

Abstract

In this study, we focused on prevalence and risk factors of hepatitis C virus (HCV) among thalassemia major and hemodialysis patients in district Lahore. HCV is one of the most common bloodborne viral infections reported in Pakistan. The health standard in Pakistan is below than international level. In view of that, transfusion of contaminated blood is still a major risk factor for the spread of HCV. Meanwhile blood transfusion therapy is common effective means used for the treatment of disease and pro-longes lives of patients diagnosed for thalassemia. For that reason thalassemia patients are at high risk of blood borne viral infections. Similarly, frequent dialysis treatment of hemodialysis patients exposes them to a high risk of HCV infection. Moreover, the public sectors hospitals are not adequately equipped for screening of blood and blood products in Pakistan and according to our own observation proper sterilization procedures are also not practiced due to various reasons including burden of patients or sometimes lack of proper awareness, contaminated devices, equipment and supplies, environmental surfaces, and attending human resources play a crucial role in the transmission of HCV. The main purpose of this research is to quantify the prevalence and risk factor of HCV among thalassemia major and hemodialysis patients through a systematic review. To achieve this purpose, a cross sectional study was based on sample of 277 thalassemia major patients and 136 children of hemodialysis. Data were collected through self-administrated questionnaire from children hospital & institute of child health Lahore. Descriptive analysis was used to find the relationship between prevalence of HCV among thalassemia major and hemodialysis patients and explanatory variables. Prevalence of HCV among thalassemia major and hemodialysis patients were measured in percentages. Among sampled population of 277 thalassemia major respondents and 136 hemodialysis respondents, 29.96% were thalassemia major patients and 22.06% hemodialysis patients were diagnosed for HCV. Binary logistic regression model was used to study the impact of different risk factors on the prevalence of HCV among thalassemia major and hemodialysis patients. Akaike's Information Criterion (AIC) was used to determine the explanatory variables. The most significant variables for HCV among thalassemia major patients were: age, family history about HCV, increase in the frequency of blood transfusions and Parent's awareness about risk of developing HCV. The most significant variables for hemodialysis patients were: age, weight and Parent's awareness about risk of developing HCV.