ABSTRACT

The current study is hospital centered case-control study with both descriptive and analytical results. The major objectives of this study are to figure out the prevalence of HCV among beta thalassemia patients, secondly which age group of beta thalassemia patients is most affected with HCV and also detect the effects tradition of inter family marriages in the target population. A sample of 500 patients in which 286 (57.2%) are males and 214 (42.8%) are females and aged from 1 month to 33 years. The inclusion criterion for this study is that patients who have any kind of beta thalassemia and receives blood transfusion in "Thalassemia Day Care Center (Thalassemia Society of Pakistan) Sir Ganga Ram Hospital, Lahore". The data is collected through structured questionnaire during the time period May 2019 to November 2019 by interviewing patients and their attendants. The information about different risk factors for prevalence of HCV e.g., Age, Gender, Type of Thalassemia, No. of blood transfusions, Place of blood transfusion, Area, Province, Ethnic Group, Family History, Income, Income Source, Consanguineous Marriage, Other family member suffering from thalassemia, Other disease expect HCV and thalassemia, Visit to dental clinic, Dental tool sterilization satisfaction, Cuts, Other family member suffering from HCV, Relationship, Blood screening satisfaction etc.

The data gathered regarding risk factors was coded and entered into computer by using SPSS 20.0 and Minitab 16 for the analysis. In the descriptive section, frequencies and percentages of numerous risk factors are determined and interpreted. Impact of different risk factors is also check with other risk factors. Results are displayed as multiple bar charts and pie-charts. The descriptive study shows 227 (45.4%) patients of beta thalassemia have HCV; 127 cases are male and 100 cases are females. In the analytical section, binary logistic regression model is selected by applying AIC formula. Hosmer- Lemeshow test and Pearson's Chi-square test are used as goodness of fit tests.

It is concluded that this disease does not rely on a single risk factor. There are many factors which may enhance the risk of this disease (HCV). The study enlighten that age has a great impact on prevalence of HCV. There is no significant impact of consanguineous marriages on thalassemia and HCV. In this study age, weight, number of blood transfusions, place of blood transfusions, family member with thalassemia, visit to dental clinic, other family member with HCV and other diseases is recorded as significant factors. Among all significant variables, Variable "Other family member with HCV" showing most significant results i.e., 0.781 and have great impact in prevalence of HCV.