Global Health Care Quality; a Public Health Perspective

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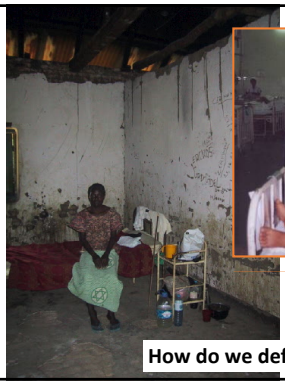
No conflicts of interest to declare.



How do we define "Global" healthcare?

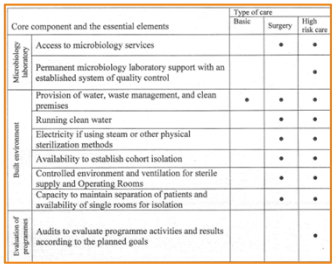
Matching capacity to care in Resource-limited settings

- Levels of capacity:
  - Basic safety: water, shelter, light
  - Sanitation, protective equipment, and disinfection
  - Microbiology laboratory capacity, sterilization, reliable water and electricity, medical records, professional nursing…
- Limited vs lost capacities

Prioritizing infection prevention capacity

Capacity should be tailored to activities, e.g.:

• Oral therapy	Security, record keeping
• Wound care	+ gloves, suture, sharps management etc.
• Obstetrics (uncomplicated)	+ PPE, placenta management
• Surgical therapy	+ Sterilization, surgical PPE
• ICU, hemodialysis, etc	+ Environmental control, water safety, microbiology



Core component and the essential elements		Type of care		
		Basic	Surgery	High risk care
Microbiology laboratory	Access to microbiology services		•	•
	Permanent microbiology laboratory support with an established system of quality control			•
Built environment	Provision of water, waste management, and clean premises	•	•	•
	Running clean water		•	•
	Electricity if using steam or other physical sterilization methods		•	•
	Availability to establish cohort isolation		•	•
	Controlled environment and ventilation for sterile supply and Operating Rooms		•	•
	Capacity to maintain separation of patients and availability of single rooms for isolation		•	•
Evaluation of programme	Audits to evaluate programme activities and results according to the planned goals			•

Core Components for Infection Prevention and Control (IPC) Programmes

Report of the second meeting of the IPC in Health Care informal network

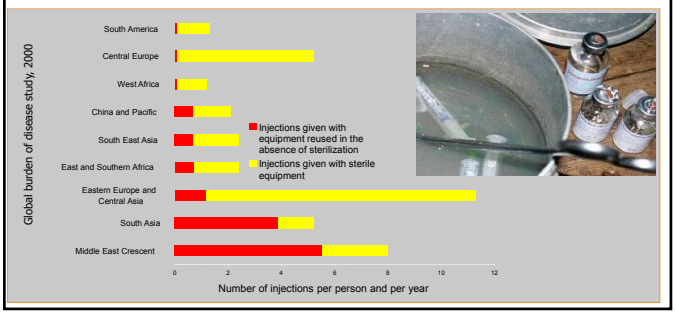
Geneva, Switzerland
26th - 27th June 2008

World Health Organization

Epidemic and Pandemic Alert and Response
Biorisk Reduction for Dangerous Pathogens
Infection Prevention and Control in Health Care

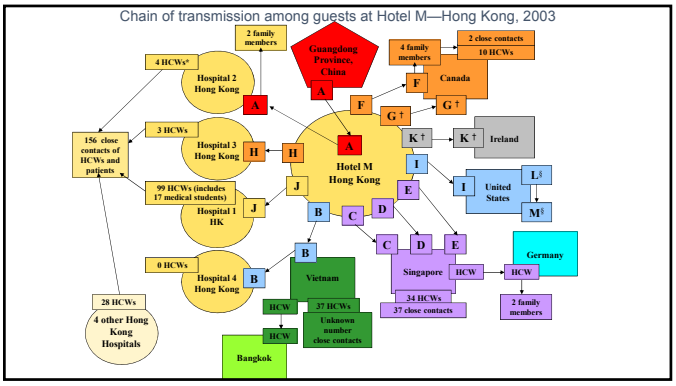
Translational Challenges:
Importation of technology without

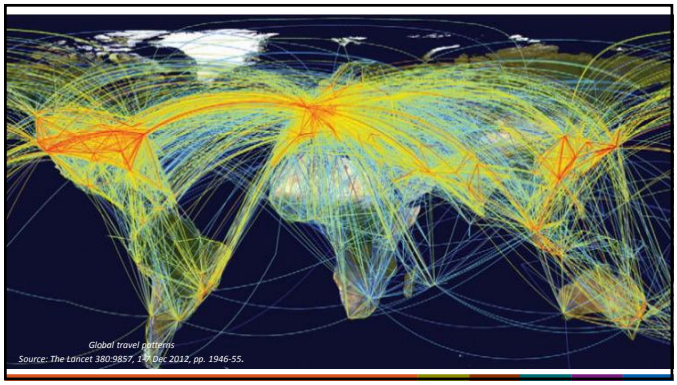
Unsafe Injections:



