Hubungan antara Infeksi Parasit Usus, Alfa-1 Antitripsin, dan Status Gizi pada Anak Prasekolah di Kecamatan Nangapanda = Relationships Between Intestinal Parasitic Infection, Alpha-1 Antitrypsin, and Nutritional Status in Preschool-age Children in Nangapanda District, East Nusa Tenggara

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Abstrak

Infeksi parasit usus pada anak prasekolah di Indonesia dapat meningkatkan risiko malnutrisi akibat adanya kerusakan barier dan peningkatan permeabilitas mukosa usus. Studi ini meneliti hubungan antara infeksi parasit usus, permeabilitas usus (diukur dengan konsentrasi alfa-1 antitripsin/AAT), dan status gizi pada 108 anak prasekolah (usia 12-59 bulan) di Kecamatan Nangapanda, Kabupaten Ende, Nusa Tenggara Timur. Sampel feses anak diperiksa secara mikroskopis untuk konfirmasi diagnosis infeksi parasit, sementara status gizi ditentukan berdasarkan z-score WHO Anthro 2006. Sebanyak 68 sampel feses diperiksa untuk konsentrasi AAT menggunakan ELISA. Infeksi terbanyak disebabkan oleh B. Hominis (27,8%). Prevalensi underweight, stunted, dan wasted masing-masing adalah 20,4%, 21,3%, dan 6,5%. Infeksi tunggal T. trichiura berhubungan dengan underweight (p=0,026), sedangkan koinfeksi T. trichiura-A. lumbricoides berkaitan dengan malnutrisi (p=0,018). Mayoritas anak (95,6%) mengalami peningkatan AAT, tetapi konsentrasi AAT lebih tinggi pada kelompok tanpa infeksi. Meskipun infeksi parasit berhubungan negatif dengan AAT, hubungan signifikan antara AAT dan status gizi tidak ditemukan. Studi lebih lanjut diperlukan untuk mengeksplorasi faktor lain yang mempengaruhi hubungan antara infeksi parasit dan malnutrisi.
.....Intestinal parasitic infections in preschool children in Indonesia can increase the risk of malnutrition due to damage to the intestinal barrier and increased mucosal permeability. This study investigates the relationship between intestinal parasitic infections, intestinal permeability (measured by alpha-1 antitrypsin/AAT concentration), and nutritional status in 108 preschool children (ages 12–59 months) in Nangapanda District, Ende Regency, East Nusa Tenggara. Children’s stool samples were microscopically examined to confirm parasitic infection, while nutritional status was determined based on WHO Anthro 2006 z-scores. A total of 68 stool samples were tested for AAT concentration using ELISA. The most common infection was B. hominis (27.8%). The prevalence of underweight, stunted, and wasted children was 20.4%, 21.3%, and 6.5%, respectively. T. trichiura infection alone was associated with underweight (p=0.026), while T. trichiura-A. lumbricoides coinfection was associated with malnutrition (p=0.018). Most children (95.6%) had elevated AAT, but AAT concentrations were higher in the non-infected group. Although parasitic infection was negatively associated with AAT, no significant relationship was found between AAT and nutritional status. Further research is needed to explore otherfactors that may influence the relationship between parasitic infections and malnutrition.