From the global to the national commitment to curb the spread of AMR

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Simpozij za osebe odgovorne za smiselno rabo protimikrobnih zdravil v slovenskih bolnišnicah
16 November 2017
WHO: AMR resistance has dramatically increased in last decades

**Tuberculosis**
- 440,000 new MDR-TB cases yearly
- XDR-TB in 58 countries
  - Europe: 81,000 cases

**Malaria**
- Rezistence to Artemisinin very high especially in monotherapy
- Commitment in Europe to eliminate malaria by 2015 failed

**HIV**
- Resistance to ARV combinations increasing
Building the AMR momentum in WHO´s work

2011 WHO/Europe Regional Committee - *Regional strategic action plan on antibiotic resistance*

2015 World Health Assembly - *Global action plan on antimicrobial resistance*

2016 United Nations General Assembly - *Declaration: “a fundamental, long-term threat to human health, sustainable food production and development”*

2017 Interagency Coordination Group on AMR

2017 AMR among top priorities of WHO’s new DG

2017 WHO/Europe Regional Committee - *Fighting antimicrobial resistance “is an urgent priority” in the European Region (RC67)*
27 February 2017: WHO publishes list of bacteria for which new antibiotics are urgently needed

- first ever list of antibiotic-resistant "priority pathogens"
- a catalogue of 12 families of bacteria that pose the greatest threat to human health
- 3 categories according to the urgency of need
- promote R&D of new antibiotics

Priority 1: CRITICAL
- *Acinetobacter baumannii*, carbapenem-resistant
- *Pseudomonas aeruginosa*, carbapenem-resistant
- *Enterobacteriaceae*, carbapenem-resistant, ESBL-producing

Priority 2: HIGH
- *Enterococcus faecium*, vancomycin-resistant
- *Staphylococcus aureus*, methicillin-resistant, vancomycin-intermediate and resistant
- *Helicobacter pylori*, clarithromycin-resistant
- *Campylobacter* spp., fluoroquinolone-resistant
- *Salmonellae*, fluoroquinolone-resistant
- *Neisseria gonorrhoeae*, cephalosporin-resistant, fluoroquinolone-resistant

Priority 3: MEDIUM
- *Streptococcus pneumoniae*, penicillin-non-susceptible
- *Haemophilus influenzae*, ampicillin-resistant
- *Shigella* spp., fluoroquinolone-resistant
New antibiotics?
Last 50 years only very few new molecules
• **World Antibiotic Awareness Week 2017**
  13 – 19 November
  - Main message: See your doctor before taking antibiotics

  - Main message in WHO/Europe: Every infection prevented is an antibiotic treatment avoided. Play your role in controlling antibiotic resistance!

• **European Antibiotic Awareness Day 2017**
  18 November
  - Main message: „Keeping antibiotics working“: Everyone has a role to play in ensuring that these medicines remain effective
Every infection prevented is an antibiotic treatment avoided

- Effective infection prevention and control in health-care settings can avoid more than 1 in 3 HAIs.
- It reduces occurrence of any type of infection by preventing microbial transmission, and consequently reduce antibiotic use and AMR
- It limits or stops the spread of multi-drug resistant microorganisms
- This means reducing the need for antibiotics, and in turn AMR.
Globally, up to 10% of hospitalized patients acquire at least one health-care-associated infection (HAI)

In the European Union

- ~ 4 million hospitalized patients are estimated to acquire a HAI each year;
- ~ 37,000 die as a direct result from these infections.

Source: ECDC, 2017
Today’s medicine cannot do without antibiotics: prophylaxis, treatment
Health-care workers: “It is in your hands”
**The Role of Infection Prevention and Control in Preventing Antibiotic Resistance in Health Care**

- On average, 1 in every 10 patients is affected by healthcare-associated infections (HAIs).
- Antibiotic-resistant HAIs can double or more the likelihood of death.
- Over 50% of surgical site infections can be resistant to antibiotics.

**Effective Infection Prevention and Control (IPC) and water, sanitation and hygiene (WASH) stops the spread of antibiotic-resistant organisms.**

**IPC and WASH in healthcare protects patients and healthcare workers from avoidable infections.**

**The building blocks of IPC and WASH in healthcare facilities are:**
- Effective hygiene practices, including hand hygiene.
- Core components of IPC programmes.
- A clean, well-functioning environment and equipment.

**This leads to:**
- Less spread of antibiotic-resistant organisms.
- A reduced need for antibiotics.

**Every infection prevented is an antibiotic treatment avoided:**
- Play your role in controlling antibiotic resistance!
- Ensure IPC programmes are in place and champion IPC practices.

**IPC saves millions of lives every year.**

*Source: World Health Organization, Infection prevention and control, Available at: [http://www.who.int/infection-prevention](http://www.who.int/infection-prevention)*

*World Health Organization, Water, sanitation and hygiene, Available at: [http://www.who.int/water_sanitation_health/en/]*

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What can health-care workers do?

- Prevent the spread of AMR through proper hand hygiene („Clean hands: Safe care“)
  1. before patient contact;
  2. before preparing and administering injections;
  3. after contact with body fluids;
  4. after patient contact; and
  5. after touching patient surroundings.

- Educating patients to observe hygiene measures
- Promote vaccination against vaccine-preventable diseases
Controlling AMR requires multisectoral action
Combined resistance to multiple antibiotics: a growing problem in the EU

On the occasion of the 10th European Antibiotic Awareness Day, the European Centre for Disease Prevention and Control (ECDC) is releasing its latest EU-wide data on antibiotic resistance.

More information

Data on antibiotic resistance

Influenza surveillance: 2017-2018 season

Outbreak of plague in Madagascar

West Nile fever Surveillance Maps

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| Data        | **Summary of the latest data on antibiotic resistance in the European Union**
  data - 15 Nov 2017 |      |        |      |
| Publication  | **Surveillance of antimicrobial resistance in Europe: 2017**
  surveillance report - 15 Nov 2017 |      |        |      |
| Data        | **Summary of the latest data on antibiotic consumption in the European Union**
  data - 15 Nov 2017 |      |        |      |
| News        | **Combined resistance to multiple antibiotics: a growing problem in the EU**
  press release - 14 Nov 2017 |      |        |      |

Load More
Slovenia: National institutions/organizations participating in EARS-Net

- Slovenia National Institute of Public Health www.nijz.si
- Medical faculty, University of Ljubljana
- National Laboratory of Health, Environment and Food

- 10 laboratories
- 16 hospitals
(expressed as DDD per 1 000 inhabitants per day)

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Consumption of antibiotics for systemic use in the hospital sector by antibiotic group, EU/EEA countries, 2016 (at ATC group level 3)
Consumption of antibiotics for systemic use in the community by antibiotic group, EU/EEA countries, 2016 (at ATC group level 3)
WHO project in Slovenia: Policy-making through evidence policy briefs

**Problem:** „A lot of elderly residing in LTCFs receive ATB that are prescribed inappropriately in terms of their indication, dose or duration of therapy“

- Need to map and analyse ATB prescribing practices in LTC facilities
- Estimates show that 25–75% of AB prescriptions in LTCFs are inappropriate in terms of their indication, dose or duration of therapy (ref. Beovič et al).
- Objective: Implementation of measures for improving ATB prescribing in the LTCFs (1. Monitoring, collecting the information, 2. CME, 3. Regulation, guidelines

- Responsible: Dr. Maja Šubej, Dr. Polonca Truden (and „team“)
Thank you.

videos, fact sheets, quiz...
