Virtual Symposium Report

Combating AMR: A Collaborative Approach for a Resilient Future

The Global Health Network Nigeria Country Centre

22 November 2023

Introduction:
In commemoration of World AMR Awareness Week 2023, The Global Health Network Nigeria Country Centre hosted a virtual symposium with the theme: “Combating AMR: A Collaborative Approach for a Resilient Future.” The symposium was dedicated to addressing the pressing issue of Antimicrobial Resistance (AMR) and it sought to gather healthcare professionals, researchers, policymakers, and stakeholders for an exchange of insights, best practices, and innovative strategies in the ongoing global battle against AMR. The event, held virtually, and though with a focus on Nigeria attracted participants from 40 countries of various time zones, emphasizing the global collaboration required to address the critical issue of AMR.

Panel

Chair:
Godwin Pius Ohemu - Hub/Media Coordinator, The Global Health Network Nigeria Country Centre

Speakers:
Solomon Olorunleke (DVM, MVPH, PhD) - Lecturer with the Department of Animal Science, Ebonyi State University, and the AMR Program Manager of Dr Ameyo Stella Adadevoh (DRASA) Health Trust

Dr Seniyat L. Afegbua - Department of Microbiology, Ahmadu Bello University, Zaria

Christine Kirima - Africa Regional Coordinator, The Global Health Network

Dr. Ryan Walker - AMR Knowledge Hub Coordinator, The Global Health Network
### Agenda

<table>
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<th>Time (WAT)</th>
<th>Activity</th>
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| 10.00 – 10.05 | Welcome, housekeeping  
*Godwin Pius Ohemu, TGHN Nigeria Country Centre* |
| 10.05 – 10.10 | Opening remarks on behalf of TGHN Africa Region  
*Christine Kirima, TGHN Africa Region Coordinator* |
| 10.10 – 10.15 | Overview of The Global Health Network AMR Knowledge Hub and Community of Practice  
*Dr Ryan Walker, TGHN* |
| 10.15 – 10.35 | Session 1: Promoting Public Awareness and Education on Responsible Antibiotic Use  
*Solomon Olorunleke, Program Manager DRASA Health Trust.* |
| 10.35 – 10.45 | Q & A Session |
| 10.45 – 11.05 | Session 2: Use of Antibiotics in Livestock Farming: the Gains and Pains  
*Dr Seniyat L. Afegbua, Ahmadu Bello University, Zaria.* |
| 11.05 – 11.15 | Q & A |
| 11.15 – 11.20 | Announcement: Launch of TGHN Nigeria Country Center |
| 11.20 – 11.30 | Closing Remarks |

### Registration/Attendance:

434 persons registered for the symposium, 177 persons were present from 40 countries and 136 persons stayed on the call till the end. Nigeria (90) had the highest number of persons on the call while Kenya (36), and Uganda (35) followed.

### Welcome and Housekeeping:

The Chair welcomed all participants, introduced the distinguished panel, and highlighted essential housekeeping details to ensure a smooth virtual experience. The symposium was recorded for future reference on The Global Health Network website.
Overview of Global Health Network Africa:

Christine Kirima, Africa Regional Coordinator, The Global Health Network provided a thorough overview of The Global Health Network Africa, emphasizing its East African origin in Kenya and its mission to address health research inequity in Africa. The network, with over 700,000 members, focuses on empowering individuals with research skills and supporting evidence-based decision-making in global healthcare.

Key achievements include delivering free training to 3.5 million healthcare workers, benefiting 150,000 researchers, and operating a digital platform with 60 Knowledge Hubs. The network's commitment to research equity is evident in freely available courses and resources, contributing to the development of independent research teams.

A notable milestone is the network's designation as a WHO Collaborating Centre, recognizing its collaborative work with the WHO Science Division. Christine concluded by expressing gratitude and inviting participants to celebrate World AMR Awareness Week with The Global Health Network, providing valuable insights into its mission and achievements.

Overview of the AMR Hub:

Dr. Walker provided an overview of The Global Health Network's AMR Hub, launched in 2021, with nearly 10,000 members globally. The hub engages in diverse activities, including a digital platform, collaborative networks with partners like the WHO, and hosting webinars and events.

Key activities highlighted:

1. Digital Platform and Resources: Centralized space for AMR-related resources.
2. Collaborative Networks: Partnerships, including the WHO's "AWaRe" system.
3. Webinars and Events: Regular literature scoping and successful symposiums.

Future plans and initiatives:

1. E-learning Development: Targeted and accessible online courses.
2. Regional Engagement: Increased community involvement through meetings and collaborative proposals.
3. Content Development: Welcoming contributions from the community for relevant materials.

Collaborators and partnerships include the British Society of Antimicrobial Chemotherapy, WHO, and the AMR Data to Inform Local Action, with potential collaborations with groups like the Nyanza Reproductive Health Society in Kenya.
Dr. Walker concluded by emphasizing the hub's commitment to providing resources, fostering collaboration, and seeking community involvement in shaping future initiatives. According to him, the symposium is a testament to AMR Hub’s commitment to raising awareness and fostering collaboration in the fight against antimicrobial resistance. He encouraged all participants to actively engage in the discussions and utilize the knowledge hub as a valuable resource for ongoing research and initiatives.

