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Reply: Response to Nationwide Analysis of Antimicrobial Prescription in Korean Hospitals between 2018 and 2021: The 2023 KONAS Report

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▸ See the letter "Response to Nationwide Analysis of Antimicrobial Prescription in Korean Hospitals between 2018 and 2021: The 2023 KONAS Report" in volume 56 on page 555.

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Dear Editor:

We appreciate the thoughtful commentary on our recent study, Nationwide Analysis of Antimicrobial Prescription in Korean Hospitals between 2018 and 2021: The 2023 KONAS Report [1, 2]. We fully recognize the importance of the One Health approach and international cooperation in addressing antimicrobial resistance (AMR). However, since our research specifically focused on antimicrobial usage within Korean healthcare institutions, the most evidence-based conclusion we can derive from our data is related to the implementation of antimicrobial stewardship within healthcare facilities. In response to the commentary, I would like to present my thoughts on the importance of the One Health approach and international cooperation on AMR.

AMR is a major threat to public health, undermining the effectiveness of antimicrobial treatments and leading to the loss of numerous lives [3, 4]. Significant time and resources has been invested in the implementation of antimicrobial stewardship and the development of new antimicrobials to combat microorganisms with AMR. However, resistance is not only driven by antimicrobials used in healthcare settings but also by environment such as agrochemicals, waste products, and the interactions

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between livestock, wildlife, and humans [5]. This interconnectedness is referred to as the One Health, yet these environmental factors have often been overlooked in the context of AMR. Understanding AMR from the One Health perspective is crucial, as it allows for a more comprehensive view of how antimicrobial resistance spreads across sectors. It is necessary to bring together experts from human, animal, and environmental health fields to uncover the sources and mechanisms of AMR transmission from a One Health perspective through multidisciplinary collaboration and research. Furthermore, to effectively address the AMR crisis, it is essential to establish a close global coordination for sharing One Health data. However, there are numerous challenges in accessing, integrating, analyzing, and interpreting diverse global datasets. Effective global coordination depends on the ability to securely and transparently share multidisciplinary data across borders. Creating robust, standardized systems for global data sharing will enable timely exchanges of critical information and support collaborative efforts to combat AMR. Governments and stakeholders must prioritize the development of these systems, as well as policies that encourage international interdisciplinary cooperation. Moreover, since AMR has the most severe impact in resource-limited countries, where it poses a significant threat to public health [3], it is crucial to ensure that these systems are accessible and functional in resource-limited countries. Global efforts are required to provide technical and financial support for building the necessary infrastructure and capacity for secure data sharing and analysis in resource-limited countries. These will lay the groundwork for the resolution of the global AMR crisis.

In conclusion, while our study focused on antimicrobial stewardship within Korean healthcare institutions, we acknowledge the critical role of the One Health approach and international cooperation in addressing AMR. By fostering interdisciplinary collaboration and establishing systems that enable global data sharing across all countries, we can develop more comprehensive strategies to combat AMR and mitigate its impact on public health worldwide.

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