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สำนักงานกองทุนสนับสนุนการสร้างเสริมสุขภาพ

Antimicrobial Resistance: Experience from Thai NAP

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DMDC

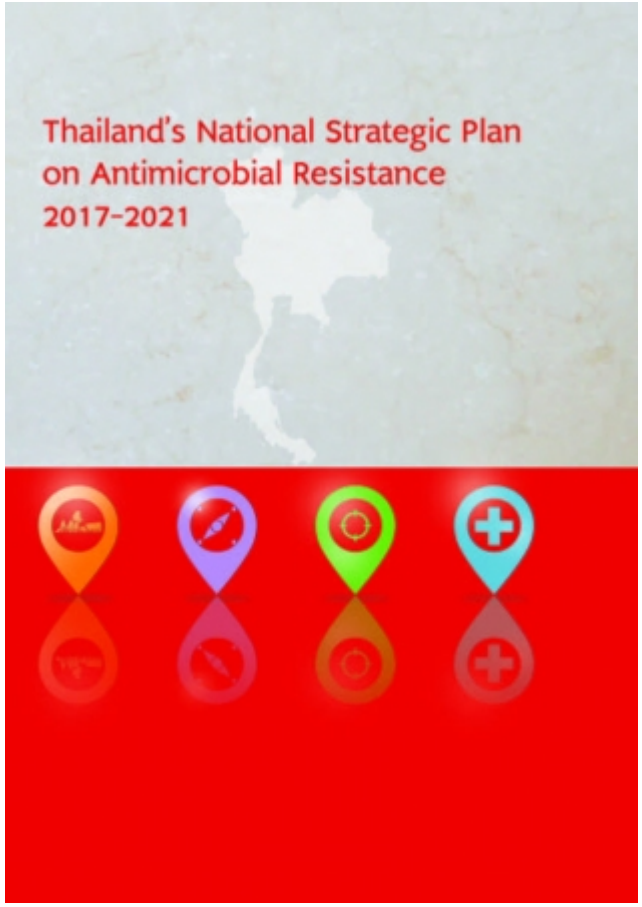
4th June 2019

Charting a Civil Society Agenda on Antimicrobial Resistance: Connecting Global to Local
Geneva

Outline

- Thailand a success story:
  - CSO role on AMR policy
  - AMR/SDG/UHC intersectoral collaboration
- Lessons from NAP Southeast Asia region
- Barriers and solution approaches to supporting NAPs within and across LMICs
- Opportunities and needs from global and regional efforts to support NAP work

AMR 6 Strategies (2017-2021)



Cabinet approved Aug 2016

1. AMR Surveillance system using a 'One Health' approach
2. Regulation of antimicrobial distribution
3. AMR prevention and control and antimicrobial stewardship in human
4. AMR prevention and control and antimicrobial stewardship in agriculture and animal
5. Public knowledge on AMR and awareness of appropriate use of antimicrobials
6. Governance mechanisms to develop and sustain AMR-related actors

Thai AMR Policy Timeline

International interaction: ReAct, ARC, WHO, IACG, JEE, etc.

