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One Health surveillance system; challenges and constraints of investigating antibiotic resistance in Viet Nam’.

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Presentation outline

- Background;
 - The One Health (OH) surveillance system, Viet Nam
- Research objectives
- Methodology
- Results
- Key findings

Research Objectives

Elucidate information of the challenges and opportunities of harmonizing an investigation process within the context of resistant food-borne bacteria within the pork value chain, Viet Nam.

- *What are the potential challenges and constraints for actors in the animal and human health sector to investigate ABR within the pork value chain in Viet Nam?*



Robyn Alders, Vietnam 2017

Background

*ABR is a
ONE HEALTH
issue*

Health of people

Health of animals

*Health of the
environment*

Hypothetical scenario: ABR foodborne resistant pathogen

1. Identification of ABR food-borne resistant pathogen in a person during a foodborne illness outbreak.
2. Identification of ABR food-borne resistant pathogen within the pork-value chain (including: slaughter house, retailer and pork product).

Participants

Human Health Sector	
Government (Research, Ministry Department, Hospital)	3
International Organisations	1
Animal Health Sector	
Government (Research, Ministry Department, Sub-Department Animal Health)	6
International Organisations	2
TOTAL	12

Methodology

Qualitative research methodology

1. Thematic analysis of the key informants understanding of the capacity for the Vietnamese public health and animal health sector to respond to an antibiotic resistant pathogen outbreak.
 - a) Challenges?
 - b) Constraints?

Results

Identify the potential challenges and constraints to investigate antibiotic resistance within the pork value chain in Vietnam.

THEMES

Public Health systems and
Food systems

Data availability

SUB-THEME

Technical Capacity

Financial Capacity

Human Resources

Themes

- Public Health systems and Food systems;
- *“The first is that we cannot know... that pork meat is from which farms... second... we can only surround that area... third... there are many sources from which it can be able to transmit... can be from the environment... the breeding process, from this pig to this piece of meat, or from the breeding environment it transmits to, or even in the consumption environment... so it is difficult to identify.”*
(Animal health sector, participant 6).

Sub themes

Public Health systems and Food systems

➤ Technical Capacity

➤ *“There are multiple difficulties, but especially the problem of gene analysis, genotype, Viet Nam can implement some, but some has not, because of no machinery, no solvent, no chemicals; then it must be transferred overseas for analysis.”* (Human health sector, participant 5)

➤ Human Resources

➤ *“That’s the isolation solution that must be within the infection control, so this one is the, the relative... very complex one. It is because it will... the condition in our country Viet Nam it, the infrastructure it is not as good as the overseas...”* (Human health sector, participant 12).

Themes

- Data availability;
 - “I think it is still a little bit early. Because the surveillance program now is...formulating. So, a real, surveillance investigation I think will take a little bit more time.” (Animal health sector, female, participant 2)
 - “In Viet Nam we haven’t established the surveillance network yet. So, we don’t have the SOP for surveillance so far. It’s based on the research.” (Human health sector, female, participant 11)

Sub themes

Data availability

➤ Technical Capacity

➤ *““In our organisation we have data warehouse for our infectious disease....We have communication between [the animal health and human health sector]. With... zoonotic disease so we can share the data...information...send the team together for investigation... and the data in the lab we send together.” (Human health Sector, participant 11)*

➤ Human Resources

➤ *“Yeah, there needs more well-trained professionals in such majors, because it's new in Viet Nam also. The professional in antibiotic resistance, it means the deep analysis is also insufficient. Deep, deeper in analysing ... the antibiotic resistance.” (Animal health sector, participant 7)*

Key Findings

- Diverging opinions across different levels of government and sectors
- Limited information flow



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