RISK FACTORS ASSOCIATED WITH HEPATITIS B INFECTION

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ABSTRACT

Hepatitis B viral disease is a global health problem. This study developed a binary logistic regression model to assess the risk factors of Hepatitis B using data collected from gastro clinic, cardiovascular department of Federal medical Centre Gusau Zamfara state from January 2018 to December 209. The study revealed that marital status (OR – 1.99), history of blood transfusion (OR = 2.70), multiple sex partner (OR = 2.01), and alcohol consumption (OR = 2.55) has statistical association with Hepatitis – B virus disease while gender, and infected family member were not statistically associated with Hepatitis – B virus disease. A binary logistic regression model was built with all the predictor (Model 1) and the coefficients were tested for significance, Non-significant predictors were removed and another model (Model 2) with only significant predictors was developed. Model selection criterion such as Akaike Information Criterion (AIC) and Bayesian Disease Criterion (BIC) were employed and hence the model with only significant predictors (Model 2) provide a strong likelihood between the observed and model predicted values. The study recommends that community access to and use of health services, notably for hepatitis B and other infectious diseases, must be improved.

Keywords: Hepatitis B, risk factors, logistic model, odds ratio