Cabinet approved Aug2016

National AMR Policy Board w subcom

Thai Health

NHA

WHO CCS AMR

National AMR Strategy

2015 2016 2017 2018 2019 2020 2021

2007
ASU Program
2009
DMDC Project
Drug System
Report 2010
AAW since 2014
Consumer
Media

Preparation

Research mapping

National Health Survey

M & E

Surveillance

IPC

THAISAC/AMU project

Stewardship

AMR dictionary

ATB reclassification

CSO

HSRI, IHPP, Universities, FDA, DMSC,

School
Farmers

MoPH, MoA, M of Edu, Mo E,

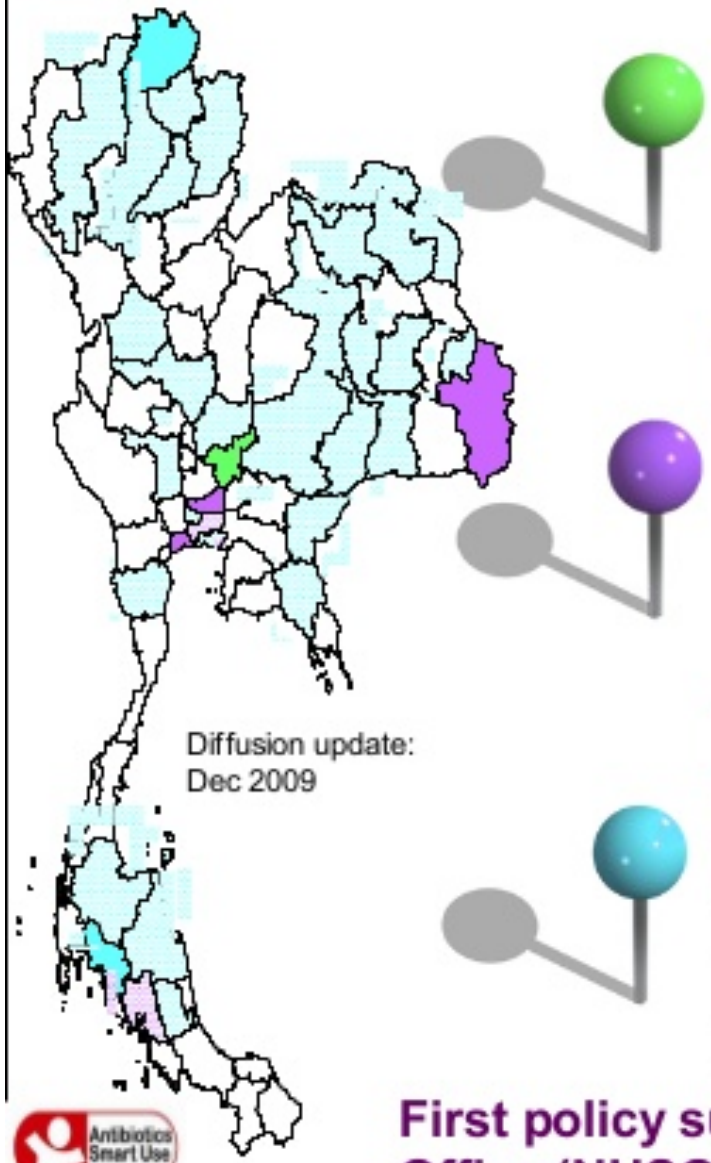
New chapter in tackling antimicrobial resistance in Thailand

Nithima Sumpradit and colleagues
describe the experience of Thailand in developing its national strategic plan on antimicrobial resistance and highlight the need for sustained political commitment and multisectoral collaboration
BMJ 358 Suppl1 Antimicrobial Resistance in South East Asia

Developing National Strategic Plan/ NAP

- Understand landscape and complex nature of AMR
- Engaging stakeholders
- Joining forces with regional and global stakeholders
- Translating the national plan into action
- Programme implementation
- Programme monitoring

Antibiotics Smart Use Program (5 year)



Phase 1: Pilot project (2007 – 2008)

Goal: To test the effectiveness of interventions in changing antibiotics prescribing behavior

Settings: 1 province (Saraburi) involving all 10 community hospitals and 87 primary health centers

Phase 2: Scaling up feasibility (2008 – 2009)

Goal: To test feasibility of program expansion and develop decentralized, collaborative networks.

Settings: 3 provinces (large, medium & small provinces) and 2 hospital networks (public & private hospitals)

Phase 3: Program sustainability (2009 – 2012)

Goal: To integrate ASU into national agenda on antibiotics and create social norms on proper use of antibiotics

Strategy: Policy advocacy, Network strengthening & empowerment, Public communication & campaign

First policy support was from the National Health Security Office (NHSO) in March 2009.

