

ABSTRACT

In this research, we concentrated on pervasiveness of HCV and mapping and its association risk factors in all the districts of Punjab, Pakistan. In this research, we used multistage cluster sampling method, 13501 respondents were nominated of age 17 years and beyond. Prevalence of HCV was measured in percentages. For hotspot analysis of HCV and mapping, we used GIS techniques. According to hotspot analysis prevalence rate of HCV was high in Toba Tek Singh (18.18%), Rahim YarKhn (15.34%), Khanawal (13.95%), Multan (13.51%), Chinot (13.13%), Hafizabad(12.43%), Jhang (12.81%), MandiBahaudin (12.89%), Sargodha (11.44%), Faisalabad (11.54%), Shakhupura (11.89%). To determine the correlation between the variable we used Pearson's chi-square test. We used independent variable such as gender, age, marital status, area, blood transfusion, having a cut by barber, having tattoos, diabetic patients, age of diabetes, pregnancy issues, and blood pressure and the dependent variable was HCV. Minitab 16 and IBM SPSS Statistics 21 was used to achieve binary logistic regression model to study the influence of different risk factor on the prevalence of HCV, with the response variable of two classes: yes and no. Akaike information Criterion was used to determine the explanatory variables: Gender, Age, Area, Marital Status, Group Injection, Blood Transfusion, Tattoos, Dental Treatment, Debits and Age of Debits. Out of 13501 participants, 35.89% were man and 64.11% were woman beings were HCV patients. Thus, the most of the respondents in which prevalence of HCV is high was females. Age groups above 17 were exposed at more risk of increasing the diabetes. The most significant variables for HCV were: Gender, age, marital status, group injection, blood transfusion, tattoos, dental treatment, diabetes and age of diabetes are found from our binary logistic regression model.