

A study from Ontario with a cohort of more than 180 000 older patients with acute upper respiratory tract infections found that almost half were prescribed unnecessary antibiotics.³ This is consistent with data from the United States showing similar rates of inappropriate antibiotic use in the community.⁴ We believe the results of this national survey by Smith et al highlight the discordance between observed overprescribing of antibiotics in the community and physicians' perceptions of appropriate use.

The authors also indicate that most physicians correctly identified that not taking a full course of antibiotics increases the risk of AMR. While we concur that adherence to medication regimens is important, a large proportion of antibiotic prescriptions are prescribed for longer than necessary. A multitude of studies have noted that shorter courses (7 days or fewer) are as effective as long courses for common infections managed in the community (eg, urinary tract infections,⁵ pneumonia,⁶ chronic obstructive pulmonary disease exacerbation⁷). Despite this, approximately 35% of all Ontario prescriptions are longer than 8 days' duration. Not completing the course of antibiotics has in fact not been linked to increasing levels of AMR. Furthermore, there is evidence that longer courses of antibiotics lead to more AMR.^{8,9} As a result, this "finish the course" counseling point has been addressed in a number of recent commentaries calling on clinicians to reconsider this dogma.¹⁰⁻¹²

We encourage future efforts to identify characteristics of physician antibiotic prescribing, understand the barriers to appropriate antibiotic use, and incorporate behavioural science theory to optimize antibiotic stewardship interventions. It is vital that family physicians take an active role in antimicrobial stewardship to prescribe antibiotics only when needed, to select the most appropriate agent, and to select the shortest duration necessary to effectively treat the infection. Adopting these principles will ensure that we have effective, and lifesaving, antibiotics for future generations.

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Competing interests

None declared

References

1. Smith CR, Pogony L, Foley S, Wu J, Timmerman K, Gale-Rowe M, et al. Canadian physicians' knowledge and counseling practices related to antibiotic use and antimicrobial resistance. Two-cycle national survey. *Can Fam Physician* 2017;63:e526-35. Available from: www.cfp.ca/content/63/12/e526. Accessed 2018 Feb 1.
2. Linder JA, Schnipper JL, Tsurikova R, Volk LA, Middleton B. Self-reported familiarity with acute respiratory infection guidelines and antibiotic prescribing in primary care. *Int J Qual Health Care* 2010;22(6):469-75.
3. Silverman M, Povitz M, Sontrop JM, Li L, Richard L, Cejic S, et al. Antibiotic prescribing for nonbacterial acute upper respiratory infections in elderly persons. *Ann Intern Med* 2017;166(11):765-74. Epub 2017 May 9.
4. Fleming-Dutra KE, Hersh AL, Shapiro DJ, Bartoces M, Enns EA, File TM Jr, et al. Prevalence of inappropriate antibiotic prescriptions among US ambulatory care visits, 2010-2011. *JAMA* 2016;315(17):1864-73.
5. Milo G, Katchman EA, Paul M, Christiaens T, Baerheim A, Leibovici L. Duration of antibacterial treatment for uncomplicated urinary tract infection in women. *Cochrane Database Syst Rev* 2005;(2):CD004682.
6. Uraga A, España PP, Bilbao A, Quintana JM, Arriaga I, Intxausti M, et al. Duration of antibiotic treatment in community-acquired pneumonia: a multicenter randomized clinical trial. *JAMA Intern Med* 2016;176(9):1257-65.
7. El Moussaoui R, Roede BM, Speelman P, Bresser P, Prins JM, Bossuyt PM. Short-course antibiotic treatment in acute exacerbations of chronic bronchitis and COPD: a meta-analysis of double-blind studies. *Thorax* 2008;63(5):415-22. Epub 2008 Jan 30.
8. Chastre J, Wolff M, Fagon JY, Chevret S, Thomas F, Wermert D, et al. Comparison of 8 vs 15 days of antibiotic therapy for ventilator-associated pneumonia in adults: a randomized trial. *JAMA* 2003;290(19):2588-98.
9. Singh N, Rogers P, Atwood CW, Wagener MM, Yu VL. Short-course empiric antibiotic therapy for patients with pulmonary infiltrates in the intensive care unit. A proposed solution for indiscriminate antibiotic prescription. *Am J Resp Crit Care* 2000;162(2 Pt 1):505-11.
10. Llewelyn MJ, Fitzpatrick JM, Darwin E, Gorton C, Paul J, Peto TEA, et al. The antibiotic course has had its day. *BMJ* 2017;358:3418.
11. Spellberg B. The new antibiotic mantra—"shorter is better." *JAMA Intern Med* 2016;176(9):1254-5.
12. Langford BJ, Morris AM. Is it time to stop counselling patients to "finish the course of antibiotics"? *Can Pharm J (Ott)* 2017;150(6):349-50.

Learner-centred research mentoring in academic family medicine

Further to the article by Stubbs et al in the December 2016 issue,¹ there continues to be room for improving the mentorship we provide on research and scholarship, particularly to early career and clinician-teacher faculty. A common challenge is helping the new researcher identify an area of focus and develop a researchable question. A new approach to this challenge is the P3 (Pursuing Personal Passion) mentoring method for learner-centred research mentoring.²

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Competing interests

Dr Phillips refers readers to a recent article he wrote on the topic of learner-centred research mentoring.

References

1. Stubbs B, Krueger P, White D, Meaney C, Kwong J, Antao V. Mentorship perceptions and experiences among academic family medicine faculty. Findings from a quantitative, comprehensive work-life and leadership survey. *Can Fam Physician* 2016;62:e531-9. Available from: www.cfp.ca/content/62/9/e531. Accessed 2018 Feb 1.
2. Phillips WR. Pursuing personal passion: learner-centered research mentoring. *Fam Med* 2018;50(1):41-6.

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