Antibiotics Smart Use
National Use of Medicine

Antibiotics Smart Use: a workable model for promoting the rational use of medicines in Thailand

Bull World Health Organ 2012;90:905–913 | doi:10.2471/BLT.12.105445

Table 2. **Characteristics of the Antibiotics Smart Use (ASU) programme, by programmatic phase, Thailand**

Characteristics	Phase 1 (Aug 2007–Aug 2008)	Phase 2 (Sep 2008–Dec 2009)	Phase 3, ongoing (transition period) (Mar 2010–Aug 2011)
Goals	Test the effectiveness of ASU in changing antibiotic prescription behaviour	Test feasibility of scaling up ASU model	Strengthen networks and assess scaling-up mechanisms
Target	1 province[a]	3 provinces and 2 networks of public and private hospitals[b]	22 public hospital networks in 15 provinces
Funding agencies	WHO, Thai FDA	HSRI, NHSO, Thai FDA	DSMDC, Thai FDA
Coordinating agencies	Thai FDA	Thai FDA	DSMDC, Thai FDA, IHPP
Budget spending[c]	US$ 33 000[d]	US$ 73 000	US$ 123 000
Spillover effect[e]	No	Yes	Yes

DSMDC, Drug System Monitoring and Development Centre; FDA, Food and Drug Administration; HSRI, Health Systems Research Institute; IHPP, International Health Policy Program; NHSO, National Health Security Office; US$, United States dollar; WHO, World Health Organization.

[a] 10 district hospitals and 87 primary health centres.

[b] 44 hospitals and 621 primary health centres.

[c] The budget spending reported here is for the amount received from funding agencies; it does not include budget funds received from local partners.

[d] The exchange rate was 30 Thai baht to one US dollar.

[e] This is the extent to which health-care facilities, organizations and individuals not targeted by ASU implement ASU methods.

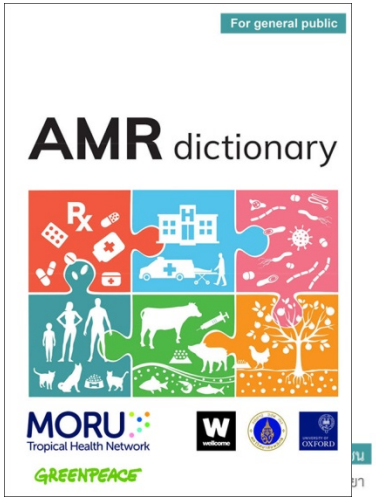
DMDC AMR Project

- AMR Policy Board member represent CSO
- Drug System Annual Report 2010: AMR and antibiotic use
- Support ASU scale up (2010-2012)
- Raise awareness to the media (2009 onward)
- National Health Assembly Resolution (2015)
- Support community model development at different levels
- Community and CSO empowerment model
- Monitor the policy implementation

