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## Correlation of Asthma Symptoms with Prevalence of Indoor NO<sub>2</sub> Concentration in Kuwait

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### ABSTRACT

The research literature provides strong evidence that characteristics of buildings and their indoor environments influence the prevalence of several adverse health effects. Kuwait is considered one of the countries with harshest weather conditions. It is estimated that Kuwaitis spend most of their times indoors. Indoor environments quality should be taken seriously since indoor allergens and irritants can play a significant role in determining the health of households. In this research we propose to profile synergistic interaction between morbidity differentials and air quality in Kuwait residential area. The objective of this project is to investigate the relation between indoors air quality and asthma symptoms. Data mining techniques are employed to discover the correlation between indoor air quality measures and asthma symptoms and trigger. The main trigger considered in this research is the concentration of nitrogen dioxide. Some other triggers investigated are dust mites, smoking and others.

### KEYWORDS

Asthma, Indoor Air Quality, Data mining, Correlation

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