CLASSIFICATION OF THE CERVICAL CANCER PAP SMEAR TEST BASED ON RISK FACTORS (CASE STUDY IN PRIVATE HOSPITALS SURABAYA)

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Abstract
Cervical cancer is the uncontrolled growth of the cell cycle that is on the cervix (abnormal). Cervical cancer is also called cervical cancer or cervical cancer located in the lining of the cervix. According to data from the World health Organization Into (World Health Organization / WHO) per year, there are approximately 15,000 cases of cervical cancer are found in Indonesia. The cause of most primary cervical cancer were HPV (Human Papilloma Virus). Cervical cancer can be detected through Pap Smear Test. By Classification and Regression Trees method (CART) will be generated several groups of patients with cervical cancer workup relatively more detail. Based on the descriptive statistic of the results showed that patients who detected more abnormal than normal patients by using the results of Pap Smear Test, with the ratio of 70% (2452 patients) abnormal and 30% (1053 patients) normal. Classification results with CART approach provides information that the variables that most affect the results of the Pap Smear Test Patient age, history of miscarriage, Contraceptive Use, Age Menstruation (Menstrual Cycle and Childbirth First Age), and Frequency Childbirth. And classification tree method produces optimal tree with the accuracy of data classification learning and testing that is equal to 58.3% and 60.4% for the combination of 80% learning data and 20% testing data.

Keywords : Pap Smear Test Results, Cervical Cancer, CART, Classification Accuracy
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