

Factual Comparison on Use of CAM (Home Based Remedies) in COVID-19 Prevention and Treatment

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ABSTRACT

This study highlights the power of spices and common remedies to strengthen immunity fight and prevent COVID-19 infections. Reviewed evidence of heat treatment to prevent and prevent infection. This joint study looks at the pros and cons associated with the use of traditional medicine without monitoring and guidance. Studies include the effect of alternative therapies on steam, the use of an autoimmune beverage, sauna bath and its importance and risks in the treatment and prevention of COVID-19. This study concludes that unbiased use of traditional method of treatment without proper knowledge and guidance may serve as boon as well as curse. Proper dose administration of CAM is necessary to avoid complications also improper way of use of steam inhalation both in adults as well as in paediatrics age group resulted in further complications rather than benefitting patient. Thus without proper medical guidance using these home remedies may not be any useful. Hence it is advised not to blindly follow any of the remedies without any reliable evidence. These traditional methods may be helpful to particular group of people but not necessarily benefit everyone in same way. In country like India this panic situation made people to blindly follow any remedies in social media without any medical evidence. Therefore it is advised that people should not panic, they must follow only government guidelines and medical advices and should not rely on any information without proper medical knowledge and evidence.

Key words: CAM, COVID-19, Traditional medicine, Immunity booster, Anti-viral medication, Home remedy, Ayurveda kadha, Heat stress

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INTRODUCTION

The 2019 coronavirus, due to acute breathing syndrome 2, has spread worldwide in a short period of 6 months. COVID-19 has created serious health problems around the world, caused alarm, caused economic losses, and hampered efforts to reduce its spread. The new coronavirus producing COVID-19 is a capsid-bound RNA virus that crosses glycoprotein systems. The external protein structure, which invades human cells, is a powerful target for therapeutic interventions for viral recurrences in the airways. The literature suggests that the virus affects our immune system. Thus, having a strong immune system is essential in preventing many viral infections. Evidence suggests that CAM marketing is effective in responding to the immune system. Here we use molecular docking and molecular dynamics recovery techniques to gain a beneficial role in the use of herbal

products such as immunity booster fluid, sauna bath and steam in preventing COVID-19. Countries such as China and India, which have a rich history of traditional medicine, are testing the effectiveness of traditional medicine in dealing with COVID-19 due to its drug-drug interactions and its ongoing treatment. Therefore, the time to look after recovering patients is important in determining the effects of CAM medications or products due to the disorder or intervention.

AYUSH in India directs another type of traditional medicine that has been successfully used in various diseases, prevention or treatment of COVID-19, as well as all COVID-19 related clinical trials registered in the Indian Clinical Trial Registry, about 60% is associated with AYUSH intervention. Similarly, at the same time, many preparations mainly from complementary and alternative medicines are being distributed without clinical evidence. India as a country has a good idea of their traditional medicine and family healing techniques. Given that, a number of those programs do not have the facts related to efficiency, risk times, production method, and special controls. Their smooth availability and advertising and marketing have led to their being ignored in public. Therefore, the current view has shifted to a more general

understanding of the sample and the commercial use of CAM and other home remedies among patients without covid symptoms [1].

LITERATURE REVIEW

Effect of immunity booster drinks

In addition to the community based measures taken to save the virus, we are able to increase our exposure to natural products, the power of exotic spices and herbs such as anti-viral agents and surprisingly light boosting immunity boosters. Beneficial roles of phyto chemists and pharmacists working on Indian herbs are widely used in Kadur based ayurvedic drug treatment programs to control many respiratory problems. Studies have found that phytochemicals exist in those that have the greatest potential for preventing stages of coronary infection. Phytochemicals present in those herbs have great anti-inflammatory properties.

Alternate medicine

In the wake of the COVID-19 outbreak, enhancing immunity performs a critical position in maintaining top-rated health. In India Chyavanprash, an ayurvedic immune boosting preparation is being encouraged within the combat against COVID-19. Also use of herbal tea/ decoction crafted from Tulsi, Cinnamon, Kalimirch, Dry Ginger and Munakka is usually recommended to growth the immunity. Green tea has additionally been studied to have immunostimulant effect and is being studied for use towards the combat towards the corona virus. Chinese traditional drug treatments and homeopathic medicines also are being tried for the treatment of corona virus contamination. Herbal Chinese medicines actually have a position in the preventing and treating recent and surprising breathing infections which includes H₁N₁ influenza. However its efficacy for 2019-nCoV wishes similarly evaluation [2].

COVID-19 myths and home treatments

Medicinal plant life is the most important age-old supply of therapeutically useful phyto-chemicals used for maintaining properly fitness, and to prevent and treat many sicknesses. These encompass flowers and herbs that are both utilized in Ayurveda, a traditional and opportunity medicinal remedy based totally on holistic body restoration, which originated in the Indian subcontinent. Ginger has therapeutic residences in opposition to pneumonia. In addition, ginger together with its phyto-chemicals has antiviral, ant fibrotic and anti-inflammatory. A notion that Vitamin D prevents and treats COVID-19 emerged. On the contrary, this fantasy is argued by several authors that it is more of the socio-monetary. View of the reality that the injuries were unnecessary. Since excessive temperature can reason irreversible denaturation of proteins and loss of SARS CoV-2 infectivity.

