# Prevalensi infeksi parasit usus pada anak di daerah urban dan rural = The prevalence of intestinal parasitic infection among children in rural and urban area

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Abstrak

Pendahuluan : Infeksi parasit usus disebabkan oleh STH dan protozoa. Faktor risiko infeksi parasit usus antara lain higienitas dan sanitasi yang buruk, kekurangan air bersih, kekurangan nutrisi, serta kontak dengan sumber infeksi. Di Indonesia salah satu kawasan rural adalah Kabupaten Bogor. Sementara itu Jakarta sebagai kawasan urban, penduduknya juga memiliki faktor risiko terhadap infeksi parasit usus terutama anak-anak. Oleh karena itu penelitian ini bertujuan untuk mengetahui hubungan kawasan tempat tinggal rural atau urban dengan prevalensi infeksi parasit usus. Metode           : Penelitian ini merupakan studi potong lintang yang menggunakan data hasil survei Kementerian Kesehatan RI tahun 2017. Sampel diambil dengan teknik consecutive sampling pada populasi anak usia 4-9 tahun atau sedang dalam tingkat pendidikan PAUD hingga SD/MI/sederajat di Kabupaten Bogor (sebagai kawasan rural) dan Kota Administrasi Jakarta Barat (sebagai kawasan urban). Sampel berjumlah 620 dengan jumlah sampel dari masing-masing kawasan adalah 310. Data diolah dengan menggunakan uji chi square atau Fisher exact. Hasil                : Prevalensi infeksi cacing di kawasan rural 3,2% sedangkan di kawasan urban 1,0% dengan nilai p = 0,09 (OR = 3,33; IK 95% = 0,93 – 11,99). Infeksi cacing didominasi STH spesies A. lumbricoides. Prevalensi infeksi protozoa di kawasan rural 31,3% sedangkan di kawasan urban 16,5% dan didapat nilai p = 0,00 (OR = 1,90; IK 95% = 1,41 – 2,57). Spesies yang paling banyak ditemukan adalah B. hominis. Terdapat infeksi tunggal dan infeksi campur, namun prevalensi infeksi parasit usus (kombinasi cacing dan protozoa) tidak dapat dihitung karena infeksi hanya ditemukan di kawasan rural (5 kasus). Diskusi           : Infeksi cacing memiliki prevalensi relatif rendah. Hal ini dapat terjadi apabila kontak dengan tanah sebagai sumber utama infeksi berkurang atau pengobatan yang adekuat. Sementara itu tingginya prevalensi infeksi protozoa usus dapat disebabkan oleh konsumsi air dan makanan yang terkontaminasi kista protozoa. Kontaminasi dapat terjadi antara lain akibat higienitas dan sanitasi buruk, fasilitas MCK yang tidak memadai, dan kekurangan air bersih. Kesimpulan    : Prevalensi infeksi parasit usus lebih tinggi di kawasan rural dibanding dengan kawasan urban. Terdapat perbedaan bermakna antara kawasan tempat tinggal rural atau urban dengan prevalensi protozoa usus, namun tidak terdapat perbedaan bermakna antara kawasan tempat tinggal rural atau urban dengan prevalensi cacing usus. <hr /><p style="text-align:

justify;">Introduction  : Intestinal parasitic infection is commonly caused by STHs and protozoa. The risk factors of the infection are poor sanitation and hygiene, lack of clean water, lack of nutrition, and having contact with sources of infection. In Indonesia, one of rural area is Bogor District. Meanwhile, Jakarta as an urban area was considered to have the risk factors of intestinal parasitic infection, particularly children. Therefore, this study aims to know the association between intestinal parasitic infection and rural or urban as living area. Method           : This study used a cross-sectional design and the results of survey conducted by Indonesia’s Ministry of Health in 2017. Sample was collected by consecutive sampling method among children who were at age 4<sup>th</sup> – 9<sup>th</sup> years old or being a student in early childhood education program or kindergarten and elementary school in Bogor District (as rural area) and Jakarta Barat (as urban area). Total were 620 samples that was divided into 310 samples for each area. Data was analyzed using chi square test or Fisher exact test. Result             : The prevalence of helminths infection in rural area was 3,2% whereas  in urban area was 1,0% with p = 0,09 (OR = 3,33; CI 95% = 0,93 – 11,99). Helminths infection was dominated by STH especially A. lumbricoides species. The prevalence of protozoa infection was 31,3% found in rural area and 16,5% found in urban area (p = 0,00; OR = 1,90; CI 95% = 1,41 – 2,57). The most prevalence species was B. hominis. There were single and mixed infections in each area, however the prevalence of intestinal parasitic infection caused by both helminth and protozoa was unable to count because it is only found in rural area (5 cases). Discussion      : The prevalence of helminths infection was relatively low. It was possibly because of diminishing contact with soil as the main transmission media or adequate treatment had been given. Meanwhile, the prevalence of protozoa infection remains high probably due to consumption of contaminated water and foods by the cysts. Contamination happens as consequences of poor sanitation and hygiene, insufficient latrines, and lack of clean water. Conclusion     : The prevalence of intestinal parasitic infection was higher in rural compared to urban area. There was statically significant difference between rural or urban as living area and the prevalence of protozoa infection, nevertheless there was not statically significant difference between living area and the prevalence of helminths infection.