhamnetin
3. Myricyl alcohol	8. phytosterol
4. Salicylic acid	9. Mucilage
5. Resin	10. Cacium oxalate

The dried leaves and fruits of the bush area unit are used for medicinal functions. There are unit forms of the bush, the most common one being the tinnevelly Senna that originates from Egypt and is additionally called "Alexandrian Senna" [8]. Cassia *angustifolia* is the second most common style of bush that originates from Asian nation and is known as "Tinnevelly Senna" [9, 10]. Tinnevelly Senna is native to central and northern and is cultivated beside the watercourse Nile, whereas *Cassia angustifolia* is native to Somalia and Southern Arabian Peninsula, and is cultivated within the North-West of Asian countries and Southern Asian countries. The type of bush that herbalists use in Indo-Pak and Arabian In China, traditional herbal treatment was also adopted against COVID-19 and has shown good result [12].

Contraindication and drug-drug interaction of Senna Makki

The counseled dose of bush Makki is eight.5 mg per day for youngsters, 17.2 mg per day with no thirty-four ours. 4 mg for children over twelve and adults twenty-eighth mg per day for children over twelve and adults twenty-eighth mg per day. Its consumption is contraindicated in youngsters but a pair of years mature and patients with enteropathy ulcerative rednes Crohn's n's unwellness, rubor, dehydration, symptom and heart diseases [14]. Also, the have as been noticeable drug interactions of bush Makki in people that use contraceptives (vaginal ring, patch, and pills), digoxin, warfare, diuretics, estrogens, horsetail herb and licorice [28].

The elements of shrub Makki work as a robust laxative and will irritate the bow bowelnings, which suggests it can irritate the symptoms of these patients littered with COVID-19, World Health Organization might also suffer from looseness of the bowels and nausea, that area unit COVID-19 symptoms. However, due to its exaggerated promotion for effectiveness against COVID-19, [15] it shortly became the chalice in the Islamic Republic of Pakistan for COVID-19 treatment and other people started victimization excess quantity. The drug while not deliberating its risks and facet affects over its edges

[21]. The very fact that it will cause severe dehydration and associate solution imbalance which may be fatal, along with abdominal pain, cramping, fainting, and discomfort was unheeded [23].

Nursing mothers should consult a healthcare professional as constituents of Senna Makki can pass into breast milk in smaller amounts, however, if taken in affect nursing baby's feces its safety in pregnant women are yet to be confirmed [34].

Senna Makki and COVID-19 in Pakistan

People in Asia countries were greatly influenced by the claim of a UK-based-herbalist UN agency reportable spoken communication that he treated concerning a hundred and fifty COVID-19 affected patients by prescribing them bush Makki, and this was additionally supported by the governor of Sindh, Pakistan [18]. The general public of Asian count countries began exploitation. It absolutely was reportable by the media that Senna Makki, that accustomed be oversubscribed at PKR three hundred /kg, was now merchandising for PKR one, 500-2,000/kg. [32] There is still a significant difference over the usage of bush Makki as a cure for COVID-19. Pakistani health consultants strongly urged the general public to avoid bush Makki, stating that there are not any clinical trials or studies that ensure the effectiveness of bush Makki in treating COVID-19 [16]. Anthraquinone is reported to have medicament, antiviral and immune-boosting role [17]. Senna Makki and lack of clinical data, health care professional's have strongly discouraged its use in COVID-19. The use of natural plants as medicines was started in ancient times. Hazrat Muhammad (SAW) used a number of plants and plant products for the treatment of many diseases in His life [24].

Medicinally benefits of Senna Makki

The Plant having medicinal importance mentioned in the Holy Quran and Hadith, and the identification of active phytochemicals having antiviral properties that can be used for the cure of respiratory and other contagious viral diseases including COVID-19 [7, 14].

