

## Abstract

Tuberculosis is one of ARI (Acute Respiratory Infection) disease, which are included in the Global Emergency category. The number of tuberculosis cases in Indonesia including the third largest in the world and West Java province has the highest number of patients among other provinces. West Java's Department of Health has made some policies to overcome the spread of tuberculosis, such as data collection of Tuberculosis patients by region, education, and free medical treatment. However, to support the existing policy or policies to be issued, the prediction of number of Tuberculosis patients is required as a reference in the execution of policies issued

Fuzzy Time Series is one of the few prediction methods, where the method is to take approach by studying the patterns of data occurring in the past to be projected in future prediction. This method applies the concept of fuzzy logic to the time series data which will be used to construct a fuzzy logical relationship (FLR) and fuzzy logical relationship group (FLRG).

The results of prediction are distinguished based on regional data and also the number of intervals is taken. The accuracy of the results obtained from the testing process ranged between 93% - 98% of the training data and 93% - 96% of the testing data.

**Key Word:** *Tuberculosis, Time Series, Fuzzy Time Series, Fuzzy Logical Relationship, Fuzzy Logical Relationship Group*