

WHO's initiative to contain AMR resistance

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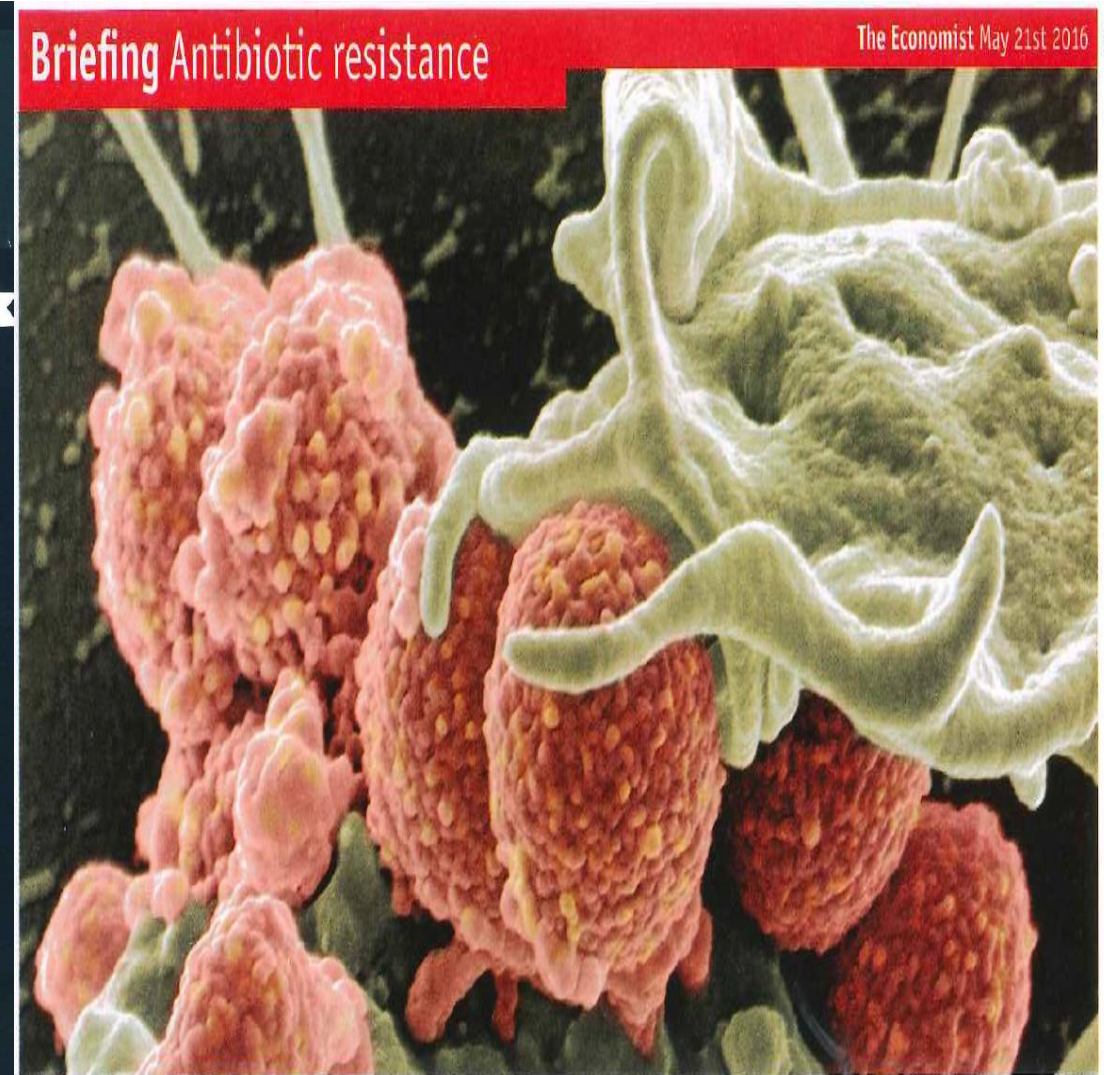
WHO Health Systems Strengthening



Presentation outline

- Historical background to growing global awareness to AMR
 - Global
 - Regional situation main findings and analysis
- World Health Assembly actions: AMR resolution
- AMR threat to achievement of SDGs
- WHO initiatives to combat AMR
- Existing partnerships
- Conclusion

Alarm!!!



