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Research article

## Comparison of interleukin-17 level in leprosy and non-leprosy patients at Dr. Muhammad Hoesin Palembang general hospital

Siti sakdiah\*, Eddy mart salim, Zen hafy, Fifa argentina, Nova kurniati, Ya'kub rahadiyanto

*Faculty of Medicine, Universitas Sriwijaya, Palembang, Sumatera Selatan, Indonesia.*

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**Key words:** Leprosy, Interleukin-17, Patients.

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**\*Corresponding Author Siti sakdiah,**  
Faculty of Medicine, Universitas  
Sriwijaya, Palembang, Sumatera Selatan,  
Indonesia.

E-mail: [istsakdiah@gmail.com](mailto:istsakdiah@gmail.com)

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### Abstract

Leprosy is a chronic disease caused by an infection of *Mycobacterium Leprae*. Leprosy has several clinical types that correlate with the immune response. The study was conducted to analyze the differences in serum IL-17 levels between leprosy and non-leprosy patient in RSUP Dr. Muhammad Hoesin Palembang. Research design is case control. The study was conducted at Dr. Muhammad Hoesin Palembang General Hospital and IL-17 Examination was conducted at the Molecular Biology Laboratory, Medical Faculty of Sriwijaya University Palembang from January to February 2019. The case and control groups samples were 40 lepers and 40 medical personnel and paramedics who work at Dr. Muhammad Hoesin Palembang General Hospital and also patients family. The parameters studied were IL-17 levels, respondent status, clinical type of leprosy and respondent characteristics. Serum IL-17 is measured with ELISA. The average age of leprosy patient is 35 years, and non-leprosy is 36.5 years. The frequency of men (27) is higher in lepers and women (24) in non-lepers. MB patient (36) is higher compared to PB patient (4), and there are 19, 10, and 7 respondent of BL, LL, and BB patient respectively. And also there are 2 respondent of TT and BT patient. The median score of IL-17 levels for non-lepers are 47.86 pg/ml and for lepers are 102.86 pg/ml with  $p < 0.05$ . Conclusion, there are significant differences in IL-17 levels in lepers and non-lepers at Dr. Muhammad Hoesin Palembang General Hospital.

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