Zaključi dialoga o politikah za optimizacijo predpisovanja antibiotikov v domovih starejših občanov

Conclusions of the policy dialogue on antibiotic prescribing in long-term care facilities for the elderly

Tanja Kuchenmüller, Unit leader
Knowledge management, Evidence and Research for Policy Division of Information, Evidence, Research and Innovation WHO Regional Office for Europe

Bojana Beović, UKC Ljubljana, MF Ljubljana
Evidence-informed Policy Network, Europe

- promotes the systematic use of research evidence in policy-making to improve health systems through a networked structure
- increases country capacity in knowledge translation
- institutionalizes knowledge translation through the establishment of knowledge translation platforms
- ‘Live’ in 21 countries in the European Region
(5) to establish or strengthen mechanisms to transfer knowledge in support of evidence-based public health and health-care delivery systems, and evidence-based health-related policies;
EVIPNet Europe country activities

The Estonian example of shaping policy influenced by providing sound evidence

- Baseline study
- Understand the EIP context
- Develop an EIP strategy
- Identify the institutional niche of the national EVIPNet Europe team
- Bring together global & local research evidence
- Inform deliberations about health policies
- Includes:
  - A policy problem, summarizing the best available evidence
  - A description of the likely impacts of key policy options
  - Implementation considerations
- To clarify the problem and solutions
- To add to the value of the policy brief
- To contribute to effective policies
- To contribute to good governance and democracy
Development of Evidency Brief for Policies

- The results of point-prevalence surveys.
- Ageing population in Slovenia.
- Inclusion of long-term care under auspices of MoH.

A meeting of public health medicine specialists and infectious diseases specialists, general practitioners (GPs) and Ministry of Health officials was held to discuss the Evidence-informed Policy Network (EVIPNet) approach to prepare the EBP on the introduction of antimicrobial stewardship programmes in Slovene LTCFs.
Nation-wide point-prevalence survey of antibiotic use in LTCFs in Slovenia 2016

- 80 / 117 LTCF responded to our invitation;
- 13022 residents participated in our study (71.6% of all eligible residents in Slovenian LTCF).

Dora Stepan D, Lea Usaj, Marija Petek Šter, Marjetka Smolinger Galun, Hermina Smole, Bojana Beović. Eurosurveillance 2018, accepted for publication.

ECDC point-prevalence studies on antibiotic use in LTCFs in 2010 and 2013 (% of residents on antibiotics)

Slovenia 2016
Most prescribed antibiotics:
1. Co-amoxiclav: 109 (43%)
2. Fluoroquinolones: 60 (24%)
Figure 33. Quinolone antibacterials (ATC J01M) as a percentage of all used antimicrobials (J01) on the day of the PPS, HALT-2, 2013

Slovenia 2016: 24%
Prevalence of colonisation with *multidrug resistant bacteria* in patients receiving antibiotic treatment.

<table>
<thead>
<tr>
<th>Multidrug resistant bacteria</th>
<th>n (% of residents receiving antibiotics)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRSA</td>
<td>11 (4.5%)</td>
</tr>
<tr>
<td>ESBL</td>
<td>39 (15.8%)</td>
</tr>
<tr>
<td>CRE</td>
<td>2 (0.8%)</td>
</tr>
<tr>
<td>VRE</td>
<td>0</td>
</tr>
</tbody>
</table>

Prevalence of colonisation with multidrug resistant bacteria in UMC Ljubljana in 2016:
- MRSA: 0.6 % of patients;
- ESBL: 1.6 % of patients.

ECDC 2013: 25% Prescriptions Preceeded by Microbiology Testing

Slovenia 2016: 5.2%

In conclusion...

• Broad-spectrum antibiotics fuel the vicious circle of antimicrobial resistance.

• LTCF residents with bacterial infections are potentially undertreated (possibility of infections with MDR, resistant to most commonly used antibiotics, few microbiology diagnostics).
After the review of the literature we have chosen three evidence-supported options to improve antimicrobial prescribing in LTCFs for elderly:

- Surveillance, monitoring, audit and feedback of antibiotic use.

- Development and implementation of guidelines and clinical pathways for diagnosis and treatment of infections.

- Continuous educations for health-care professionals and providing health information for the residents, caretakers, families and visitors.
Highlights of the Dialogue

• All options were considered as indispensable to address the national challenge of AMR (= mutually reinforcing options).

• AMR to be put even higher on the political agenda; and ensure buy-in from all relevant political decision-makers.

• Institutional bridges between the MoH and the Ministry of Social Affairs shall be built – at the national level and within the LTCF.

• A unified approach of the MoH is to be established (not to have three directorates in the MoH separately involved, dealing with LTCF and AMR).

• Consider integrating a human rights perspective with regard to people living in LTCF.
Highlights specific to Option 1

*Surveillance, monitoring, audit/feedback*

- AMR data are insufficient as very little laboratory testing is done.
- Lack of healthcare staff in LTCF, not to increase burden by demanding more data collection.
- Surveillance of antimicrobial consumption should be based on existing data sources.
- Education of healthcare workers is required in monitoring (they are not aware of the importance of monitoring and that their efforts in this field add value).
- Network of sentinel practice could be established.
Highlights specific to Option 2

Development and implementation of guidelines and clinical pathways for diagnosis and treatment of infections

- Dual “ownership” of LTCF complicates implementation of guidelines: Health staff cannot influence the work of non-health staff.
- Guidelines should be developed in collaboration with providers.
- When new guidelines are endorsed, staff should be informed and training should be provided also on site in LTCF.
- Implementation of guidelines depends on sufficient staffing (in LTCFs and externally).
- The guidelines should include end of life situations.
Highlights specific to Option 3

Continuous educations for health-care professionals and providing health information for the residents, caretakers, families and visitors.

• Daily work with residents requires continuous updating of knowledge; CME is a must for all type of staff in LCTF.

• Health literacy of the residents and their relatives is important, tailored to the type of people they are intended for - this will also empower the people to ask for what they need.

• There is a need to invest to young generations to understand the value of antimicrobials.

• Knowledge and information is not enough to change the prescription habits, incentives for changing the mind-set and behaviour are needed.
# Common enablers and barriers to all three options

## Enablers

- Association of doctors in LTCF – prescriptions are mainly in the hands of GP.

- A lot to be learned from education in chronic diseases, and other best practices.

- Economic study on long term effect of interventions on quality of care and AMR.

## Barriers

- Cultural and behavioural constraints.

- Fluctuation of healthcare personnel.

- Increased cost of microbiology diagnostics, human resources needed for the implementation.
Steps forward

- Sharing the EPB and the policy dialogue report with MoH (all three directorates involved with LTCF and AMR), high-level policy-makers and practitioners in social care, GPs in LTCF, Epidemiologist, and other important stakeholders as well as multipliers.

- National Institute of Public Health’s mandate in the field of AMR is public education and awareness raising, while universities/professionals’ associations should look into professional training.

- MoH to initiate a working group and nominate multisectoral/multidisciplinary experts (including practitioners in LTCF) to identify and develop required guidelines related to AB prescription.

- The development and subsequent implementation of guidelines across all LTCF in Slovenia can set a good example of how to harmonize approaches and set standards.