

INTRODUCTION

DR JEAN CARLET, PRESIDENT, THE WORLD ALLIANCE AGAINST ANTIBIOTIC RESISTANCE (WAAAR)
AND EDITOR IN CHIEF, AMR CONTROL



Welcome to the third annual edition of *AMR Control*, which continues to bring together contributors from around the world to monitor and analyse the worrying challenge of antimicrobial resistance (AMR), as well as providing its readership with a coherent picture of the latest thinking on developments, solutions and policy. Our writers all come from the fields that are in the frontline of prevention, epidemiology and research.

The work of the World Alliance Against Antibiotic Resistance (WAAAR) has been recognized by the European Union, who awarded it Third Prize in its World AMR competition for NGOs. Dr Marc Sprenger, Director of the World Health Organization's AMR Secretariat, paid tribute to WAAAR "for its long-standing commitment to addressing AMR and for publishing the annual *AMR Control* book" (WHO March AMR newsletter).

An International Advisory Scientific Committee

During the Spring of 2017, the *AMR Control* editorial team have recruited leading minds to an International Scientific Advisory Committee (ISAC), which is now composed of world-renowned figures from across the AMR community and from around the world.

At present the members (in alphabetical order) are as follows:

- ➔ Professor Jacques Acar (Expert OIE, WHO-AGISAR and AMR pioneer)
- ➔ Dr Antoine Andremont (Member, Advisory Group on Integrated surveillance of AMR, WHO-AGISAR)
- ➔ Dr Awa Aidara-Kane (Coordinator, WHO-AGISAR)
- ➔ Dr Jean Carlet (President, ACdeBMR/WAAAR, 2015 Chair of the National AB Preservation Plan, France)
- ➔ Professor Dame Sally Davies (Chief Medical Officer, England, UK)
- ➔ Professor Ilona Kickbusch, (Director, Global Health Centre, Graduate Institute, Switzerland)
- ➔ Dr Rashad Massoud (Director, USAID's Applying Science to Strengthen and Improve Health Systems, ASSIST Project, USA)
- ➔ Mrs Precious Matsoso, (Director, Department of Health, South Africa)
- ➔ Professor Cassandra L Quave, (Dermatology and Human Health, Emory University, USA)
- ➔ Dr Mario Raviglione, (Director, Global Tuberculosis Program, World Health Organization)
- ➔ Professor John-Arne Røttingen, (Chief Executive, Research Council of Norway)

- ➔ Dr Joseph Sitienei, (Head, National Strategic Programmes, Ministry of Health, Kenya)
- ➔ Dr Steve Solomon, (Global Public Health Consulting, former AMR Office Director, US CDC, USA)
- ➔ Dr Soumya Swaminathan, (Director General, Medical Research Council, India)
- ➔ Professor Yonghong Xiao, (State Key Laboratory for the Diagnosis and Treatment of Inf. Diseases, China)
- ➔ Professor Tong Zhang, (Civil Engineering Department, University of Hong-Kong, China)

The IASC members have already made a valuable contribution to *AMR Control 2017* and we look forward to working with them on future editions.

New in the 2017 edition of *AMR Control*

In this edition we have five key sections: Governance, One Health, Healthcare, Economics and Innovation and Alternatives to Antibiotics which reflect the broad approach required to cover all the issues involved in AMR. Highlights include:

- ➔ "Best of" in national plans and governance with the examples of Germany and Senegal, notably, and of large countries facing huge challenges such as China and small countries like Lebanon.
- ➔ Germany leads the G20 in putting AMR on the agenda and has an exemplary national programme.
- ➔ Senegal is a leader on the African continent, and has moved way ahead in AMR control, notably with a focus on infection prevention and surveillance, while engaging other African state representatives with training seminars.
- ➔ The critical issues of AMR in health services: Intensive care units and surgery.
- ➔ A special section on the One Health approach (WHO, FAO, OIE) explained by its leaders and the interconnectedness of animal and human health. This was one of the key components of the UN High-Level Declaration on AMR.
- ➔ The Economics of AMR: the latest from the World Bank, the efforts to quantify AB from an economic standpoint (with

ASSIST URC), and the poverty-AMR links with CDDEP.

