

International Advanced Research Journal in Science, Engineering and Technology

DOI: 10.17148/IARJSET.2022.9307

COMPARATIVE STUDY ON COVID-19 WITH AYURVEDIC AND HOME REMEDY SOLUTION USING DATA ANALYSIS

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Abstract: Covid -19 and its related diseases are a large family of viruses that may course illness in animals as well as humans. In humans, numeral of COVID-19 related virus are be able to recall to cause cold air communication of disease orderly from the common cold to more harsh in attitude or treatment diseases. The most Viral epidemics of cure cold air communication of disease syndrome pose a worldwide hurt. The majority frequent a change is the physical or mental condition of COVID-19 are fever, illness, tiredness and dry cough. Some patients may have aches and pains, nasal congestion, runny nose, sore throat or diarrhea. These change is the physical or mental condition are normally mild and begin gradually. Some people become infected but don't develop any change is the physical or mental condition and don't feel unwell. Many people improve from the disease without needing special treatment. Healthcare associated sympathy is a major reason of morbidity as well as the number of deaths in a given period. Hand hygiene as an desired effect break down size. This paper explains the assesses the short and long term success of strategies to get better fulfillment to recommendations for hand hygiene and establish home remedy as well as solution utilizing home remedy Data Analysis.

Keywords: CoronoVirus-19, Data Mining, Food Borne Viral Communication of disease, Causes of Virus, Immunity improve methods, Home Remedy.

I. INTRODUCTION

Virus is a microspic organism consisting mainly of nucleic acid in a protein coat. Some viruses also have marked by abnormal deposition of fat. They are lacking the required quality or characteristics of reproducing on their own. Viruses depend on the organisms they contaminate with harmful organisms for their very practice that has remained from a former time. Viruses get a bad strike smartly, but they also perform many important functions for humans, plant, animals and the environment. Some viruses protect the host against other communication of disease. Viruses also participate in the process of evolution by transferring genes among different species. Viruses can affect many areas in our body, including the reproductive, cold air, scientists use viruses to insert new genes into cells. Viruses can affect many areas in the body, including the reproductive, cold air, and relating to the stomach and intestines and also affect the liver, brain and skin.

1.1 VIRAL INFECTION

A Viral infection is reproduce of a harmful virus inside the body. Virus cannot give a specified quality without the an act of helping of a host. Virus infect a host by introducing their genetic material into the cells as well as with an active viral infection, a virus makes copies of it as well as bursts the host cell to set the newly formed virus particles free. In other vases virus particle bud off the host cell over a period of time before killing the host cell. Either new virus particles are then free to infect other cells. Change is the physical or mental condition of the viral illness occur as a result of cell damage, tissues destruction. The cold store cells remains in an inactive state. A trigger sunlight or something may reactivate the virus and lead to new change is the physical or mental condition. Viruses are very smaller than bacteria. Virus can be through or by sharing contaminated needles. Virus from one host to another contaminated food and water are other potential sources or viral communication of disease.

1.2 FOODBORNE VIRAL COMMUNICATION OF DISEASE

Viruses are one of the most common causes of food poisoning. The Change is the physical or mental condition of these communication of disease vary depending on the virus involved. Change is the physical or mental condition may include yellow skin, nausea, diarrhea and vomiting. Upto 15% of infected individuals experience recurrent illness within 6 months of infection. Nor virus has been reported to be responsible for outbreaks of harsh in attitude or treatment gastrointestinal illness that happen on cruise ships, but it causes disease in numeral of situations and various locations. Foodnorne viral illnesses are transmitted via the fecal oral route. This means that a person gets the virus by



International Advanced Research Journal in Science, Engineering and Technology

Impact Factor 7.105 in Vol. 9, Issue 3, March 2022

DOI: 10.17148/IARJSET.2022.9307

absorb virus particles that were a large roofed structure with one side open for storing or maintaining machinery through the feces of an infected person. The virus can transmitted through the dirty hands by shaking hands, preparing food or touching hard surfaces. Pollute with radioactivity water is another potential source of infection. A virus is a small infectious agent that helps to re produces inside the cells of living hosts. When infected the host cell is forced to rapidly produce thousands of identical copies of the original virus. New viruses assemble in the infected host cell. A virus consists of two or three parts: Genes made from either DNA or RNA. Long molecules that carry genetic information a protein coat that protects the genes as well as in some viruses an envelope of fat that surrounds the protein coat.

Viruses vary in shape from the simple helical and icosahedra to more complex structures. Viruses range in size from 20 to 300 nanometers; it would take 33,000 to 500,000 of them, side by side, to stretch to 1 centimeter (0.4 in). Viruses spread in many ways. Just as many are very specific as to which host species or tissue they attack, each species of virus relies on a particular method for propagation. Plant viruses are often spread from plant to plant by insects as well as other organisms, be able to recall as vectors. Some viruses of humans as well as other animals are spread by exposure to infected bodily fluids. Viruses such as influenza are spread through the air by droplets of moisture when people cough or sneeze. Viruses such as nor virus are transmitted by the waste matter discharged from the bowls which involves the contamination of hands, food as well as water. The dengue virus, are spread by blood-sucking insects. Viruses, particularly those that have RNA, can mutate rapidly as well as give rise to new types against which their hosts have little protection. Influenza virus, changes often, which is why a new vaccine is needed each year. Major changes can cause pandemics as in 2009 when swine influenza spread to most countries. Often these mutations take place when the virus has infected other animals such as bats in the case of corona virus, as well as pigs as well as birds in influenza, before spreading to humans. Viral communication of disease can cause disease in humans, animals as well as plants. In humans as well as other animals they are normally eliminated by the immune system, conferring lifetime immunity to the host for that virus. Antibiotics have no effect on viruses, but antiviral drugs have been developed to treat lifehardening communication of disease. Vaccines that produce lifelong immunity can prevent some viral communication of disease.

II. LITERATURE REVIEW

The World Health Organization (WHO) defines mass gatherings as occasions, which are organized or are occurring without external cause. The supposed production of living from non living matter as inferred from the appearance of life. That pulls large numerals of pool of people for straining the planning as well as response resources in the community, city or nation hosting that particular event. In addition to religious congregations, these events may be held in the sports, socio-cultural or political contexts[17]. The religious Kumbh Mela, held every 12 years in Uttar Pradesh in India, is considered as one of the biggest human mass gatherings on earth[18]. The other examples of religious mass gatherings in India include the Maha Pushkaram festival in Andhra Pradesh (last held in 2015 and attended by 48.1 million people in Andhra Pradesh and 57 million people in Telangana), annual pilgrimage to Sabarimala temple in Pathanamthitta district of Kerala (attended by 45-50 million devotees every year) and Velankanni, the biggest Catholic pilgrimage centre in India (visited by around 3 million people from late August to early September), Mahamaham in Kumbakonam in Tamil Nadu (last held on February 22, 2016, attended by one million people)[19].

Similar events of other religious denominations attended by comparatively lesser numerals of pilgrims are also observed in India with fervor. Such opportunities create situations for human proximity within very close distances and the challenges they present to the maintenance of sanitation. These gatherings create considerable public health concern. Transmission of cold air and gastrointestinal communication of disease remains major concerns during such large-scale assemblies. These assume additional importance in the wake of the emerging and re-emerging infectious diseases, including that due to viruses. Large numerals of Muslim followers return from the Hajj and Umrah pilgrimage every year, there have been concerns that they might acquire communication of disease with MERS-CoV during the event as well as subsequently lead to its introduction in India. However, no case of MERS-CoV infection has been detected in the country so far though reports have indicated the spread of influenza through infected, returning pilgrims[21]. It would seem likely that these large-scale gatherings may provide platforms for exchange of genomic material as well as thereby evolution of pathogens, including viruses.

