

## **PERBEDAAN EFEKTIVITAS BERKUMUR OBAT KUMUR TANPA ALKOHOL DENGAN AIR MINERAL TERHADAP pH SALIVA**

Dessy Tiarasani, Siti Sulastri, Almujadi  
Jurusan Keperawatan Gigi Poltekkes Kemenkes Yogyakarta  
Jl. Kyai Mojo No. 56, Pingit, Yogyakarta 555243  
Email : dessysani52@gmail.com

### **ABSTRAK**

**Latar Belakang:** Pertumbuhan bakteri pada rongga mulut lebih mudah apabila pH saliva rendah (4,5–5,5) yang mengakibatkan terjadinya karies gigi. Upaya untuk menjaga kesehatan gigi dan mulut dilakukan pembersihan rutin mandiri dengan sikat gigi dan berkumur secara teratur dan benar. Obat kumur tanpa alkohol dapat menjadi pilihan. Berdasarkan studi pendahuluan yang telah dilaksanakan di Yogyakarta pada 10 orang didapatkan hasil bahwa 60% orang mengalami kenaikan pH saliva setelah berkumur menggunakan obat kumur tanpa alkohol.

**Tujuan penelitian:** Diketahui perbedaan efektivitas berkumur obat kumur tanpa alkohol dengan air mineral terhadap pH saliva.

**Metode Penelitian:** Penelitian ini menggunakan jenis penelitian eksperimental semu. Variabel bebas yaitu berkumur obat kumur tanpa alkohol dan berkumur air mineral. Variabel terikat adalah pH saliva. Jumlah sampel sebanyak 15 orang dengan teknik sampling jenuh. Pengambilan data dengan cara responden meludah pada pot plastik kecil kemudian di ukur menggunakan pH *test strips*. Analisa data menggunakan uji *Wilcoxon* dan uji *Mann Whitney*.

**Hasil Penelitian:** Rata-rata pH saliva sebelum dan sesudah berkumur obat kumur tanpa alkohol adalah 6,80 dan 7,40. Rata-rata pH saliva sebelum dan sesudah berkumur air mineral sebesar 5,60 dan 5,80. Hasil uji *Wilcoxon* menunjukkan kenaikan pH saliva setelah berkumur obat kumur tanpa alkohol ( $p<0,05$ ) dan tidak terjadi perubahan berarti berkumur menggunakan air mineral ( $p>0,05$ ). Hasil uji *Mann Whitney* menunjukkan bahwa berkumur obat kumur tanpa alkohol lebih efektif dalam meningkatkan pH saliva daripada berkumur air mineral ( $p<0,05$ ).

**Kesimpulan:** Ada perbedaan efektivitas berkumur obat kumur tanpa alkohol dengan air mineral terhadap pH saliva.

**Kata Kunci:** Berkumur obat kumur tanpa alkohol, berkumur air mineral, pH saliva

# **THE DIFFERENCE BETWEEN THE EFFECTIVENESS OF NON-ALCOHOL MOUTHWASH WITH MINERAL WATER GARGLING ON SALIVARY pH**

Dessy Tiarasani, Siti Sulastri, Almujadi  
Majoring in Dental Nurse at Polytechnic of Health Ministry Yogyakarta  
Jl. Kyai Mojo No. 56, Pingit, Yogyakarta 555243  
Email: dessysani52@gmail.com

## **ABSTRACT**

**Background:** Bacterial growth in the oral cavity more easier if salivary pH is low (4.5–5.5) which results in dental caries. Efforts to maintain healthy teeth and mouth carried out regular cleaning independently with a toothbrush and gargle regularly and correctly. Mouthwash non-alcohol can be an option. Based on preliminary studies that have been carried out in Yogyakarta on 10 people, it was found that 60% of people experienced an increase in salivary pH after gargling using mouthwash non-alcohol.

**Research Purpose:** Knowing the difference between the effectiveness of non-alcoholic mouthwash and mineral water on salivary pH.

**Research Method:** This study uses quasi-experimental type of research. The independent variable is mouth rinse non-alcohol and rinse mineral water. The dependent variable is salivary pH. The sample are 15 people with total sampling technique. Retrieval of data by means of respondents spitting in a small palette pot then measured using pH test strips. Data analysis using Wilcoxon test and Mann Whitney test.

**Research Result:** The average pH of saliva before and after gargling mouthwash non-alcohol is 6.80 and 7.40. The average pH of saliva before and after gargling mineral water is 5.60 and 5.80. Wilcoxon test results showed an increase in salivary pH after rinsing mouthwash non-alcohol ( $p < 0.05$ ) and there was no significant change in rinsing using mineral water ( $p > 0.05$ ). Mann Whitney test results showed that gargling mouthwash non-alcohol was more effective in increasing salivary pH than gargling mineral water ( $p < 0.05$ ).

**Conclusion:** There is a difference in the effectiveness of non-alcoholic mouthwash gargling with mineral water on salivary pH.

**Keywords:** Gargling mouthwash non-alcohol, gargling mineral water, salivary pH