



Prediction Of Neonatal Jaundice(Hyperbilirubinemia) By Using Logistic Regression

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Citation:Ragini Patil.et al (2024). Prediction Of Neonatal Jaundice (Hyperbilirubinemia) By Using Logistic Regression, *Educational Administration: Theory and Practice*, 30(5), 12738-12741, Doi: 10.53555/kuey.v30i5.3360

ARTICLE INFO

ABSTRACT

The present study is undertaken with the aim to evaluate the utility of Logistic Regression classification in pre- identifying Neonatal Jaundice. In this research by using Logistic Regression classification we have predicted Neonatal Jaundice by using various parameters of neonates. Here our aim is to provide a benchmark and improve earlier ones in the field of Neonatal Jaundice diagnostics with the help of Logistic Regression classification technique. We have collected data of neonates by observing them from birth up to 72-96 hours of postnatal life. We have predicted Neonatal Jaundice by using Logistic regression. Then we have obtained accuracy, precision, recall, F1 score as evaluative measures. Also by using Receiver Operating Characteristic curve (ROC) area under curve (AUC) is 89.99%. This indicates that our model has higher discriminating power in prediction of Neonatal Jaundice.

Keywords: Hyperbilirubinemia(Jaundice), Logistic regression(LR), AUC, prediction, accuracy.