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# MEDICINAL COMPOSITION FOR TREATMENT OF PANDEMIC COVID-19- A THEORETICAL THERAPEUTIC STUDY

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## ABSTRACT
A new virus was discovered in the city of Wuhan, China in last December, 2019. This virus was named COVID-19, previously called 2019-nCoV. It was caused by the SARS-CoV-2 virus. Since then it is spread all over world and the number of deaths exceed more than 3.4 lakh till 26th May-2020. World Health Organization (WHO) was declared it a pandemic on 11th March 2020 and a Public Health Emergency of International Concern (PHEIC). The human capital of a country is established by good health of citizen concern. So health is very significant factor in the development of nation because good population and health go hand in hand with national income. As a result health has been accepted as one of the welfare component, but this component of every country in the world going down by spreading of COVID-19. It is due to no medicine or vaccine for preventing of this disease is discovered by our scientists till date. This paper is related with the discovery of medicine for stopping COVID-19. It is possible to stop as well as eradicate the harmful COVID-19 if the proposed medicine used in the treatment of patients suffering this pandemic COVID-19.

**KEYWORDS:** December, COVID-19, Capital, Welfare, Vaccine, Eradicate, Pandemic.

## INTRODUCTION
World is currently witnessing an epidemic caused by the novel coronavirus i.e COVID-19. It is a pathogenic virus which can create pandemic outbreak in environment. Till writing of this paper it covers more than 210 countries in the world and spreading a destruction of socio-economic condition all over the world. COVID-19 virus is a single-stranded positive-sense RNA virus which can infect animals (Example Tiger in USA) and humans. Till writing of this paper several hypotheses about its origin and source remains elusive. The COVID-19 viruses are transmitted through body or aerosol contact with persons infected by this virus. So it is required to know about virus.

Viruses are small obligate intracellular parasites, which by definition contain either RNA or DNA genome surrounded by a protective virus-coded protein coat. Virus may be viewed as mobile genetic elements, most probable of cellular origin and characterized by a long co-evolution of virus and host. For propagation viruses depend on specialized host cells supplying the complex metabolic and biosynthetic machinery of eukaryotic or prokaryotic cells. A complete virus particle is called a virion. The main function of virion is to deliver its DNA and RNA genome into the host cell so that the genome can be expressed (transcribed and translated) by the host cell. The viral genome, often with associated basic proteins is packed inside a symmetric protein capsid. The nucleic acid associated protein called nucleoprotein, together with genome, forms the nucleocapsid. In enveloped viruses, the nucleocapsid is surrounded by a lipid bilayer derived from the modified host cell membrane and studded with an outer layer of virus envelope glycoproteins.

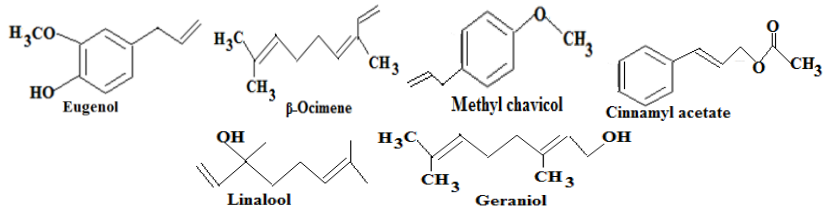
The spike glycoprotein (S) of coronavirus is derived into two subunits i.e S1 and S2. The S1 subunit helps in receptor binding and S2 subunit facilitates the fusion of cell membrane.[1-2] The spike glycoproteins of coronaviruses are important to determine tissue tropism and host range and it is very important for developing vaccine as well as other preventions.[3] Spike glycoprotein i.e S-proteins that help the virus in host recognition and attachment. In this paper I have described prevention of COVID-19 as well as medicine taking different literatures of Phytochemistry into consideration. Phytonutrients play an important role in the curing chronic diseases due to their pharmacological and biological properties. Due to medicinal properties in the plants, these are used as primary health care aid in the form of plant extract or their active components.[4] As it is theoretical study, but it is sure the medicine having no side effect and also it will kill the virus. This can be

confirmed after discussion and it will help world from fear of harmful COVID-19. This paper must help other researchers to go ahead in the preparation of vaccine and medicine also.

