INTISARI

Ekstrak kakao memiliki potensi untuk digunakan sebagai salah satu komponen aktif dalam pasta gigi karena kandungan polifenol di dalamnya yang bersifat antibakteri.Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan pasta gigi berbahan dasar ekstrak biji kakao terhadap indeks plak.

Jenis penelitian eksperimen uji klinis dengan rancangan *pre-post test control group design* yang dilakukan pada 35 santri Panti Asuhan Aisyiah Semarang yang dipilih secara *random sampling* dan dibagi dalam 6 kelompok.kelompok I (ekstrak biji kakao 12,5% + bahan abrasif 30%), II (ekstrak biji kakao 12,5% + bahan abrasif 20%), III (ekstrak biji kakao 20% + bahan abrasif 20%), IV (ekstrak biji kakao 30% + bahan abrasif 20%), kelompok V (pasta gigi basis), dan IV (tanpa pasta gigi). Indeks plak diukur sebelum dan sesudah menggosok gigi yang selanjutnya dianalisis dengan uji paired sample t-test, sedangkan perubahan indeks plak dianalisis dengan Kruskal Wallis dan Mann Whitney.

Keenam kelompok menunjukkan penurunan indeks plak yang signifikan ($p<0,05$) menunjukkan bahwa semua perlakuan menggosok gigi dengan berbagai kombinasi kandungan pasta gigi dapat menurunkan indeks plak. Kelompok yang menunjukkan efektifitas paling baik yaitu kelompok III (pasta gigi ekstrak biji kakao 20% + bahan abrasif 20%).

Kesimpulan: ada pengaruh penggunaan pasta gigi berbahan dasar ekstrak biji kakao (*theobroma cacao L*) terhadap indeks plak.

Kata kunci: Ekstrak Biji Kakao, Indeks Plak.

ABSTRACT

Cacao extract is potential alternative to be used as one of active component in the tooth paste because it contains polifenol, acting as antibacterial. This study was to determine the effect of cacao beans extract contained tooth paste against the plaque index.

Clinical experimental study with *pre-post test control group design* was done in 35 childrens of Aisyiah Orphanage of Semarang were chosen randomly and divided into 6 groups. Group I (12,5% of cacao beans extract + 30% of abrasive materials), II (12,5% of cacao beans extract + 20% of abrasive materials), III (20% of cacao beans extract + 20% of abrasive materials), IV (30% of cacao beans extract + 20% of abrasive materials), group V (tooth paste basis), and IV (without tooth paste). The plaque index were measured before and after brushing teeth followed by paired sample t-test, while the plaque index changes were analysis using Kruskal Wallis and Mann Whitney.

From the six groups revealled that plaque index were decreased significantly, ($p<0,05$). Showed that all treatment of brushing teeth using every combination of tooth paste content can reduce the plaque index. Group that showed the best effectiveness is group IV(30% of cacao beans extract tooth paste + 20% of abrasive materials).

Conclusion: there was significant impact on the use of tooth paste containing cacao beans extract (*theobroma cacao L*) against the plaque index.

***Keywords**: Cacao beans extract, Plaque Index*