ANTIMICROBIAL RESISTANCE CONTROL PROGRAM: an Indonesia experiences in 2005-2018

Workshop on AMR in SEA - ASIA Region
Penang: 26-28 March 2018

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on behalf of AMR Control Committee
Ministry of Health, Republic of Indonesia
PAK MARTIN DAN PASSION

Awal bulan November 2014 beruntung dapat kesempatan mengadakan regional meeting negara se-selatan benua karena bertemu dengan bajur hadir yang mendapat kesempatan samma. Mereka adalah orang yang memahami seksual yang berguna membantu bagai negara meeting meeting.

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SPECIFIC CHALLENGES ON TACKLING OF AMR IN INDONESIA

• Indonesia has 18,000 islands, 6000 of which are inhabited
• Population: 258 M
• 2,755 hospitals, 9,700 PHCs
• 1,000,780 health workers
• National insurance (cost base on ICD X)

• ARCC require the data base of: AMR, AMU, Morbidity, Mortality.
• working with hospitals and PHCs for AMR and AMU surveillance
• Collaboration with veterinary farm for AMR and AMU surveillance
• collaboration program of Human and Animal sectors
ANTIMICROBIAL RESISTANCE CONTROL COMMITTEE
ARCC - MoH

2000-2005
- AMRIN (Antimicrobial resistance in Indonesia: Prevalence and Prevention) Study
- Collaboration with LUMC, NUMC, EUMC, funding by KNAW – the Netherlands

2005-2014
- AMRIN Study → National Concept for AMR Control
- Pilot Project of ARCP Implementation
- 20 teaching Hospital, fully support by MoH

2014-2019
- MoH Decree of ARCC (No.HK.02.02/MENKES/273/2014)
- supervised by Health and Services DG
- member: Staff of MoH, University and hospital experts
The Strategic Plan of ARCC in Indonesia 2015-2019

**Outcome:**
Increasing Public Health quality through AMR Control Program
(Diagnostic, Antibiotic usage, Infection management, AMR Spreading, Decreasing AMR Incidence)

**Output:**
To Develop AMR Control Implementation in Health Facilities (% number of Health Facility included)
Realization of Community Care toward AMR Global Problem and control (% understanding of AMR, % antibiotic consumption, % decreasing antibiotic OTC)

**Strategic Implementation Processes:**
- Realization of AMR Control in Hospital
- Realization of AMR Control in Primary Health Facilities
- Realization of AMR Control in Private Practice setting
- Realization of education system of AMR Problem and control in community
- Realization of antibiotic selling control and monitoring
- Realization of collaboration between gov. and NGO

**Resources:**
- Available competent health provider in for AMR control program: (Physician, Clinical Microbiologist, Clinical Pharmacist, Clinical Pharmacologist, ICN)
- Facilities support for AMR Control program: (Diagnostic, IC, Pharmaceutical facilities)
- Gov. Regulation support (National Policy, National guideline, Clinical guideline)

**Outputs:**
- Update of AMR teaching material in Health education (Medical Doctor, Pharmaceutical, Nurse, Midwife)
- Collaboration between Ministry of health, MoA, MoE, MoMF, MoD, MHE

**Strategic Implementation Resources:**
- Facilities support for AMR Control program:
  - Diagnostic, IC, Pharmaceutical facilities
- Gov. Regulation support:
  - National Policy, National guideline, Clinical guideline

**Existing System:**
- Existing system of AMR control in Health facilities and community

**Implementation of AMR surveillance Availability of AMR control Program funds**
- Collaboration among health faculty / university
- Collaboration of medical profession collegium
- Collaboration of MoA, MoD, MoHE, MoE
- Collaboration between institution that concern in antibiotic use
The NAP-AMR development in Indonesia

MoH Roadmap Recommendations from situation analyses and review missions

NAP template proposed by WHO-FAO-OIE

Draft of National Action Plan for containment of AMR in Indonesia by multi sectoral

June 2016

January 11-13.2017

Submit on May 17.2017
STRUCTUR OF NATIONAL ARCC

Inter-Ministerial Steering Committee (IMSC)

National ARCC (NARCC)
National Focal Point

TWG 1: Education-Awareness
- ARCC from 5 Ministries
- Ministry of Education
- Ministry of Information and Communication
- TASK FORCE

TWG 2: Surveillance-Research
- ARCC from 5 Ministries
- Academic stakeholders
- NGO
- TASK FORCE