Antimicrobial Resistance (AMR)

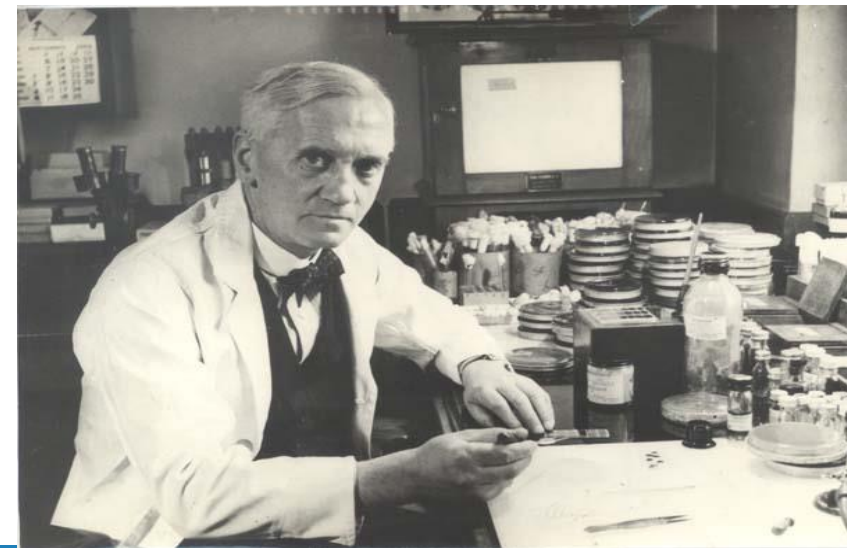


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AMR resistance was foreseen early

*“They **will come a time** when penicillin can be bought by anyone in the shops. Then **there is danger** that an ignorant man may under dose himself and thereby expose his microbes to non-lethal quantities of the drug and **make them resistant**”*

- Alexander **Fleming**, Nobel Prize Laureate
Dec **1945**



Over decades... extensive concern & efforts to address AMR

- Various agencies, scientific & medical societies, academia etc
- **1959** WHO scientific group on antibiotics research recommended **studies** on resistance
 - The Work of WHO, 1959, Official Records of WHO no. 98
- **1981** WHO Scientific Working Group on Antimicrobial Resistance report included **guidelines** for the appropriate use of antibiotics
 - WHO/BVI/PHA/ANT/82.1
- **2001 WHO Global Strategy for containment of antimicrobial resistance**
 - WHO/CDS/CSR/DRS/2001.2

Growing gathered evidence...



**Tuberculosis
(2006)**



**Artemisinin-
resistance in
Malaria (2011)**



**Antimicrobial
resistance in
N. Gonorrhoea
(2012)**



**Anti-HIV
drug-resistance
(2012)**

Over decades...extensive concern & efforts to address AMR

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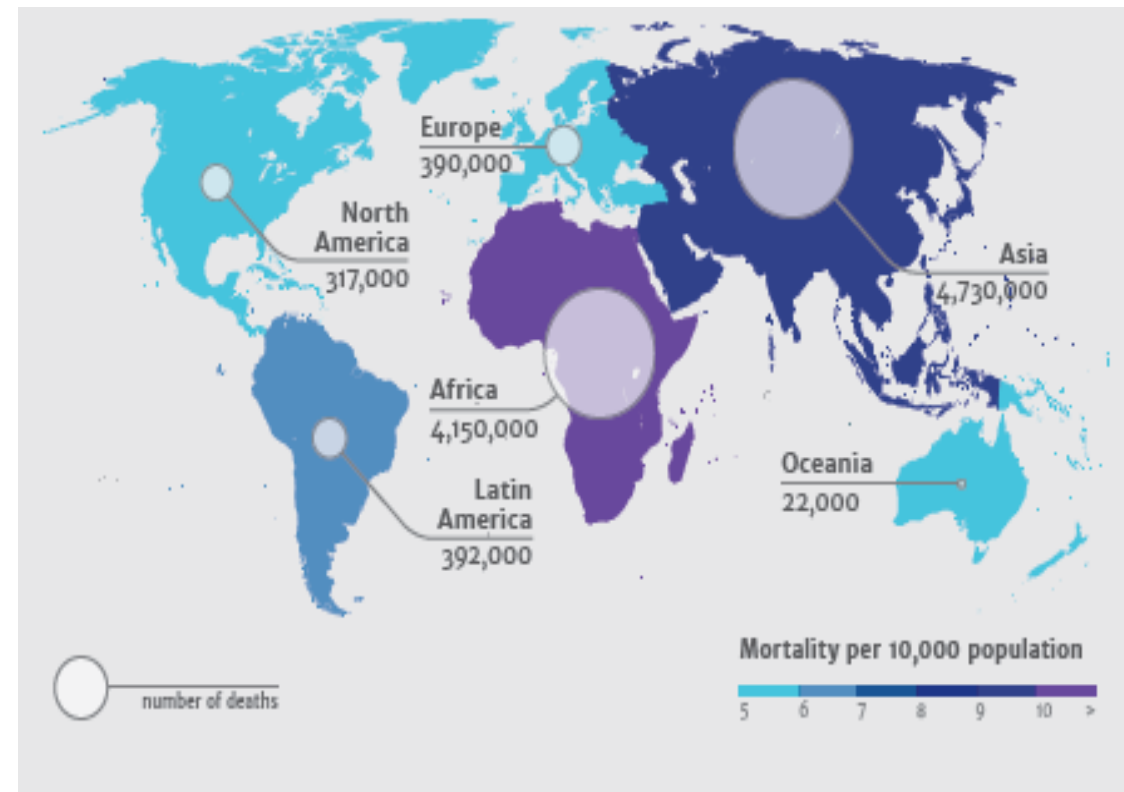
- **2011** World Health Day: policy package
 - Theme “*Antimicrobial resistance: No action today, No cure tomorrow*”
- **2012** The evolving threat of antimicrobial resistance -Options for action
- **2015** Adoption by WHA of Global Action Plan for AMR

