

# Review On Polyherbal Hand Sanitizer

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**Abstract:** Hand hygiene is of paramount importance as hands can easily become contaminated through direct contact of with airborne microbial droplets from coughing and sneezing. Especially in situations like the outbreak of a pandemic, it is crucial to break the chain of transmission of the virus through the practice of good hand sanitization. Hand hygiene in hospitals and public facilities. The success of hand Sanitizer depends solely on the use of effective hand sanitizers formulated in various types and formulations such as: B. antimicrobial soaps, water-based or alcohol-based hand sanitizers. is commonly used in hospitals.

The emergence of new pathogens, whether bacterial or viral, has always been a major public health concern worldwide. One of these Dangerous Pathogens is “severe Acute Respiratory Syndrome Coronavirus 2” or SARS-CoV-2 which is most commonly known as the causative agent of the Coronavirus Disease of 2019 or COVID-19 which has been spreading since the World to global pandemic was declared. Organization of health in early 2020

**Key words:** Neem extract Hand Hygiene ,Antimicrobial agent, Pathogen, skin infection

## Introduction:

The skin as the part of our body that is most exposed to the sun, environmental pollutants and protection from skin pathogens. hospital-acquired infections became a critical problem in hospital care, resulting in prolonged hospital stays and significant morbidity and mortality. The hands of healthcare workers (HCWs) are the main transmission routes for multidrug-resistant pathogens and infections to the patient, consequently there is a need for antiseptics for hand washing/cleaning. Many of the chemical antiseptics are now commercially available as alcohol-based hand sanitizers. These soaps or solutions help reduce the transmission of healthcare-related infectious diseases more effectively, but have brief comedogenic or side effects. Their frequent use can lead to skin irritation and resistance of pathogens. Organisms such as Staphylococcus aureus pseudomonas spp., Klebsiella pneumonias are among the causative agents of skin infections. Azadirachta indica (Neem) G leaves have antibacterial, antifungal, antidiabetic and antiviral properties and are used to treat leprosy. They also contain phytochemicals such as tannins and are said to contain azadirachtin

## Methodology

Extract combination was added to water and all ingredients were added and mixed well except triethanolamine, alcohol and fragrance. Lemongrass oil and Cinnamon oil were added to the triethanolamine containing the fragrance, mixed well and the two contents were t

**Hand Sanitizer USES :-** These are antiseptic products used to prevent the transmission of skin infections.

- Alcohol-based hand sanitizer kills 99% of bacteria on hands within seconds of applying
- Reduces skin dryness and leav

Formulation table

Sr no.	Ingredients	Quantity	Uses
1	Extract (Neem)	0.75g	Antibacterial, antiviral
2	Citronella oil	1.0 ml	Antifungal properties
3	Cinnamon oil	1.0ml	Against infection
4	Carbopol	0.1 g	As thickening agent
5	Triethanolamine	0.1 g	Emulsifier
6	Glycerine	0.5 ml	Humectant
7	Polysorbate 20	0.1 ml	Emulsifier
8	Perfume	Q.S	Impacts flavour
	Methyl paraben	0.1 mg	Preservative
10	Alcohol	4.0 ml	Antiseptic
11	Water	2.0 ml	Solvent

**Evaluation parameter:-**

Sr.no	Parameter	Observation
1	Colour	Light green
2	Odour	Characteristics
3	PH	6.5

## CONCLUSION

The above formulation works well as Hand sanitizer. Further research is needed to test the antibacterial activity of And compare it to other Hand sanitizers available. more moisture. mixed and made up to the mark with alcohol.

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