- ➔ A report from BARDA (Biomedical Advanced R&D Authority) in the United States and important alternative insights on treating AMR from plant research.
- ➔ AMR as a global health security threat with an Australian team making an assessment.

In this edition you will also find many prominent writers addressing a wide range of issue. These include:

- ➔ The World Bank Group on AMR, with Dr Enis Baris and Dr Timothy Evans, Senior Director of the Health, Population and Nutrition Global Practice, World Bank.
- ➔ Senegal's Minister of Health, Her Excellency Professor Awa Coll Seck with Dr Pape Amadou looking at the Senegalese AMR plan.
- ➔ The Federal Republic of Germany Ministry of Health with Dr K Knufmann-Happe, outline the German national plan.
- ➔ The US Biomedical Advanced Research and Development Authority (BARDA) initiative's Director, Christopher Houchens, PhD and Joe Larsen PhD explain their work.
- ➔ The USAID-URC Assist project team with Dr Rashad Massoud on IPC, Dr Tamar Chitashvili (first study on AB prescribing in Uganda), Edward Broughton (on the economics of AB prescribing) and the new group investigating HAI in Palestine.
- ➔ The China AMR plans are detailed by Professor Xiao from the National State Laboratory.
- ➔ The WHO Tuberculosis leadership and MDR-TB with Dr Mario Raviglione, Karin Weyer and team.
- ➔ The OIE's involvement in AMR with Dr Elisabeth Erlacher-Vindel, Head, Scientific and Technical Department.
- ➔ Updates from WHO-AGISAR with Chair Dr Awa Aidara Kane and John Hopkins University's Professor Ellen Silbergeld.
- ➔ The Lebanese AMR plan with WHO STAG member Professor Salameh.
- ➔ The importance of looking at AMR in the Intensive Care Unit with Dr Jean Carlet and Professor Jan de Waele, Belgium.
- ➔ A new coalition to combat AMR in Surgery with Dr Massimo Sartelli.
- ➔ The Algerian Ministry of Health with the AFRO group at WHO linking up AMR and drug access.
- ➔ A glimpse of alternatives to antibiotics discoveries on the horizon with Professor Cassandra L Quave who made headlines in the United States with the anti-MRSA properties of the Brazilian Peppertree and researcher Nora Mahfouf, on the antimicrobial properties of Oregano essential oil.

Developments at WAAAR

Following the reappointment of Dr Jean Carlet as President of WAAAR, the board also nominated two vice presidents:

- ➔ Dr Vincent Jarlier, a reputed expert in infection prevention and control and pioneer in AMR surveillance as well as French representative to the European Antimicrobial Resistance Survey System and
- ➔ Garance Fannie Upham, Co-Editor in Chief of *AMR-Control*, and *AMR-Times*, the monthly emailed newsletter.

We have also helped establish a broad coalition in France to place AMR high on the list of government priorities, including The Pasteur Institute, The Mérieux Foundation, the patient organization against nosocomial infections, Le Lien, the French Scientific Society, SPILF, The French Microbiology Society, SFM, The French Society for Hospital Hygiene, SF2H, The National Observatory for the Epidemiology of Bacterial Resistance, ONERBA, and The Institute Maurice Rapin. The Coalition against antibiotic resistance – Together Let Us Save Antibiotics brings together over 10,000 people representing the key leaders in the domain of infectious diseases, microbiology and antibiotic resistance. Strengthened by its partnership, WAAAR is also preparing major campaigns addressing doctors and the public to cut back on antibiotic overuse.

We are a founding member of CARA, The Conscience of Antimicrobial Resistance Accountability, and currently one of its steering committee members. Launched at the time of the United Nations General Assembly on AMR, in September 2016, CARA brings together over 50 major stakeholders presently combining trusts and foundations with Ministries of Health, research institutions and not-for-profit-NGOs. Full details of CARA can be found in Appendix Two on page 127.

We hope you will find lots to interest you in the 2017 edition of *AMR Control*. Please feel free to contact me or my Co-Editor Garance Fannie Upham if you would like to contribute or make suggestions.

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List of supporters

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