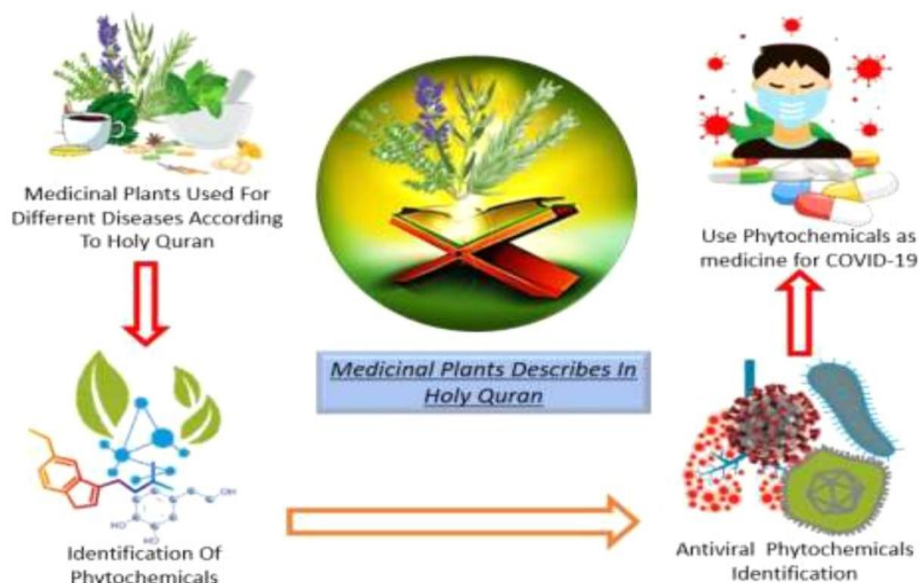


Fig 2: Senna makki use for the cure of COVID-19 [9]

Boosts Immunity

Skin aggravations like psoriasis, skin inflammation, dermatitis, and pimples should have an admission of Sana Makki. It is on the grounds that the glue which is made of Alexandria Senna when applied to the skin can assist with disposing of any of these disturbances [27]. Also, the Sana Makki has an antibacterial component so it supports the insusceptible framework and assists with battling against any of these aggravations. Likewise, in this COVID19 condition, we really want to supports our safe framework [35].

Weight Loss

It helps in weight reduction thus; it is awesome for those you are making a decent attempt to lose their weight. Its low-calorie flavorsome arrangement expands the admission of fluid and it advances the fiber which fixes the issue of stoppage. The purging capacity of it detoxifies the body [26].

Strengthens the Hair:

Senna Makki is beneficial for Hairs. Citrus components and natural components, that is beneficially giving good results. Sana Makki battles with going bald as well. It volumizes the hair and gives the hair the ideal definition [17].

Helps In Digestion

It helps in giving alleviation from indigestion, queasiness, gas, bulging, and burping. It is ideal to manage stomach related issues [29].

Disadvantages of Senna Makki

Senna makki side effects can be harsh for those patients already in critical conditions. There have been many reported interactions of Senna with many drugs and it is not suited for heart, liver and kidney patients. Cause unusual stomach throb, burping, spasms, weighty retching, an increment of protein in

Urine, and unusual pee with blood (in some cases). WHO has encouraged the clinical investigations to find safe and effective herbs in the treatment of COVID-19 [30], Senna leaves may not be used for the prophylaxis or treatment of COVID-19 without having any sufficient clinical data as the drug is potent laxative and can raise the complications of COVID-19 patients instead of benefits by augmenting diarrhea and other gastrointestinal problems [32].

Hazard Factors

The Senna Leaves can be extremely hazardous as well on the off chance that it is utilized for a more extended time frame. [31] The danger factors are: the spice might prompt staining of the spice additionally, the inward covering of the digestive tract might become dark, lack of potassium in the blood, skin sensitivities, rashes, debilitates the bones might prompt Arthritis as well, it relax the bones as well, and so on Assuming you are pregnant then try not to take it [13].

CONCLUSION

It is crucial that the public strongly follow their healthcare provider's recommendations, direction, and preventative guidelines for COVID-19. As an urgent measure to control COVID-19 and its further exacerbations of Disease, the general public is advised to avoid self-treating with medicines and herbs which they assume might have a potential role in curing COVID-19, unless it is proven by clinical trials and studies. As in evidence-based medicine, clinical trials play a pivotal role in determining the effectiveness of a particular treatment for a disease. Hence, there is a critical and necessary need for additional clinical studies that can assess the potential role of Senna Makki in treating Covid-19.

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