

ABSTRACT

DRUG USE STUDY IN PEDIATRIC MILIARY TUBERCULOSIS OR MENINGITIS TUBERCULOSIS PATIENTS

**(Study at Ambulatory Unit of Pediatric Respiriology Department
Dr. Soetomo Teaching Hospital Surabaya)**

Nuril Riska Puspaningrum

Tuberculosis mostly develop to severe disease, such as miliary tuberculosis and meningitis tuberculosis in pediatric (WHO, 2006; Seddon and Shingadia, 2014). The best outcome of therapy depends on tubercular drug combination, duration of therapy, dose regiment, and patient compliance. The effect of inappropriate therapy and noncompliance causes failure, drug resistance, organ damage expansion, and relapse.

This study was aimed to analyze drug utility profile of tubercular drugs, such as tubercular drug combination, dose regiment, and duration of therapy in pediatric patient with miliary tuberculosis or meningitis tuberculosis and to identify its drug related problems. This type of study was used observational and retrospective method on outpatients with miliary tuberculosis or meningitis tuberculosis of Pediatric Respiriology Department Dr. Soetomo Teaching Hospital Surabaya period start from January 1st 2010 to May 31st 2016 (N=24).

The result showed that drug combination use for tuberculosis miliary or meningitis is Isoniazid-Rifampicin-Pyrazinamide-Etambutol in intensive phase and Isoniazid-Rifampisin in continuing phase for 10-12 months (miliary tuberculosis) and 12 months (meningitis tuberculosis). The doses of anti-tubercular drugs are based on drug rule in literature from IDAI 2005 and Kemenkes 2013.

There were some drug-related problems (DRPs) identified, such as underdose, actual side effect of drugs, and potential drug interaction. Underdose occurred in 5 patients that use ethambutol. Increasing transaminase concentration was the common side effect and interaction between isoniazid-rifampicin-pyrazinamide caused the risk of hepatotoxicity increased was the major potential drug interaction.

Keywords: Anti-tuberculosis drugs, drug related problem, drug use study, miliary tuberculosis, meningitis tuberculosis.