

## ABSTRAK

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Program Studi : Kedokteran Gigi  
Judul : Efektivitas Berkumur Larutan Madu Hutan 10%  
Terhadap Akumulasi Plak Pada Pengguna Alat Ortodonti Cekat  
Pembimbing : drg. Nushita Dinar, M.Biotech, Sp.Ort  
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**Latar belakang:** Alat ortodonti cekat untuk memperbaiki maloklusi dan susunan gigi serta mempertahankan jaringan pendukung gigi memiliki kompleksitas desain dan bentuk alat yang dapat mempermudah pembentukan plak. Upaya preventif untuk menjaga status *oral hygiene* selama perawatan alat ortodonti cekat dapat dilakukan dengan menggunakan obat kumur alternatif berbahan alami salah satunya madu hutan. **Tujuan:** mengetahui efektivitas berkumur larutan madu hutan 10% terhadap penurunan akumulasi plak pada pengguna alat ortodonti cekat. **Metode:** Jenis penelitian *quasi experiment* dengan rancangan *pre-post test with control group design*. Sampel sebanyak 40 orang dibagi kedalam kelompok kontrol berkumur akuades dan kelompok perlakuan berkumur larutan madu hutan 10% selama 4, 6, dan 8 hari. Penilaian akumulasi plak menggunakan *Orthodontic Plaque Index (OPI)*. **Hasil:** Hasil uji normalitas *Sapiro-Wilk* signifikan ( $p>0,05$ ) atau terdistribusi normal. Hasil *Levene's Test* bersifat homogen atau signifikan ( $p>0,05$ ). Uji *One Way Anova* menunjukkan hasil signifikan ( $p<0,05$ ) bahwa terdapat perbedaan bermakna antara OPI sebelum dan sesudah pada kelompok kontrol dan kelompok perlakuan. Hasil *Post Hoc LSD* terdapat nilai tidak signifikan ( $p>0,05$ ) pada kelompok K (akuades) dan kelompok P1 (4 hari), sedangkan pada kelompok P2 (6 hari) dan P3 (8 hari) berkumur larutan madu hutan 10% menunjukkan nilai signifikan ( $p<0,05$ ). **Kesimpulan:** Berkumur larutan madu hutan 10% selama 6 hari dan 8 hari efektif terhadap penurunan akumulasi plak pada pengguna alat ortodonti cekat.

**Kata Kunci:** Berkumur larutan madu hutan 10%, alat ortodonti cekat, akumulasi plak, *Orthodontic Plaque Index (OPI)*.

## ABSTRACT

Name : Salsabila Aliyah Husna  
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Title : The Effectiveness of Gargling With 10% Forest Honey Solution on Plaque Accumulation in Fixed Orthodontic Appliances Patient  
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**Background:** Fixed orthodontic appliances to correct malocclusion and tooth arrangement and maintain dental supporting tissues have complex designs and appliance shapes that can facilitate plaque formation. Preventive efforts to maintain oral hygiene status during treatment of fixed orthodontic devices can be done by using alternative mouthwashes made from natural ingredients, one of which is forest honey. **Objective:** To determine the effectiveness of gargling with 10% forest honey solution on reducing plaque accumulation in fixed orthodontic appliance patient. **Methods:** Type of research quasi experiment with pre-post test with control group design. A sample of 40 people was divided into a control group gargling distilled water and a treatment group gargling with 10% forest honey solution for 4, 6, and 8 days. Assessment of plaque accumulation using the Orthodontic Plaque Index (OPI). **Results:** Sapiro-Wilk normality test results were significant ( $p>0.05$ ) or normally distributed. Levene's Test results are homogeneous or significant ( $p>0.05$ ). One Way Anova test showed significant results ( $p<0.05$ ) that there was a significant difference between OPI before and after in the control group and treatment group. Post Hoc LSD results showed insignificant values ( $p>0.05$ ) in group K (aquadest) and group P1 (4 days), while in group P2 (6 days) and P3 (8 days) gargling 10% forest honey solution showed significant values ( $p<0.05$ ). **Conclusion:** Gargling with 10% forest honey solution for 6 days and 8 days is effective in reducing plaque accumulation in fixed orthodontic appliance patient.

**Keywords:** Gargling with 10% forest honey solution, fixed orthodontics appliances, plaque accumulation, Orthodontic Plaque Index (OPI).