

Excess of Mortality By Asthma during COVID-19 Pandemic in Colombia

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OBJECTIVE

Global efforts to estimate epidemiological trends for asthma indicate that asthma-related deaths have declined globally. However, the effect of COVID-19 on asthma mortality is not well understood. We aimed to investigate excess asthma mortality during the COVID-19 pandemic (2020-2021) in Colombia using available official national records.

METHODS

Data on asthma-related mortality (ICD-10: J45-J46) from 2015 to 2021 were obtained from the vital statistics provided by National Administrative department of Statistics (DANE) in Colombia. Population projections from DANE were utilized to estimate crude mortality rates (CMR) for asthma. Mean deaths during the periods 2015–2019 and 2020–2021 were compared. Variations of CMR according to main geographical units of the country (states) were analyzed.

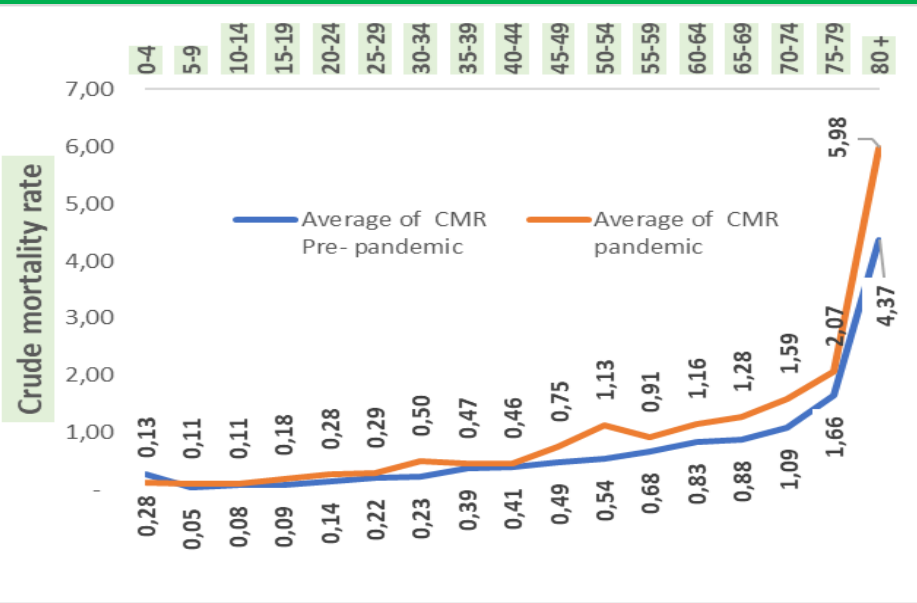
RESULTS

Between 2015 to 2019, Colombia recorded a mean of deaths of 203 due to asthma. During pandemics, the mean of deaths was 321 (95% UI 320 – 322). The difference of means was 118 deaths (95% UI 116 – 120). There was an increase of 40.2% in asthma-related mortality during the pandemic. Out of the 33 Colombian states, 14 experienced an increase above the national mean, while in 6 states, there was a decrease in the CMR for asthma during the pandemic, where in Bolívar was the most affected state. Age-specific CMR showed that the asthma-percent change during the pandemic was more pronounced among individuals under the age of 65, with a 48.9% increase, compared to a 36.3% increase in those over 65 years-old

CONCLUSIONS

The study indicates a concerning increase in asthma-related deaths during the pandemic in Colombia, especially among those under 65 years old.

Average of CMR of Asthma by age, both sexes, pre-pandemic and pandemic, Colombia



Ages	Pre-pandemic					Pandemic	
	2015	2016	2017	2018	2019	2020	2021
< 65 years	0,27	0,25	0,27	0,34	0,33	0,42	0,46
65 + years	2,46	1,82	1,72	1,62	1,57	2,72	2,30