# ABSTRACT

This study examined the role of different risk factors that could be related to incidence of dental caries. A case control study was carried out using both descriptive and analytical approaches. A sample of 300 subjects consisting of 150 cases and 150 controls was selected from Lahore using a questionnaire and direct interviews. Cases were selected from Punjab Dental Hospital, Lahore while controls of were selected from attendants of patients and other healthy people. All respondents of age 5-19 years were selected for this study. The SPSS 18.0 was used for analysis. For bivariate analysis, the Chi-square and Phi/V statistics are used. In the bivariate analysis, the factors including regular brushing and brushing before sleep are found to be negatively associated with dental caries showing that these factors provide prevention against disease. On the other hand, eleven factors including gender, family history, chewy and sticky food, favorite food, bedtime feeding, frequent sugar consumption, bleeding gums, crooked teeth, crowded teeth and defected enamel are positively related to the disease which means that these factors could increase the risk of dental caries.

By using the Logistic Regression model, the seven factors including bleeding gums, chewy and sticky food, frequent sugar consumption, regular brushing, family history, crooked teeth, and defected enamel are found to be significantly related to dental caries. In which six factors bleeding gums, chewy and sticky food, sugar consumption, family history, crooked teeth and defected enamel are positively related to dental caries.

**Key Terms:** Dental caries, Risk Factors, Logistic Regression, Odds ratio, Controls, Significance, Retrospective