
Integrated Activities and Tools for Antimicrobial Stewardship



MoHP Policy and Program Implementation of ASP

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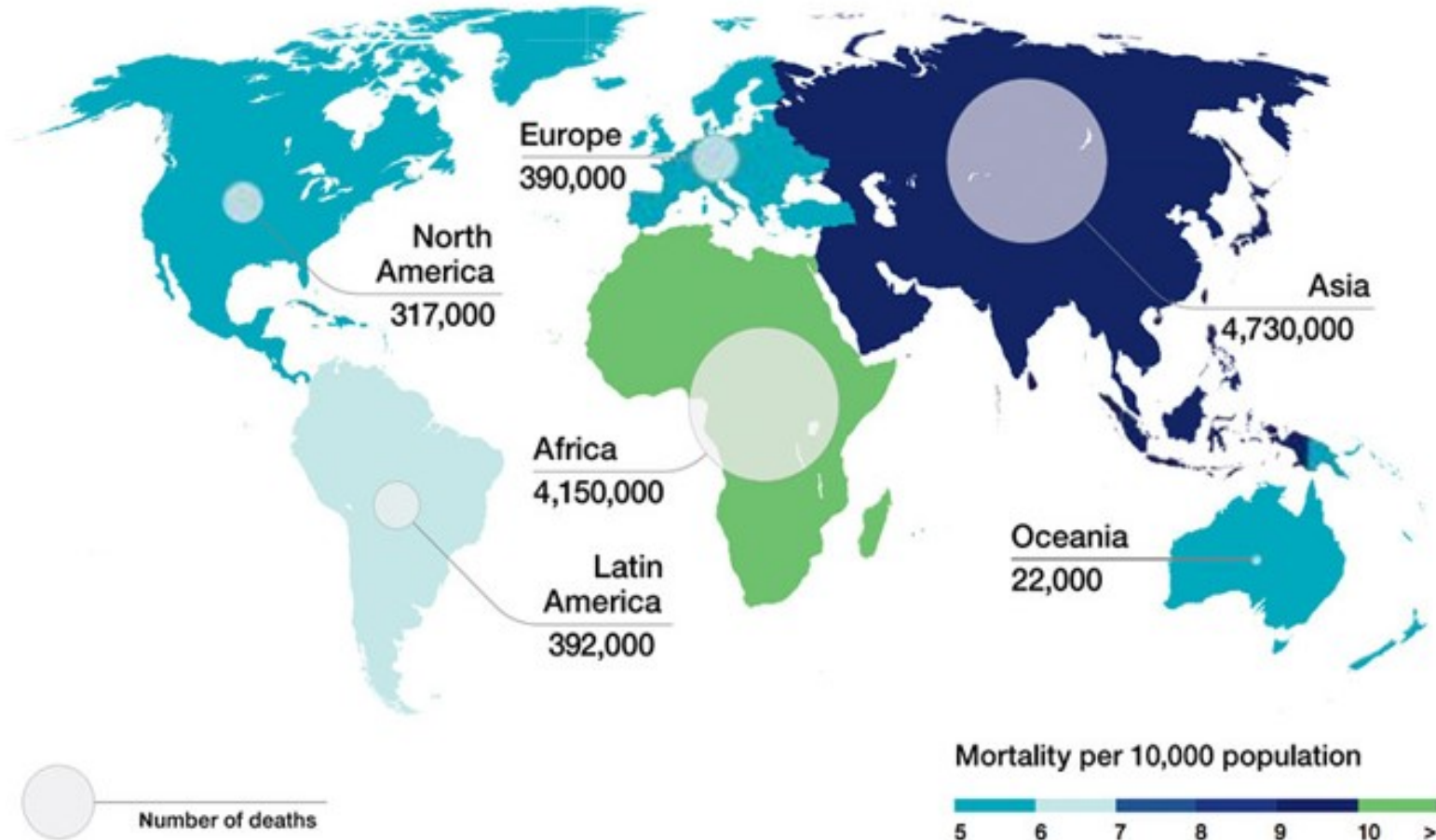
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Global situation of AMR

- 0.7 million people dying due to AMR
- Estimated 10 million annual deaths related to AMR by 2050 with £100 trillion economic loss
- The highest burden will be shared by the developing countries:
 - Africa: Total deaths 4.15 million (>10 deaths / 10,000 population)
 - Asia: Total deaths 4.73 million (9 deaths / 10,000 population)

Deaths attributable to AMR every year by 2050



Source: Review on Antimicrobial Resistance

Key facts

- Antimicrobial resistance (AMR) is a global health and development threat. It requires urgent multisectoral action in order to achieve the Sustainable Development Goals (SDGs).
- WHO has declared that AMR is one of the top 10 global public health threats facing humanity.
- Misuse and overuse of antimicrobials are the main drivers in the development of drug-resistant pathogens.
- Lack of clean water and sanitation and inadequate infection prevention and control promotes the spread of microbes, some of which can be resistant to antimicrobial treatment.
- The cost of AMR to the economy is significant. In addition to death and disability, prolonged illness results in longer hospital stays, the need for more expensive medicines and financial challenges for those impacted.
- Without effective antimicrobials, the success of modern medicine in treating infections, including during major surgery and cancer chemotherapy, would be at increased risk.