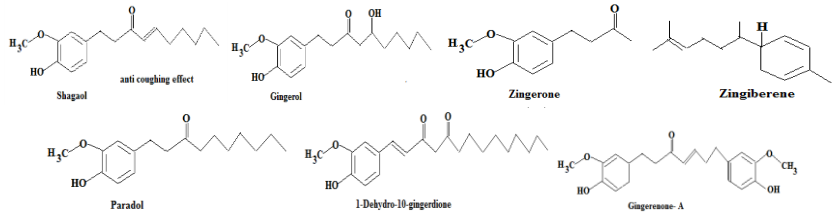
**Chemicals and Methods**

The proposed medicine is composed of four groups of medicinal valued chemicals. Let it be A, B, C and D groups. Molecular structures and their names are given bellow.

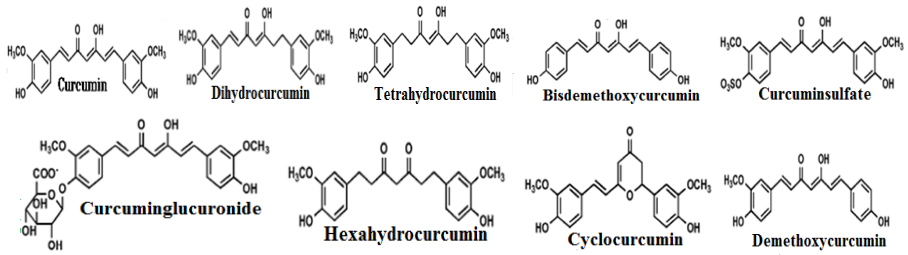
**1 - Group A**



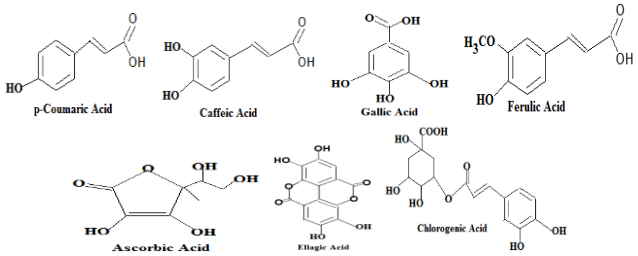

**2- Group B**




**3- Group C**




**4- Group D**




**Methods of preparation and doses**

Group A chemical compounds are present in Tulsi leaves. Group B chemicals are present in ginger root. Group C chemicals are present in turmeric. Group D chemicals are present in pomegranate (aril and its seed)

**First method (For prevention of COVID-19)**

**Requirements**

1-Group A 3g (24 leaves of Tulsi)
2-Group B 5g of clean ginger (cut into small pieces)
3- Group C 5g of clean turmeric (immersed in water for hours then cut into small pieces)
4-Group D 20g of pomegranate (Aril+ Seed)

**Procedure**

These are grinded with juice maker grinder with 5ml of water. The prepared juice is filtered to a clean vessel and filtrate is given to a normal people with warm water who is not affected COVID -19 as prevention. **(One dose)**

The residue is collected in a clean vessel and it is boiled with three cups of water for 30 minutes. Then it is filtered in hot condition and cooled. Now it can be used as drinks. When it is used, it should be warmed. Now residue is washed away.

Normal people can take it once in a day. (It may be taken before food for better result). For a non-affected people, it can be taken minimum two days (two doses only)

What will happen after taking medicine:-

- Feel weakness for sometime
- Slight confusion and feel sleepiness
- Required more food and plenty of water to drink
- Should take rest for minimum six hours
- After 12 hours one will feel energetic

(This feeling will be felt by people having age group above 40 years)

**Second method (Patients suffering from COVID-19)**
**Requirements**

1-Group A 4g (thirty two leaves of Tulsi)
2-Group B 4g of clean ginger (cut into small pieces)
3-Group C 3g of clean turmeric (Immersed in water for hours, then cut into small pieces)
4-Group D 20g of pomegranate (Aril+ Seed)

**Procedure**

These are grinded with juice maker grinder by adding 5ml of 50% ethyl alcohol i.e Ethanol. The prepared juice is filtered to a clean vessel and filtrate with warm water is given to affected patient. **It is one dose**.
A patient can take three doses per day (before food for better result.)

Within minimum time (it may 72 hours to 96 hours) result will come out i.e patient will be cured from COVID-19. Residue obtained can be used as described in first method.

