Analisis Hubungan Total Konsentrasi Protein dan Profil Protein Saliva dengan Status Kebersihan Rongga Mulut (OHI-S) dan Status Karies Dental (DMF-T dan def-t): Subjek Kelompok Usia Dewasa Muda dan Anak-anak. = Analysis of the Relationship between Total Protein Concentration and Saliva Protein Profile with Oral Hygiene Status and Dental Caries Status: Subject Group of Adult and Child Age.

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Abstrak

Latar Belakang: Rongga mulut manusia memiliki beragam mikroorganisme yang dapat membentuk suatu komunitas yang memengaruhi kesehatan rongga mulut. Menurut Riskesdas 2018, prevalensi karies di Indonesia mencapai 60-80%. Konsentrasi protein dan polipeptida yang ada dalam saliva penting dalam pemeliharaan kesehatan mulut dan homeostasis dengan perubahan kualitatif dan kuantitatif dari proteome saliva. Tujuan: Penelitian ini bertujuan untuk menganalisis hubungan total konsentrasi protein dan profil protein saliva dengan status kebersihan rongga mulut (OHI-S) dan status karies dental (DMF-T dan def-t) pada subjek kelompok usia dewasa muda dan anak-anak. Metode: Penelitian ini bersifat deskriptif laboratorik dengan menggunakan Uji Bradford untuk menetapkan total konsentrasi protein dan Uji SDS-PAGE untuk menetapkan profil protein saliva. Sampel uji berupa sampel saliva berjumlah 18 sampel masing-masing kelompok usia (total 36 sampel), dengan diketahui status kebersihan rongga mulut (OHI-S) dan status karies dental (DMF-T dan def-t). Analisis statistik dijalankan dengan menggunakan uji normalitas, kemudian Uji T test-independent. Untuk menganalisis hubungan dilakukan uji korelasi spearman. Analisis data menggunakan SPSS iOS versi 22.0. Hasil: Terdapat perbedaan signifikan antara total konsentrasi protein saliva kelompok usia dewas muda dan anak-anak (p = 0.001 (p<0.05)), namun tidak terdapat korelasi signifikan antara total konsentrasi protein saliva kelompok usia terhadap OHI-S dan DMF-T atau def-t, serta terdapat perbedaan profil protein saliva berupa perbedaan frekuensi protein bands yang muncul pada masing-masing profil protein. Kesimpulan: Total konsentrasi protein dan profil protein saliva tidak berhubungan dengan OHI-S dan DMF-T atau def-t pada kelompok usia dewasa muda dan anak-anak, namun tetap memiliki tendensi korelasi.

..... Human oral health contains various microorganisms that can form a community that affects oral health. According to Riskesdas 2018, the prevalence of caries in Indonesia ranges from 60-80%. The concentration of proteins and polypeptides in saliva is important in maintaining oral health and homeostasis through qualitative and quantitative changes in the salivary proteome. Objective: This study aims to analyze the relationship between total protein concentration and saliva protein profile with oral hygiene status (OHI-S) and dental caries status (DMF-T and def-t) in adult and child age groups. Methode: This study is a deskriptive laboratory analysis using Bradford tests to determine total protein concentration and SDS-PAGE tests to determine saliva protein profiles. The sample consisted of 18 saliva samples from each age group (total 36 samples), with OHI-S and dental caries status (DMF-T and def-t) determined. Statistical analysis was performed using normality tests, followed by independent sample t-tests. To analyze the relationship, Spearman's correlation test was conducted. Data analysis used

SPSS iOS version 22.0. Result: A significant difference was found in the total saliva protein concentration between the young adult and child groups ($p = 0.001$, $p < 0.05$), but no significant correlation was found between total saliva protein concentration and OHI-S and DMF-T or def-t status. There was a difference in saliva protein profiles, manifested as differences in the frequency of protein bands in each protein profile. Conclusion: The total protein concentration and saliva protein profiles do not have a significant relationship with OHI-S and DMF-T or def-t status in young adult and child age groups, but they still show a tendency to correlate.