WEIBULL REGRESSION ANALYSIS FOR KNOWING FACTORS THAT AFFECTING THE CLINICAL IMPROVEMENT RATE OF STROKE PATIENTS (CASE STUDY HOSPITAL HAJI SURABAYA)

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Abstract

Stroke is the leading cause of death in Indonesia, because 15.4% of the causes of death in Indonesia caused by stroke. The aim of this study assigned the models and obtain the factors that can accelerate the rate of recovery of stroke patients at RSU Haji Surabaya using Weibull regression method. Weibull regression is a regression method that can be used for the dependent variable Weibull distribution. Results of this study showed that the average length of the patient's clinical condition improved stroke 8 days, the average systolic and diastolic blood pressure were 154.38 and 93.38. The average age of stroke patients aged 61 years. The majority of stroke patients in hospital Haji Surabaya female, both socio-economic conditions, no history hiperurekemia, heart disease, hypercholesterolemia-emia and hypertriglyceridemia, and has a history of diabetes mellitus, (TIA), and has the kind of stroke infrak.

The best model shows the factors that affect the rate of improvement of the clinical condition of patients with stroke in RSU Haji Surabaya is age, heart disease, diabetes mellitus, hypercholesterolemia, TIA, stroke and type the 36.484 AIC value. Odds ratio value at each additional factors of age (U +1) are likely to experience clinical condition perbailan 0.99 times compared with patients U. On factors that patients had a history of heart disease, diabetes mellitus, hypercholesterolemia, and TIA likely to experience clinical improvement 0.853; 0.839; 0.811; 0.8 times than the opposite. Patients suffering from stroke infrak 1.33 times likely to experience improvement compared suffered a hemorrhagic stroke.

Keywords: clinical improvement, weibull regression, stroke, weibull.