



IJPPR

INTERNATIONAL JOURNAL OF PHARMACY & PHARMACEUTICAL RESEARCH
An official Publication of Human Journals

ISSN 2349-7203



Human Journals

Research Article

July 2020 Vol.:18, Issue:4

© All rights are reserved by Anuja Zilpe et al.

Preparation, Effectiveness and Antimicrobial Activity of Polyherbal Hand Sanitizer



Minal Deolekar¹, Anuja Zilpe^{*2}, Sonali Kumarwar³

1.Assistant Professor, Department of Microbiology,
Kamla Nehru Mahavidyalaya, Nagpur, Maharashtra
India

*2.Department of Microbiology, Kamla Nehru
Mahavidyalaya, Nagpur Maharashtra India

3.Lecturer, Department of Microbiology, Kamla Nehru
Mahavidyalaya, Nagpur, Maharashtra India

Submission: 20 June 2020

Accepted: 27 June 2020

Published: 30 July 2020



HUMAN JOURNALS

www.ijppr.humanjournals.com

Keywords: Herbal hand sanitizer gel, Antimicrobial activity, Hand hygiene, alcohol based hand rub (ABHR), *Aloe barbadensis miller*, *Zingiber officinale*, *Citrus limon*

ABSTRACT

Introduction: Hand Hygiene, particularly hand sanitizing, is essential in reducing infectious disease transmission. The recent outbreak of corona in world increased public awareness of practice of hand sanitizing in order to introduce new products of hand sanitizer to the world. **Objective:** Thus, the present study was to preparation of polyherbal hand sanitizer which contains antimicrobial efficiency. **Material:** The present study was carried out by mixing the extract of Aloe vera, Ginger and Lemon with isopropanol, carbapol and glycerin instead of chemical ingredients. **Method:** The anti-microbial activity of the polyherbal hand wash gel was tested against *Escherichia coli*, *Staphylococcus aureus* and *Klebsiella* by Kirby-Bauer well diffusion method and the results obtained were compared with commercial hand sanitizer. The efficiency of polyherbal hand wash gel was checked on volunteers. The physical parameters of hand sanitizer were studied as well. **Result:** According to the zone of inhibition and by bacterial load, the prepared hand sanitizer was more effective than other marketed hand sanitizer. **Conclusion:** An attempt has been made to prepare herbal hand sanitizer by using plant extract with no side effects on human tissue. The prepared hand sanitizer was cheaper than other marketed hand sanitizer and gave more yield in less quantity and time. It was safer to use due to its natural ingredients.