Antibiotic stewardship and pharma’s social conscience

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In January 2016, 85 pharmaceutical, diagnostics and biotechnology companies signed the “Declaration by the Pharmaceutical, Biotechnology and Diagnostics Industries on Combating Antimicrobial Resistance” at the World Economic Forum.1 Academia and global institutions have long recognized antimicrobial resistance as a serious threat to global public health. Indeed, the threat has never been more serious, with identification last year, from pigs in China, of Escherichia coli with transferable plasmid-mediated resistance to colistin.2

The declaration’s signatories have committed to furthering action on drug resistance in three broad areas, aligning with strategic objectives of the World Health Organization’s 2015 action plan to tackle antimicrobial resistance.3 They have promised to encourage better and more appropriate use of new and existing antibiotics, including promoting judicious use of antibiotics in livestock; committed to extending collaborative efforts to research new antibiotics, diagnostics and vaccines; and said they will help to ensure affordable global access to new antibiotics. Pharma’s embracing of social responsibility is nice, but there is a hint at industry “self-regulation,” a rather dubious enterprise. Is pharma a reliable co-steward of antimicrobials?

CMAJ highlighted the problem created by poor regulation of antimicrobial use in agriculture in North America in 2012. We called on Canada to move toward banning off-label antimicrobial use in livestock farming.4 Progress has been painfully slow. Data on antimicrobial use in Canada and on patterns of resistance to available drugs have been patchy and inadequate for years, something the Canadian Antimicrobial Resistance Surveillance System (CARRS) aims to correct. Their inaugural report, issued in March 2015, collated drug resistance and usage information from across Canada.5

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South of us, the US Food and Drug Administration (FDA) has chosen a collaborative approach, seeking the voluntary cooperation of pharmaceutical sponsors of animal antimicrobials to revise the approved conditions for use of their medically important antimicrobial products, remove production use claims from labels and bring the remaining therapeutic uses under veterinary oversight.7 In August 2015, the FDA reported that all of the affected drug sponsors have committed in writing to making the changes, hopefully to be in place by the end of 2016.

The recent public support of antibiotic stewardship by pharmaceutical companies, and their written commitments to the FDA, which, if honoured, may influence use of antimicrobials in livestock farming in Canada, is encouraging. But multinational companies adhere to the laws of business, which generally prioritize the maximization of profits for shareholders over upholding the public good. And given that selling antibiotics does not tend to generate profits unless they are used in huge quantity and continuously — one of the reasons that no new class of antibiotic has been developed in the last 25 years and new funding models for research and development are being explored through collaborations — we would be naïve to rely solely on industry self-regulation to fix the agriculture problem. Antibiotics are growth-promoters; they can increase production and boost farmers’ profits. Demand will remain. The costs of antimicrobial resistance, however, are borne by the entire global community. It is past time for Canada to step in decisively to close that gaping legal loophole.

References

Competing interests: See www.cmaj.ca/site/misc/cmaj_staff.xhtml
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