

## ABSTRACT

Leprosy is one of worldwide public health major problem. The disability of leprosy not only can impact in medical side but also in social, economic, culture and national endurance. One of disability of leprosy is caused by leprosy reaction. Leprosy reaction can normally happen in natural history of disease but if the treatment is unwell it can make complication and end up to disability of leprosy. The aim of this research was to analyzed the risk factor related to leprosy reactions.

This research was a case control study with analytical approach to 76 leprosy patients in Sumberglagah Leprosy Hospital, Mojokerto. Subjects were selected by simple random sampling. Data was analyzed by Chi-square test with 5% of significance level.

The result showed that there was relationship between duration of treatment and leprosy reaction ( $p=0,04$  OR=0,31 95%CI:0,109-0,881), it means patient with duration of treatment  $\leq 6$  month estimates to be 3,1 times as great for patient with duration of treatment  $>6$  month. There was no relationship between age at leprosy diagnosis ( $p=0,61$ ), sex ( $p=0,79$ ), type of leprosy ( $p=0,71$ ), type of occupations ( $p=0,63$ ), education level ( $p=0,31$ ), regulatory treatment ( $p=1,00$ ) and leprosy reactions. There was no relationship between type of leprosy ( $p=1,00$ ) and disability of leprosy.

In conclusion, long duration of treatment has significant relation with leprosy reaction, so the patients in treatment of leprosy should wary and the disability of leprosy can be avoid.

Keywords : duration of treatment, type of leprosy, leprosy reactions