

INTISARI

Latar Belakang: Infeksi protozoa usus disebabkan oleh infeksi tunggal atau multi infeksi parasit usus, diantaranya *Entamoeba histolytica*, *Giardia lamblia* dan *Cryptosporidium parvum*. Transmisinya melalui makanan/air yang terkontaminasi kista atau *fecal-oral*. Anak usia sekolah merupakan kelompok risiko tinggi karena makan/minum ataupun buang air besar (BAB) tidak bersih. Manifestasi klinisnya dapat tanpa gejala, diare akut, diare kronis, bahkan kematian. Infeksi ini terdapat di seluruh dunia, termasuk Indonesia. Diare merupakan penyakit kedua terbanyak di Provinsi Maluku, terutama Kabupaten Maluku Tengah, namun penyebabnya tidak diketahui.

Tujuan: Penelitian ini bertujuan untuk mengetahui kejadian dan jenis infeksi protozoa usus serta hubungannya dengan karakteristik sosio-demografik (usia, jenis kelamin, tingkat pendidikan orang tua, penghasilan dan mata pencaharian utama keluarga), pengetahuan anak tentang kebersihan, serta lingkungan (sumber air bersih, sumber air minum, jamban, tempat tinggal).

Metode: Studi potong lintang dilakukan pada siswa kelas 4 dan 5 SDN 11 Tulehu, SDN 02 Tengah-Tengah di Kecamatan Salahutu, dan SDN Oli di Kecamatan Leihitu. Variabel bebas berupa pengetahuan anak tentang kebersihan diperoleh dari wawancara siswa sedangkan karakteristik sosio-demografik dan lingkungan dari orang tua. Variabel terikat berupa kejadian dan jenis infeksi diperoleh dengan pemeriksaan mikroskopis sampel tinja siswa. Analisis data dilakukan secara deskriptif dan dengan uji Chi square.

Hasil Penelitian: Dari 170 siswa, dijumpai infeksi tunggal (32,9%) dan multi infeksi (7,6%). Protozoa usus patogen yang dijumpai, yakni *Cryptosporidium sp.* (24,7%), *G. lamblia* (5,9%), *E. histolytica/E. dispar* (3,5%), serta non patogen, yakni *E. coli* (13,5%), *C. mesnili* (0,6%), *I. bustchlii* (0,6%). Rendahnya pengetahuan anak tentang kebersihan menjadi faktor risiko kejadian infeksi protozoa usus (Rasio Prevalens/RP 2,098; 95% CI 1,453-3,030) dan jenis infeksi tunggal dibandingkan tanpa infeksi (RP 2,349; 95% CI 1,547-3,567). Bertentangan dengan hipotesis awal, sumber air minum dari sungai, mata air pegunungan, penampungan air hujan, dan sumur terbuka menurunkan risiko jenis infeksi tunggal dibandingkan tanpa infeksi (RP 0,585; 95% CI 0,351-0,974). Cakupan sumber air bersih di Kabupaten Maluku Tengah masih sangat terbatas.

Kesimpulan: Infeksi protozoa usus terdapat pada anak SD di Kabupaten Maluku Tengah. Rendahnya pengetahuan anak tentang kebersihan merupakan faktor risiko bermakna terhadap kejadian infeksi protozoa usus, serta jenis infeksi tunggal dibandingkan tanpa infeksi. Sumber air di Kabupaten Maluku Tengah potensial menjadi sumber penularan infeksi protozoa usus. Diperlukan edukasi kebersihan, terutama bagi anak SD, serta evaluasi dan perbaikan sarana sumber air minum untuk mencegah transmisi protozoa usus.

Kata Kunci: infeksi protozoa usus, sosio-demografik, pengetahuan tentang kebersihan, lingkungan, anak sekolah dasar

ABSTRACT

Background: Intestinal protozoan infections are caused by single or multi intestinal parasites, such as *Entamoeba histolytica*, *Giardia lamblia*, and *Cryptosporidium parvum*. It can be transmitted through cysts-contaminated food/water or fecal-oral. School children are the high risk group because of unclean food/water consumption or indiscriminate defecation. The clinical manifestations can be without symptom, acute/chronic diarrhea, and even death. These infections are found throughout the world, including Indonesia. In Maluku province, diarrhea is the second most diseases, especially in Central Maluku regency, but the cause usually remains unknown.

Objectives: The aims of this study are to determine the intestinal protozoan infection prevalence and types, and its relationship with socio-demographic characteristics (age, gender, parent's education level, monthly family income, family main livelihood), hygiene knowledge and the environment (clean water source, drinking water source, latrine, residency).

Method: A cross-sectional study conducted for 4th and 5th-grade students of SDN 11 Tulehu, SDN 02 Tengah-Tengah in Salahutu district, and SDN Oli in Leihitu district. Independent variables were hygiene knowledge from interviewing students, socio-demographic characteristics and environment from parents. Dependent variables were the intestinal protozoan infection and infection type which were obtained by student's stool microscopic examination. Descriptive statistical analysis and Chi-square test were applied.

Result: A total 170 students were involved. There were two types of infection, single infection (32.9%) and multi-infection (7.6%). The intestinal protozoan pathogens were *Cryptosporidium sp.* (24.7%), *G. lamblia* (5.9%), *E. histolytica/E. dispar* (3.5%), and also non-pathogenic, ie *E. coli* (13.5%), *C. mesnili* (0.6%), *I. bustchlii* (0.6%). Lack of hygiene knowledge was a risk factor for the intestinal protozoan infections (Prevalence Ratio/PR 2.098; 95% CI 1.453-3.030) and the types between single to no infection (PR 2.349; 95% CI 1.547-3.567). Contrary to the initial hypothesis, drinking water from the river, mountain spring water, rainwater or open well was lower risk factor between single to no infection (PR 0.585; 95% CI 0.351-0.974). Clean water di Central Maluku regency was still limited to several areas.

Conclusion: Intestinal protozoan infections were found in Central Maluku regency elementary school children. Lack of hygiene knowledge was a significant risk factor for the intestinal protozoan infections, as well as the type of a single infection compared with no infection. Water sources in Central Maluku regency were potential media for intestinal protozoan transmission. Hygiene education is needed, especially for elementary school children, as well as the evaluation and improvement of drinking water facilities to prevent the transmission of intestinal protozoa.

Keywords: intestinal protozoan infection, socio-demographic, hygiene knowledge, environment, primary school children