Intervention on Comprehensive Review of the global indicator framework for SDG: Indicator for AMR 3.d.2

The Inter-Agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) conducted a Comprehensive Review of the global indicator framework throughout 2019 In accordance with GA Resolution 71/313 to submit its proposed refinements, revisions, replacements, additions and deletions to the 51st session of the United Nations Statistical Commission in March 2020 for its consideration. More on this can be read here.

The People's Health Movement as well as its partners in Antibiotic Resistance Coalition (ARC) also participated in the open consultation and called for the addition of the proposed Indicator 3.d.2: Reduce the percentage of bloodstream infections due to selected antimicrobial resistant organisms, includes monitoring of methicillin-resistant Staphylococcus aureus (MRSA) and Escherichia coli resistant to 3rd-generation cephalosporin (e.g., ESBL- E. coli).

PHM's comments for the open consultation is reproduced below and has been included in the list of comments received by The Inter-Agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) that can be accessed here. The background summary for the comment can be read further below the comments.

PHM's comments for the open consultation on the SDGs

Antimicrobial resistance (AMR) is one of the top public health problem of the world and has wide implications which challenge the attainment of SDGs. This has been acknowledged in the Political Declaration of the High-Level Meeting of the General Assembly on Antimicrobial Resistance, UN IACG Report to the Secretary-General of UN, and WHO Global Action Plan on AMR. The People's Health Movement (PHM) is strongly in favor of the World Health Organization (WHO)-proposed indicator to track the presence of two WHO priority pathogens among hospital patients.

By 2030, there are clear estimates that AMR could affect atleast three SDGs. Almost 700,000 people die due to AMR, which is a clear hindrance to achieving SDG 3: Good Health and Wellbeing. In addition, World Bank estimates that unchecked AMR could force 24.1 million more people to extreme poverty, threatening SDG 1: No Poverty and SDG 8: Decent work and economic growth. Many diseases such as Urinary Tract Infections and sexually tract infections are caused by pathogens prone to resistance and given the gender-based differential risk and treatment access, this could have potential ramifications on SDG 5: Gender equality.

We support the inclusion of WHO's proposed indicator as it will ensure the much needed data for action against AMR. The proposed Indicator 3.d.2: Reduce the percentage of bloodstream infections due to selected antimicrobial resistant organisms, includes monitoring of methicillin-resistant Staphylococcus aureus (MRSA) and Escherichia coli resistant to 3rd-generation cephalosporin (e.g., ESBL- E. coli). Both these organisms are notoriously resistant and despite the need, their surveillance or uniformly collected data is not present in many countries. While this has improved due to WHO Global AMR Surveillance System (GLASS), the addition of this indicator would lead to strengthened local commitments towards such surveillance. It is important to note that the proposed indicator has been built after careful consideration by the tripartite agencies (the World Health Organization, as well as the Food and Agriculture Organization of the United Nations and the World Organisation for Animal Health) and their wide consultations.

The data could help us understand and compare the status of AMR and its determinants through its focus on the emergence of key drug-resistant pathogens.

Another important concern with reference to AMR is the in-accessibility of antimicrobials. In LMICs, less than one-third of under 5 children suffering from Pneumonia receive antibiotics (amoxicillin), with an extremely pronounced gap in access between the richest and the poorest quintiles (UNICEF, 2012). Two indicators could help us in addressing this important determinant of AMR. SDG Indicator 3.b.3 could show a clear picture of whether the vital 'access' antibiotics against pneumonia is accessible or not. SDG indicator 3.8.1 captures the coverage of essential health services and has an indicator that measures care seeking behavior among children under age 5 for suspected pneumonia. There is no measure of whether they receive appropriate antibiotics or not. We believe that fine-tuning of these two indicators could be of vital help in our understanding of AMR and its determinants.

PHM would strongly request a consideration of the World Health Organization (WHO)-proposed indicator to track the presence of two WHO priority pathogens among hospital patients.

