## **ABSTRACT**

## DRUG RELATED PROBLEMS (DRPs) OF ANTI-TUBERCULOSIS DRUGS IN PATIENT WITH EXTRAPULMONARY TUBERCULOSIS

(Study at Inpatient and Outpatient Units of Jember Chest Hospital)

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Extrapulmonary Tuberculosis is an infectious disease caused by *Mycobacterium tuberculosis* that infects another organ other than lung by lymphogen and hematogen. Patient with extrapulmonary tuberculosis has the potential to develop Drug-Related Problems (DRPs) which are caused by long-term therapy and polypharmacy. DRPs can cause noncompliance and decrease quality of life that will affect the success of therapy.

The aim of this study was to analyze the actual problem of the anti-tuberculosis drug on patients with extrapulmonary tuberculosis in Jember Chest Hospital. This study was retrospective observational by descriptive analysis. The inclusion criteria were adult patient (≥18 years old) that diagnosed extrapulmonary tuberculosis in January 2016 to June 2018, have completed the electronic medical record and take treatment at inpatient and outpatient units. DRPs were identified by using classification of PCNE V8.02 2017 version and conducted by interprofessional communication between physician and pharmacist.

The result from the electronic medical record of 140 patient, there were 27 DRPs identified in 11 patients (8%). The DRPs were 96% adverse drug event and 4% related to drug selection. Patient's adverse drug event such as pyrazinamide caused elevation hepatic enzyme (33%), nausea and vomiting (13%), nausea (5%), hyperuricemia (5%) and rash (5%); rifampicin caused elevation of hepatic enzyme (10%), nausea and vomiting (10%), rash (5%), epigastric pain (3%); ethambutol caused rash (5%); isoniazid caused rash (3%); and streptomycin caused vertigo (3%). From the overall DRPs, total 74% were resolved with 4% of them were in going on therapy.

**Keyword:** Anti-Tuberculosis Drug, Drug-Related Problems, PCNE, Extrapulmonary Tuberculosis.

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