

Fewer asthma attacks during pandemic – or better self-management?

While a recent study found the number of asthma attacks apparently halved in the first months of the first lockdown, patients say this is because they took extra care to avoid triggers such as infections

Practices in England saw patient consultations for asthma exacerbations halve during the UK's first lockdown, a study has found,¹ although the number of people needing hospital treatment remained the same.

Researchers used the Optimum Patient Care database, which collates medical records from general practices from around the UK, to study exacerbations among over 100,000 patients in England who had at least one such event from January 2016 to August 2020. During that time there were 278,996 exacerbations, most of which (229,058; 82%) were managed in primary care.

The researchers compared the exacerbation rate in two distinct periods of the five years studied—weeks 1 to 12 and weeks 13 to 32, which in 2020 was after lockdown was imposed on 23 March. They found that from March to August 2020 there was a significant reduction in asthma exacerbations among patients treated solely in general practice when compared with the previous four years (-0.244 episodes per person per year; $P=0.000$). But no significant difference was seen in exacerbations that needed a hospital visit or admission.

The lower rate of GP consultations was seen in all age groups but especially in children aged 5 to 10 and in most regions of England, except for London and the north east, the researchers reported in *Thorax*.

Syed Shah, study author from the Asthma UK funded Usher Institute at the University of Edinburgh, told *The BMJ* that

from March to August 2020 there were just 23 exacerbations per 100 patients attending primary care – half the rate seen during the equivalent period in the previous four years, when the figure was 46 exacerbations per 100 patients.²

Speaking about the reduction in asthma attacks, Shah said: 'It's not clear whether this was an actual improvement in asthma because of reduced pollution and [fewer] opportunities for respiratory viruses to spread or whether patients were afraid of consulting primary care and stayed home. Further research will help explain the reasons behind our findings.'

Self-management

Improved self-management of asthma driven by concerns about the pandemic and shielding by high risk patients may also have been factors, said the authors.

Samantha Walker, a director at the charity Asthma UK, said: 'Many of our supporters have told us they were afraid to seek help during the pandemic. We cannot assume that because GPs are seeing fewer patients with asthma attacks people aren't experiencing them, as our research shows that 66.7% of people with asthma who had an attack dealt with it at home.'

Dr Thomas Beaney, author of a recent paper on managing asthma during the pandemic,³ said: 'This finding will chime with what many of us experienced in general practice in the first wave of the pandemic. Many questions remain, however. We need further research to establish how much of

this reduction is from real falls in incidence, changes to patients' care-seeking behaviours, or barriers to accessing care, and whether any inequities in accessing care may have arisen.'

Publication of the study followed the announcement in February that only people with severe asthma, requiring continuous or repeated use of oral steroids, should be eligible for early vaccination (clinically vulnerable band 6). The basis for the Joint Committee on Vaccination and Immunisation (JCVI) decision was a judgement that available data do not show an increased risk of death from COVID-19 for people with asthma, except among those with severe disease.

PATIENT SURVEY

However, both interpretation of the study and the decision to remove asthma patients from band 6 of the COVID-19 vaccination priority list have been disputed by Joanna Woods, a patient with asthma.

Ms Woods undertook a survey of 181 people with asthma and found that although fewer people reported asthma exacerbations, this did not appear to be as a result of being at lower risk of COVID-19, but because of the respondents' efforts to shield themselves from the risk of infection.

She said: 'QCovid, the algorithm used by the JCVI and the government, didn't allow for this extra shielding, therefore the "science" used to remove [people with asthma] from Group 6 was, and remains, flawed.'



Further research is needed to discover whether the reduction in consultations is due to lower incidence of exacerbations or other factors

Ms Woods' poll, conducted in April, asked people with asthma three questions based on the previous 12 months: whether they shielded or self-isolated or took additional precautions over and above government recommendations; whether they had had colds or flu in this time; and whether they had had any asthma flare-ups in this time.

- 98% of respondents said they shielded, self-isolated or took additional precautions.
- 65% did not have colds or flu
- 78% said they had asthma exacerbations
- 14% had no asthma attacks.

Of those who had had an exacerbation, 21% attributed it to stress and anxiety; 18% said

flare-ups were due to hayfever; temperature or weather changes accounted for 12% of exacerbations.

Many people commented that they had not had a cold or flu over the past year, and that this had been the first time in several years that they had not needed oral steroids. All of these respondents said they believed this was due to the additional precautions they had taken, such as shielding, as well as social distancing, mask-wearing and hand hygiene.

All of those who experienced an exacerbation self-medicated; some had a phone or video consultation with a GP or asthma nurse; none had a face-to-face appointment. Some people had their annual

review over the phone, but many had not had one in the past 12 months.

Editor in chief Beverley Bostock, asthma lead for the Association of Respiratory Nurse Specialists, commented that while there was an issue with surveys of self-selected groups of people who chose to respond, it was 'important to hear the message here.'

Where people experiencing an exacerbation self-medicated, if they were following their personal asthma action plan (PAAP), 'this was exactly what we would expect them to do, up to the point where they need to see a clinician for a physical assessment and potentially oral steroids. Those who needed to be seen should have been seen but apart from physical examination, a thorough review can be completed without meeting face-to-face, especially when risks outweigh benefits.'

Ms Bostock added: 'Many clinicians were taken away from their usual place of work or role to deliver COVID care. Those who were continuing to work in their usual roles were getting to grips with the IT needs for video consultations or were working from home and needed to work out the processes that needed to take place to achieve this. This should, at most, have delayed reviews, not resulted in reviews being cancelled.'

'We knew pre COVID that phone reviews were effective so we should learn to optimise the outcomes for patients and clinicians alike and change expectations that all consultations should be face-to-face.'

Ms Bostock concluded: 'There is clearly a major mismatch between patient and clinician expectations and we should be very focused on explaining to people how the new ways of working can be beneficial for all – but we should tailor our approach to the individual and never underestimate the value of face-to-face contact.' ♦

REFERENCES

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