Workstream 3: Antimicrobial Consumption & Use

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Objective

• To discuss and agree on steps for GLASS further development & implementation on surveillance of antimicrobial use at country and hospital levels
Discussion points

1. Antimicrobial consumption methodologies and tools

Consolidate Member States understanding of the WHO strategy and methodologies for AMC and AMU surveillance

Discuss the needs for additional tools

2. Use of antimicrobial consumption data for policy and practice

Discuss the levels of AMC data use, to inform the development of the GLASS guidance on AMR and AMC surveillance data use

Introduce the integrated approach for optimal use of antimicrobials

Discuss the level of in-country collaboration and data sharing needed for decision making

3. WHO and partners support to countries on surveillance of antimicrobial use

Discuss and agree on the support needed by countries to ensure establishment of sustainable and efficient antimicrobial use surveillance programs
WHO AMC SURVEILLANCE STRATEGY, METHODOLOGIES AND TOOLS
GLASS methodology for AMC surveillance at hospital level

Methodological questions: capacity on collecting disaggregated data on AMC

Data disaggregation enables better interpretation of antibiotic consumption patterns to inform hospital practices

Feedback from the technical consultation

Most countries replied that inpatient/outpatient consumption data can be separated and AMC data is available at ward level

Outcome from the discussion

- Capacity to disaggregate data varies between countries and among hospitals within countries
- Capacity depends on hospital organization, medicines procurement practices, data recording procedures, IT systems, manpower
- Relevance of disaggregation depends on objectives of the surveillance systems and on the use of data
- Stepwise approach: start simple to ensure data quality
GLASS methodology for AMC surveillance at hospital level

- **Main barriers**
  - Medicines for inpatients are purchased outside the hospital (e.g., due to shortage)
  - Lack of regulation on medicines
  - Lack of hospital management support
  - Lack of man-power
  - Poor knowledge on ATC/DDD system and drug utilization principles
  - Lack of IT software and hardware
  - Lack of training on AMC surveillance in hospitals
  - Poor understanding of the value of AMC surveillance for patient care improvement
GLASS methodology for AMC surveillance at hospital level

- **Main enablers**
  - Training on AMC methodology / ATC-DDD
  - Improving IT system that minimize workload, increase data quality
  - Create networks and identify focal points at regional/province/district levels
  - Consider centralization for optimization of data management and analysis
  - Apply complementary methodologies and tools to answer specific surveillance questions (incl. metrics for hospital activity)
  - Increase awareness of the relevance of surveillance data at the hospital and national level
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USE OF AMC SURVEILLANCE DATA
Sharing and utilization of surveillance data on use of antimicrobials

Domains of interest

Poll: Priority domains (max 3 domains)

- Regulations
- Rational use
- One health
- Antimicrobial stewardship
- Antimicrobial resistance

Poll results:
- Group 1 (n=11)
- Group 2 (n=13)
- Group 3 (n=9)
- Overall (n=33)
Sharing and utilization of surveillance data on use of antimicrobials

Integrated approach

Poll: Do you currently collaborate with other groups on optimizing the use of antimicrobials on the following areas (multiple choice)?

- Education & behaviour
- Antimicrobial resistance
- Infection prevention & control
- Antimicrobial stewardship programs
- Treatment guidelines
- Rational use
- Procurement & supply
- Regulations

- Group 1 (n=11)
- Group 2 (n=13)
- Group 3 (n=9)
- Overall (n=33)
Sharing and utilization of surveillance data on use of antimicrobials

Integrated approach

Key messages
- Integration in NAPs is key and ensures sustainability through a programmatic approach;
- Integration with Universal Health Coverage is key to ensure data is used to improve health systems
- AMC/AMU surveillance indicators could be used to monitor strategies developed as part of the NAPs and their impact

Enablers
- Well defined objectives for surveillance programs will facilitate data uptake
- Stepwise approach for building integration (especially for One Health)
- Set-up metrics / indicators / targets to improve data analysis orientation and increase data application and understanding
- WHO guide on use of surveillance data (under development)
Sharing and utilization of surveillance data on use of antimicrobials

Poll: Do you publish/share antimicrobial use/consumption data at national or facility level?

- Yes, routinely (at least every 2 years), publicly
- Yes, routinely (at least every 2 years), internally
- Yes, occasionally, publicly
- Yes, occasionally, internally
- Yes, on request
- No

Group 1 (n=11)  Group 2 (n=13)  Group 3 (n=9)  Overall (n=33)
3
country support
Training on drug utilization and ATC/DDD

- Capacity building on ATC/DDD:
  - IF YOU DON’T USE IT, YOU LOSE IT
  - ATC/DDD requires hands-on training
  - Acquire knowledge, skills, competencies
  - WHO-CC and GLASS-AMC agreed for better collaboration to provide more capacity building

- Three approaches proposed by countries:
  - Integration with the curricula of university and continuing professional education (offline and online)
    - Targets primarily pharmacists but also doctors, nurses, veterinary, policy makers
  - Top-down country approach: training of trainers / group of experts / focal points
  - Create national resource materials (guides / manuals)
Training on drug utilization and ATC/DDD

Poll: Do you plan to integrate drug utilization/ATC DDD in university degree?

- Group 1 (n=11)
- Group 2 (n=13)
- Group 3 (n=9)
- Overall (n=33)
Support on surveillance of antimicrobial use and consumption

- Training
  - Training on the analysis, reporting and use of data
  - Training on AMC surveillance potentially included in other training (e.g. stewardship)
  - Training on integration with existing structures (DTC, AMS, IPC)
  - Develop (WHO) certification programs on surveillance of use of antimicrobials

- Networks
  - Enhance the impact of training programs
  - Share experiences among countries with the same regional context
  - Supra national regional support for countries
  - Encourage peer support
  - Create pool of experts

- Integrate AMC surveillance in existing disease programs capacity building activities
- WHO costing tool for NAP (coming soon)
Support on surveillance of antimicrobial use and consumption

Poll: What is your priority area for support?

- Support on use of surveillance data
- Additional tools for surveillance
- Financial support on surveillance program
- Technical support on surveillance program

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<th>Priority Area</th>
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Conclusion

• Surveillance methodologies must have clarity for optimal implementation & so as to produce reliable and comparable data

• For surveillance of antimicrobial consumption & use, IT hardware and flexible and user-friendly software is crucial

• Healthcare professionals should have adequate opportunities for training on surveillance methodologies and use of surveillance data

• Surveillance systems should provide analytical measures and outputs that can be translated & relevant to practice and are actionable

• Integration with other components of the AMR NAP or other strategic programs is key for sustainability

• Understanding the importance of data for surveillance is key. Start small, move forward at your own pace so that you become confident and competent. This will ensure continuity & sustainability of AMC/AMU of GLASS.
Thank you

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