Ascaris lumbricoides eggs and human-intestinal protozoan cysts found in river water of Angke River, Jakarta / Rizal Subahar, Lisawati Sutanto

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Abstrak

Fecal contamination is a serious environmental problem at Angke River Jakarta. A cross-sectional study was conducted during April-June 2007 and the aim of the study is to assess the water quality of Angke River by detection of Ascaris lumbricoides eggs and the protozoan cysts. A total 24 L water of Angke River was collected from 8 sampling locations consisted of Kembangan/Duri Kosambi (upper reaches of river), Pesing Polgar (lower reaches of river), Teluk Gong (lower reaches of river), Pantai Indah Kapuk (estuary), River Mouth, left side of River Mouth, right side of River Mouth, and outer side of River Mouth. The water specimen was examined microscopically for A. lumbricoides eggs and protozoan cysts using a concentrated technique. Of 8 locations, 4 locations (50 %, 4/8), Kembangan/Duri Kosambi, Teluk Gong, Pantai Indah Kapuk and left side of river mouth were positive for A. lumbricoides eggs and 2 locations (25%, 2/8), Kembangan/Duri Kosambi and Pesing Polgar positive for Entamoeba histolytica cysts. Overall, 60 A. lumbricoides eggs and 2 E. histolytica cysts were found in 24 L water specimens. Among sampling locations, the most number of A. lumbricoides eggs were found at eastuary. The water of Angke River, Jakarta, has been contaminated by human feces contained A. lumbricoides eggs and E. histolytica cysts. The water was unsafe for drinking water.