

Role of FELTP in building a public health laboratory network

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Outline

- Background
- Public Health Laboratory Networking
- Building a PHLN through FELTP
- Challenges facing the NPHLN
- Conclusion

Background [1/2]

- The situation of laboratory services in Africa is characterized by:
 - Inadequate staffing (skills and numbers)
 - Shortage/ unavailability of supplies (Quantity and Quality)
 - Inadequate equipment/ poorly serviced
 - Challenges with developing robust systems and training the workforce to operate the PHLN
- Public health laboratories have almost disappeared in some African Countries
 - Either integrated with, or replaced by, clinical diagnostic laboratories
 - Where public health laboratories exist, they are at the national level only

Background [2/2]



INTERNATIONAL
HEALTH
REGULATIONS
(2005)



Public Health Laboratory in the revised IHR 2005 :

- Functional Laboratory Networking
- Specimen collection, storage and transport
- Biosafety
- Quality Assurance Programme
- Data Management and reporting systems
- Information sharing (bulletins, special reports)

Public Health Laboratory Networking [1/3]

- The functions of PHLN include:
 - Training
 - Quality assurance (QC/QA)
 - Monitoring of laboratory data and information
 - Timely and reliable results primarily for the purpose of disease control and prevention
- Efficient PHLN can assist in:
 - Successful detection
 - Successful characterization
 - Tracing of disease transmission that is essential for the prevention and control of public health events

Public Health Laboratory Networking [2/3]

- How can we strengthen PHLN?
 - Develop public health laboratory workforce capacity with competencies in field epidemiology
 - Major investment in personnel and equipment
 - Develop national laboratory strategic plans and policies and networking guidelines
 - Establish public - private partnerships
 - Ensure effective leadership and commitment

Public Health Laboratory Networking [3/3]

Laboratory Network Guideline Document

Guide for National Public Health
Laboratory Networking
to Strengthen
INTEGRATED DISEASE
SURVEILLANCE AND RESPONSE (IDSR)



- Guide of National Public Health Laboratory Networking to Strengthen IDSR (2008)
- Focuses on how to enhancing multi-disease laboratory networks



World Health Organization Regional Office for Africa (AFRO)
Communicable Disease Surveillance and Response (CSR)
Brazzaville, Republic of Congo

Test Version 1.0 - September 2008

Building a PHLN through FELTP [1/4]

- FELTPs was established in 1980s
- Modeled after CDC's Epidemic Intelligence Service
- 2-year, full-time postgraduate training program
- Closely supervised, on-the-job, competency-based training
- Trainees assigned to positions that provide epidemiologic service to MOHSW
- Graduates receive a degree



Building a PHLN through FELTP [2/4]

- FELTP trainees provide services such as epidemic investigations, surveillance, surveys and program evaluations
- FELTP with “L” was established in 2004 in Kenya
 - FELTP + laboratory management component



A regional program with participants from Kenya, Southern Sudan, Tanzania, and Ghana

Building a PHLN through FELTP [3/4]

- Successful FELTPs contribute to the following critical outcomes:
 1. Functional and robust public health surveillance systems (e.g., IDSR)
 2. Timely and effective outbreak investigation and response (including other public health threats)
 3. Evidence-based decision making in public health
 4. Strengthened human capacity for public health (leaders and implementers)
 5. Networking between programs and laboratories
 6. Reduction in morbidity and mortality from priority diseases

Building a PHLN through FELTP [4/4]

- “L” part aim to develop laboratory epidemiologists to operate public health laboratories and networks
 - Epidemic preparedness
 - Outbreak investigation and response
 - Emerging infectious disease surveillance
 - Pathogen diagnostic techniques
- Develop also lab field epidemiologists to operate public health surveillance and response systems
- Foster linkage between public health laboratory scientists and epidemiologists
- Enhance communication

Outcomes of “L” in FETP [1/2]

- Improved laboratory-based disease surveillance
 - Frequency
 - Extent
 - Scope of reporting
- Improve lab component of IDSR
- Enhanced response to outbreaks
 - Rapid confirmation
 - subtyping
 - Antimicrobial sensitivity determination
 - Monitoring of genetic changes

