

ABSTRACT

Stunting is a serious health problem that affects child growth and development, especially in areas with limited access to adequate healthcare and nutrition. Garut Regency is still one of the areas in West Java with a relatively high number of stunting cases. This research aims to identify the profile for each sub-district in Garut Regency based on stunting indicators. This research uses the K-Means algorithm to cluster sub-districts based on indicators related to stunting, such as access to proper sanitation, access to safe drinking water, and nutritional counselling for pregnant women. The data used is sourced from relevant government agencies. The research findings can later be used by the Garut District Health Office to determine suitable areas for implementing stunting intervention programs specific to each sub-district group. The test results show that the K-Means algorithm is able to produce clusters with different profiles for each sub-district group. There are 4 clusters formed: cluster 0 with indicator values close to the average, cluster 1 with low indicator values, cluster 2 with high indicator values, and cluster 3 with varied indicator values across several indicators. With this research, the Garut District Health Office and policymakers can design and implement more targeted stunting intervention programs to reduce stunting rates in Garut District.

Keywords: Stunting, Clustering, K-Means, and Garut Region