

Antibiotic resistance - A Call for Global Leadership

ReAct to the WHO Progress Report on the resolution on "IMPROVING THE CONTAINMENT OF ANTIMICROBIAL RESISTANCE (WHA58.27)"

BACKGROUND

Infectious agents - including antibiotic resistant bacteria - travel faster and further than ever before. Containment of resistance must therefore be addressed through collaboration on the global level. Antimicrobial resistance is one of the major threats to public health, a challenge that threatens to roll back the major achievements of modern medicine. Though the magnitude of the problem continues to grow, a global coordinated engagement has been lacking.

The need for global coordination – and the lack of leadership

In 1998, the World Health Assembly adopted a resolution urging the Member States to take action on this problem.¹ In 2000, the WHO Report on Infectious Diseases focused on antimicrobial resistance, and requested a massive effort to prevent the "health care catastrophe of tomorrow".² Shortly thereafter, WHO presented a global strategy for the containment of antimicrobial resistance.³ Over the years, resolutions and reports from WHO have highlighted the issue and called for a multidisciplinary and coordinated approach to the problem. However, sufficient financial and human resources were never provided. In the meantime, the "health care catastrophe of tomorrow" has become a health care catastrophe of today in many parts of the world.

Resolution WHA 58.27

Member States recognized this lack of leadership in 2005, and the World Health Assembly adopted a new resolution. In *Improving the Containment of Antimicrobial Resistance (WHA 58.27)*,⁴ the assembly requested the Director-General to strengthen the leadership role of WHO in containing antimicrobial resistance by expanding and strengthening the provision of technical support to Member States; to collaborate with other relevant programmes and partners in order to promote the appropriate use of antimicrobial agents; to provide support for up-to-date information on antimicrobial resistance and to make this available to Member States and other parties; and to provide support for gathering and sharing of evidence on cost-effective interventions for prevention and control of antimicrobial resistance at national and local levels.

PROGRESS UPDATE

While evidence on the significant global health burden caused by antimicrobial resistance continues to mount, very little has taken place to implement the resolution WHA 58.27 since its passage. This is particularly the case regarding drug resistance

affecting the treatment of major bacterial diseases such as septicaemia, bacterial diarrhoeal diseases, pneumonia and wound infections. The WHO progress report on resolution 58.27 states that: ⁵

“Overlap of issues and recommendations has resulted in the subject of containment of antimicrobial resistance being subsumed into the rational use of medicines.”

ReAct’s response:

By reducing the containment of AMR to an issue of rational antibiotic use, the comprehensive and multidisciplinary approach essential in meeting the challenge of antimicrobial resistance, highlighted in previous WHO documents, cannot be met. What synergy might be obtained from ongoing attention to resistance in AIDS, TB and malaria to bacterial diseases? How can the failing R&D pipeline for innovation of new antibacterials be reinvigorated?

“The limited progress so far in implementing resolution WHA58.27 reflects the low investment in developing coherent, comprehensive programmes across health systems for promoting rational use of antimicrobial medicines and containing resistance”

ReAct’s response:

The report refers to that the subject is recognized in the Eleventh General Programme of Work 2006-2015, and forms part of one of the strategic objectives in the draft Medium-term strategic plan 2008-2013 and the draft Proposed Programme Budget 2008-2009. However, in these documents, antimicrobial resistance (and especially antibiotic resistance in common bacterial diseases), is only mentioned briefly, and no specific directions or details are given on how the problem should be addressed.

WE ARE CALLING ON THE WORLD HEALTH ORGANIZATION:

- *To provide global leadership on antimicrobial resistance by creating a coordinated response within WHO.*
- *To provide sufficient staffing and funding to make antimicrobial resistance a key priority.* The work to combat antimicrobial resistance must be put at the core of the broader, multisectoral communicable diseases agenda, and in particular, this agenda must include the much neglected challenge of antibacterial resistance.
- *To report each year to the World Health Assembly on the progress and the results of these activities.*

IN THE MEANTIME...

The treatment options for bacterial disease will continue to decrease due to overuse and misuse as well as an inadequate R&D pipeline because of declining interest from the pharmaceutical industry.

People are dying from infections because of the lack of effective therapy.

- Data from developing countries indicate that 70% of hospital-acquired neonatal infections would not be successfully treated by the WHO recommended regimen.⁶
- A study from South Asia indicates that one young infant is dying every second minute as a direct consequence of treatment failure due to antibiotic resistance.⁷
- In Israel, more than 3 % of all deaths in intensive care units are due to multidrug resistant, gram-negative bacteria.⁸

Antibiotic resistance imposes significant costs on the health care system.

- Outpatient costs stemming from antimicrobial resistance in the United States are estimated to lie between US\$400 million and US\$18.6 billion, and inpatient costs are likely to be several times higher.⁹
- The cost of nosocomial MRSA bacteraemia in Europe is estimated to €120,000,000 annually.¹⁰
- To treat drug-resistant neonatal sepsis in South Asia with second-line antibiotic therapy would cost an additional US\$120 million per year.⁷

¹ WHA 51.17 Emerging and other communicable diseases: antimicrobial resistance (1998)

² WHO Report on Infectious Diseases 2000: Overcoming Antimicrobial Resistance (Available at <http://www.who.int/infectious-disease-report/>)

³ WHO Global Strategy for Containment of Antimicrobial Resistance WHO/CDS/CSR/DRS/2001.2 (Available at: www.who.int/drugresistance/WHO_Global_Strategy_English.pdf)

⁴ WHA 58.27 Improving the containment of antimicrobial resistance (2005)

⁵ A60/28 Progress report on technical health matters

⁶ Okeke IN, Laxminarayan R, Bhutta ZA, et al. Antimicrobial resistance in developing countries. Part I: recent trends and current status. *Lancet Infect Dis* 2005; 5: 481-93.

⁷ Bhutta et al. 2007. Newborn and Young Infant sepsis and antimicrobial resistance: burden and implications (Available at: www.reactgroup.org)

⁸ Carmeli Y. Estimating nationwide Mortality Attributable to bacteremia by Multidrug (MDR) Gram Negative Pathogens (GNR) in Israel. in 46th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), 2006, San Francisco: American Society of Medicine: Abstract no. L-1538

⁹ Okeke IN, Laxminarayan R, Bhutta ZA, et al. Antimicrobial resistance in developing countries. Part I: recent trends and current status. *Lancet Infect Dis* 2005; 5: 481-93.

¹⁰ Strategic Council on Resistance in Europe. Resistance: A sensitive issue. The European roadmap to combat antimicrobial resistance. SCORE 2004. Available from: <http://www.scoreproject.org/>

About ReAct

Action on Antibiotic Resistance, ReAct, is a coalition that links a wide range of individuals, organisations and networks around the world taking concerted action to respond to antibiotic resistance.

Our mission is that current and future generations will have access to effective treatment of bacterial infections as part of their right to health.

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