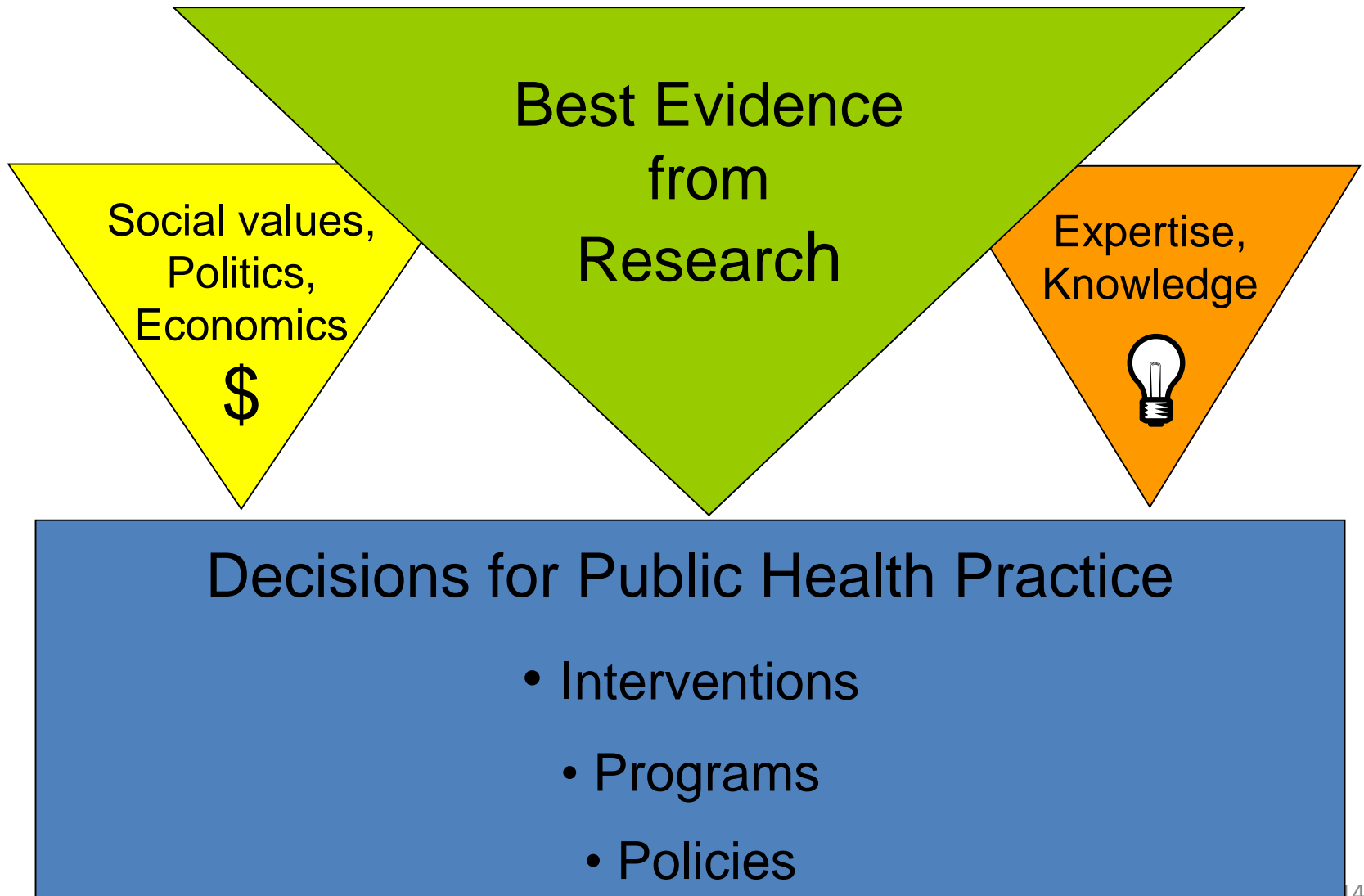


Outcomes of “L” in FELTP [2/2]

- Improved laboratory management
 - Use of quality management systems
- Scientific and managerial leadership in development of public health policy
- Improved biosafety technology and practices in public health laboratories
- Utilize residents to develop, analyze and maintain laboratory information system



Evidence-Based Public Health



Challenges in incorporating FELTP in NPHLN

- Lack of scheme of service for FELTP graduates
- Sustainability of training programmes
- Inability to acquire required competent
 - Mentorship
 - Established Laboratory QMS
- Insufficient funding
 - Field work and hands on practice
- Inadequacy of essential reagents and consumables
- Competing priorities
- Limited quality assurance and control protocols



Conclusion

- FELTP has contributed to enhancing the public laboratory strengthening component in ministries of health
- FELTP has led to improved diagnostic and monitoring services
- FELTP is supporting the implementation of laboratory quality management systems and initiation of laboratory accreditation process
- Through FELTPs, East African countries have managed to obtain well trained public health laboratory leaders to drive the process of strengthening laboratory systems
- Apart from training of laboratory personnel, laboratory departments should be created within the ministries of health