

INTISARI

Plak gigi merupakan salah satu deposit yang terdiri dari kumpulan bakteri pada permukaan gigi dan penyebab berbagai penyakit gigi dan mulut. Larutan air garam konsentrasi 10% dan konsentrasi 12% menurut penelitian dapat menurunkan indeks plak gigi. Efektifitas cara kerja larutan air garam menggunakan larutan hipertonis. Penelitian ini bertujuan untuk mengetahui perbedaan efektifitas larutan air garam dengan konsentrasi 10% dan konsentrasi 12% sebagai obat kumur terhadap akumulasi plak dan mengetahui perbedaan tingkat kenyamanan berkumur larutan air garam dengan konsentrasi 10% dan konsentrasi 12% pada anak usia 12-15 tahun.

Penelitian menggunakan metode *Quasy Eksperimental* dengan rancangan penelitian *pre and posttest group design*. Penelitian dilakukan dengan cara pemeriksaan plak awal sebelum perlakuan, kemudian dibagi 2 kelompok perlakuan yaitu berkumur larutan air garam konsentrasi 10% sebagai kelompok 1 dan konsentrasi 12% sebagai kelompok 2, diberikan kepada 82 santri untuk dikumur dua kali sehari selama 10 hari setiap pagi dan malam. Maing-masing santri berkumur sebanyak 20 ml. Setelah 10 hari, diperiksa indeks plak akhir dan pemberian kuisioner untuk mengetahui tingkat kenyamanan.

Berdasarkan uji *Independent T-test* didapatkan ada perbedaan bermakna antara berkumur larutan air garam konsentrasi 10% dan konsentrasi 12% terhadap akumulasi plak dengan signifikansi 0,021 ($p < 0,05$), sedangkan berdasarkan uji *Chi-square* didapatkan perbedaan tingkat kenyamanan antara berkumur dengan larutan air garam konsentrasi 10% dan konsentrasi 12% dengan signifikansi 0,001 ($p < 0,05$).

Dari hasil penelitian dapat disimpulkan bahwa larutan air garam dengan konsentrasi 10% bisa dijadikan sebagai alternatif baru obat kumur karena mampu menurunkan akumulasi plak (1,1623) dan relatif lebih nyaman dengan $p = 0,001$.

Kata Kunci : plak gigi, larutan air garam konsentrasi 10%, larutan air garam konsentrasi 12%, tingkat kenyamanan.

ABSTRACT

Dental plaque is one of deposits which consist a collection of bacteria on the tooth surface and the cause a variety of dental and oral diseases. 10% salt solution concentration and 12% concentration can reduce the dental plaque index. The effectiveness ways of workings salt water solution using a hypertonic solution. This study aims to determine the effectiveness differences of salt solution with a 10% concentration and a 12% concentration as a mouthwash against the plaque accumulation to determine the comfort level differences of salt water gargle with a 10% concentration in children aged 12-15 years.

This study use a Quasy Experimental method with pre- and posttest study plan group design. The research are done by the initial plaque examination before the treatment, then divided into 2 treatment groups that is gargling with a 10% salt water solution concentration as a group 1 and the 12% concentration as a group 2, was given to the 82 students for gargled daily twice a day for 10 days every morning and evening 20 ml for each of the students, after 10 days, the final plaque index were examined and the provision of a questionnaire was given to determine the level of comfort.

Based on the Independent test T-test found no significant difference between the gargling with a 10% concentration of salt water solution and 12% concentration of the accumulation of plaque with a significance of 0.021 ($p < 0.05$), while based on Chi-square test there was no difference in the comfort level between rinsing with a 10% concentration salt solution and 12% concentration with 0,001 significance ($p < 0.05$).

From the results of this study it is concluded that the salt solution with a 10% concentration can be used as an alternative mouthwash because it is able to reduce the accumulation of plaque (1.1623) and relative comfortable with $p = 0.01$.

Keywords: dental plaque, a 10% concentration salt water solution, a 12% concentration salt water solution, level of comfort