ABSTRAK

Aisyah

Latar Belakang: Kejadian *stunting* tidak hanya dari kurangnya asupan makanan, faktor lingkungan seperti paparan merkuri dapat menyebabkan terjadinya *stunting*. Pertambangan emas merupakan penyumbang merkuri terbesar di lingkungan. Merkuri dapat terakumulasi di dalam tubuh melalui konsumsi ikan, pemakaian air dan udara yang tercemar merkuri.

Tujuan: Untuk mengetahui hubungan paparan merkuri (Hg) dengan kejadian *stunting* pada anak usia 24-59 bulan di daerah aliran sungai pertambangan emas Kabupaten Indragiri Hulu, Riau.

Metode: Penelitian ini merupakan penelitian *observasional* dengan desain *cross-sectional* dilakukan pada 53 anak usia 24-59 bulan di wilayah kerja Puskesmas Sei Lala, Kabupaten Indragiri Hulu, Riau. Subjek dipilih melalui *simple random sampling* berdasarkan kriteria inklusi dan eksklusi. Data diperoleh dengan melakukan pengukuran antropometri, wawancara menggunakan kuesioner, observasi dan pengujian kadar merkuri pada rambut anak. Analisis data menggunakan analisis univariat, bivariat, dan multivariat.

Hasil: Hasil penelitian menunjukkan bahwa terdapat hubungan yang bermakna antara peningkatan kadar merkuri rambut anak (p<0,001), panjang badan lahir rendah (p=0,030), riwayat imunisasi (p=0,031) dan tingkat kecukupan protein rendah (p<0,001) dengan kejadian *stunting* dan terdapat hubungan yang bermakna antara jumlah konsumsi ikan dengan kadar merkuri rambut anak (p<0,001). Analisis multivariat menunjukkan bahwa kadar merkuri rambut anak yang tinggi, tingkat kecukupan protein, tinggi badan ayah dan panjang badan lahir yang rendah sebagai faktor risiko *stunting* pada anak usia 24-59 bulan di Kecamatan Sungai Lala Kabupaten Indragiri Hulu, Riau.

Kesimpulan: Paparan merkuri berhubungan dengan kejadian *stunting* pada anak usia 24-59 bulan di Kecamatan Sungai Lala Kabupaten Indragiri Hulu, Riau.

Kata Kunci: *stunting*, paparan merkuri, tambang emas

ABSTRACT

Aisyah

Background: Stunting occurs not only from lack of food intake, environmental factors such as exposure to mercury can cause stunting. Gold mining is the largest contributor of mercury to the environment. Mercury can accumulate in the body through consumption of fish, use of water and air contaminated with mercury.

Objective: To determine the relationship between exposure to mercury (Hg) and the incidence of stunting in children aged 24-59 months in the gold mining river basin of Indragiri Hulu Regency, Riau.

Method: This research is an observational study with a cross-sectional design conducted on 53 children aged 24-59 months in the working area of the Sei Lala Community Health Center, Indragiri Hulu Regency, Riau. Subjects were selected through simple random sampling based on inclusion and exclusion criteria. Data was obtained by carrying out anthropometric measurements, interviews using questionnaires, observation and testing mercury levels in children's hair. Data analysis uses univariate, bivariate and multivariate analysis.

Results: The results of the study showed that there was a significant relationship between increased mercury levels in children's hair ($p<0.001$), low birth length ($p=0.030$), immunization history ($p=0.031$) and low levels of protein adequacy ($p<0.001$) with the incidence of stunting and there is a significant relationship between the amount of fish consumed and the mercury levels in children's hair ($p<0.001$). Multivariate analysis shows that high levels of mercury in children's hair, adequate levels of protein, father's height and low birth length are risk factors for stunting in children aged 24-59 months in Sungai Lala District, Indragiri Hulu Regency, Riau.

Conclusion: Mercury exposure is associated with the incidence of stunting in children aged 24-59 months in Sungai Lala District, Indragiri Hulu Regency, Riau.

Keywords: stunting, mercury exposure, gold mining