

Delayed antibiotic prescribing is safe and effective for most patients

29 April 2021



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Delayed antibiotic prescribing is a safe and effective strategy for most patients with respiratory tract infections, finds an analysis of patient data published by *The BMJ* today.

Delayed [antibiotic prescribing](#)—also known as 'just in case prescribing' - is where [patients](#) agree not to collect a prescription immediately and see if symptoms settle to help reduce [antibiotic use](#).

The results show that delayed prescribing was associated with a similar duration of symptoms as no antibiotic prescribing and is unlikely to lead to poorer [symptom](#) control than immediate antibiotic prescribing. There was a slight benefit for children with immediate antibiotics but this was not important enough to justify immediate antibiotic prescribing.

Respiratory tract infections affect the sinuses, throat, airways or lungs and include conditions such as the common cold, sore throat, cough and ear [infection](#). Most get better without treatment, but in the UK and internationally, antibiotics are still often being prescribed for these conditions.

Clinical trials have suggested that delayed antibiotic prescribing for [respiratory tract infections](#) is probably safe and effective for most patients, but they were unable to examine different groups of patients or complications.

To address this, an international research team set out to assess the effect of delayed antibiotic prescribing on symptoms for patients with respiratory tract infections in the community.

They used individual patient data from nine randomised controlled trials and four [observational studies](#) (a total of 55,682 patients) to compare average symptom severity between delayed versus no antibiotic prescribing, and delayed versus immediate antibiotic prescribing.

Most studies were conducted in primary care settings and the average age of study participants ranged from 2.7 to 51.7 years.

Factors such as patient age, sex, previous duration of illness, severity of symptoms, smoking status and underlying conditions were taken into account, and average symptom severity was measured two to four days after the initial consultation on a seven point scale (ranging from normal to as bad as could be).

The researchers found no difference in symptom severity for delayed versus immediate antibiotics or delayed versus no antibiotics.

Symptom duration was slightly longer in those given delayed versus immediate antibiotics (11.4 v 10.9 days), but was similar for delayed versus no antibiotics.

Complications resulting in hospital admission or death were lower with delayed versus no antibiotics and delayed versus immediate antibiotics, but neither result was statistically significant.

A significant reduction in re-consultation rates and an increase in patient satisfaction were found for delayed versus no antibiotics, but not for delayed versus immediate antibiotics.

Children younger than 5 years had a slightly higher symptom severity with delayed antibiotics than with immediate [antibiotics](#), but this was not considered to be clinically meaningful, and no increased severity was found in the older age groups.

This is a large, detailed analysis that took account of differences in study design and quality to minimise bias. However, the researchers point to some limitations and say they cannot rule out the possibility that other unmeasured factors may have affected their results.

Nevertheless, they conclude that delayed antibiotic prescribing "appears to be a safe and [effective strategy](#) for most patients, including those in higher risk subgroups."

And they suggest that delayed prescribing "could be used as a standalone interventional approach, but it might also be a way of resolving mismatched expectations between clinician and patient."

More information: Beth Stuart et al, Delayed antibiotic prescribing for respiratory tract infections: individual patient data meta-analysis, *BMJ* (2021).
[DOI: 10.1136/bmj.n808](https://doi.org/10.1136/bmj.n808)

Provided by British Medical Journal

APA citation: Delayed antibiotic prescribing is safe and effective for most patients (2021, April 29) retrieved 11 September 2022 from <https://medicalxpress.com/news/2021-04-antibiotic-safe-effective-patients.html>

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