Session 1: Promoting Public Awareness and Education on Responsible Antibiotic Use

Dr. Solomon's presentation focused on promoting public awareness and education on responsible antibiotic use, particularly in the context of Nigeria. He emphasized the importance of antibiotic stewardship, highlighting the need for responsible use in both humans and animals. Dr. Solomon discussed the challenges contributing to high antibiotic use, such as over-the-counter availability, poor enforcement of regulatory policies, and patient and pharmaceutical pressures on physicians. In response, he advocated for the following as comprehensive strategies for Promoting Responsible Antibiotic Use:

1. Behavioral Change and Interventions: Implementing strategies to change the behavior of individuals, healthcare providers, and farmers regarding antibiotic use. This could include educational campaigns, workshops, and training programs.

2. Infection Prevention and Control (IPC): Emphasizing the importance of infection prevention and control measures in both human and animal health settings. This includes proper hygiene practices, sanitation, and biosecurity measures.

3. Regulatory Policies and Enforcement: Strengthening regulatory policies related to antibiotic use and ensuring strict enforcement. This involves creating and enforcing guidelines for prescribing and dispensing antibiotics.

4. Promoting Antimicrobial Stewardship: Encouraging responsible antibiotic use through stewardship programs. This involves healthcare professionals and veterinarians taking leadership roles in promoting appropriate antibiotic use.

5. Public Engagement and Education Campaigns: Engaging the public through awareness campaigns, educational materials, and community outreach programs. This could include using various media channels to disseminate information.
6. Capacity Building for Healthcare Providers and Veterinarians: Providing training and capacity-building programs for healthcare providers and veterinarians to enhance their knowledge and skills in prescribing antibiotics responsibly.

7. Collaboration and Partnerships: Fostering collaboration and partnerships between relevant stakeholders, including government agencies, healthcare institutions, veterinary associations, and non-governmental organizations. This can facilitate a coordinated effort in addressing antibiotic misuse.

Dr. Solomon emphasized the need for a One Health approach, considering both human and animal health in addressing antibiotic use. Public awareness and education, along with strategic interventions and collaborations, play pivotal roles in promoting responsible antibiotic use and ensuring a sustainable future for global health.

Session 2: Use of Antibiotics in Livestock Farming: the Gains and Pains

Dr. Seniyat Afegbua's presentation discussed the uses of antibiotics in livestock production, emphasizing four primary purposes: disease treatment, disease control, disease prevention, and production purposes. The gains from antibiotic use in livestock include disease prevention, growth promotion, increased feed efficiency, and potential cost reductions for producers. However, the presentation highlighted several public health concerns, including antibiotic residues in food products, the emergence of drug-resistant bacteria, and environmental contamination.

According to her, the Pains and Public Health Concerns for the use of Antibiotics in Livestock farming include:

- Presence of Antibiotic residues in food products causes allergic reactions and digestive problems in humans.
- Appearance of drug-resistant bacteria in food animals after antibiotic use.
- Implications for routes of transmission to humans:
  - Contact with contaminated food.
  - Contact with resistant bacteria via live farm animals, manure, or shed material.
  - Infected people transmitting illness to others.
- Environmental contamination through wastewater and wastes from livestock farms.
- Limited antibiotic options, especially in low-income countries, contribute to the challenge with livestock farms identified as major hotspots for antimicrobial resistance (AMR).

Dr. Afegbua suggested managing the problem by reducing antibiotic use in livestock farming, raising AMR awareness, conducting more research on AMR in livestock farms in Nigeria, and
implementing various measures such as vaccination, biosafety, waste management, veterinary support, and government policies. Additionally, alternative approaches to antibiotics, such as vaccines, bacteriophage therapy, predatory bacteria, quorum sensing inhibitors, antimicrobial peptides, essential oils, and genetically modified probiotics, were discussed as potential solutions.

In summary, her presentation emphasized the dual aspects of gains and pains associated with antibiotic use in livestock. It advocated for a comprehensive approach to mitigate the public health risks posed by antimicrobial resistance.

**Announcement: The Launch of TGHN Nigeria Country Center.**

In an announcement made by Godwin Pius Ohemu on behalf of the Nigeria Team, it was revealed that The Global Health Network Nigeria Country Centre is set to be launched. Following a year of collaborative efforts with the University of Oxford's Global Health Network and the formal signing of a memorandum of understanding with Obafemi Awolowo University, the centre aims to operate locally, connecting individuals with diverse global health research opportunities. Ohemu reported that the official launch date is yet to be confirmed but is expected either by the end of 2023 or January 2024. He encouraged everyone to stay informed and participate in the launch to benefit from the valuable resources offered by The Global Health Network Nigeria Country Center.

**Closing Remark from Speakers**

**Dr. Solomon**

“...so the gospel is to go out there and talk to people about AMR, the grave consequence of AMR and that AMR is a silent pandemic greater than whatever infection you could think. So let's go out there and talk to people about AMR and then one of the things that can actually increase AMR spread is the indiscriminate use of antimicrobials so please, let's tell them to don't use antibiotics unless being prescribed by a competent physician.”

**Dr. Seniyat**

“I would say that there is a need for proper use of antibiotics in Livestock farming so we need to weigh between having just big chicken or preserving our own lives and avoiding AMR. So it's important that more awareness is created and responsible use of antibiotics should be ensured on farms, be careful handling your chicken and be careful also discharging waste from the poultry farm.”

**Closing:**
The meeting ended at 11:45 am with a vote of thanks from the Chair.