Growing Awareness & Political Commitment

Mortality & Economic impact

- ➔ Review on Antimicrobial Resistance Chaired by *Jim O'Neill* (Feb 2015) projected that *if nothing serious is done now* by 2050
 - AMR will lead to 10 million deaths per year (from current 700 000, more than cancer)
 - Will result in reduction of 2 - 3.5 percent in GDP
- ➔ Cumulative costs to the world up to US\$100 trillion

Deaths attributable to AMR every year by 2050



J. O'Neil, Feb 2015. Review on Antimicrobial Resistance: Tackling a crisis for the health and wealth of nations.



WHO assessment of Global burden of AMR



Published on April 29, 2015

Antimicrobial Resistance (AMR)



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2014 WHO report “Antimicrobial resistance: *global report on surveillance*”

- Survey data from 114 countries in all regions
- Focus on selected hospital & community bacteria & antibiotic resistance patterns
- Limitations
 - Surveillance gaps in many countries
 - No standard methodology
- But provided the best available global picture

Overall Key Findings



The survey was completed by **133** countries in 2013-2014.




Few countries (**34 out of 133**) have a comprehensive national plan to fight resistance to antibiotics and other antimicrobial medicines.



Monitoring was infrequent.

In many countries there was poor laboratory capacity, infrastructure and data management systems required to support effective surveillance.

Overall Key Findings




Sales of antibiotics and other antimicrobial **medicines without prescription** was widespread.

Many countries lack standard treatment guidelines, increasing the potential for overuse of antimicrobial medicines by the public and medical professionals.



Lack of programmes to prevent and control hospital-acquired infections.



Public awareness is low in all regions, with many people still believing that antibiotics are effective against viral infections.

WHO Africa Region

8 out of **47**

Member States in the region participated in the survey.

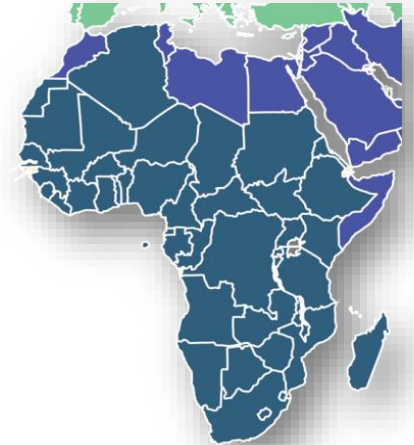


The data in AFRO region was incomplete due to lack of information, however the results indicated that antimicrobial resistance was a growing problem.

All **8** countries in the region stated that resistance to treatments for malaria and TB were their greatest challenges.



