

ABSTRAK

HUBUNGAN KADAR FERITIN SERUM DAN KADAR BESI SALIVA DENGAN KEJADIAN KARIES GIGI PASIEN THALASSEMIA BETA MAYOR USIA 12-17 TAHUN (Penelitian *Cross Sectional* di RSUD Banyumas)

Anggun Dini Setiowati

Thalassemia beta mayor merupakan thalassemia yang terjadi jika kedua orang tua memiliki ciri-ciri thalassemia. Manifestasi klinis umum dari thalassemia beta adalah anemia berat, salah satunya bermanifestasi sebagai karies gigi pada rongga mulut. Zat besi juga merupakan nutrisi penting yang berada dalam saliva serta digunakan sebagai fungsi dari pertahanan saliva untuk menilai penyakit karies gigi yang dialami. Tujuan dari penelitian ini adalah untuk mengetahui hubungan kadar feritin serum dan kadar besi saliva dengan kejadian karies gigi pasien thalassemia beta mayor usia 12-17 tahun. Metode penelitian ini adalah observasional analitik dan pendekatan *cross sectional*. Populasi penelitian ini adalah pada anak remaja thalassemia beta mayor usia 12-17 tahun di RSUD Banyumas. Sampel penelitian diambil menggunakan teknik *purposive sampling* dengan kriteria inklusi dan juga eksklusif. Jumlah sampel penelitian meliputi 70 anak thalassemia beta mayor. Penilaian skor indeks DMFT dilakukan pada semua gigi dan penilaian kadar besi saliva menggunakan uji Spektrofotometer Serapan Atom. Analisis statistik dilakukan menggunakan uji korelasi *pearson product moment*. Hasil analisis statistik menunjukkan bahwa terdapat hubungan yang signifikan antara kadar feritin serum dan kadar besi saliva dengan kejadian karies gigi ($p < 0,05$, $cc = 0,399$, $cc = 0,623$). Simpulan penelitian ini adalah terdapat hubungan hubungan kadar feritin serum dan kadar besi saliva dengan kejadian karies gigi pasien thalassemia beta mayor usia 12-17 tahun.

Kata Kunci: Feritin serum, kadar besi saliva, karies gigi, thalassemia beta mayor

ABSTRACT

**THE RELATIONSHIP OF SERUM FERRITIN LEVELS AND IRON
LEVELS SALIVA WITH THE INCIDENT OF DENTAL CARIES
BETA MAJOR THALASSEMIA PATIENTS
AGED 12-17 YEARS
(Cross Sectional study at RSUD Banyumas)**

Anggun Dini Setiowati

Beta thalassemia major is thalassemia that occurs if both parents have the characteristics of thalassemia. The general clinical manifestation of beta thalassemia is severe anemia, one of which manifests as dental caries in the oral cavity. Iron is also an important nutrient found in saliva and is used as a salivary defense function to assess dental caries. The aim of this study was to determine the relationship between serum ferritin levels and salivary iron levels with the incidence of dental caries in beta thalassemia major patients aged 12-17 years. This research method is analytical observational and a cross sectional approach. The population of this study was beta thalassemia major adolescent children aged 12-17 years at Banyumas District Hospital. The research sample was taken using a purposive sampling technique with inclusion and exclusion criteria. The total research sample included 70 children with beta thalassemia major. The DMFT index score was assessed on all teeth and the salivary iron content was assessed using the Atomic Absorption Spectrophotometer test. Statistical analysis was carried out using the Pearson product moment correlation test. The results of statistical analysis showed that there was a significant relationship between serum ferritin levels and salivary iron levels and the incidence of dental caries ($p < 0.05$, $cc = 0.399$, $cc = 0.623$). The conclusion of this study is that there is a relationship between serum ferritin levels and salivary iron levels with the incidence of dental caries in beta thalassemia major patients aged 12-17 years.

Keywords: *Serum ferritin, salivary iron levels, dental caries, beta thalassemia major*