Emerging diseases follow a consistent pattern:

1) Disturbance of, intrusion into, or importation from an ecologic system
2) Primary insertion into human host(s)
3) Secondary spread among humans
4) **Amplification in healthcare settings**





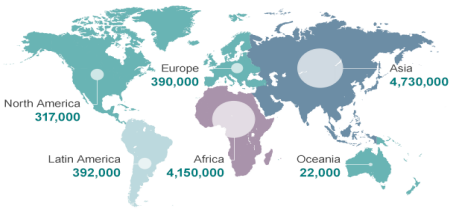
Global travel patterns
Source: The Lancet 380:9857, 1st Dec 2012, pp. 1946-55.

Outbreak Response vs Routine Practices

- Short term interventions for outbreak control
  - Brief urgent effect
  - Importation of resources and personnel
  - Cohort and Isolate
  - **Limited residual**

- Establishment of new capacities
  - Ongoing effect
  - Regional resources and personnel
  - Extensive training, commitment of leadership
  - **Retention of capacity**

Yearly deaths attributable to AMR, 2050



Source: Review on Antimicrobial Resistance 2014

AMR Action Package: Core Activities

- Develop sound national policies
- Detect AMR through improved lab testing
- Track AMR through surveillance and reporting
- Build workforce capacity for AMR prevention through strengthening infection prevention and control and stewardship
- Contain AMR by responding to outbreaks and threats

- **Advocacy** at the highest levels for stronger IPC to contain AR in healthcare
- **Global policies** for IPC, based on the level of care provided
- Country-level **leadership** to strengthen national and regional IPC programs
- **Regional and global cooperation** to track and prevent transmission of AR

Focus on long-term national programs:

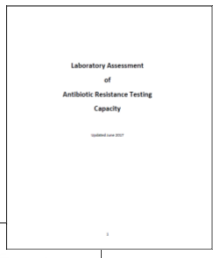
Technical Assistance Area	Countries (2015-2018)
National policies and plans	Kenya, India, Thailand, Vietnam, Pakistan, Bangladesh, Ethiopia, Tanzania, Cambodia
Lab strengthening	India, Vietnam, Kenya, Georgia, Senegal, Pakistan, Ethiopia, Tanzania
National surveillance systems	India, Vietnam, Kenya, Georgia, Thailand, Senegal, Pakistan, Bangladesh, Ethiopia, Cambodia
Workforce strengthening- IPC and stewardship	Sierra Leone, Liberia, Kenya, Vietnam, India, Nigeria, Georgia, Thailand, South Africa
Outbreak response	India, Thailand, South Africa, Fiji

1. Policies, Plans, Guidelines

- Global level
- National level
  - National AMR action plan
  - National AMR surveillance strategy
  - National IPC guidelines
  - National healthcare policies

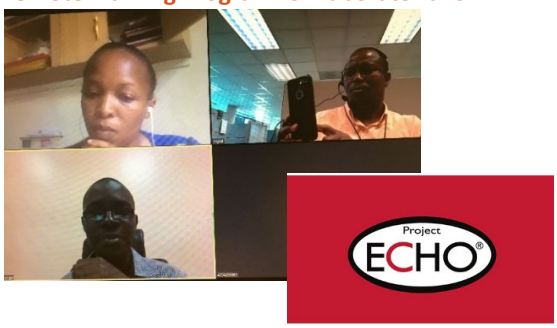
2. Lab strengthening

- Identify laboratories for national surveillance
- Assess current microbiology capacity
- Work with partners to target capacity building



AMERICAN SOCIETY FOR MICROBIOLOGY

Remote Training Program for Laboratorians

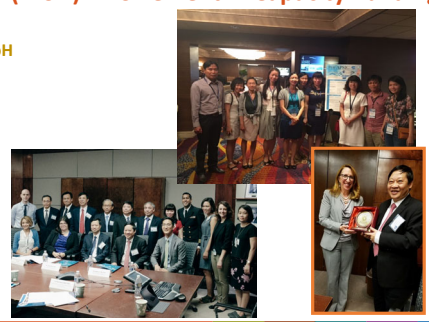


3. National Surveillance Systems

- Two main types of AMR surveillance:
  - Lab-based
  - Clinical/ healthcare
- Submission of data
  - WHONet, DHIS2, other systems
- Analysis and utilization of data

Ministry of Health (MoH) Involvement in Capacity Building

- **New AMR unit at MoH**
  - Physician, IT officer, Epidemiologist, Planning officer
- **Delegation to CDC**
  - Vice Minister and other MoH and hospital leadership



Challenges for Infection Prevention

- Infrastructure
- Resources and Maintenance
- Personnel
  - Training and retention
- National priorities
  - Crisis response vs capacity building

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Sustainability

Thank you!