

An *in-vitro* study of the antimicrobial efficacy of personal productive herbal makes toothpaste on oral pathogens

Batool Sadeghi-Nejad¹, Eskandar Moghimipour², Sedigheh Yusef Naanaie³, Shahrzad Nezarat¹ and Ali Kordzangeneh²

¹Abadan School of Medical Sciences, Iran

²Ahvaz Jundishapur University, Iran

³The Agricultural and Natural of Resources, Iran

Background & Aim: Dental plaque is an important risk factor for the development of dental and periodontal disease. In most cases, tooth brushing only removes a limited amount of dental plaque and other chemical agents are required to reduce the microbial load. The purpose of this survey was to determine *in vitro* antimicrobial effects of herbal-made toothpaste containing the extracts of *Artemisia dracuncululus*, *Satureja khuzestanica* and *Myrtus communis* against oral pathogens related to caries and oral fungal infections.

Materials & Methods: Antimicrobial effectiveness Herbal-made toothpaste was evaluated against five microorganisms: *Streptococcus mutans*, *Lactobacillus caseie*, *Streptococcus sanguis*, *Streptococcus salivarius* and *Cadida albicans* by agar well diffusion method. Agar well diffusion method. The herbal-makes toothpaste was tested at four different concentrations: 1:4 (25%), 1:1 (50%), 3:4 (75%) and full strength (100%) with

sterile distilled water as the diluent.


Results: After 24 hours of incubation, the maximum mean diameter of inhibition zone against tested oral pathogens by *Lactobacillus caseie* (17 to 30 mm), *C. albicans* (15-27 mm) and the minimum mean diameter of inhibition zone against *Streptococcus mutans* (17-20 mm).

Conclusions: The results indicate tested herbal toothpaste was a significant product to inhibit the growth of plaque bacteria and yeast..

Speaker Biography

Batool Sadeghi-Nejad has been currently serving as the Assistant Professor, Department of Infectious Diseases, Abadan School of Medical Sciences, Abadan, Iran. She has extensive research experience in infectious diseases section and had thus published 21 research articles in renowned journals.

e: batsad4@yahoo.com

 Notes: