

Oral Hygiene Improvement using Combined Mouthwash with Plant extracts

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Abstract - Dental caries considered as one of the most common infectious diseases affecting mankind today, the dissolution of tooth structure by acid produced as a result of the fermentation of dietary carbohydrates by oral bacteria. The antimicrobial susceptibility of medicinal plants including black pepper, black cumin, cinnamon, cardamom on toothpaste and mouthwash against oral isolates for healthcare improvement was studied. Different oral isolates from 50 selected individuals aged 3 to 60 years were obtained from both genders, and a total of 59 bacterial and yeast isolates were collected, purified, and tested against four different commercial medicinal plants extracts for antimicrobial susceptibility profile. A total of 10 mouthwashes was purchased, and the combined action of the medicinal plants with mouthwash was studied against oral isolates. We found a higher bacterial population was in the age group of 3–40 years than other two groups, with approximately 44%. In addition, the combined action of acetone plant extracts (alone) against oral isolates showed increasing effect profile up to 61.02% when combination A (Ci/N) was added. Also, While, the combined action of medicinal plants with mouthwash was improved 100% with combination C. We conclude that the combination C (P/N/Ca/Ci) with mouthwash showed high susceptibility against oral isolates.

Keywords: oral isolates, medicinal plants, mouthwash