

ABSTRACT

INTRODUCTION: WHO's report on the Global Problem of Oral Diseases says dental caries, periodontitis and oral and pharyngeal cancers are major global health problem. Dental caries is considered as the most wide spread infectious disease in the world. The World Health Organization has estimated that about 80 % of the population in developing countries are unable to afford drugs and rely on traditional medicines especially those that are medicinal herbal plant. Herbal mouthwash may act as a good and cost-effective oral hygiene product, alternative as chlorhexidine mouthwash.

AIM AND OBJECTIVES: To assess the antibacterial efficacy of *Spilanthes acmella* on salivary Mutans Streptococci.

MATERIALS AND METHODS: It is a Randomized, concurrent parallel arm, non-invasive, interventional, controlled trial designed to assess the "Anti-bacterial efficacy of *Spilanthes acmella* on salivary Mutans Streptococci.

RESULTS: There is a statistically significant difference seen within (before and after) using *Spilanthes acmella* plant extract + methanol mouthwash and *Spilanthes acmella* plant extract + distilled water mouthwash. There is no statistically significant difference seen between *Spilanthes acmella* plant extract + methanol mouthwash and chlorhexidine. There is statistically significant difference seen between *Spilanthes acmella* plant extract + distilled water mouthwash and chlorhexidine.

CONCLUSION: 20% Methanolic extract of *Spilanthes acmella* shows as efficacious as chlorhexidine as an antimicrobial agent on salivary Mutans Streptococci.

DENTAL PUBLIC HEALTH SIGNIFICANCE: Although the antibacterial efficacy of 20% *Spilanthes acmella* plant extract + methanol mouthwash is as effective as the gold standard Chlorhexidine, it is devoid of adverse effects like staining and taste alteration. If people can use herbal mouthwash and promote such cost effective measures of maintaining the oral health which are also devoid of any untoward side effects.

KEY WORDS:

Spilanthes acmella, Mutans Streptococci, Chlorhexidine, Dental Caries