III. COVID 20

Coronaviruses are non segmented positive stranded RNA Viruses with a roughly 30KB genome covered by a protein envelope. Most of the coronoviruses source diseases in their exacting host species those that can infect humans through cross species transmission have become an important hurt to public health. Since December 2019 harsh in attitude or treatment acute cold air syndrome coronovirus 2 (SARS-CoV-2) has been recognized as the causal factor in a series of



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Impact Factor 7.105 $\,$ $\,$ $\,$ Vol. 9, Issue 3, March 2022 $\,$

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harsh in attitude or treatment cases of pneumonia originating in Wuhan in Hubei province, China. The disease has been named by WHO as Coronovirus disease 2019 (COVID-19 related virus). WHO is working closely with clinicians caring for patients with COVID-19 and related virus, in China and across the globe and international experts on infectious disease to better understand, in real time, the clinical management, natural history as well as treatment interventions for COVID-19 and related virus. SARS-CoV-2 has been shown to cause disease via a mechanism analogous to the SARS coronovirus with potential damage to vital organs such as lung, heart, liver and kidney as well as infection poses a considerable risk to patients by the prevalence of pneumonia [5].

Real-time PCR (RT-PCR) assays on these samples were positive for pan-Betacoronavirus. Using Illumina as well as nanopore sequencing, the whole genome sequences of the virus were acquired. Bioinformatic analyses indicated that the virus had features typical of the coronavirus family as well as belonged to the Betacoronavirus 2B lineage. Alignment of the full-length genome sequence of the COVID-19 and related virus as well as other available genomes of Betacoronavirus showed the closest relationship was with the bat SARS-like coronavirus strain BatCov RaTG13, identity 96%. COVID-19 and related is a zoonotic virus. From phylogenetics analyses undertaken with available full genome sequences, bats appear to be the reservoir of COVID-19 related virus, but the intermediate host(s) has not yet been identified. However, three important areas of work are already underway in China to inform our understanding of the zoonotic origin of this outbreak.

3.1 ROUTES OF TRANSMISSION

COVID-19 is transmitted via droplets as well as fomites during close unprotected contact between an infector and infect. Airborne spread has not been reported for COVID-19 and related virus as well as it is not believed to be a major driver of transmission based on available evidence; however, it can be envisaged if certain aerosol-generating procedures are conducted in health care facilities. In China, human-to-human transmission of the COVID-19 and related virus is largely occurring in families. The Joint Mission received detailed information from the investigation of clusters as well as some household transmission studies, which are ongoing in a numeral of provinces. Household transmission studies are currently underway, but preliminary studies ongoing in Guangdong estimate the secondary attack rate in households ranges from 3-10%.

IV. THE CHANGE IS THE PHYSICAL OR MENTAL CONDITION & DISEASE PROGRESSION

Change is the physical or mental condition of COVID-19 and related virus are non-specific as well as the disease presentation can range from no change is the physical or mental condition (asymptomatic) to harsh in attitude or treatment pneumonia as well as death. As of 20 February 2020 as well as 12 based on 55924 laboratory confirmed cases, typical signs as well as change is the physical or mental condition include: fever (87.9%), dry cough (67.7%), fatigue (38.1%), sputum production (33.4%), shortness of breath (18.6%), sore throat (13.9%), headache (13.6%), myalgia or arthralgia (14.8%), chills (11.4%), nausea or vomiting (5.0%), nasal congestion (4.8%), diarrhea (3.7%), as well as hemoptysis (0.9%), and conjunctive congestion (0.8%). People with COVID-19 and related virus generally develop signs as well as change is the physical or mental condition, including mild cold air change is the physical or mental condition as well as fever; on an average of 5-6 days after infection. Most people infected with COVID-19 and related virus virus have mild disease and recover. Approximately 80% of laboratory confirmed patients have had mild to moderate disease, which includes non-pneumonia and pneumonia cases, 13.8% have harsh in attitude or treatment disease.

4.1 ASYMPTOMATIC INFECTION

Asymptomatic Infection has been reported, but the majority of the relatively rare cases who are asymptomatic on the date of identification/report went on to develop disease. The proportion of truly asymptomatic communication of disease is unclear but appears to be relatively rare as well as does not appear to be a major driver of transmission. Individuals at highest risk for harsh in attitude or treatment disease as well as death include people aged over 60 years as well as those with underlying conditions such as hypertension, diabetes, cardiovascular disease, chronic cold air disease as well as cancer. Disease in children appears to be relatively rare as well as mild with approximately 2.4% of the total reported cases reported amongst individuals aged under 19 years. A very small proportion of those aged under 19 years have developed harsh in attitude or treatment (2.5%) or critical disease (0.2%). As of 20 February, 2114 of the 55,924 laboratory confirmed cases have died (crude fatality ratio [CFR2] 3.8%) (note: at least some of whom were identified using a case definition that included pulmonary disease). The overall CFR varies by location and intensity of transmission (i.e. 5.8% in Wuhan vs. 0.7% in other areas in China).



