ABSTRACT

Multivariate data is data that consists of more than two variables. Health care mother is one of the indicators that influence maternal mortality and the multivariate data because it consists of several variables among which visit coverage of pregnant women K1, K4, visit maternity health care workers and health facilities, visit puerperal women, coverage early detection of complications by health workers and treatment of complications coverage by health personnel. Multivariate data is very important to analyze normality prior to advanced analysis such as parametric or non-parametric analysis. The research objective is to mengetahuji multivariate normality test is best used for analyzing multivariate data normality health services. Normality test multivariate comparison is Mardia MVN test, Henze Zikler MVN test and Royston's MVN test. The third test will be analyzed using statistical applications "R" then the results will be compared based on the type II error (β) and power test. The study was conducted with secondary data in the form of health care coverage mothers in 38 districts / cities in East Java province in 2015. Results showed that the test Mardia MVN test has value greater power than the Henze Zikler test MVN and Royston's test MVN because it has power the biggest and value of type II error is smallest. Conclusion of research is any test of multivariate normality has its advantages and disadvantages of each so that the expected election of normality test can be adjusted with a caracteristic of data and research purposes.

Keywords: multivariate normal test and maternal health services