Letters

I WAS READING with great interest the article by Magin et al published in *Australian Journal of General Practice* in January–February 2022, titled 'Evidence-based strategies for better antibiotic prescribing'.[1]

I wanted to clarify a minor point. In the article the authors briefly mentioned a randomised controlled trial (RCT) conducted in Pakistan comparing amoxicillin versus placebo for mild-to-moderate pneumonia,[2] stating that: 'a recent RCT of antibiotics versus placebo in children with mild-to-moderate pneumonia in Pakistan showed that placebo was non-inferior to antibiotics'.[1] However, when I referred to the published results of the trial, it was actually the opposite. The primary outcome of treatment failure at day 3 was 4.9% for placebo and 2.6% for amoxicillin, a difference of 2.3% (95% confidence interval [CI]: 0.9, 3.7) higher in the placebo group.[2] As explained by the trial investigators in their results section:[2]

> *This difference was above the noninferiority margin of 1.75 percentage points, which indicates that we did not find that placebo was noninferior to amoxicillin. The 95% confidence interval suggested that amoxicillin was superior to placebo. The results were similar when the analysis was repeated in the intention-to-treat population (between-group difference, 2.3 percentage points; 95% CI, 0.9 to 3.6, favoring amoxicillin).*

Would it be possible to clarify this point with the authors as it seems they might have made a mistake when referencing the results of this RCT? Otherwise, the piece was a very enjoyable read and really provided me with new and unique perspectives to the question of antibiotics for respiratory infections.

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2. Jehan F, Nisar I, Kerai S, et al. Randomized trial of amoxicillin for pneumonia in Pakistan. N Engl J Med 2020;383(1):24–34. doi: 10.1056/NEJMoa1911998.

Reply

We thank the correspondent for pointing out our error. In error, we misrepresented the results of Jehan et al's article.[1] As the correspondent has pointed out, placebo was not noninferior to amoxicillin. However, it is relevant to note that, for the primary outcome, 95.1% in the placebo group did not experience early treatment failure (compared with 97.4% in the amoxicillin group).

We can only reiterate the statement in our article that we are certainly not suggesting antibiotics should be withheld in mild pneumonia. The context was that fear of 'missing' a case of pneumonia (with fear of consequent poor outcome) is one driver of antibiotic prescribing for acute bronchitis, but that initial misdiagnosis is very unlikely to have an adverse outcome. In retrospect, we should have illustrated this by citing studies that are more directly relevant that have shown that, after excluding patients suspected clinically of having pneumonia, immediate prescription of antibiotics for acute lower respiratory tract infections does not result in better outcomes.[2,3]

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