

Briefing Note 3

Knowledge and Research Gaps in the Global Governance of AMR

Issue

Interviews with international, national and provincial stakeholders in AMR governance, as well as a scoping review of the AMR governance literature were conducted in 2018. These revealed gaps in knowledge of the governance of AMR. Knowledge gaps and research areas requiring investigation are identified in bullet form.

Knowledge Gaps

- Limited discussion in academic literature of what proposed governance frameworks for AMR could look like (existing frameworks have mostly been developed by international organizations and policy actors), with academic discussions mostly focusing on the role that an international treaty could play in AMR governance
- Limited knowledge about appropriate governance forms to advance global actions on AMR (e.g. hierarchical versus network forms of governance)
- Lack of knowledge about what incentives are needed to integrate a wide array of stakeholders into an effective AMR Global Governance system
- Lack of knowledge about alternative agricultural practices (that would allow reduction of antimicrobials in animal husbandry)
- Impact of antimicrobial use in agriculture on antimicrobial residue in humans contested
- Limited knowledge about what lessons can be learnt from past governance challenges, both successful (e.g. ozone depletion and Montreal Protocol) and failed (or at least failing) attempts (e.g. climate change and Kyoto Protocol) to develop an effective global governance regime to govern complex issues
- What global governance means might support or incentivise better (more complete) surveillance systems for AMR resistance at community levels, both within Canada, and globally' What are effective ways to generate public support for antimicrobial stewardship and how could these scaled up globally through governance mechanisms
- What global governance means might incentivize funding mechanism to ensure equitable implementation of AMR policies and regulations across the developing world
- Even though trade is one of the key pathways for transmission of resistant organisms, it receives little attention in academic research

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- There is currently no testing and monitoring of AMR done along the food chain which makes it difficult to pinpoint the source of resistant organisms
- Lack of research on, and knowledge about, how Canada should engage in the global governance of AMR, and what comparative advantage it brings to the table when engaging in discussion surrounding AMR governance

Potential research areas

- What can be learnt from previous successful and failed attempts to address a global problem that requires inter-sectoral collaboration through global governance mechanisms
- What governance forms have been used most effectively in the past to address global collective action problems
- What strategies could be used to promote and sustain wide-spread participation in an AMR global governance regime, , especially for actors and sectors that will be negatively impacted by novel regulations
- What is the link between use of antimicrobials in animal husbandry and the presence of AMR pathogens in humans (to address AMR denialism)
- What are effective incentives for pharma to invest in developing a new generation of antimicrobials, given the growing criticisms of PPP models
- What role could cooperation of labs
- How do domestic governance arrangements impact the implementation of AMR policies in individual countries (corruption, federated systems, etc.)
- Systematically study AMR content in the international food chain, and assess how standard setting through Codex could positively impact existence of AMR in food supply
- Active testing and monitoring of AMR at strategic points along the food chain

Conclusions and Recommendations

Research on the global governance of antimicrobial resistance and related infection diseases is still in its infancy. While a range of global funders have recently acknowledged the importance of funding research on global governance of AMR and related infectious diseases, and are starting to fund research in this area, it will be important to promote use of multidisciplinary research teams to develop research approaches to the global governance of AMR that can respond to the identified knowledge gaps which span across multiple fields and disciplines.

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