

**Karunjeeragam based hand sanitizer- COVID-19 awareness**

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**ABSTRACT**

COVID-19 was affected patient shows various symptoms like fever, cough, sore throat, breathlessness and also severe tired. The COVID-19 disease was general treatment like symptomatic treatment, by using antiviral drugs, oxygen therapy and by the immune system. A very important issue was prevented viral infection is hand shake and social distance, hand wash used Karunjeeragam based hand sanitizer. The socio-economic effects of COVID-19 on individual aspects of the world economy. The G.H. Bruntland (1987), former Prime Minister of Norway and the Director of World Health Organization (WHO), defined Sustainable Development.

**INTRODUCTION**

The 2019 novel coronavirus (2019-nCoV) or the severe acute respiratory syndrome corona virus SARS-CoV-2 as it is now called, is rapidly spreading from its origin in Wuhan City of Hubei Province of China to the rest of the world [8]. The greatest risk in COVID-19 is transmission to healthcare workers. In the SARS outbreak of 2002, 21% of those affected were healthcare workers [1]. With the continued spread of COVID-19 across the world, rapid diagnostic tools, readily available repurposable drugs, and prompt containment measures to control the SARS-CoV-2 infection are of paramount importance(2) During the pandemic, this process has been modified for COVID-19 (3) . WHO recommends nucleic acid amplification test

(NAAT) based reverse transcription polymerase chain reaction (RT-PCR) as the primary testing method because of its accuracy and hence it remains the gold standard for COVID-19 detection [4] However, most population models assume a homogeneous infected population without considering that the imported and secondary cases contracted by the imported cases can pose different risks to community spread.(5) Maintaining hand hygiene has been established as crucial for reducing the colonization and incidence of infectious diseases in all populations. Compliance with hand hygiene recommendations is believed to play a significant role in decreasing the risk of gastroenteric and respiratory infections(6,7). The number of cases started increasing exponentially, some of which did not have exposure to the live animal market, suggestive of the fact that human-to-human transmission was occurring [9].

#### **PREPARATION OF KARUNJEERAGAM BASED HAND SANITIZER:**

Karunjeeragam Based Hand Sanitizer was prepared in 1:1 ratio of Karunjeeragam and Fenugreek mixed with 50 ml of water for 7 hours. After then extract was mixed with 99% rubbing alcohol (isopropyl alcohol), pure aloe vera gel, 8 to 10 drops of lemon. All the ingredients are mixed together well. The mixture should be completely smooth. The extract is separated out using the hand sanitizer. If the solution is thicker either add aloe vera gel or thin with alcohol.

#### **METHODS TO CREATE COVID-19 AWARENESS**

COVID-19 awareness must be created through formal and informal education to all sections of the society. The various methods that are useful for raising COVID-19 awareness are discussed here.

Every citizen washes their hands with soap and sanitizer frequently

Every citizen uses a mask

Every citizen keeps social distance

COVID-19 awareness in schools and colleges

Through mass-media: Media like radio, TV and cable network can educate the people on COVID-19 issues through cartoons, documentaries, plantation campaign and street plays.

Newspapers: All the newspaper as well as magazines must publish the COVID-19 related problems.

Audio-visual media: To disseminate the concept of COVID-19 special audio-visual and slide shows should be arranged in all public places.

Voluntary organizations: The services of the voluntary bodies like Rotary club, NCC and NSS should be effectively utilized for spreading the COVID-19 awareness.

Traditional techniques: The traditional techniques like folk plays and dramas may be utilized to spread COVID-19 messages to the public. These techniques attract the rural people very much.

Arranging Competitions: Story writing, essay writing and painting competitions on COVID-19 issues should be organized for student, as well as for the public. Attractive prizes should be awarded for the best effort.

#### PARAMETERS:

1. Exponential growth: Now COVID-19 growth occurs exponentially like  $10, 10^2, 10^3, 10^4$  etc., which shows the dramatic increase in global population .
2. Doubling time: It is the time required to for a population to double its size at a constant few months.
3. Mortality rate: It is the percentage of mortality died out of those COVID-19 affected in fast few months.
4. Demographic transition: population growth is generally related to economic development. The death rates and affected COVID-19 fall due to improved living conditions. This results in low population growth.

#### ISSUES

1. Increasing demands for food .
2. Inadequate housing and health facilities.
3. Demand of agricultural and horticulture crop yields.
4. Unemployment.
5. Main health effect of Respiratory system



The respiratory system is made up of the organs included in the exchange of oxygen and carbon dioxide. These are the parts: Nose, Mouth, Throat (pharynx), Voice box (larynx), Windpipe , (trachea), Large airways (bronchi), Lungs, The upper respiratory tract is made up of the: Nose, Nasal cavity, Sinuses, Larynx, Trachea, The lower respiratory tract is made up of the: Lungs, Bronchi and bronchioles, Air sacs (alveoli), Lungs. The lungs take in oxygen. The cells of your body's cells need oxygen to live and carry out their normal functions. The lungs also get rid of carbon dioxide, a waste product of the cells.

### CONCLUSION:

Generally alcohols are considered safer than detergents.[23].. However, it is expected, the use of **karunjeeragam based hand sanitizer (KBHS)** caused by COVID-19.. Compliance with **KBHS** hygiene recommendations is believed to play a significant role in decreasing the risk of gastroenteric and respiratory infections.

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