World Health Assembly (WHA) Resolution of 1998 urged member states to develop measures to encourage

1. appropriate and cost effective use of antimicrobials,
2. to prohibit the dispensing of antimicrobials without prescription of a qualified health care professionals,
3. to improve the practices to prevent spread of infection and thereby the spread of resistant pathogens,
4. to strengthen the legislation to prevent the manufacture, sale and distribution of counterfeit antimicrobials and sales of antimicrobials on the informal market, and
5. to reduce the use of antimicrobials in food-animal production.

- WHO developed a **Global Strategy for Containment of Antimicrobial Resistance** in 2001.
- This strategy provides the framework of interventions to slow the emergence and reduce the spread of antimicrobial-resistant microorganisms through:
 - Reducing the disease burden and the spread of infections
 - Improving access to appropriate antimicrobials
 - Improving use of antimicrobials (rational use)
 - Strengthening health systems and their surveillance capabilities
 - Enforcing regulations and legislations
 - Encouraging the development of appropriate new drugs and vaccines.

- WHA's 68'th Resolution in May, 2015 adopted Global Action Plan on AMR (GAP-AMR) which outlined five objectives :

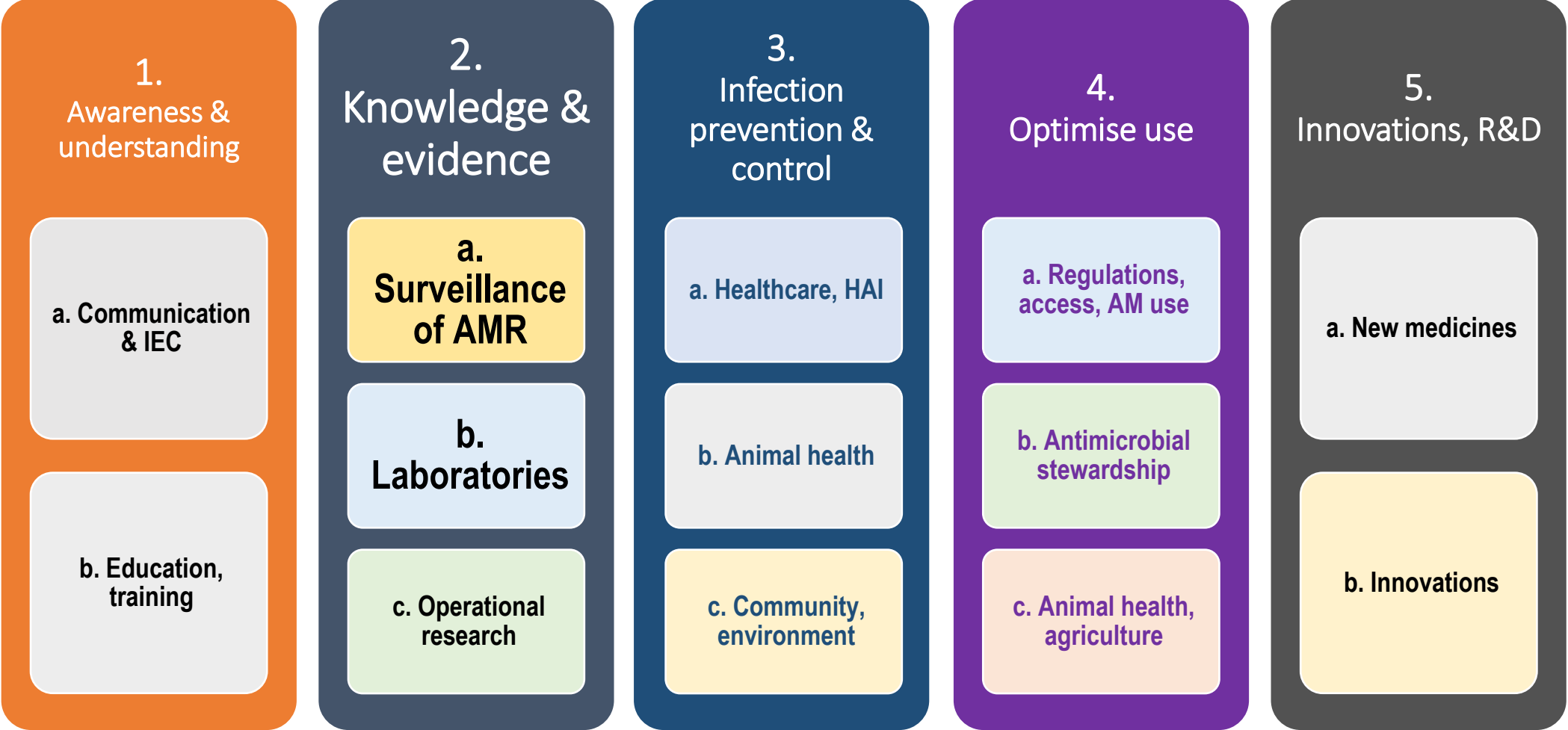
1. To improve awareness and understanding of AMR through effective communication, education and training.
2. To strengthen the knowledge and evidence through surveillance and research.
3. To reduce the incidence of infection through effective sanitation, hygiene and prevention measures (IPC).

