

**PERBEDAAN EFEKTIVITAS MENYIKAT GIGI MENGGUNAKAN
KAYU SIWAK DENGAN SIKAT GIGI KONVENSIONAL
TERHADAP PENURUNAN DEBRIS INDEKS SISWA
MI MA'ARIF CANDRAN YOGYAKARTA**

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ABSTRAK

Latar Belakang : Debris merupakan sisa makanan yang tertinggal di permukaan gigi serta gusi pada individu dan upaya yang dilakukan dengan cara membersihkan debris secara mekanis yaitu menyikat gigi. Siwak telah digunakan sebagai alat untuk membersihkan gigi dan mulut sejak 7000 tahun yang lalu dan sikat gigi konvensional alat utama yang digunakan untuk membersihkan gigi dan mulut.

Tujuan penelitian : Mengetahui perbedaan efektivitas menyikat gigi menggunakan kayu siwak dengan sikat gigi konvensional terhadap penurunan *debris indeks* siswa MI Ma'arif Candran Yogyakarta.

Metode Penelitian : Penelitian ini adalah eksperimen semu dengan rancangan *pre-test* dan *post-test*. Penelitian ini dilaksanakan pada bulan Desember 2019. Sampel penelitian seluruh siswa kelas III MI Ma'arif Candran Yogyakarta berjumlah 48 orang dengan teknik pengambilan *total sampling*. Analisis data menggunakan Uji *Wilcoxon* dan Uji *Mann-Whitney*.

Hasil Penelitian : Rerata *pre-test debris indeks* pada kelompok menggunakan kayu siwak adalah 1.37 ± 0.50 dan rerata *post-test debris indeks* menurun hingga 0.70 ± 0.40 dengan selisih 0.66 ± 0.30 . Sedangkan rerata *pre-test debris indeks* pada kelompok menggunakan sikat gigi konvensional adalah 1.25 ± 0.49 dan rerata *post-test debris indeks* menurun hingga 0.49 ± 0.33 dengan selisih 0.76 ± 0.38 . Uji *Wilcoxon* menunjukkan hasil dengan nilai $p = 0.000$ dan nilai $p < 0.05$ dan Uji beda *Mann-Whitney* menunjukkan hasil dengan nilai $p = 0.000$ dan nilai $p < 0.05$.

Kesimpulan: Ada perbedaan efektivitas menyikat gigi menggunakan kayu siwak dengan sikat gigi konvensional terhadap penurunan *debris indeks* pada siswa MI Ma'arif Candran Yogyakarta.

Kata kunci: kayu siwak, sikat gigi konvensional, *debris indeks*

**THE DIFFERENCE IN THE EFFECTIVENESS OF BRUSHING TEETH USING
THE MISWAK AND BY USING THE CONVENTIONAL TOOTHBRUSH ON
THE INDEX DEBRIS DECREASE OF THE STUDENTS OF MA'ARIF
ISLAMIC ELEMENTARY SCHOOL (MADRASAH
IBTIDAIYAH MA'ARIF) OF CANDRAN
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ABSTRACT

Background: The debris is the leftover of food that is left on the surface of the teeth and gums in an individual, and brushing the teeth is one effort in cleaning the debris mechanically. Miswak (*siwak* ~Arabic) has been used as a tool for cleaning the teeth and mouth since 7000 years ago, and the conventional toothbrush is the main tool used to clean the teeth and mouth.

Research Objective: The miswak with the conventional toothbrush on the index debris decrease of the students of Ma'arif Islamic Elementary School of Candran, Yogyakarta.

Research Method: This research is a quasi-experiment with the designs of pre-test and post-test. This research is conducted in December 2019. The research samples are all the 3rd grade students of the Ma'arif Islamic Elementary School of Candran, Yogyakarta, with a total of 48 people, and use the total sampling technique. All the data analysis of the research samples uses the Wilcoxon test and the Mann-Whitney Test.

Research Results: The average of index debris pre-test in the group who uses the miswak is 1.37 ± 0.50 , and the average of the index debris post-test decreases to 0.70 ± 0.40 with a difference of 0.66 ± 0.30 . Meanwhile the average of the index debris pre-test in the group who uses the conventional toothbrush is 1.25 ± 0.49 , and the average of the index debris post-test decreases to 0.49 ± 0.33 with a difference of 0.76 ± 0.38 . The Wilcoxon test shows the results with the value of $p = 0.000$, and the value of $p < 0.05$, and the Mann-Whitney difference test shows the results of the value of $p = 0.000$, and the value of $p < 0.05$.

Conclusion: Indeed, there is a difference in the effectiveness of brushing teeth using the miswak and by using the conventional toothbrush on the index debris decrease of the students of Ma'arif Islamic Elementary School of Candran, Yogyakarta

Keywords: Miswak, conventional toothbrush, index debris.