

***SUB-DISTRICTS GROUPING IN YOGYAKARTA CITY BASED ON CASES
OF MALNUTRITION AND FACTORS***

By : Adisty Deviana

Departement of Statistics, Faculty of Mathematics and Science
Universitas Islam Indonesia

ABSTRACT

Malnutrition is a condition where nutrition is at a very bad level, where the nutritional status is far from the nutritional standards needed for the human body. Infants and children are groups that are vulnerable to nutritional problems because at that age they need additional nutrients for their growth and development. There are many factors cause malnutrition, direct and indirect factors. One of the direct factors is food nutrition and one of the inderect factors is the parenting system and health facilities. In Indonesia, malnutrition cases in children are still high, such as in the Yogyakarta which has increased from the previous year. One way that the government can make it easy to pay special attention to the handling of malnutrition cases in the Yogyakarta is by knowing the sub-district groups in the city of Yogyakarta. The purpose of this study is to find out the groups of sub-districts in the city of Yogyakarta based on malnutrition cases and the factors that influence malnutrition cases. In order to know the clustering of regions cluster analysis is used, where the clustering method used is the Fuzzy C-Means method. The results of Fuzzy C-Means analysis obtained the best cluster number of 2 clusters based on the index coefficient value the Dunn that is closest to 1 (one) is 0.7521176. The Cluster 1 has 6 sub-districts and for the cluster 2 members has of 8 sub-districts in the total. The most dominant characteristics of the cluster 1 are the number of the malnutrition cases, the number of health facilities, the number of ASIE babies, and the number of PHBS households. The most dominant characteristics of the cluster 2 are the number of BBLR babies, the number of children with complete immuzation, the children who get the vitamin A, the destitute population, and the pregnant woman who get the Fe1 and Fe3 tablets.

Keywords: Malnutrition, Dunn Index, Connectivity Index, Fuzzy C-Means