

INTISARI

Obat kumur saat ini telah banyak digunakan untuk berbagai tujuan, salah satunya sebagai metode praprosedural perawatan gigi dan mulut di klinik. Terdapat banyak jenis obat kumur di pasaran, salah satunya yang paling populer adalah obat kumur minyak esensial. Penelitian ini bertujuan untuk mengetahui seberapa efektif obat kumur minyak esensial dalam menurunkan jumlah bakteri saliva ditinjau dari durasi aktivasi.

Subjek dalam penelitian ini adalah mahasiswa sebanyak 4 orang kondisi skor OHI-s baik. Subjek berkumur dengan 10 mL obat kumur minyak esensial merk nonalkohol selama 30 detik. Sampel saliva subjek diambil sebelum berkumur (T0), segera setelah berkumur (T1), 30 menit setelah berkumur (T30), dan 60 menit setelah berkumur (T60). Dilakukan kultur bakteri saliva pada media *BHI agar* dan dilanjutkan dengan penghitungan jumlah koloni bakteri yang tumbuh. Data yang didapatkan dianalisis dengan uji normalitas, *Friedman Test* dan uji *post-hoc Dunn-Bonferroni Test* karena tidak memenuhi syarat untuk uji ANAVA Satu Arah.

Hasil *Friedman Test* menunjukkan perbedaan signifikan antara rerata jumlah koloni bakteri sebelum berkumur (T0) dan setelah berkumur (T1, T30, dan T60). Hasil *Dunn-Bonferroni Test* menunjukkan adanya perbedaan signifikan ($p < 0,05$) hanya antara rerata jumlah koloni bakteri T0 dan T1. Kesimpulan penelitian ini adalah obat kumur minyak esensial efektif menurunkan jumlah koloni bakteri saliva hingga menit ke-1.

Kata kunci: obat kumur minyak esensial, durasi aktivasi obat kumur, bakteri saliva

ABSTRACT

Mouthwash has been used for many purposes, one of those being a preprocedural method before treatment in dental clinics. There is a multitude of mouthwash variants in the market, and the most popular one is arguably the essential oil (EO) mouthwash. This study attempted to evaluate how effective EO mouthwash is on the salivary bacterial count for multiple periods of activation.

The subjects in this study were four college students with good OHI-s score. They were asked to rinse with 10 mL of EO mouthwash for 30 seconds. Saliva sample from each subject were collected prior to (T0), right after (T1), 30 (T30), and 60 minutes after rinsing (T60). Next, each specimen was serially diluted and cultivated on BHI agar. Total plate count was then conducted on each plate. The data gathered afterwards was analysed with non-parametric Friedman Test and Dunn-Bonferroni for post-hoc test as it didn't meet the requirement for One-Way ANOVA.

The result of the Friedman Test exhibited a significant decrease ($p < 0.05$) of bacterial count from before rinsing (T0) to after rinsing (T1, T30, T60). Post-hoc test showed a significant change of bacterial count only between T0-T1 ($p < 0.05$). The conclusion of this study is that EO mouthwash was effective against salivary bacteria until the first minute of activation.

Keywords: essential oil mouthwash, mouthwash duration of activation, salivary bacteria