**The composition may vary from patient to patient as physicians' choice with their experiences. There is no side effect within the limited amount of materials discussed in this paper. (For Children upto12 years) percentage of alcohol may change within 50% to 75% the maximum limit.**

**Third Method (If above said materials are not available)**

The chemicals given in different groups can be prepared in the laboratory.
1-Group A chemicals 3g
2- Group B chemicals 4g
3- Group C chemicals 4g
4- Group D 10g
5- Minerals: Different minerals with their quantities are given in table 1

**Table 1**

| Symbols of Minerals | Zn | Mn | Fe | Cu | Ca | P | Cr |
|---|---|---|---|---|---|---|---|
| Amount in mg/100g | 60.5 | 5.90 | 290.7 | 8.80 | 280.0 | 8060.0µg | 70µg |

**DISCUSSION**

First of all it is required to know what are the symptoms of COVID-19? It is mentioned in the website of Government of India that the dry cough, high fever, sore throat and difficulty in breathing are the symptoms of COVID-19, the pandemic. Regarding spreading this website has mentioned air by cough or sneeze, personal contact, contaminated objects and mass gathering.[5] Infection by the virus causes respiratory symptoms, fever, fatigue and in severe cases can cause SARS, organ failure and even death.[6,7]

**Group A**

Chemicals belong to this group are present in Tulsi leaves obtained from Tulsi plant which is a sacred plant in Hindu religion. For its medicinal values it is called **Queen of Herbs**. There is a place after the name of Tulsi called **Tulsi kshetra** present in Kendrapara district of Odisha, India. Also this place is the place of Lord Balbhadra the elder brother of Lord Jagannath. This Herbal Queen having capacity to diminish all most all the virus in the world which cause harm to human civilization. So it is called as "The incomparable one", "elixir of life", and "Mother Medicine of Nature" which is discussed bellow. Botanical name of Tulsi is Ocimum Sanctum and it belongs to Lamiaceae family. Tulsi contains polyphenols which has anti-oxidant property. Antioxidants are the bio-chemicals in our body which neutralize disease producing free radicals. Polyphenols effects on genes by stopping fatty plague formation in blood vessels.[8] It can damage the RNA genome which is present in Coronavirus i.e COVID-19. So it kills the coronavirus. Important constituents are eugenol (71%), Methyl eugenol (20%), ursolic acid[9] and other constituents in minor quantities like camphene, cineol, carvacrol, methyl chavicol have excellent analgesic, anti congestive and disinfectant properties. It also contains vitamin A, vitamin C and chlorophyll.[10] It contains number of other medicinal constituents and minerals like zinc, calcium, iron, copper, phosphorus.[11] So Tulsi has ant-ageing, immunomodulatory property along with antimicrobial, anti-viral, adaptogenic and anticancer property.[12]

**Group B**

Chemicals present in this group belong to Ginger root having Botanical name Zinger Officinal Rose has flu-symptoms, antimicrobial properties. The presence of fibre content, fat/oil, protein and essential minerals like calcium, phosphorus, iron, vitamin C[13,14] zinc, copper, chromium, manganese using atomic adsorption spectrophotometer (AAS) coupled with the therapeutic value of ginger root. Gingerols are responsible for the ginger pungency, with 6-Gingerol being the most abundant.[15,16] It has antioxidant, anti-inflammatory and analgesic property. Other compounds with pungent characteristics are Zingerone and shogaols.[16] Shogaol is the dehydrate product of Gingerol have anti-coughing effect. American Spice Trade Association (ASTA), European Spice Association (ESA) and Indian Standard Institute agree about the consumption of ginger 6.6mg/kg.[17] The main active constituent of ginger is

gingerol (5-Hydroxy-1-(4-hydroxy-3-methoxy phenyl) decan-3-one). In our Study, it is required 5.60mg/kg/day of these Constituents.

