CLASSIFICATION SYSTEM OF
MEDICAL ACTION BASED ON GIVEN BIRTH MOTHER
MATERNAL MEDICAL RECORDS USING THE DECISION
TREE ID3

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ABSTRACT

Medical treatment in women who give birth are giving all kinds of drugs to be consumed after the birth . These types of drugs include : antibiotics due to infection and multivitamins or high doses of vitamin C serves to heal the wounds of the mouth of the uterus after childbirth . To assist clinicians in diagnosing performance symptoms experienced by medical record's mother, made a classification system based on the attributes of the record . Attributes include : how to be born , the color of membranes, maternal conditions, the condition of the fetus, maternal age , gestational age and fetal membrane rupture per hour .

This research applies the classification techniques of data mining with decision tree method ID3 to provide medical treatment to the mother who gave birth to that class without action (blank) , antibiotics and multivitamins . This study uses the FDR method (ischer 's Discriminant Ratio) to test the numerical valued attributes in the preprocessing attributes maternal age , gestational age and fetal membrane rupture per hour. The results of the FDR proved that all three attributes have no effect at all because the data value is less than 1.

System testing performed three times, each test was repeated three times with composition training data and test data are different. Data used in the testing of this system is the data in September 2013 until March 2014. Highest accuracy value obtained on the type of the third test, the fist and third test with a value of 70 % . From the test again tested by adding the test data from the data 20 to 50 times the data with 3 trials. Highest accuracy values obtained with a value of 86 % with 50 experiments to the data.

Based on the test results showed that the amount of training data affects the accuracy of predictions . The more training data and test data are used , the value obtained higher accuracy.

Keywords : Data mining, classification, FDR, Decision Tree ID3, medical measures of mothers who gave birth

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