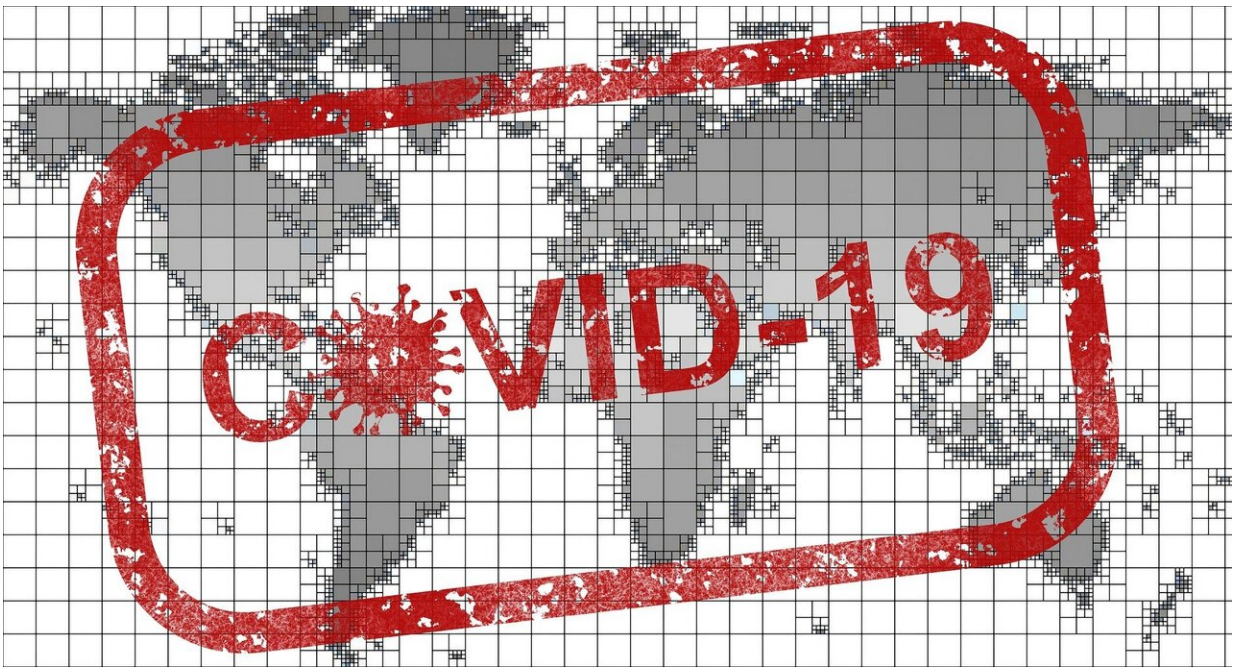
Fewer people sought medical help for severe asthma attacks during the COVID-19 pandemic

March 29 2021



Credit: Pixabay/CC0 Public Domain

Fewer patients with severe attacks were seen by their GP or admitted to hospital during the COVID-19 pandemic, and fewer were admitted to hospital for pneumonia, influenza and chronic lung diseases, show findings from three papers published online in the journal *Thorax*.

Early in the pandemic, asthma was identified as a potential risk factor for hospital admission and death from COVID-19, and since the majority of asthma exacerbations are associated with respiratory viral illnesses, it was expected that asthma exacerbations might increase.

Stay at home messages from governments, and fear of the virus could have dissuaded patients experiencing asthma exacerbations from seeking help from health services. On the other hand, restrictions on travel and social contact, resulted in reduced air pollution and transmission of other respiratory viruses, which could have led to a true reduction in asthma exacerbations during lockdown.

In the UK the first nationwide lockdown began on 23 March 2020.

In the first paper Shah and colleagues use the Optimum Patient Care Database of 9,949,387 patients in England to assess weekly asthma exacerbation rates over the period January to August 2020, using January to August 2016-2019 as a baseline, to see how they changed after lockdown.

After 23 March there were almost 20 fewer episodes for every 100 patients with asthma. When looked at by health setting, the reduction was only significant for patients who did not attend hospital or require hospital admission.

Shah and colleagues say, "We believe that a combination of factors led to a reduction in asthma exacerbations. These factors include changing behaviour due to lockdown measures leading to reduction in air pollution, reduced circulation of respiratory viruses, improved self-management driven by patient concerns during the pandemic and shielding by a subset of patients."

In the second paper, Davies and colleagues follow a similar approach.

They use official data on emergency admissions and deaths due to asthma from Scotland's Public Health Scotland and Wales' SAIL Databank to compare weekly rates in the first 18 weeks of 2020 with the national averages over 2015-2019. They look at how trends changed between the first 13 weeks of 2020 compared with the five weeks post-lockdown.

Across both countries, the number of asthma exacerbations resulting in emergency hospital admission fell by more than a third (36%) post-lockdown, and there was no significant change in asthma deaths.

Davies and colleagues say, "We do not yet know to what degree the reduced numbers of emergency presentations of asthma in our study are due to improvements in asthma control or reductions in exposures to triggers during the pandemic versus avoidance of healthcare settings."

And they note that in Wales there was a large spike in GP prescriptions for asthma medication the week before lockdown—121% more inhaled corticosteroids and 133% more oral corticosteroid prescriptions compared with the five-year average.

In the third and final paper, Jung and colleagues report that the COVID-19 pandemic has been associated with a fall in hospital admissions for pneumonia, influenza, COPD (chronic obstructive pulmonary disease) and asthma in South Korea. They looked at weekly hospitalisation for the four conditions over February-July 2020, using figures from the National Health Insurance Service for January 2016-January 2020 as a baseline.

"Since the early days of the COVID-19 epidemic, South Korea has thoroughly carried out social distancing, personal hygiene and universal use of face masks. In this study, the significant decrease in hospital admissions for influenza, pneumonia, COPD and asthma suggests the

unintended benefits of these measures," Jung and colleagues say.

Personal hygiene and droplet precautions are well-known effective measures for preventing the spread of influenza and a substantial portion of pneumonia, they add, "Our findings suggest that the decrease in admissions due to COPD and asthma might be associated with the decrease in respiratory infections, which are the most common triggers for acute exacerbation of COPD and asthma."

These are observational studies, and as such, can't establish cause. The authors of all three studies also point out several limitations including that diagnoses were not validated and that reliance on specific databases may have meant that some care episodes may have been missed as they were recorded in other databases.

More information: Impact of COVID-19 national lockdown on asthma exacerbations: interrupted time-series analysis of English primary care data, *Thorax* (2021). DOI: 10.1136/thoraxjnl-2020-216512

Impact of COVID-19 lockdown on emergency asthma admissions and deaths: national interrupted time series analyses for Scotland and Wales, *Thorax* (2021). DOI: 10.1136/thoraxjnl-2020-216380

Decrease in hospital admissions for respiratory diseases during the COVID-19 pandemic: a nationwide claims study, *Thorax* (2021). DOI: 10.1136/thoraxjnl-2020-216526

Provided by British Medical Journal

Citation: Fewer people sought medical help for severe asthma attacks during the COVID-19

pandemic (2021, March 29) retrieved 11 May 2024 from https://medicalxpress.com/news/2021-03-people-sought-medical-severe-asthma.html