

Economic Burden of Adult Asthma in Turkey: A Cost of Illness Study from Payer Perspective

Abstract

Objective: To estimate economic burden of adult asthma in Turkey from payer perspective

Methods: This cost of illness study was based on identification of per patient annual direct medical costs for the management of adult asthma in Turkey from payer perspective. Average per patient direct medical cost was calculated based on cost items related to outpatient visits, laboratory and radiological tests, hospitalizations and interventions, drug treatment and equipment, and co-morbidities/complications.

Results: Overall, per patient annual direct medical cost of adult asthma was \$1,371.20 with hospitalizations (\$811.39, 59.2%) as the main cost driver, followed by drug treatment/equipment (\$252.42, 18.4%). Management of uncontrolled asthma was associated with higher per patient annual direct medical cost when compared to controlled asthma (\$1,213.09 vs. \$594.34), mainly due to higher hospitalization costs (\$653.28 vs. \$34.52; 51.97% vs. 5.81%). Based on estimated number of adult asthma patients (n=2.422.919) and prevalence of disease (4.5%) in Turkey, overall economic burden of asthma in Turkey was calculated to be \$2.2 billion.

Conclusions: In conclusion, our findings indicate that managing adult patients with asthma pose a considerable burden to health economics in Turkey, with hospitalizations identified as the main cost driver and two-fold cost increment in case of uncontrolled disease. In this regard, our findings emphasize the need for cost-effective prevention strategies to reduce the financial burden of adult asthma, and the likelihood of potential cost-savings by better disease control with reduced frequency of hospitalizations.

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Received October 22, 2018; **Accepted** November 17, 2018; **Published** November 22, 2018

Citation: Turktas H, Bavbek S, Sekerel B, Oksuz E, Malhan S (2018) Economic Burden of Adult Asthma in Turkey: A Cost of Illness Study from Payer Perspective. *J Respir Med* 2: 111.

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Citation: Turktas H, Baybek S, Sekerel B, Oksuz E, Malhan S (2018) Economic Burden of Adult Asthma in Turkey: A Cost of Illness Study from Payer Perspective. J Respir Med 2: 111.

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