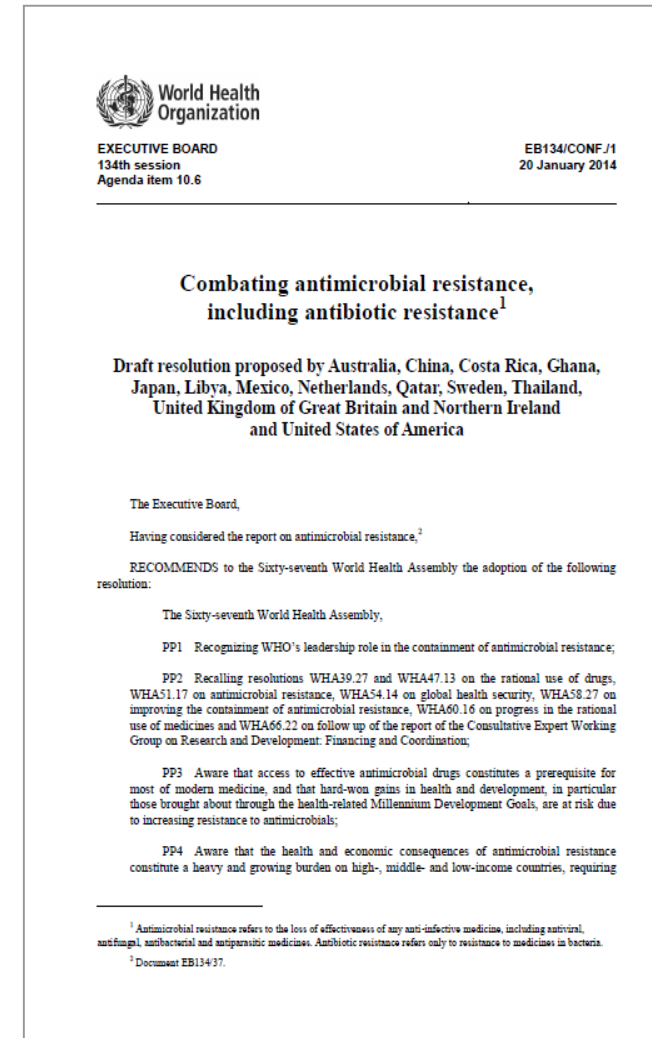
Poor-quality medicines were a general problem, further contributing to the challenge.



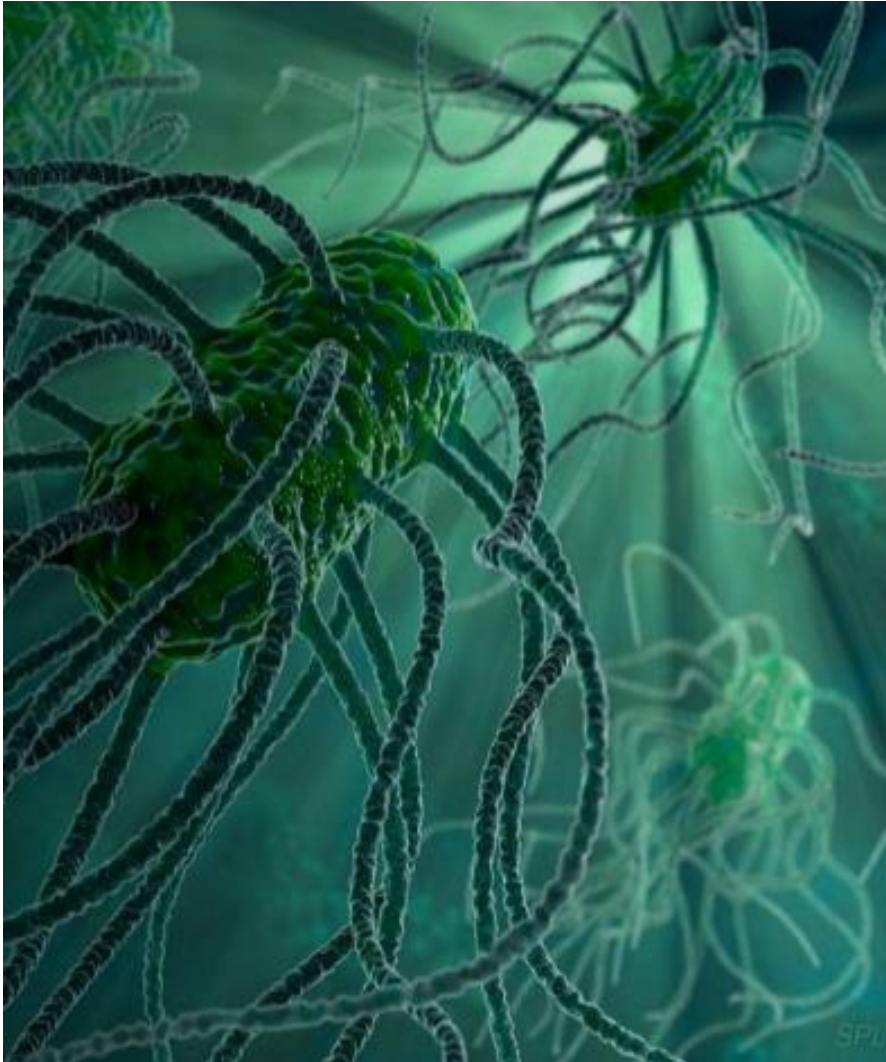
Countries who participated in the survey:
Burkina Faso,
Central African Republic,
Gambia, Ghana, South Sudan,
United Republic of Tanzania,
Uganda and Zambia

