ABSTRACT

THE COMPATIBILITY OF EXAMINATION RESULTS FROM M. tuberculosis antigen (Tb Ag) Rapid Test and MPT 64 Rapid Test WITH CULTURE OF M. tuberculosis AS A GOLD STANDARD WITH SPUTUM AND ISOLATE AS THE SAMPLE

Tuberculosis (TB) is still regarded as one of the dangerous diseases in the world. In 2012, at was estimated 8.6 million people were suffering from TB and 1.3 million of them died. Mycobacterium tuberculosis as the cause of TB disease, can be detected by staining bacteria, Acid Fast Bacilli (AFB), but this method need a skillfully laboratory assistant to examine the staining slide. Tb gold standard examination is bacterial culture, but it is considered taking too long time in delivering results. Some manufacturers were developed new method that simplify procedures, provide fast results but still qualified. In Indonesia, JD Biotech Tb Ag Rapid Test and SD Bioline MPT64 are available. The aim of this research was to evaluate these two new methods in sputum and isolates as specimens. This research used an observational method and cross sectional studies design. It was conducted in Regional Health Laboratories of South Kalimantan and it was implemented with conducting on 50 patients with 34 patients of them suffering from pulmonary tuberculosis. Data were tested by Chi Square to determine the suitability of TbAg Rapid Test and MPT64 Rapid Test in sputum and isolates with culture as a gold standard. The result of TbAg Rapid Test was in accordance with the results of culture using sputum samples gives the results of with significance 0.000 (less than the 0.05), this was different from MPT64 with significance of 0,153. While the TbAg Rapid Test and MPT64 Rapid Test in isolates showed corresponding results although MPT64 Rapid Test results were more convincing.

Key Word: Tuberculosis, Tb Ag Rapid Test, MPT64 Rapid Test