The importance for Development of a One Health curriculum for Universities in Vietnam

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Investigation and control of zoonotic diseases, and other complex problems is impossible without a multidisciplinary approach involving human, animal, environmental and other scientific disciplines.
Costs increase if late actions

Adapted from IOM (2009)
GHSA (2014) to advance a world safe and secure from infectious disease threats, to bring together nations from all over the world to make new, concrete commitments, and to elevate global health security as a national leaders-level priority.

1. Prevent 1 : Antimicrobial Resistance
2. Prevent 2 : Zoonotic Disease
3. Prevent 3 : Biosafety and Biosecurity
4. Prevent 4 : Immunization
5. Detect 1 : National Laboratory System
7. Detect 4 : Reporting
8. Detect 5 : Workforce Development
9. Respond 1 : Emergency Operations Centers
10. Respond 2 : Linking Public Health with Law and Multisectoral Rapid Response
11. Respond 3 : Medical Countermeasures and Personnel Deployment
Seven One Health focus areas

- Building **OH capacity**
- OH approaches for managing **human disease emergencies of zoonotic origin**
- OH approaches for managing **zoonotic agents with pandemic potential that are yet to emerge**
- OH approaches for managing **zoonotic influenza viruses with pandemic potential**
- OH approaches for managing **rabies**
- OH approaches for managing **antimicrobial resistance**
- OH approaches for managing other **priority zoonotic diseases**
**GOAL:** To promote the OH approach through university training and research to inspire a new generation of lecturers and researchers equipped with a full range of knowledge and skills to practice the OH approach.
One Health Modules

**OH core competency modules**
1. Collaboration and Partnership
2. Communication and Informatics
3. Culture, Beliefs
4. Values and Ethics
5. Leadership
6. Management
7. Systems Thinking
8. Policy, Advocacy and Regulation

**OH technical modules**
1. One Health Concepts and Knowledge
2. Fundamentals of Infectious Disease
3. Infectious Disease Management
4. Epidemiology
5. Risk Analysis
6. Public Heath
7. Ecosystem Health
8. Behavior Development
9. One Health Economics
10. Zoonotic diseases
11. Wildlife diseases
12. Environmental & livestock waste management
13. Antimicrobial resistance
Key achievements

- OH compulsory module (2-3 credits, under-graduate & post-graduate students: PH, PM, MD, DVM., etc.)
- Master of Public Health with OH oriented teaching in English (HMU)
- Master of Public Health majoring in Environmental Health (HUPH)
- Master of Veterinary Public Health teaching in English (HCM NLU)
- 400 current health & veterinary staff were trained OH
- 15 OH students clubs were established (> 1,000 students)
- Field-based OH teaching & learning
- OH SMART, etc.
Number of lecturers trained OH: **367** – average age: **35.4** years old

### Disciplines of faculty

- **Faculties of human health**: 229
- **Faculties of animal health**: 138

### Gender

- **Male**: 49.0%
- **Female**: 51.0%
The number of students studying One Health modules in 2017-2018:

- One Health field trip
- Risk analysis & infectious diseases
- One Health economic
- Policies relating to One Health
- Ecosystem health
- Antimicrobial resistance
- Zoonotic diseases
- Infectious diseases prevention
- Value and Ethics
- Planning and Management
- System thinking
- Culture and Belief
- Collaboration
- Communication
- Leadership
- Overview of One Health concept

Gender distribution:

- Male: 28.5%
- Female: 71.5%
Number of professional staff trained OH: **448** – average age: **33.9** years old

**Disciplines of professional staff**

- **Human health**: 235
- **Animal Health**: 213

**Gender**

- Female: 58.3%
- Male: 41.7%
Collaboration & Communication

National One Health Forum
One Health Communication Network (One Health Partnership)

BioRisk Management curriculum (DTRA)

World Rabies Day AMR (GDPM, DAH, NIHE, WHO, FAO)

OH short training course for professionals (CDC, Sub-DAH)
Government agencies consultation
Reflection on One Health Workforce

• Acceptance, policy engagement (e.g. ministries)

• How to share credits, added values of OH curricular among universities & government agencies & other organizations

• Closer collaboration/partnership between universities & government agencies, private sectors, NGOs, CSOs, etc.

• Engaging OHW frameworks within ministries (e.g. National Action Plan)

• Improving the translation of OH education & research evidences into policy

• Complementarity : OH curriculum for other health issue (e.g. NCDs)

• Maintenance & expansion of the networks
Thank you very much!