

COST OF ASTHMA HOSPITALIZATIONS IN THE BRAZILIAN PUBLIC HEALTH SYSTEM

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ORIGIN Health

INTRODUCTION

- Asthma is a heterogeneous inflammatory chronic disease affecting > 260 million of patients worldwide. (1,2)
- Asthma affects both adults and children, leading to humanistic and economic burden. (3–5)
- In Brazil, asthma patients have a important frequency of hospitalization when compared to controls.(6)

OBJECTIVE

This study aims to describe asthma hospitalizations patterns and its costs in the Brazilian Unified Health System (SUS) for adults and children, from 2016 to 2021.

METHODS

Hospital admissions and costs data between 2016 and 2021 were obtained from the Brazilian Hospital Information System (7), using ICDs J45 and J46 for asthma. Collected variables were stratified for adults (≥ 18y) and children (≤17y): hospitalization year, number of hospitalizations, total hospitalization costs, number of hospitalizations with intensive care unit (ICU) stay and total costs of ICU hospitalizations with ICU. Descriptive analyses were performed to evaluate these data and average cost was calculated. Costs values were presented as Brazilian Real (BRL).

RESULTS

Total costs of hospitalization for children decreased from 34.2 million BRL in 2016 to 25.3 million BRL in 2021, but mean hospitalization costs showed increase from 553.05 BRL/hospitalization to 625.55 BRL/hospitalization.

For adults a similar scenario was observed, with decrease of total costs (2016: 18.7 million BRL; 2021: 11.2 million BRL), and with increase in mean costs (2016: 562.71 BRL; 2021: 694.09 BRL).

- Number of hospitalizations for children decreased from 61,764 in 2016 to 40,472 in 2021.
- For adults a decrease in hospitalization number as also observed (2016: 33,360; 2021: 16,108).
- Regarding hospitalization with ICU stay mean cost, children presented a slighter decrease during the analyzed period (2016: 3,158.65 BRL/hospitalization with ICU stay; 2021: 3,101.64 BRL/hospitalization with ICU stay), while adults presented increase from 5,044.89 BRL/hospitalization with ICU stay to 5,692.09 BRL/hospitalization with ICU stay.

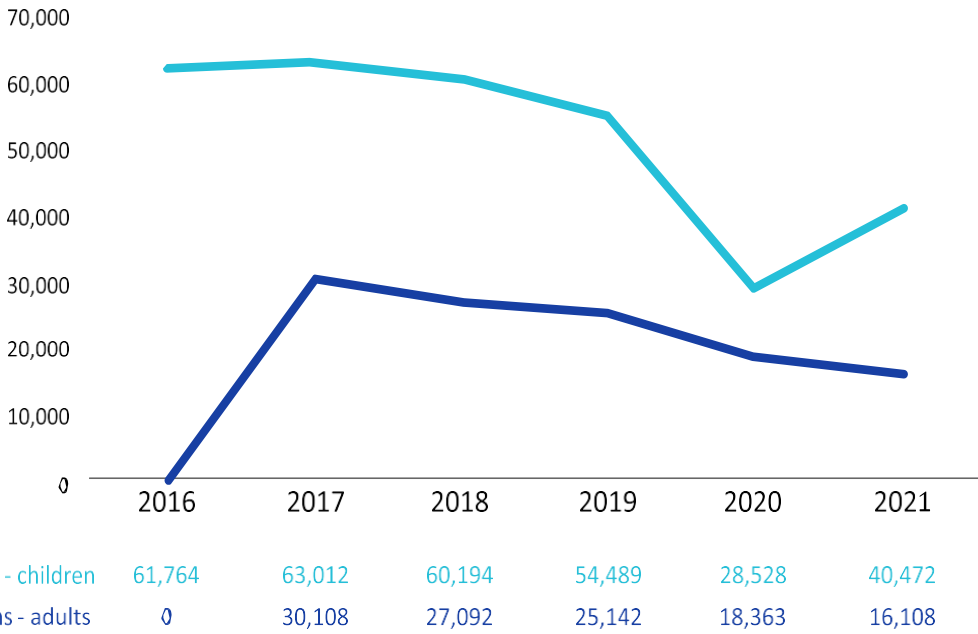
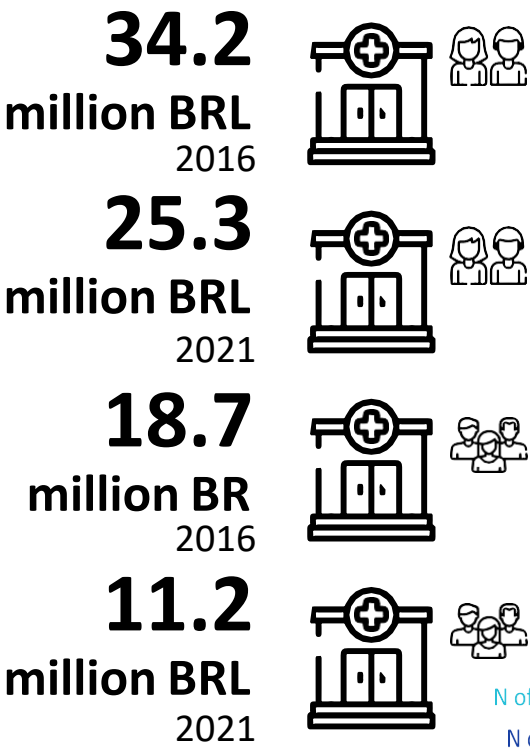
CONCLUSION:

Mean costs of hospitalization for children and adults with asthma in SUS showed an increase despite reduction in number of hospitalization and costs, signaling those total costs did not decrease in the same velocity of hospital admissions, except for children hospitalization with ICU stay.

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Total cost



Mean cost