-Nafis Faizi
PHM's representative to the ARC

Background for comments (prepared by React and ARC Secretariat)

AMR's connection to the SDGs: Several key policy documents reference AMR as important to the achievement of the SDGS

1. "antimicrobial resistance challenges the sustainability and effectiveness of the public health response to [communicable] and other diseases as well as gains in health and development and the attainment of the 2030 Agenda" - Political Declaration of the High-Level Meeting of the General Assembly on Antimicrobial Resistance
2. "Antimicrobial resistance is a global crisis that threatens a century of progress in health and achievement of the Sustainable Development Goals"- No Time To Wait: Securing The Future From Drug-Resistant Infections. Report To The Secretary-General Of The United Nations
3. "Emerging global health priorities not explicitly included in the SDGs, including antimicrobial resistance, also demand action" - WHO Global Action Plan on SDG3
4. "indirect impact of antimicrobial resistance, however, extends beyond increased health risks and has many public health consequences with wide implications, for instance on development" - WHO Global Action Plan on AMR
5. ReAct's report "When the Drugs Don't Work Antibiotic Resistance as a Global Development Problem" has detailed other connections to the SDGs

Proposed AMR indicator for the SDGs builds upon the already adopted Tripartite Monitoring and Evaluation Framework as well as WHO's own Global Program of Work.

6. Goal II: "Prevalence of bloodstream infections caused by the following: a: Methicillin-resistant Staphylococcus aureus b: ESBL in E.coli – third-generation cephalosporin resistance as a proxy" - Tripartite Monitoring and Evaluation Framework

7. Target 42: Reduce the percentage of bloodstream infections due to selected AMR organisms by 10% - WHO 13th Global Program of Work Impact Framework
8. 3rd generation-cephalosporin resistant *Escherichia coli* and methicillin-resistant *Staphylococcus aureus* are both priority pathogens - Prioritization Of Pathogens To Guide Discovery, Research And Development Of New Antibiotics For Drug-Resistant Bacterial Infections, Including Tuberculosis

Reasons why AMR is important to achievement of SDGs
9. Antibiotic resistance is estimated to kill 700,000 people per year - UK Review on AMR Final Paper
10. In the EU and EEA, antibiotic resistant infections accounted for an estimated 33 ,110 attributable deaths and 874 ,541disability adjusted life years. AMR's burden was also greatest among infants and adults older than 65 years of age - Cassini et al Lancet 2018
11. In a high AMR burden world, 24 million people would be forced into extreme poverty by 2030. Most of the increase [in extreme poverty] would occur in low-income countries" - World Bank Drug-resistant infections: a threat to our economic future
12. Declines in economic growth due to AMR would be inequitable, low-income countries would experience larger negative impacts than wealthy countries. World Bank Drug-resistant infections: a threat to our economic future

Why monitoring AMR in the SDGs also should include access, not just excess, of antibiotic use
13. Providing universal access to antibiotics could prevent an average of 445,000 deaths from community-acquired pneumonia in children younger than 5 years - Access to effective antimicrobials: a worldwide challenge

The IAEG-SDG should consider, in the future, a complementary indicator to capture the use of antibiotics in the food production sector, which, by volume, is greater than in human medicine.
14. In 2013, 70 to 80 percent of total antibiotic consumption was for livestock. Monitoring AMR's threats in the SDGs must progress towards One Health (Environment, Animals and Healthcare)
    a. For food animals, the global use of antimicrobials was estimated to be 131,109 tons in 2013 – "Reducing antimicrobial use in food animals" in Science
    b. Antibiotic use in livestock and humans is similar, averaging 118 mg/PCU and 133 mg/kg, respectively. - *"Reducing antimicrobial use in food animals" in Science*. The total human biomass in 2005 was 287 million tonnes. Therefore, one could estimate total antibiotic use for humans is estimated to be 38,171 tonnes in 2013.
    c. As such, antibiotic use in livestock would account for approximately 80% of global consumption