

Abstract

Cancer is one of the leading causes of death worldwide. In 2012, about 8.2 million deaths were caused by cancer. Lung, liver, stomach, colorectal and breast cancer are the biggest causes of cancer deaths each year. Cancer cases in Indonesia have now reached 4.8 million in 2018. The most cases are breast, cervix, and lung. And we need to note that 43 percent of these cancer cases are preventable. Therefore, the importance of early detection. This study uses linear logistics regression model. Linear logistic regression models can be used for categoric datasets. The appropriate model is obtained after parameter assessment, test the significance of each affecting attribute, and test the suitability of the model. This is done to obtain prediction models and risk factors at the level of correlation of disease size. This method is quite easy and conceptually practical, so it is possible to apply in the diagnosis of early symptoms of lung cancer. The results include a linear logistics regression model for early prediction of lung cancer patients based on symptoms, habits, and history of health diseases to see the likelihood that someone with a certain level of risk could have lung cancer. The factors that affect a person with lung cancer are difficulty swallowing, coughing, chronic diseases, fatigue, and age.

Keywords: prediction model, cancer, logistic linear regression.