To optimize the use of antimicrobials in human and animals.

5. To develop the economic case for sustainable investment that takes account of needs of all countries and to increase investment in new medicines, diagnostic tools, vaccines and other interventions.

- WHO urged the member countries to develop their own National Action Plan on AMR (NAP-AMR) within 2017.

Global Action Plan (GAP)-AMR



Global AMR Surveillance report 2014

Nepal's Initiative

- Signatory of Jaypur Declaration on Antimicrobial Resistance on 6'th September, 2011 signed by the Health Ministers of South-East Asia Region.
- Formation of Multi-Sectorial Steering Committee on AMR (MSSC-AMR) chaired by the Secretary of MoHP.
- National Technical Working Committee on AMR (NTWC-AMR) chaired by Chief of Quality, Standard and Regulation Division of MoHP.
- Formation of Technical Working Group for antimicrobial use (TWG-AMU).
- One Health Approach is being taken into account.
- MoU between MoHP and Department of Health & Social Care, UK Government for Fleming Fund
- Department of Drug Administration (DDA) -National Focal Point for Global Antimicrobial Resistance Surveillance System for Antimicrobial Consumption (GLASS-AMC).

- National Public Health Laboratory (NPHL)- National coordinating center and National reference laboratory for AMR surveillance in coordination with Central Veterinary Laboratory
- Ministry of Health and Population- National focal point for Antimicrobial Use (AMU)
- Drafting of National Action Plan on AMR (NAP-AMR)

Governance Structure

Multi-sectoral Steering Committee - AMR

National Technical Working Committee - AMR

Technical Working Committee (TWC)

Strategic priority 1

- TWC1A
- TWC1B

Strategic priority 2

- TWC2

Strategic priority 3

- TWC3

Strategic priority 4

- TWC4A
- TWC4B
- TWC4C

Strategic priority 5

- TWC5

AMR Country Policy Documents/Guidance

National Health Policy 2076

15th Five year plan

NHSS 2015 - 2020

National Drug Policy 1995

National Food Safety Policy 2075

“One Health” Strategy 2076

Animal Health and Animal Service Regulation 2056

Feed Regulation 2041

AMR major activities

- GLASS reporting -Laboratory surveillance for 8 isolates from 2017
- Fleming Fund Country Grant – Phase I (Aug 2018 – Dec 2020) with 3 objectives:
 1. Establish a function One Health AMR/AMU Surveillance Technical Group to support AMRMSC.
 2. Strengthen AMR/AMU surveillance in human health
 3. Strengthen AMR/AMU surveillance in animal health
- Fleming Fund Country Grant- Phase-II (Jan 2021- Feb 2022)
 - Fleming Fund Fellowship: 6 (Professional-4; Policy-2)
 - Laboratory capacity strengthening (trainings, logistics, renovations)-15 HH, 7AH, 1 Food
 - AMR Surveillance system strengthening :AMU,AMC and Food Safety and Environment

AMR major activities

- Surveillance Sites to date :
 - Human Health Laboratories – 26; Animal Health Laboratories - 7
- World Antimicrobials Awareness Week Celebration engaging one health sectors
- Point Prevalence Survey on Antimicrobial Use
- Revision of Antibiotic Treatment Guidelines, 2014
- Development of National Infection Prevention Guidelines

National Action Plan on AMR (NAP-AMR)

Five strategies under NAP-AMR Nepal (aligned with the GAP-AMR).

- 1: Improve awareness and understanding of AMR
- 2: Strengthen knowledge and evidence through surveillance
- 3 : Reduce incidence of infection through infection prevention and control
- 4 : Optimize the use of antimicrobial in human, animal and food
- 5: Promote investment for AMR activities, research and innovations

- **Antimicrobial Stewardship in NAP-AMR**

- Under the strategic priority 4 : Optimize the use of antimicrobial agents in human, animals and food.

- Strategic interventions :

1. Establish antimicrobial stewardship program (ASP) in human healthcare facilities
2. Improve and ensure appropriate use of antimicrobials in animal health

Various activities being proposed to carry out the ASP.

Chronology in development of NAP AMR



Thank You for your kind
Attention.