AMR CSO activities

http://www.thaidrugwatch.org/

http://atb-aware.thaidrugwatch.org/



https://www.amrdictionary.net

Roles of CSO in AMR policy

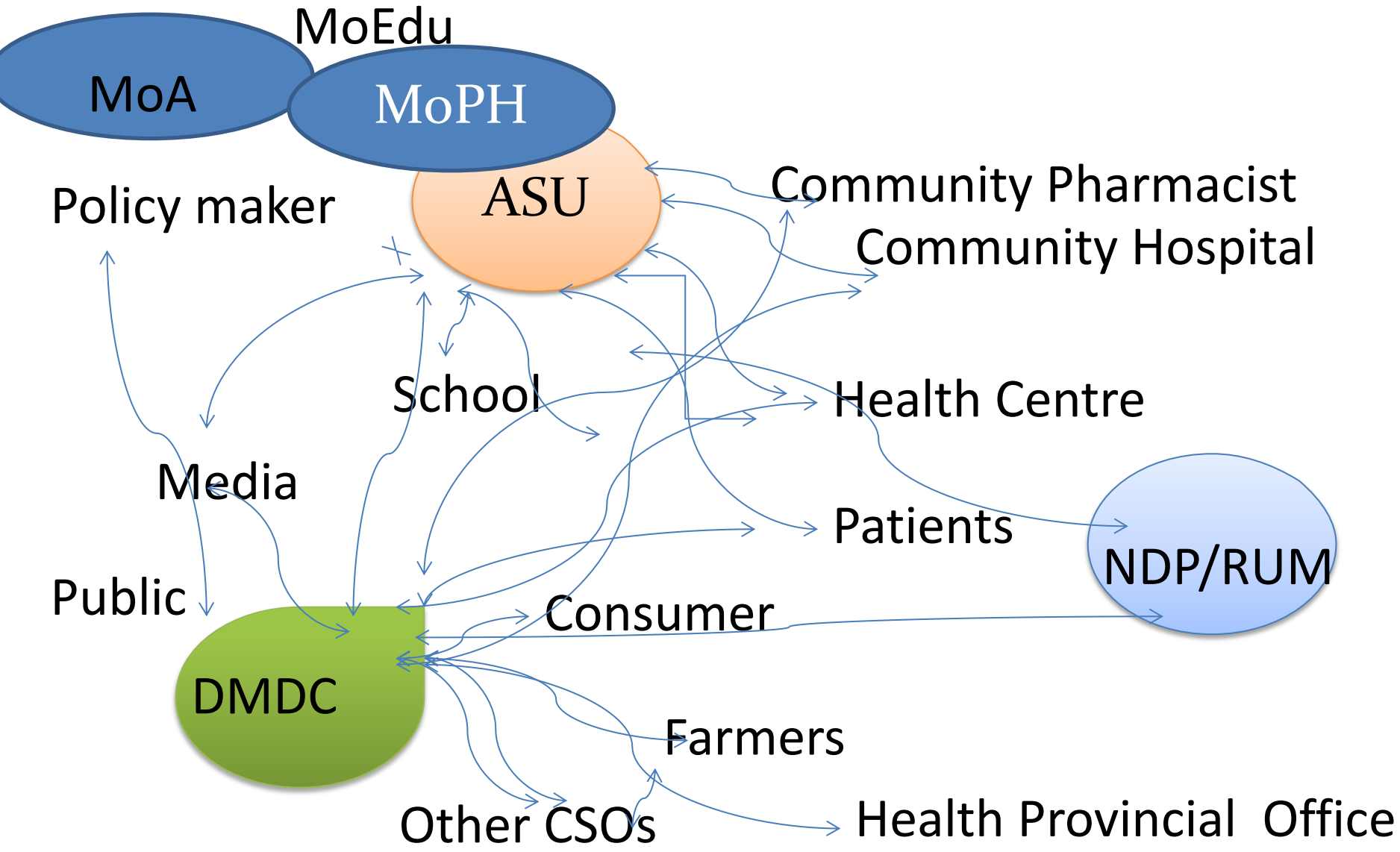
Policy formulation

- Agenda setting
- Raise public concern
- Media communication

Policy Implementation

- Represent voice from lay people
- Community empower and engagement
- M & E
- Voices

Network of network



Reclassification of ATB in Thailand

- In response to National AMR Strategy
- Set up subcommittee under Drug Board
- Phase 0: All antibiotics are at least Pharmacy class and higher, banned colistin oral preparation in human,
- Phase I: TB drugs and injection ATB at health facility only
- Phase II: fluoroquinolone, betalactam-betalactamase inhibitor combination, และ oral third-generation cephalosporin
- Phase III:

Legal status of antibiotics

- Prescription only
- Pharmacy
- OTC

- Dispense via hospital
- Dispense via pharmacies
- Dispense via grocery

Pre-marketing

- Application (drug master file, special requirement)
- assessment/ review
- Registration (drug info, legal status, valid of MA)

Post marketing

- Re-evaluation, reclassification (ADR, AMR)
- Review, DUE in hospitals = change guideline
- Regulatory action (banned, change legal status Change information, etc.)