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Impact Factor 7.105 i; Vol. 9, Issue 3, March 2022

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V. COMPARATIVE ANALYSIS CORONOVIRUS-19 TO OTHER VIRUS CHANGE IS THE PHYSICAL OR MENTAL CONDITION

Coronavirus appears to spread more slowly than the flu. This is probably the biggest difference between the two disease. The flu has a shorter incubation period and a shorter serial interval. Corona virus's serial interval is around five to six days, while flu's gap between cases is more like three days, the WHO says.

COVID-19 compared to other common conditions

| SYMPTOM | COVID-19 | COMMON COLD | FLU | ALLERGIES |
|--|-----------|----------------|------------|-----------|
| Fever | Common | Rare | Common | Sometimes |
| Dry cough | Common | Mild | Common | Sometimes |
| Shortness of breath | Common | No | No | Common |
| Headaches | Sometimes | Rare | Common | Sometimes |
| Aches and pains | Sometimes | Common | Common | No |
| Sore throat | Sometimes | Common | Common | No |
| Fatigue | Sometimes | Sometimes | Common | Sometimes |
| Diarrhea | Rare | No | Sometimes* | No |
| Runny nose | Rare | Common | Sometimes | Common |
| Sneezing | No | Common | No | Common |
| *Sometimes for children Sources: CDC, WHO, American College of Allergy, Asthma and Immunology BUSINESS INSIDER | | | | |

Fig.1. Compared to other Common Virus Condition

Viral shedding is what happens when a virus has infected a host, has reproduced, and is now being released into the environment. Some people start shedding the coronavirus within two days of contracting it, and before they show change is the physical or mental condition, although this probably isn't the main way it is spreading,

5.1 RECOMMENDATIONS AND ADVICE FOR THE PUBLIC

During previous outbreaks due to other coronavirus (Middle-East Cold air Syndrome (MERS) and Harsh in attitude or treatment Acute Cold air Syndrome (SARS), human-to-human transmission occurred through droplets, contact and fomites, suggesting that the transmission mode of the COVID-19 and related virus can be similar. The basic principles to reduce the general risk of transmission of acute cold air communication of disease include the following:

• Avoiding close with people suffering from acute cold air communication of disease.

• Frequent hand-washing, especially after direct contact with ill people or their environment.

• People with change the physical or mental condition of acute cold air infection should practice cough etiquette maintain distance and cover coughs and sneezes with disposable tissues or clothing, and wash hands.

• Within health care facilities, enhance standard infection prevention and control practices in hospitals, especially in emergency departments.

In case of change is the physical or mental condition suggestive of cold air illness either during or after travel, travelers are encouraged to seek medical attention and share their travel history with their health care provider. Sleep like a regular human being and eat more garlic with milk. Drink lemon, honey, ginger and turmeric with warm water. Make workouts a part of your weekly regimen. Indulge in tea time, Have yogurt for breakfast, Soak up some sun. Simply going for a daily stroll or sneaking in yoga a few times week will keep you physically fit as well as help your immune system stay in top shape.

5.2 RECEIPE TO PREVENT OUR COVID-19 and RELATED VIRUS

For marginalized communities in particular, this is the process often requires mothers to act as cultural gatekeepers. Passed down as well as learned from their mothers, these riturals, as well as the pride in them, become intergenerational. Without this prevention of practices these home remedies as well as our confidence in their healing, may otherwise be lost. In our Indian cultural are highly preferred ayurvedic as well as home remedies as a medicine. Most of the Indian women act as a first doctor of their children to recover the different as well as critical situation from their family members. Some of the easy home remedies are list out here to prevent as well as recover the COVID-19 and related virus problem.

Citric Fruits

The class of fruits includes lemons, limes, oranges as well as grapefruit as well as many more hybrids as well as varieties. They have a lot of health benefits from boosting immunity.



