## Abstract

This thesis presents a comprehensive case-control study aimed at investigating the phenomenon of amnesia in adults in Pakistan. The title is Case Control Study on Amnesia in Adults: A Diagnostic and Statistical Analysis. Data for this study was meticulously collected from hospitals by questionnaire from 2010-2020 with the sample of 300 patients from which 200 are cases and 100 are controls. The data is conducted from both male and female of different age groups. There are many variables are used in this study which Age, Gender, Education, Employment, Income, children, Diagnosis, History of Trauma and other health and behavior related questions. The research employed rigorous methodologies to ensure the robustness and reliability of the findings. We performed data analysis on SPSS for getting results. For methodology we use graphical representation, descriptive analysis and analytical analysis. In descriptive analysis, frequency and percentages are calculated then various test are applied which are chi square, Phi Coefficient, Cramer V, Kendall's Tau-b etc. which shows significant result and strong association among variables. This signifies that the amalgamation of selected variables plays a pivotal role in the occurrence of amnesia. For analytical analysis, logistic regression model and health belief model are applied which includes Hosmer Lemeshow test results as insignificance finding and regression shows the good results as the R2 gives the model fit conclusion. This study provides a comprehensive foundation for understanding amnesia in adults, offering a significant stride towards unraveling its underlying mechanisms.