Antimicrobial stewardship and resistance: what are the different roles of global, regional and national level policies?



Heather Deall¹

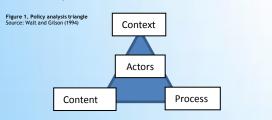
University Hospital Southampton NHS Foundation Trust, Southampton, UK

Background

Antimicrobial resistance (AMR) is now recognised as very real threat to global health and security. As a result there are increasing numbers of policy documents on the subject as both individual countries and the international community attempt to tackle the issue. As AMR is a complex global health problem, there must be a cohesive global policy response with countries and organisations working together. This report analyses policies on AMR at global, regional and national level, with a view to making recommendations as to how policy might be improved. The UK, India and Ghana are used as country case studies.

Methods

A systematic literature review was undertaken searching for policy documents at global and regional levels, and at national level for the three countries studied. Policies were analysed using Walt and Gibson's policy analysis triangle. (Figure 1) In each policy document, the main themes and priorities for tackling antimicrobial resistance were identified and then compared.



Results: 14 global level and 13 regional level policies were identified. 2 policies were found for the UK, 3 for India and 1 was in development for Ghana. The only region to not yet have a policy on AMR is Africa. Policies at all levels emphasised the need to improve antimicrobial stewardship, increase surveillance and improve infection control. Table 1 shows the principal authors and the other main priorities identified in the policies examined.

Table 1	Authors	Priorities common to policies at all levels	Other main priorities
Global policy	WHO, global organisations e.g. CDDEP, sector specific policy bodies e.g. APUA	Improving antimicrobial	Advancing R&D, increasing awareness and education, improving vaccination
Regional policy	WHO regional offices, APEC, EU	stewardship	Advancing R&D, generating national plans, increasing regulation and policy
UK Policy	Government	Increasing surveillance	Advancing R&D, increasing education and regulation, encouraging international collaboration
India Policy	Government, group of medical bodies (Chennei) and CDDEP	Improving infection control and prevention	Increasing education, and regulation, increasing laboratory capacity and diagnostics, banning over the counter antibiotics
Ghana Policy	Government in partnership with WHO and CDDEP		Increasing laboratory capacity, improving storage and distribution, improving education and regulation, encouraging international collaboration

Key Analysis

- Although there is some overlap in the main priorities across policies at all levels, the distinct roles of policies at global, regional and national levels are not clear.
- It is often not clear if or how national policies are influenced by regional and global priorities.
- Some priorities reflect the available resources of the country and region: R&D is a priority in high income countries, whereas low income countries focus on increasing laboratory capacity and safe storage of medicines. The country level policies highlight the challenges unique to their context, for example India highlights the problem of over-the-counter antibiotics.
- The important roles of poverty and health systems in AMR are neglected issues across the board.

Conclusion

The intended role of policy at each level needs to be clarified to prevent a fragmented approach. Global policy should set out broad vision and national policy should focus on implementation. Regional policies could be used to bridge the gap between global vision and local implementation and provide resources which assist in developing national plans which are context specific.

A cohesive approach with good international collaboration through national, regional and global policy is essential to tackle the increasing global problem of antimicrobial resistance.

Abbreviations: WHO: World Health Organisation, CDDEP: Center for Disease Dynamics, Economics and Policy, APUA: Alliance for the Prudent Use of Antibiotics, APEC: Asia Pacific Economic Cooperation, EU: European Union, R&D: Research and Development