PERBANDINGAN *COX F-TEST* **DAN** *LOGRANK TEST* **PADA DATA SURVIVAL**

BERDISTRIBUSI EXPONENTIAL ANALISIS PENCAPAIAN WAKTU KESEMBUHAN PASIEN

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A research requires statistic to analyse research data. There are some research with variable of outcome in the form of survival data, that is data which related to time the happening of an event. Data survival cannot be analysed with procedure of statistika which commonly use, but requiring new technical statistic is so called survival analysis. To compare 2 survival data distribution have distribution of exponential, Cox F test is the most powerful among the other test of parametric for the survival data. And so do Logrank test is powerful among the other of nonparametric test for the survival data. The objectives of research was to compare result of statistical analysis of Cox F test and Logrank test, covering decision of test, p value and power efficiency. Data analysis applied at attainment of patient recovering time seen pursuant to level o f malnutrisi first day patient taken care of, gender, age group, address, anaemia status and infection status. Population patient criterion is starting to be taken care of month February 2008 to February 2009, patient age less than or was equal to 60 months (5 year), Taken care of until recover in Child Room Dr. Soetomo Hospital Surabaya. Before analysed data tested, its distribution is exponential or not. Decision of test result of statistical analysis of Cox F test and also Logrank test was there were no difference of attainment of patient recovering time of malnutrition pursuant to level of malnutrition taken care of first moment, gender, age group, address, anaemia status and infection status. Mean p value Logrank test smaller than p value of Cox F test. Result of paired T test obtained p value = 0,003. Logrank test more efficient than Cox F test. Power efficiency of Logrank test 100%, while power efficiency of Cox F test 43%.

Keywords: exponential distribution, recovery time, Comparison Cox F and Logrank test