ANALYSIS OF NON HEMORRHAGE STROKE PATIENTS
LENGTH OF STAY WITH COX REGRESSION APPROACH

(Case Study: Non-Hemorrhage Stroke Patients in RSUD Salatiga, Central Java)

By: Feri Andriyanto
Department of Statistics Faculty of Mathematics and Science
Islamic University of Indonesia

ABSTRACT

Non-Hemorrhage Stroke or so-called ischemic caused by blockage of bloodstream into brain and is one of the most common pathogen which covers 80% of all occurring strokes. This research aims to find out the best Cox Proportional Hazard Regression equation in case of long time of non-hemorrhage stroke patients at RSUD Salatiga, Central Java in 2017 and any factor that affects patient's time interest. Analysis method is Regression Cox Proportional Hazard. Because used data may have ties, there will be method to determine partial likelihood, which is breslow, efron and exact. Analysis result shows of the three methods is known the best Cox Proportional Hazard Regression equation is using exact method and there are 4 factors that is really affecting the length of stay, which are total cholesterol, LDL, GDS, and usia with the interpretation obtained indicating that with increasing total cholesterol the patient has a chance to heal the smaller by 1.00637 times, the increase in LDL levels the patient has a chance to recover smaller by 1.00478 times, the increase in Blood Sugar level (GDS) the patient has the chance to recover is smaller as small as 1.00344 times, and the increase of patient age, then the patient has a chance to recover smaller by 1.01489 times.

Key Words: Non-Hemorrhage Stroke, Cox Proportional Hazard, Breslow, Efron, Exact.