## SHIGELLA-ASSOCIATED DIARRHEA IN CHILDREN IN SOUTH JAKARTA, INDONESIA

Elly Herwana<sup>1</sup>, Julius E Surjawidjaja<sup>2</sup>, Oktavianus Ch Salim<sup>3</sup>, Novia Indriani<sup>3</sup>, Paul Bukitwetan<sup>2</sup> and Murad Lesmana<sup>2</sup>

<sup>1</sup>Department of Medical Pharmacology, <sup>2</sup>Department of Microbiology, <sup>3</sup>Department of Community Medicine, Medical Faculty Trisakti University, Jakarta, Indonesia

**Abstract.** A surveillance of Shigella infections was conducted on 612 children aged 0-12 years-old presenting with diarrhea to Mampang and Tebet Community Health Centers in South Jakarta, Indonesia, during February 2005 through September 2007. Shigella was isolated from 9.3% of diarrhea patients in the health centers. *S. flexneri* which was found in 5.9% of patients, and was the most frequent species isolated, comprising 63.2% (36/57) of all *Shigella* species isolated. *Shigella* species were found significantly more often among children over 2 years old, and the rate of isolation increased with age. Stool with mucus and/or blood were the main characteristics of Shigella infection in these patients. Antibiotic multi-resistance was found in *S. flexneri* and *S. boydii* strains, in particular to ampicillin, chloramphenicol, tetracycline, and trimethoprim-sulfamethoxazole. None of the *Shigella* species showed resistance to nalidixic acid, norfloxacin, ciprofloxacin, or ceftriaxone

Key words: Shigella infections, children, diarrhea, Indonesia

Correspondence: Dr Elly Herwana, Fakultas Kedokteran Universitas Trisakti, Jl. Kyai Tapa 260 (Grogol), Jakarta 11440, Indonesia.

Tel/Fax: 62-21-5655786/62-21-5660706 E-mail: elly\_herwana@cbn.net.id