

AMR CALL TO ACTION

Lessons From Covid-19: Centerpiece for Sustainable Healthy and Active Aging

Antimicrobial resistance (AMR), the increasing resistance of microbes to existing antibiotics and other drugs, has taken on growing attention amidst the Covid-19 pandemic, where the older and especially immunocompromised among us are at greatest risk. Even before the pandemic, the AMR threat had come to a recognized crisis point and was reflected in global institutional leadership communiqués. In 2019, the G20 reaffirmed the commitment to “promote healthy and active ageing through policy measures to address health promotion, prevention and control of communicable and non-communicable diseases.” Coupled with the UN/WHO goals within the Decade of Healthy Ageing framework, AMR’s threat to healthy aging comes into even starker relief, profoundly adding to the urgency for solutions. Not only are the 2 billion over 60 by mid-century at greater risk, but, the 21st-century achievement of long lives to 100 is challenged by the impact on good health and well-being, the target of SDG 3.

Linking AMR to population aging recognizes realities:

1. AMR is a principal barrier to healthy aging, threatening the 20th-century progress in science, medicine, and sanitation that has led to our 21st-century miracle of longevity.
2. As AMR increases over time, it puts one of our most vulnerable populations—older adults—at risk of previously treatable but now resistant infections, due to exposures in healthcare and residential facilities and to a natural decline in immune function as we age.^{1,2}
3. The Covid-19 pandemic provides a warning for the challenges ahead if we do not solve for AMR.
4. AMR is undermining progress in healthcare: for example, routine heart valve, knee, or hip replacements; hospital stays; or cancer treatment and recovery can turn deadly as a result of untreatable infections.^{3,4}
5. AMR is a basic challenge to the Silver Economy. It is costly, challenging fiscal sustainability and even economic growth itself, and leading to an excess \$20 billion

¹ <https://www.nytimes.com/2019/03/15/health/antibiotics-elderly-risks.html>

² <https://www.afar.org/ask-the-expert/ask-the-expert-sean-x-leng-md-phd-on-covid-19-and-the-promise-of-geroscience>

³ Boucher H. Final Testimony, House Committee on Oversight and Reform, Subcommittee on National Security, AMR Hearing, June 26, 2019.

⁴ <https://www.nytimes.com/2017/02/10/health/clostridium-difficile-c-diff.html>

in healthcare costs in the U.S. alone, due to the rise of untreatable infections.⁵ The consequent impact on health, elder caregiving, and lost productivity compound these costs and the devastating impact on a population often limited by a fixed income.⁶

6. Vaccines and innovative antimicrobials are necessary tools to help in the fight against AMR, targeting a reduction in the burden of infectious disease and antibiotic use.⁷

We, as global leaders, invite governments to:

- I. Pursue the inclusion of AMR innovation as an **integral strategy for achieving global health security** and included as a key focus of the UN/WHO Decade of Healthy Ageing.
- II. Ensure that the priorities and **needs of older people are a central pillar** of AMR National Plans.
- III. Develop **targeted communication strategies** to more urgently elevate AMR's risks to the Decade of Healthy Ageing goals and more clearly communicate the needed solutions.
- IV. Undertake actions to create national and global mandates that recognize the **urgency for action**; support **improved stewardship** leading to positive impact on behaviors; and enact public policy changes that will **stimulate antibiotic, vaccine, and other innovations**.

⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6929930/>

⁶ Antimicrobial Resistance: Tackling a crisis for the health and wealth of nations, 2014

⁷ Lipsitch M, Siber GR. How can vaccines contribute to solving the antimicrobial resistance problem?, 2016. doi:10.1128/mBio.00428-16. Available at: <http://mbio.asm.org/content/7/3/e00428-16.full>.