ABSTRACT

The topic under study "Determination of risk factor for Asthma, A cross-sectional study of 205 patients" was selected to aware the Pakistani population about the significant risk factor associated with asthma. This was a hospital based cross sectional study of 205 patients having 136 cases and 69 controlled patients. This study contains 41 risk factor including all possible demographic, socio economic and clinical risk factors and the study duration was form May to September 2007. Moreover, the data was studied separately for overall patients, male patients and female patients. In the descriptive section count and percentages of each risk factor were studied with asthma. While analytical section was divided into two parts as bivariate analysis and multivariate analysis of the same data.

Further multiple logistic regression analysis was brought into account to find the predictive strength of different significant risk factors. Some techniques of diagnostics for logistic regression were applied on the data. For this graphs of residuals and predicted probabilities were plotted to examine the influential and leverage values in the data. The final and complete analysis was made after discarding these observations separately from the analysis of overall patients, male patients only and female patients only.

In the overall patients analysis, it was found that five risk factors cold weather (COLDWET), pollen season (POLLSEA), emotional expression (EMOEXP), respiratory infection(RESINF) and have correct menstrual cycle for female (MENCYC(2)) are significantly contributing risk factors to develop asthma.

In the male patients analysis, it was found that four risk factors cold weather (COLDWET), pollen season (POLLSEA), emotional expression (EMOEXP) and respiratory infection (RESINF) are significantly contributing risk factors to develop asthma for male patients

In the female patients analysis, it was found that two risk factors emotional expression (EMOEXP) and gastroesphageal reflux disease (GASREF) are significantly contributing risk factors to develop asthma for female patients and both are positively associated with asthma for female patients only.