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- Sweet oranges: Valencia, navel, blood orange, cara cara
- Mandarins: Satsuma, clementine, tangor, tangelo
- Limes: Persian, key lime, kaffir
- **Grapefruit:** White, ruby red, oroblanco
- Lemons: Eureka, Meyer
- Other kinds: Citron, sudachi, yuzu, pomelos



Fig.2 Class of Citric Fruits

In the changing season, cough and sore throat are the most common problems faced by our normal people. To recover from it and take precaution, jeshthamadh or mulethi also be able to recall as licorice is utilized widely by vaidyam. Ayurvedic solutions with use of licorice or mulethi are listed here,

1. Chewing a twig of licorice is an effective remedy for sore throat and hoarseness of voice.

2. Kadha or licorice tea prepared by boiling a few sticks of licorice in water can be utilized to cure cough and a few cold air disorders.

3. If you mix a spoon of licorice powder with a spoon of honey and have it, it is very beneficial to cure cough. It is most popularly utilized ayurvedic solution for kids.

4. Take piece of mulethi root, tulsi (5 leaves), pudina (2-3 leaves) and half a glass of water, boil it at low flame for 10 minutes.





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Fig.3 Tulsi and Karpuravalli Leaves to cure dry caugh

Karpooravalli Kashayam is an excellent home remedy for cold as well as cough. Kashayam is the term utilized in Tamilnadu by our ancestors to Wheat cold, cough, fever, head ache etc. Kashayam is normally prepared with herbs at home. They are prepared by boiling water with herbs as well as boil it until the water reduces to certain extent. In this kashayam each of these leaves utilized have their own medicinal values as well as benefits. Karpooravalli leaves are utilized to treat common cold, cough, sore throat, nasal congestion, indigestion rheumatism so on. Vetrilai is an excellent ailment for sore throat, improves digestions, anti inflammatory, helps in treating cold air problems, relives cough etc. next is tulasi helps in reliving fever, improves cold air disorders, great source of vitamin K, relieves head ache, is utilized in treating bronchitis, asthma etc. Tulasi is also called as "The Queen of Herbs" because it has numerous medicinal values as well as benefits. These three plants in your home or our home balcony or backyard, this actually means you have a doctor at your home.



Fig.4 Remedies for Ayurvedic -Vetrielai, Ginger



Fig.5 Remedies for Ayurvedic and Home Ingredients like Pepper, Pattai, Ginger



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Helps in treating diabetes, It is believed that the components present in betel leaves can reduce the level of sugar in the blood, thus treating diabetes. Aids in weight-loss Betel leaves can be utilized effectively by people who are trying to shed weight. It reduces body fat and increases the metabolic rate of the body. Prevents carcinogens that lead to cancer, Chewing betel leaves is be able to recall to prevent oral cancer as it helps to maintain the levels of ascorbic acid in the saliva. Heals wounds, Betel leaves, when applied over a wound as well as bandaged, can heal a wound and accelerate the healing process. They are also widely utilized in Ayurveda for treating boils. Cures headache, if you are suffering from a harsh in attitude or treatment headache, betel leaves can come to your rescue. The leaves have cooling properties which provide instant relief from the ache when applied externally. Consuming this betel leaf kashayam gives relief from cold as well as cough.

VI. CONCLUSION

This paper explains about COVID-19 and related virus is principally considered a cold air disease, but some infected people experience non-cold air change is the physical or mental condition, such as stroke. They found that the virus was most abundant in the lungs, but was also present at lower levels in the kidneys, liver, heart, brain as well as blood. The antibody is an immune signaling molecule that attaches to a viral protein called spike, which both viruses use to enter human cells. The team analyzed the postal codes of infected women to estimate disease prevalence in city neighborhoods. The researchers then compared this information with location data from Facebook that revealed the numeral of daily trips that people take into and out of each neighborhood, as well as found a link between a neighborhood's infection rate as well as the numeral of trips taken by its residents. This paper explains the assesses the recommendations for hand hygine and to establish home related items as well as solution using home remedy Data Analysis.

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International Advanced Research Journal in Science, Engineering and Technology

Impact Factor 7.105 $\ensuremath{\,\asymp}$ Vol. 9, Issue 3, March 2022

DOI: 10.17148/IARJSET.2022.9307

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