Summary of Lessons Learned

Box 2. **Summary of main lessons learnt**

- Strong political commitment, national ownership and adequate multisectoral institutional capacities will be essential for the effective implementation of Thailand's first national strategic plan on antimicrobial resistance.
- A robust monitoring and evaluation platform now contributes to evidence-based interventions.
- An integrated system for the surveillance of antimicrobial resistance in humans, livestock and pets still needs to be established.

Antimicrobial resistance: from global agenda to national strategic plan, Thailand

Viroj Tangcharoensathien,[a] Wanchai Sattayawutthipong,[b] Sukhum Kanjanapimai,[c] Wantanee Kanpravidth,[d] Richard Brown[e] & Angkana Sommanustweechai[a]

Challenges for Thailand

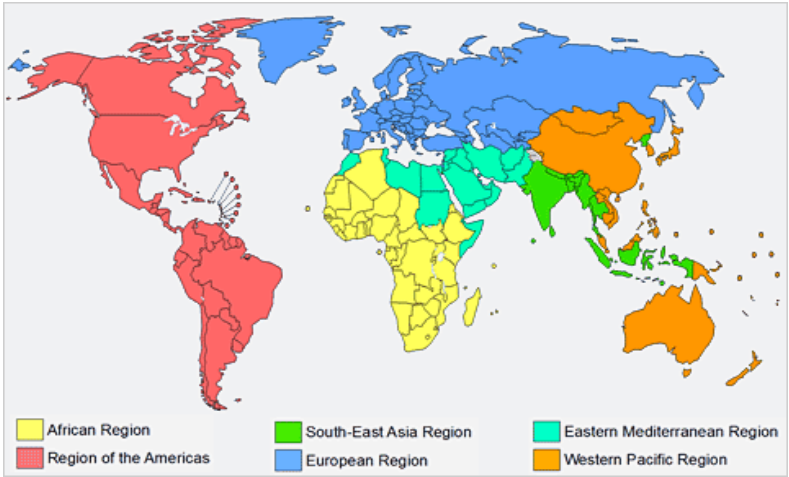
- Strong role of central government for policy implementation, need more local government and CSO
- Weak knowledges and awareness of lay people at different levels
- Professionals still not very aware
- Recognized status of CSO by government
- Resources support from government
- Collaboration among stakeholders

J Antimicrob Chemother 2017; **72**: 2963–2972
doi:10.1093/jac/dkx260 Advance Access publication 7 August 2017

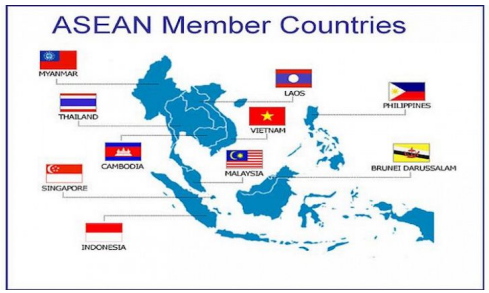
Journal of Antimicrobial Chemotherapy

A current perspective on antimicrobial resistance in Southeast Asia

- Human AMR burden
- AMR surveillance capacity
- Availability of ATB usage data
- Antimicrobial Stewardship and policy

