GLASS method for estimating attributable mortality of antimicrobial resistant bloodstream infections

Countries feedback

3rd High Level Technical Consultation and Meeting of Member States on surveillance of Antimicrobial Resistance and Use for Concerted Actions

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Master template protocol

- Prospective cohort study to estimate AMR BSI attributable mortality
- Attributable mortality determines how many extra patients died because they acquired an AMR BSI.
- Comparison of case-fatality rates between patients' groups (cohorts)

https://www.who.int/publications/i/item/9789240000650
Countries feedback

- **Five questions**
  - Clarity and appropriateness method
  - Usefulness
  - Study targets
  - Implementation

- **62 Countries feedback**
  (47 enrolled in GLASS)

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>High income</td>
<td>23</td>
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<tr>
<td>Upper-middle income</td>
<td>20</td>
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<tr>
<td>Low/Lower-middle income</td>
<td>19</td>
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Clarity and Appropriateness

1. Clear presentation of the method
   - Ethical approval
   - Rationale behind the choice of statistical methods
   - Definition of the target audience

2. Appropriate tools for implementation
   - IT tool for data collection
   - Translation to the local languages
3. **Useful for assisting in the estimation of AMR impact on human health**

- Prioritization of countries to better organize support and take into consideration differences in AMR patterns
- Representative sample of countries (‘indicator countries’) as an approach to provide an estimation of the AMR-burden globally.
4. **Target infection:** *E. coli* resistant to 3rd generation cephalosporins and MRSA (SDG indicator)

- the protocol provides a method model that can be applied to other types of AMR:
  - Carbapenem-resistant enterobacterales
  - MDR Acinetobacter baumannii
  - Vancomycin-resistant enterococci
  - Klebsiella pneumoniae resistant to 3rd generation cephalosporins
  - Other pathogens, depending on the local situation
5. Countries capacity to implement

- Laboratory capacity strengthening
- IT capacity building
- Procurement of equipment and supplies
- Training of national teams and on-site training of hospital teams
- WHO technical support missions
- Inclusion of WHO resource persons
- Online resource page (protocol, case studies, etc.) and
- Online support via email
Conclusion

Overall positive feedback

- Several countries provided detailed reviews of the document.
- Conducting similar studies and emphasized need to align/link

THANK YOU