Steam inhalation

SAR-COV-2 is sensitive to heat and is destroyed by temperature tolerable to humans. The evidence for using heat to treat and prevent viral infection has potential cellular, physiological, psychological mechanism of action. In initial phase heat applied to upper airways can support immune system. First line of defence by supporting mucociliary clearance and inhibiting and deactivating virions. Since steam therapy has no guaranteed benefit and the amount and extent of complications of this treatment in relation to burn injuries are important, it should be considered a risky procedure and is no longer recommended in professional guidelines and patient manuals [3]. Since high temperatures can cause irreversible protein fluctuations and the loss of SARS CoV-2 infection is detected after being heated at 56°C for 15 and 30 minutes in a liquid environment, we have developed a simple protocol aimed at harming SARS-CoV-2 capsid through steam inhalation cycles.

Kadha: Ayurvedic medicine is used to treat chronic bacterial infections. Ayurvedic drugs have been used on the Indian subcontinent since long Vedic relations and for more than 5000 years. An important Ayurvedic method of advising enthusiastic pharmacists from herbalists incorporates Kadha education for oral use. According to Panchvidh Kashyapam described in the history of Ayurveda, there are 5 specific ways to eat herbs and plants. These include juicing, Kwath, Kalka, Hima (an herbal remedy). Decoction from a collection of medicinal plants is considered one of the oldest man-made medicinal plants. Kadha is good for dried ingredients such as spices and herbs. To control the problem of COVID-19, many Indian Ayurvedic remedies, spices and active phytochemicals have been tested for their effective use of prevention and treatment against COVID-19.

During a viral infection, inflammation is part of the immune response to reducing infection, reducing viral replication and transmission, reducing tissue damage and killing infected cells. Extreme irritability is helpful and its miles are obtained with the help of recovery and rehabilitation. However, CoVs are notorious for cheating on shooting tools and destroying the immune gadget leading to chronic irritation. The introduction of cytokines and chemokines that cause inflammation throughout the host infection acts as a two-dimensional now inactive sword that activates the body's response to the virus but also increases tissue damage and organ toxins among other clinical manifestations illness. CoVs infect cells using spike proteins by contact with the gift of cognate receptors on the host cell floor. The SARS-CoV spike protein attaches to the enzyme 2 angiotensin receptor-converting enzyme 2 and the receptor dipeptidyl peptidase 4, respectively to reach within the cells. The COVID-19 spike protein has a positive effect on human ACE2 sensitivity. When infecting the participating cells, CoVs control the volume of the new virus and receive an inflammatory response within the host due to tissue damage. Clinical studies of critically ill patients infected with SARS-CoV-2 have shown increased

sensitivity to cytokines and chemokines in human plasma, suggesting that cytokine levels are linked to disease severity, multiple organ failure and death.

In the present theory, the phytochemicals and pharmacological components of pharmacological compounds found in the special herbs used to make Kadha combine various proteins and proteases. These phytochemicals also ensure greater binding in the active site of various inflammatory mediators. Our findings suggest that regular use of this ayurvedic cadet in consultation with an ayurvedic physician can significantly boost the immune system and help prevent bacterial infections and pathogenicity and reduce the severity of stress in an infected person [4]. Kadhá or natural mixture is made with ginger, cloves, lemon, garlic, turmeric, pepper, and other spices. Undoubtedly, these types of herbs help to boost the immune system, but they are much easier when taken in moderation. Excessive intake of kadha causes constipation, if you eat each day, be prepared to deal with problems such as acidity, heartburn, and GERD due to the presence of spices. These spices produce heat within the framework, which can change the pH level of your intestines and cause acid reflux. The condiments used in herbal products are concentrated and lead to uneven heating within the frame. This ought to in the long run cause damaging health outcomes. Thus, one may even get a liver infection or ultimately liver failure, spices and condiments in kadhás create immoderate warmth within the body, aggravating or inducing piles. Kadha reason bleeding of the nose. The kadha is packed with spices like black pepper and cinnamon which can be hot in nature, and may cause bleeding. Manufacturing of immoderate warmth inside the body can reason pimples breakouts. Not just that, you might feel your skin turn itchy or dry, the spices produce warmth, which can cause mouth ulcers. Also, sure combinations of spices disrupt the biomes of your mouth that could additionally lead to problems like bleeding gums and bad breath.