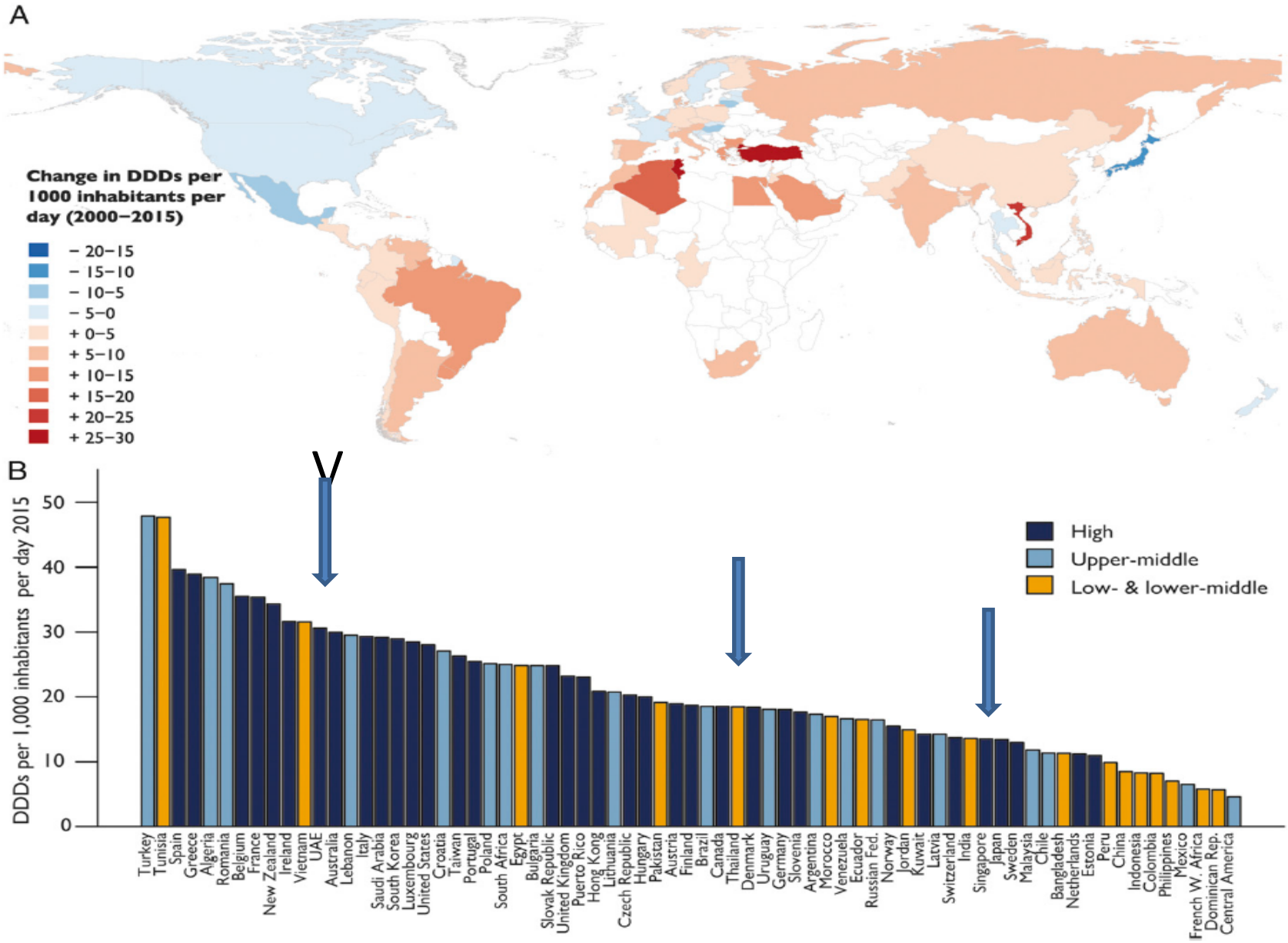


EMRO SEARO WPRO



ASEAN

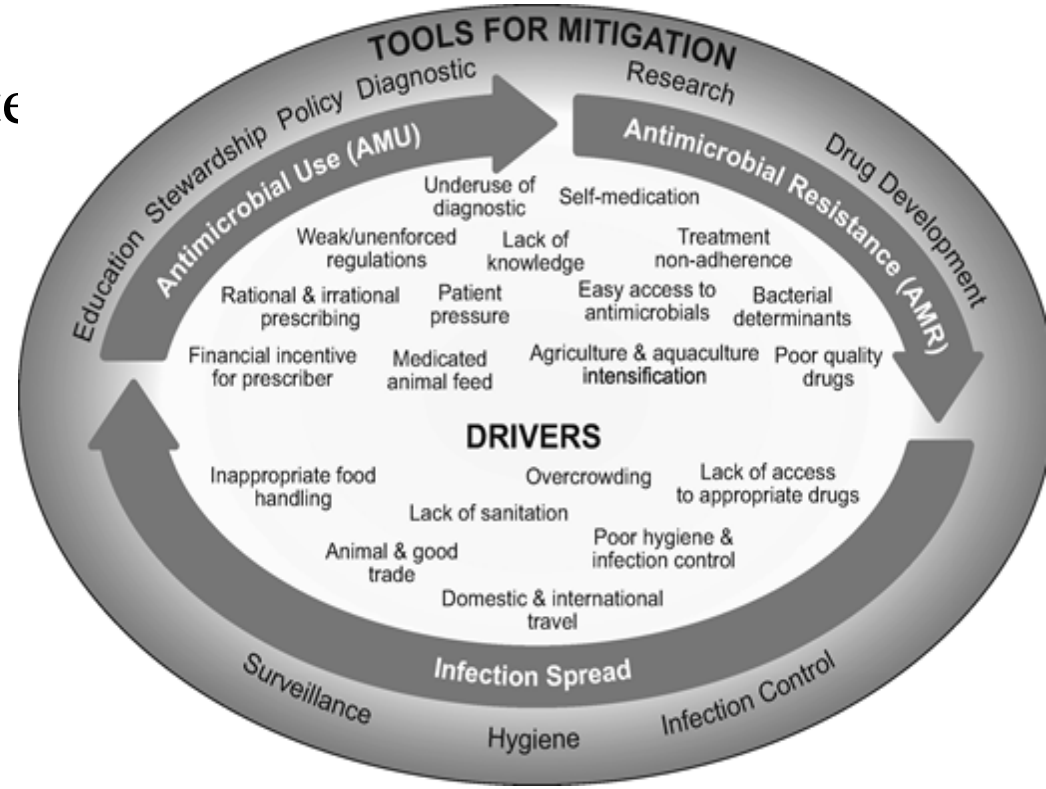
Antibiotic Consumption



Lessons from AMR in Southeast Asia

https://academic.oup.com/jac/article/72/11/2963/4076635

- AMR threats
- Network of AMR Surveillance
- Jaipur declaration
- AMU database
- Under use of ATB diagnostic
- Drivers of AMR
  - Economic development & pop growth
  - Use in human
  - Poor awareness & knowledge
  - ATB in agriculture& aquaculture
  - Drug access and quality



Solutions approaches to supporting NAPs within and across LMICs

SEA AMR network

(i) The need for collaborative surveillance networks

(ii) The need for rapid diagnostics to improve antimicrobial prescribing

(iii) The need for better awareness, education and stewardship

(iv) The need for social research

My observation

- Political commitment
- Collaboration, Communication and experience sharing
- People empowered and engagement
- Knowledge & attitude, awareness of stakeholders
- Knowledge production and management

Opportunities and needs from global and regional efforts to support NAP work

- SDG indicators: specific prioritized opportunities within the SDGs
  - 5 opportunities to anchor AMR in implementation, e.g., by engaging with FAO to define sustainable agriculture in an AMR-sensitive way (2.4.1)
  - 3 call-outs of AMR in existing indicators, e.g., adding a resistance-flag to TB incidence (3.3.2)
  - 3 potential new AMR-specific indicators, e.g., proportion of access vs. watch/reserve AMC
- UHC

https://www.who.int/antimicrobial-resistance/interagency-coordination-group/AMR_SDG_indicators_analysis_slides.pdf


THANK YOU