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## THE IMPACT OF ILLNESS EXPECTATIONS ON ASTHMA SYMPTOMS AND RESPIRATORY VALUES: A LONGITUDINAL STUDY

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**Background:** Placebo and nocebo effects can promote physical modifications by creating an expectation of change through a primer, such as a fake pill. Every person who receives a diagnosis develops their expectations about the course of the disease, known as "Illness Expectation" (IE). This cognitive schema defines future-oriented beliefs about the illness and symptoms of individuals with chronic diseases, which can be both explicit and implicit and characterized by different degrees of rigidity.

**Aims:** This study aims to test the hypothesis that IEs affect illness symptoms in asthma.

**Method:** The study employed a repeated measures design. Three hundred twelve participants with asthma were assessed three times over six months for asthma symptoms (using the Asthma Control Test), respiratory values (using FEV1 measured by spirometer), and illness expectations, using the previously validated "Illness Expectation Test," which assesses both explicit and implicit expectations. The predictive values of illness expectations on asthma symptoms and respiratory parameters were measured using latent growth modeling and linear regressions.

**Results:** Longitudinal data analysis suggests a strong predictive value of explicit expectations on self-reported asthma symptoms ( $\beta = -0.50$ ,  $se = 0.21$ ,  $p = 0.01$ ). Implicit expectations showed a non-statistically significant similar trend ( $\beta = -0.014$ ,  $se = 0.008$ ,  $p = 0.09$ ). Furthermore, expectations of improvement or worsening of symptoms over time strongly predicted changes in respiratory values ( $\beta = 0.51$ ,  $se = 0.11$ ,  $p = 0.001$ ).

**Conclusions:** These results confirm the relevance of illness expectations in asthma progression and suggest a high potential for mind/body interventions.

**Keywords:** Illness expectations, Placebo, Mind-body, Asthma

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