Resolution on AMR

- **World Health Assembly May 2014 ..WHA67.25**
 - Requested WHO DG to develop a draft global action plan to combat AMR ... to ensure that all countries had the capacity to combat AMR.
 - Took into account existing action plans and all available evidence and best practices
 - Urged a **multi-sectoral approach** in dealing with problem
- **Submit to 2015 World Health Assembly through the Executive Board January 2015**



AMR is the Greatest Threat to Modern Medicine



Antibiotic resistance is a **global health crisis** that should be addressed with the utmost urgency.

-Dr. Tedros Adhanom Ghebreyesus,
Director General
World Health Organization

AMR Threatens Global Progress to SDGs



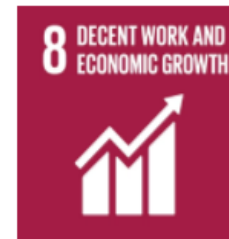
AMR strikes the poor hardest
→ Rate of resistance is high
→ Lack of affordable treatment
→ Poor infection prevention



Antibiotic residues from hospitals, pharmaceutical companies and agriculture contaminate the water



Untreatable infections in animals threaten sustainable food production for our population



***Cumulative costs of AMR is predicted to exceed US\$100 trillion by 2050**



Antimicrobials are fundamental components of all health systems



It is crucial to balance access, innovation and conservation of antimicrobials to contain AMR



All of which require multi-stakeholder partnerships

*World Bank Group Report on Drug-Resistant Infections (March 2017)

Existing Strategies/Initiatives

Surveillance

Map and assess capacity of labs to perform AMR surveillance
Develop SLIPTA-like process to increase quality of AMR testing

Delay Emergence

Better understand practices and barriers and propose solutions to promoting prudent antimicrobial use

Limit Transmission

Advocate for policies and statutes that promote infection prevention and control

Mitigate Harm

Produce evidence-based guidelines for clinicians to treat susceptible and resistant infections in humans

Other

Engage civil society
Review existing approaches to measuring progress on AMR control

Existing Partnerships

- WHO is working with several partnerships to advance AMR agenda
- **GARP** advances policy analysis and development capacity in AMR.
 - support undertaking of situational analyses on antibiotic use and resistance across One Health to inform evidence-based, country- and context-specific interventions in LMIC
 - Kenya, Mozambique, Namibia, Tanzania, Uganda, South Africa, Zimbabwe
- **ReACT** Africa:
 - Brings together experts & key stakeholders to form AMR technical working groups
 - Provides technical assistance in the development and implementation of NAPs
 - Actively supported the NAP process in Kenya, Ghana, Zimbabwe, Zambia and Rwanda
 - Raises **awareness** amongst the general public and the health, veterinarian and agricultural sectors on AMR.
- **GLASS**: AMC(4) and AMR (22)
- **ESBL** cycle implementing projects: 5 countries
- Resource mobilization to support NAP: Fleming Fund Grant and Multi Partner Trust Fund



In summary

- **AMR is a significant threat to human and animal health in the African region that needs to be addressed collectively and comprehensively**
 - → Urgent and coordinated action is required at all levels to ensure the preservation of these life-saving drugs for future generations.
- **AMR is everyone business:** a multi-sectorial problem which demands multi-sectorial collaboration and coordination between human health, animal health, food and agriculture, environment sectors, private sectors and communities
- **A growing number of partners and donors are now actively engaged in response to the threat**
 - → The time for action is now
 - This [Online Media Workshop- AMR in Africa](#) is a good beginning to raise awareness and understanding of AMR for action!



Thank you~Tatenda~Siyabonga~Merci

Antimicrobial Resistance (AMR)



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