CLASSIFICATION OF HYPERTENSION DISEASES IN THE ELDERLY USING NAIVE BAYES CLASSIFIER METHOD

(Case Study: Ponkesdes Karangmulyo Village)

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ABSTRACT

Hypertension is a disease that is still a public health problem both in the world and in Indonesia. In Indonesia, the results of the Basic Health Research (Riskesdas) in 2018, Indonesia has a prevalence of hypertension incidence of 34.1% (Ministry of Health, 2019). The incidence increases with age and is becoming more common among the aging population. A patient is diagnosed with hypertension when he has blood pressure (BP) > 140/90 mmHg. One of the elderly health programs designed by the government is through elderly health services at the Elderly Posyandu. At the posyandu, a patient will be able to check his illness complaints to the posyandu cadres, where the posyandu cadres can later make predictions for the classification of hypertension in the elderly. This study aims to create a system that can classify hypertension in the elderly using the Naive Bayes classifier method. In this study, a series of steps were carried out, namely collecting data from the Ponkesdes Karangmulyo Village, preprocessing, the classification process using the Naive Bayes classifier method, and evaluating system performance. From the test results with the testing data used, the accuracy value is 93.3%, with a total dataset of 975 elderly data which is divided into training and testing data with a division ratio of 70:30. From this study it can be concluded that the Naive Bayes Classifier method can function well in classifying hypertension in the elderly.

Keywords: Classification, Hypertension, Naive Bayes Classifier, Elderly