TWG 3: IPC
- ARCC from 5 Ministries
- KARS
- TASK FORCE

TWG 4: Optimizing AMU
- ARCC from 5 Ministries
- Professional associations
- Hospital
- Associations: PERSI, ARSI, ARSADA
- TASK FORCE

TWG 5: Innovation-Investment
- ARCC from 5 Ministries
- Academic stakeholder
- Business: Biofarma, KimiaPharma
- TASK FORCE
The efforts to accelerate and extend implementation of ARCP in health facilities

- The establishment of Health Minister regulation for the implementation of ARCP in hospital level (*PMK No. 8/2015- ARCP Implementation in hospital setting*)
- Increase capacity of training to the hospitals
- Include ARCP elements into the hospital's accreditation system since 1 January 2018. *(2 standards / 10 assessment elements)*
- Still in progress the Health Minister regulation for the implementation of ARCP in PHC level
The main content of ministerial regulations for ARCP implementation in Hospital (PMK no. 8/2015)

1. Every hospital should implement ARCP
2. Establishment ARC Team (ASP team)
3. Preparation of Hospital policy and guideline of antibiotic use and infection control principles.
4. Monitoring and evaluation
5. AMR and AMU surveillance
6. To establish integrated team for complex infectious cases
7. Report to MoH
Hospital ARCP Training Pathway 2016

AMRCC of MoH

34 National and Provincials Referral Hospitals

110 Regional Referral Hospitals

ARCP standardization training

Training of the Trainer

- AMR and AMU national Surveillance

Private and District Hospitals

Primary Health Care
The Health Ministry is carrying out the socialization of the AMR issues to the community through “drug smart use program” (GEMA CERMAT),

- has been implemented in 34 provinces
- include NGO, Prominent persons, local pharmacist as champion
NGO in Community
The effort to know the progress and outcome of ARCP Implementation

• Ministry of Health conducts:
  1. Surveillance of AMR and AMU in hospital and community setting
     – The objective:
       • to determine AMR prevalence rate in hospital and community
       • to know the resistance pattern of bacterial indicator in hospital
       • to know the level of appropriateness use of antibiotics among physicians (hospital and PHC)

  2. Monitoring and evaluation the implementation of ARCP
     – The objective:
       • Visiting for investigate to the hospital that has the high prevalence of AMR
       • Visiting for guidance to the hospital that have not yet been implemented ARCP
THE SETTING ON SURVEILLANCE AND RESEARCH OF AMR IN INDONESIA

• **Surveillance:**
  - Coordinated by ARCC on behalf of MoH
  - Surveillance based on eligible hospital for sample sites
  - Funding: MoH

• **Research of AMR:** were mostly university or academic hospital based
  - In accordance with the national AMR issue
  - Funding:
    - Ministry of Research, Technology & Higher Education
    - University
    - International Collaboration
A. Surveillance
   – Surveillance on 2016
     ▪ Bacterial indicator (ESBL producing Bacteria and MRSA)
     ▪ AMU Qualitative and quantitative
   – Surveillance on 2017 (on going)
     • Blood and urine causative pathogens
     • MRSA as clinical causative agent
     • CRE

B. The object/area of the Research:
   – Based on National Problem of bacterial indicator that prevalent and directly have impact in health care system
     • Carbapenem Resistance Enterobacteriaceae/CRE
     • HAI
     • Health economic for HAI- related to AMR (2018)
• 2016: in 8 selected teaching hospitals, ESBL producing bacteria were 45-89%

• Data 2013 (25-60%), has been an increase by 20%
AMU SURVEILLANCE IN 6 TEACHING HOSPITALS - 2016 (analysis by Gyssens method)
The challenges tackling of AMR in Health facility and community

- High prevalence of AMR / (HAI..?) in hospital
- High number of in-appropriateness use of antibiotic in health facility
- Antibiotic use in Community:
  - Self medication using antibiotic
  - OTC antibiotic in most of drug store (aphotek)
The challenges tackling of AMR in policy-making level

- requires structured acceleration of the focal point and its function
- collaboration programs between ministries for establish:
  - National surveillance coordinator
  - National referral laboratory
  - implementation of ARCP in each sector.
• Contact
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    • Research area: mostly in Antibiotic Use and AMR
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Thank You

Misuse of ANTIBIOTICS puts us all at risk.

Taking antibiotics when you don’t need them speeds up antibiotic resistance. Antibiotic resistant infections are more complex and harder to treat. They can affect anyone, of any age, in any country.

Always seek the advice of a healthcare professional before taking antibiotics.