

# Rising Antimicrobial Resistance: Not Only Attention Situation Demand Immediate Action

Sir,

Each year, thousands of people succumb to resistant bacteria, and many researchers fear the day may be coming when diseases that were once treatable will become fatal. The causes of antimicrobial resistance (AMR) are complex and multifaceted, including inappropriate prescriptions, overuse, and/or misuse of broad-spectrum antibiotics.<sup>1</sup> However, one of the major causes of AMR in the population is the overuse of antibiotics without proper indications. AMR is a global issue that does not respect borders.<sup>2,5</sup> It is present in almost every country. About 2.8 million people encounter an antibiotic-resistant infection, and more than 18,000 hospitalised patients acquire infections that are resistant to antimicrobial drugs every year. Almost 90% of antibiotics are prescribed by primary health care physicians.<sup>1</sup> The broad range of disparities in prescribing antibiotics is principally due to the lack of clarity about AMR among healthcare professionals. It is critical to raise AMR awareness among healthcare professionals to ensure that antibiotics are prescribed, distributed, and administered appropriately. It is apparent from the literature that interventions, grounded in the approaches to restrict or regulate access to resources, can help to manage issues adequately.<sup>3</sup> The importance and need for "institutional empiric treatment guidelines" with ongoing training for healthcare professionals to improve prescribing traditions can not be overemphasized. Presently, there are no concrete institutional or national guidelines implemented across the country's health facilities that can support optimal prescribing practices and reduce the misuse of antimicrobials.<sup>4</sup> Hence, formulating standard treatment guidelines for antibiotics is a possible intervention that can encourage the rational use of antibiotics and help conserve antibiotic efficacy. The guidelines are needed to restrict access to only qualified personnel. The guidelines, which can be used as a conflict resolution method, undertake behavior-based monitoring of healthcare professionals from a standard set of policies and ensure, that there is no direct influence of financial and social incentives on prescribers. Furthermore, these can address misaligned goals to ensure the appropriate use of antibiotics.<sup>3</sup>

In light of the current situation, it is evident that ignoring this issue will make it worse and its effective tackling requires a

collective and sustained effort. Hence, formulating standard treatment guidelines for antibiotics is the best intervention that can encourage the rational use of antibiotics and help conserve antibiotic efficacy. The issue of AMR requires the world to take steps to preserve a safe, secure, and healthy future for generations to come.<sup>5</sup>

## COMPETING INTEREST:

The authors declared no competing interest.

## AUTHOR'S CONTRIBUTION:

MS: Original idea, substantial contributions to the conception or design of the work, or the acquisition, analysis, or interpretation of data for the work, drafting the work or revising it critically for important intellectual content, proofreading, and editing.

## REFERENCES

1. Centre of disease and control prevention. Antibiotic prescribing and use in Doctor's offices 2017. [cdc.gov/antibiotic-use/index.html](https://cdc.gov/antibiotic-use/index.html).
2. Bjerrum, L, Llor C. Antimicrobial resistance: Risk associated with antibiotic overuse and initiatives to reduce the problem. *Ther Adv Drug Saf* 2014; **5(6)**:229-41. doi.org/10.1177/2042098614554919.
3. Tarrant C, Colman AM, Chattoe-Brown E, Jenkins DR, Mehtar S, Perera N, et al. Optimising antibiotic prescribing: Collective approaches to managing a common-pool resource. *Clin Microbiol Infect* 2019; **25(11)**:1356-63. doi.org/10.1016/j.cmi.2019.03.008.
4. Chair BC. A study on the status of antimicrobial resistance in Canada and related recommendations. Report of the standing committee on Health 2018: [http://ipac-canada.org/photos/custom/pdf/HESA\\_FinalReport.pdf](http://ipac-canada.org/photos/custom/pdf/HESA_FinalReport.pdf).
5. Michael CA, Dominey-Howes D, Labbate M. The antimicrobial resistance crisis: Causes, consequences, and management. *Front Public Health* 2014; **2**:145. doi.org/10.3389/fpubh.2014.00145.

Munazza Saleem

.....  
Faculty of Health Disciplines, Athabasca University, University Drive, Athabasca, Canada

.....  
Correspondence to: Dr. Munazza Saleem, Faculty of Health Disciplines, Athabasca University, University Drive, Athabasca, AB T9S 3A3, Canada  
E-mail: [munazza.saleem86@gmail.com](mailto:munazza.saleem86@gmail.com)

.....  
Received: October 04, 2021; Revised: January 02, 2022;

Accepted: February 06, 2022

DOI: <https://doi.org/10.29271/jcpsp.2022.07.957>

.....