

Antibiotic Stewardship Committee

Debate Topic: Should stricter regulations be implemented to promote antibiotic stewardship and combat antibiotic resistance?

Antibiotic resistance is rising to dangerously high levels in all parts of the world. New resistance mechanisms are emerging and spreading globally, threatening our ability to treat common infectious diseases. A growing list of infections – such as pneumonia, tuberculosis, blood poisoning, gonorrhea, and foodborne diseases – are becoming more challenging, and sometimes impossible, to treat as antibiotics become less effective.

Where antibiotics can be bought for human or animal use without a prescription, the emergence and spread of resistance is made worse. Similarly, in countries without standard treatment guidelines, antibiotics are often over-prescribed by health workers and veterinarians and overused by the public.

Without urgent action, we are heading for a post-antibiotic era, in which common infections and minor injuries can once again kill.



Foreword

Dear Stakeholders,

Welcome to CurisCaseStudies' first conference! We are thrilled that you have chosen to partake in our Antibiotic Stewardship Committee. In every part of the world, antibiotic resistance is rising to dangerously high levels. Our ability to treat widespread infectious illnesses is being threatened by the emergence and worldwide dissemination of antibiotic resistance. Furthermore, collaborative efforts among healthcare providers, pharmaceutical companies, policymakers, and the public are crucial in combating antibiotic resistance.

The basis of this committee is imaginatively built on the perspectives of healthcare providers, pharmaceutical companies, regulatory agencies, public health agencies, agricultural stakeholders, research institutions, NGOs, and patients in the real world. For information regarding the specific issues addressed by this committee along with any relevant character descriptions, please refer to the background guide provided on pages 3-4.

The committee's task is to determine if stricter regulations should be implemented to promote antibiotic stewardship and combat antibiotic resistance. Stakeholders need to collaborate and work together to combat antibiotic resistance effectively.

Good luck,

Agshaya Paventhan and Sehaj Kang Co-Founders of Curis Connect curisconnectinfo@gmail.com



Stakeholder Descriptions

When considering the use and impact of antibiotics, various stakeholders play important roles and have a vested interest in their appropriate and responsible use. Additionally, different stakeholders may have overlapping roles and interests, and collaboration among them is often crucial to addressing the challenges related to antibiotic use and resistance effectively.

Patients and Healthcare Providers

1. Patient 1 - Gonorrhea patient in a third-world country

Every day, it's not just the physical pain that torments me, but the fear and uncertainty that loom over my future. In a place where healthcare resources are scarce and access to quality medical care is a luxury, the stigma and lack of awareness surrounding these infections add to the isolation I feel. Antibiotics used to be the lifeline for someone like me, a chance to regain my health and reclaim my life. We need a world that recognizes that the repercussions of antibiotic misuse and resistance transcend borders, affecting us all. But most importantly, we need a world that understands the urgency of this issue. We need a world that recognizes that the repercussions of antibiotic misuse and resistance transcend borders, affecting us all. We need compassion, understanding, and a commitment to change. I dream of a day when antibiotics are a solution once again, not a cause for despair.

2. Patient 2 - TB patient in Indonesia

Every cough, every ache, every breath I take reminds me of the invisible battle raging within my body - a battle against Tuberculosis. The healthcare system is strained, resources are limited, and misinformation spreads like wildfire. I remember when I first sought treatment, hoping that antibiotics would bring relief. But now, I see how my body struggles against the very medicines that were meant to heal me. We need healthcare providers who are equipped with the knowledge to prescribe antibiotics responsibly, ensuring that they are used only when necessary.

3. <u>Healthcare provider</u> - *Medical doctor in France*

Every day, I'm faced with the delicate task of prescribing antibiotics. It's a responsibility that weighs heavily on my shoulders, knowing that the choices I make can impact not only my patient's health but also the larger battle against antibiotic resistance. I've seen the frustration in patients' eyes when they demand antibiotics for every ailment, underestimating the risks of overuse. Explaining the concept of antibiotic resistance, and helping them understand that these precious medicines are losing their power, is an essential part of my role. It's about empowering patients to be partners in their healthcare journey.



Pharmaceutical & Research Sector

4. Pharmacist - Pharmacist in India

In a country marked by diverse healthcare challenges, antibiotics serve as both a lifeline and a concern. Patients come to me seeking relief from infections, often expecting immediate solutions. It's my role to provide them with the medications they need, but I also must educate them about the importance of using antibiotics wisely. Misconceptions persist, fueled by cultural norms and limited awareness. Patients may demand antibiotics without proper prescriptions, viewing them as a quick fix. It's a cycle we need to break through continuous education and public awareness campaigns.

5. Big Pharma - CEO of GSK

Yes, pharmaceutical companies are profit-driven entities. It's a reality we can't deny. While we champion medical breakthroughs and life-saving drugs, the bottom line does drive many of our decisions. However, we are not oblivious to the gravity of antibiotic resistance and we are continuing to invest in research and development. At GSK, we try to ensure our commitment extends beyond profit margins and strive to find common grounds where profit concerns meet patient needs.

Regulatory & Public Health Sector

6. <u>United States</u> - Microbiologist from Food and Drug Administration (FDA)

My days are dedicated to the intricate task of ensuring public health and safety. Antibiotic resistance looms as a critical challenge that demands our unwavering attention, collaboration, and strategic action. Our role within the complex web of stakeholders is one of oversight and regulation. We're entrusted with safeguarding the effectiveness of antibiotics by ensuring that their use in both human medicine and food production aligns with responsible practices. As a representative of the FDA, I'm reminded daily of the impact of our actions on global public health. It's a responsibility we shoulder with dedication, knowing that the choices we make today can influence the trajectory of antibiotic resistance tomorrow."

7. <u>World Health Organization (WHO)</u> – Antimicrobial Resistance Surveillance, Prevention, and Control Representative

My days are a fascinating journey into the intricate world of microbes and their evolving dance with antibiotics. It's a world where scientific curiosity meets the urgency of addressing a global crisis - antibiotic resistance. The evolution of bacteria is relentless, and our ability to develop new antibiotics lags. Misuse and overuse of antibiotics continue to fuel the fire, hastening



the emergence of resistant strains. We are not just addressing a scientific issue; we are safeguarding the future of medicine.

Guiding Questions:

WITHIN-SECTOR DEBATE QUESTION (BY SECTOR)

Patients & Healthcare Providers

How will stricter regulations of antibiotic prescription guidelines impact patient outcomes? Consider the
hindrance to patient access to necessary antibiotics and delayed treatment for potentially life-threatening
infections, especially in third-world countries.

Pharmaceutical & Research Sector

- The development of new antibiotics is costly and time-consuming. Will stricter regulations discourage pharmaceutical companies from investing in research and development?
- Consider the impact of stricter regulation on exacerbating the issue of antibiotic scarcity.
- What are alternative treatment options that can reduce the reliance on antibiotics?
 - o If alternative treatments are better, should we continue investing in antibiotics?
- How do treatment options such as phage therapy and immunotherapies compare to antibiotics?
- How will the research sector benefit from diversifying treatment options?

Regulatory & Public Health Sector

- Who/how will uphold policy?
- Who will be impacted? [third world vs first world countries]
- How/where will the policy be implemented? [locally, nationally, internationally, recourse-allocations]

Guiding Questions:

CROSS-SECTOR DEBATE QUESTION

Should stricter regulations be implemented to promote antibiotic stewardship and combat antibiotic resistance?

 If yes: propose what a potential regulation would look like and outline details about how it can be implemented.





• If no: propose the potential consequences of implementing stricter regulations and outline details about who and how they will be affected (consider people outside your sector).