**Group C**

Chemicals belong to this group are present in Turmeric having its official name Curcuma Longa L and it is in Zingiberaceae family. The main constituent of Turmeric is Curcumin[18] which is derived from the rhizome of Curcuma Longa is a linear diarylheptanoid possessing excellent medicinal properties.[19] It is a small molecular weight polyphenolic compound i.e 1,7-bis(4-Hydroxy-3-methoxyphenyl)-1,6-heptadien-3,5-dione lipophilic in nature. Commercially produced curcumin is a mixture of curcumin, demethoxy curcumin and bisdemethoxy curcumin. Synthetically prepared curcumin and natural curcumin are reported to be equal in their activity.[20] Turmeric is known for its antibiotic, antiseptic, antibacterial, anti-asthmatic, antiulser drug, insect repellant and wound healing properties.[21] Indian turmeric is preferred due to high curcumin content as compared to other countries. Curcumin is a free radical scavenger with rich antioxidant activity, binds metals particularly iron, copper, calcium, potassium, sodium and other minerals like phosphorus, ascorbic acid, riboflavin, thiamine. It is not toxic. Curcumin is most important therapeutic agent in turmeric. Curcumin has been shown to have antiviral activity. For achieving good health effects of curcumin the required dose may vary depending on disease e.g 1.5g – 4g per day for healing lung cancer. Maximum intake can be 8g per day, but there is no toxicity.[22] For our study it is required 6g – 8g per day in three doses with warm water as coronavirus affects lungs.

**Group D**

Chemical compounds present in this group belong to Pomegranate, Punica granatum L and it is from Punicaceae family. It is considered in Ayurveda medicine as "a pharmacy unto itself". The place of pomegranate in Old Testament of the Bible, the Jewish Torah, and the Babylonian Talmud as a sacred fruit having power of fertility, abundance and good luck. It was the symbol of prosperity and ambition in Egypt[23] and the personal emblem of the Holy Roman Emperor, Maximilion. The edible parts of pomegranate fruit are named **aril**. Fruits contain antiviral compounds.[24] Pomegranate juice contain anthocyanins, ascorbic acid, ellagic acid (main constituent i.e more than 40%), gallic acid, caffeic acid, catechin, EGCG, quercetin, rutin and no. of minerals particularly iron, amino acid and its seed contains punicic acid. Ellagic acid is the most important constituent for therapeutic use. It is a good anticarcinogenic and antioxidant.[25] Pomegranate juice and seed extract have 2-3 times antioxidant capacity with either red wine or in green tea in vitro.[26] It is found that 800 mg extract contains 21.6mg of ellagic acid and 330.4mg of punicalogin which increase plasma antioxidant capacity in elderly humans as well as all humans.[27] There is no toxic effect to take 100g per day of pomegranate juice. Pomegranate juice contain Vitamin C i, e ascorbic acid which prevent the lower respiratory track infection under certain conditions.[28] So vitamin C can prevent the COVID-19. Hence pomegranate juice is justified for treatment of this disease.

**Minerals**

All materials taking into consideration contains adequate amount of minerals as constituents. When medicine will be prepared by taking said chemicals, minerals must require to them in some amounts. So it is point of discussion what is the function of minerals in this medicine? As Corona virus is a single strand RNA genome, metal is required to damage this virus, because when virus contacted with nano particle layer i.e mineral present, it destroys the virus in one of three ways

- Metal creates a free radical like hydroxide ions and it is toxic to virus cell.
- Metal combines with N, O, S in the cell of virus to damage it by chelation i.e forming a chelate
- Metals also damage the electron transport chain

Calcium and phosphorus are important in extra cellular and intra cellular body function and responsible for building block of structural component in human body. Iron act as oxidant and involved in strengthening the immune system. Zinc prevents the cardiomyopathy and bleeding disorder. Copper and nano-silver can damage the Coronavirus i.e COVID-19. Copper can prevent the throat bacterial infection.

## CONCLUSION

The proposed medicine can prevent and eradicate the COVID-19 in minimum time. It can help the people to remove from the trap of coronavirus. From discussion it is found that all most all the ingredients are present in the proposed medicinal composition to fight against the newly discovered SARS-CoV-2 virus and capacity to heal the patient by taking doses as proposed. Medicinal composition may change regarding the health condition of patient using the physicians' experience and also taking into consideration of maximum limit of ingredients described in this paper. It is legend that in our world there are medicines present in nature for treating every disease. That so why until synthetic drugs were developed in nineteenth century, herbs were the basis for nearly all medicinal therapy. So this paper can help the people in way of curing the COVID-19 and also give a successful way to researchers for preparing the medicine. It is confirmed that the medicine can cure Cold, Cough and other viral diseases.

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