## DISTRICT GROUPING IN EAST JAVA BASED ON FACTORS AFFECTING THE CONTINUING OF CHILDREN'S LIFE

(Case Study: Infant Mortality Rate in East Jawa Province in 2016)

By : Yulina Nur Damayanti

Departement of Statistics Faculty of Mathematics and Science Islamic University of Indonesia

## ABSTRACT

The health status of a country can be seen from two indicators namely Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), and Child Nutrition Status (CNS). Both indicators are important in determining the level of public health, especially measuring the survival of children. Child survival is reflected by a decrease in infant mortality. One of the provinces included in the 5 highest ranking IMR in 2016 is East Java. In an effort to improve children's survival an analysis of grouping of districts/cities in East Java was based on factors that influence the survival of children. The variables used in this study were the number of general practitioners, the percentage of deliveries handled by health workers, the number of posyandu, the percentage of urban population, the GDP of constant prices, and the average length of school. The grouping analysis method used is a hierarchical method consisting of single linkage, complete linkage, average linkage, and ward. From the four methods, the lowest icdrate value was seen as the best method, namely the complete linkage method, with a total group of 6 groups. Group 1 consists of 2 districts / cities and the characteristics of group 1 are all the variables are high dominant. Group 2 consists of 7 districts and the characteristics of group 2 are the number of general practitioners, the number of posyandu, and the constant high GRDP of the constant price. Group 3 consists of 8 cities and the characteristic of group 3 is the percentage of urban population and the average length of school is dominantly high. Group 4 consists of 8 regencies and the characteristics of group 4 are labor handled by high dominant health personnel. Group 5 consists of 4 districts and the characteristics of group 5 are all the variables are dominantly low, so the survival of children needs to be increased. Group 6 consists of 9 districts and the characteristics of group 6 are the number of general practitioners, the number of posyandu, the percentage of urban population, the GRDP of constant prices, and the average length of the medium dominant school.

Keywords: Child Survival, IMR, Group Analysis