

INTISARI

Karies gigi merupakan salah satu masalah gigi yang harus dicegah. Bakteri *Streptococcus mutans* dalam saliva berpengaruh terhadap terjadinya karies. Salah satu tindakan preventif untuk menurunkan jumlah bakteri yaitu pemberian topikal aplikasi fluor. Tujuan penelitian ini untuk mengetahui adakah perbedaan aplikasi *Sodium Fluoride* (NaF) dengan *Acidulated Phosphate Fluoride* (APF) terhadap jumlah *Streptococcus mutans saliva* anak usia 6-12 tahun.

Model penelitian yang digunakan eksperimental murni dengan rancangan *pre post test one group design*. Penelitian dilakukan terhadap murid Sekolah Dasar Negeri Genuksari 02 usia 6-12 tahun. Sampel yang didapatkan sebesar 24 orang. Data dianalisis menggunakan uji *Mann Whitney*.

Hasil penelitian menunjukkan bahwa jumlah rata rata bakteri *Streptococcus mutans* sesudah pada kelompok *Acidulated Phosphate Fluoride* sebesar 818,83 sedangkan pada kelompok *Sodium Fluoride* sebesar 1090,08. Penelitian juga mendapatkan hasil, rata rata penurunan jumlah bakteri *Streptococcus mutans* pada kelompok *Sodium Fluoride* sebesar 305,58 (21,89%) sedangkan pada kelompok *Acidulated Phosphate Fluoride* sebesar 721,17 (46,82%). Berdasar uji *Mann Whitney* mendapatkan nilai signifikansi $\rho < 0,05$ ($\rho=0,000$) artinya terdapat perbedaan efek topikal aplikasi bahan *Sodium Fluoride* (NaF) dengan bahan *Acidulated Phosphate Fluoride* terhadap jumlah *Streptococcus mutans* pada saliva anak usia 6-12 tahun. *Acidulated Phosphate Fluoride* (APF) lebih efektif dalam menurunkan jumlah *Streptococcus mutans* pada saliva.

Kesimpulan dari penelitian ini, terdapat perbedaan aplikasi *Sodium Fluoride* (NaF) dengan *Acidulated Phosphate Fluoride* (APF) terhadap jumlah *Streptococcus mutans saliva* anak usia 6-12 tahun.

Kata kunci: Topikal aplikasi *Sodium Fluoride* (NaF), *Acidulated Phosphate Fluoride* (APF), *Streptococcus mutans*, Saliva

ABSTRACT

Dental caries is one of the dental problems that must be prevented. *Streptococcus mutans* in saliva affect the occurrence of the caries. One of the preventive action to reduce the occurrence of the caries is the provision of topical fluoride application. The purpose of this study is to know if there are any difference in the application of Sodium Fluoride (NaF) with Acidulated Phosphate Fluoride (APF)) to the number of *Streptococcus mutans* in saliva of children aged 6-12 years.

This study is a quasi-experimental design with *pre post test one group design*. The study was conducted on students aged 6-12 years from elementary school Genuksari 02. The samples were determined by simple random sampling as many as 24 people. The data were analyzed using Mann Whitney test.

The results of this study shows that the average number of bacteria *Streptococcus mutans* decline before and after the group Phosphate Fluoride Acidulated of 305.58 (21.89%) whereas in the group amounted to 721.17 Sodium Fluoride (46.82%). The Mann Whitney test obtains the significant value of $p < 0.05$ ($p = 0.000$), it means there is a difference in the effect of topical application of materials Sodium Fluoride (NaF) with material Acidulated Phosphate Fluoride to the number of *Streptococcus mutans* in saliva of children aged 6-12 years. Acidulated Phosphate Fluoride (APF) is more effective in reducing the number of *Streptococcus mutans* in saliva.

The conclusion of this study is there is a difference in the application of Sodium Fluoride (NaF) with Acidulated Phosphate Fluoride (APF) to the number of *Streptococcus mutans* in saliva of children aged 6-12 years.

Keyword : *Sodium Fluoride* (NaF), *Acidulated Phosphate Fluoride* (APF), *Streptococcus mutans*, *Saliva*