Clove: Clove is used worldwide in medicine as a disinfectant for infectious diseases due to its antimicrobial activity in oral germs. Cloves are also used in the food industry because of their antimicrobial activity in enhancing shelf life. The WHO provides the recommended daily dose of cloves for humans is 2.5 mg/kg body weight. An important bioactive component of clove is eugenol. It is well known and shows many anti-bacterial activities against both Gram-high and acid-truth microorganism. Cloves are well known for their antiemetic and carminative properties. The action of eugenin inhibition is in the synthesis of viral DNA by acting as a selective inhibitor of HSV-1 DNA polymerase and eugenol in viral replication and reduction of infection. Cloves are the flowers of the clove tree, an evergreen plant called *Syzygium aromaticum*. Cloves are better known as a sweet spice and aroma, but they are also used in traditional medicine. Manganese is an important mineral for maintaining the mental faculties and for building strong bones. Cloves are rich in antioxidants. Antioxidants are compounds that lessen

oxidative stress, which can make a contribution to the development of chronic disease. Cloves also are high in antioxidants, which may help save you liver ailment due to their potential to help lower oxidative stress. It is generally advocated no longer to ingest clove in large amounts. If swallowed, cloves may additionally reason a burning sensation. Eugenol slows blood clotting and might lead to an elevated risk of bleeding. It needs to be avoided by humans with bleeding problems.

Giloy: Giloy is an Indian herbal medicine commonly referred to as Guduchi and is used in Ayurvedic medicine as a remedy for a number of ailments. Because of its medicinal value, it has been wonderfully exploited in commercial activities and has been used as an effective remedy for a number of ailments. It is called the raw extract of a dry T stem [5]. *Cordifolia* confirmed antiviral entertainment against the herpes simplex virus that has been tested. Tinocordiside, one of the main components of the giloy, confirmed the inhibition of the main SARS-CoV-2 protease in molecular docking studies. Giloy confirmed the extremely binding function of all 4 key SARS-CoV-2 goal surface glycoprotein, receptor binding site, RNA established RNA polymerase, and an important protease involved in viral attachment and replication fragments. It is generally advocated no longer to ingest giloy in large amounts.

Coffee and caffeine: Coffee, caffeine, and caffeinated beverages are naturally known for their various health benefits and disease prevention. All types of coffee are not uncommon in many cultures throughout the world for centuries. Nutraceuticals inside coffee have different anti-bacterial effects, with caffeic acid preventing the recurrence of the virus *in vitro*. Caffeic acid has also been shown to have anti-bacterial properties against the herpes simplex virus and polio virus, and it reduces the yield of the reproductive tract and suppresses the damage of infected cells. However, caffeine reported immune defences from *in vivo* laboratory and *in vitro* testing have been similar. The positive effects of caffeine on natural defences include suppression of neutrophil and monocyte chemotaxis in human blood, but caffeine has also been suggested to suppress antibody production and human lymphocyte factor as shown by reducing T cell proliferation and production. Incorrect helper (Type 1, 2, 3) T cells [6]. Other caffeine activity has been explained by its inhibition of cyclic adenosine monophosphate-phosphodiesterase, as well as the subsequent boom in intracellular cAMP concentrations food workout [7].

DISCUSSION

No nations can be left to their own devices with the help of COVID-19. It is one of the biggest threats to public order so far that it wants to be addressed as soon as possible. Many synthetic drugs have been shown to be ineffective in treating SARS-CoV-2 patients, so natural drugs have grown into a promising way to deal with the ongoing epidemic due to COVID-19 [8]. Some of the Chinese plants that have been extracted have been tested to find a cure for COVID-19 patients in a clinical setting

and the feature has shown effective effects of combining symptoms and signs. The provision of standard antiretroviral drugs is effective in India to prevent many diseases and to improve the immune system of patients. The use of diammonium glycyrrhizinate C in the treatment of COVID-19 related diseases is approved. In the current context of the epidemic, measures to prevent and strengthen infection are one of the most popular ways to prevent infection with COVID-19. In India, people use spices and herbs of ancient times to obtain their flavour, antiviral, antimicrobial, antioxidant, and homeopathic properties. From ancient times the Indians used to take those natural resources which provided protection for the Indian people, which may have been a major cause of low mortality in India. However, excessive use of spices and herbs can cause a variety of side effects, namely, stomach acid, heartburn, constipation, mouth sores, high blood pressure, and so on. Antiretroviral-based drugs have promising side effects, ranging from anti-influenza to anti-dengue. In the case of the global burden of COVID-19, where a complete solution awaits patients, drugs taken directly from plants with trained protection and efficacy may be at the forefront of this ongoing problem due to COVID-19. Problems encountered during the use of secondary bioactive metabolites such as their solubility, stability, and their availability of bioavailability need to be addressed in order to use those metabolites as a remedy. In addition, the use of artificial intelligence gear such as molecular studies, toxicology analysis, and pharmacological research may continue to load the full-size facts about the potential of the second metabolites mentioned above [9,10]. However, the change taking place in the objectives must be considered.

CONCLUSION

This study concludes that unbiased use of traditional method of treatment without proper knowledge and guidance may serve as boon as well as curse. Proper dose administration of CAM is necessary to avoid complications. Also improper way of use of steam inhalation both in adults as well as in paediatrics age group resulted in further complications rather than benefitting patient. Thus without proper medical guidance using these home remedies may not be any useful. Hence it is advised not to blindly follow any of the remedies without any reliable evidence. These traditional methods may be helpful to particular group of people but not necessarily benefit everyone in same way.

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