

Applied Biorisk Management Education in Veterinary Medicine in Vietnam

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Introduction:

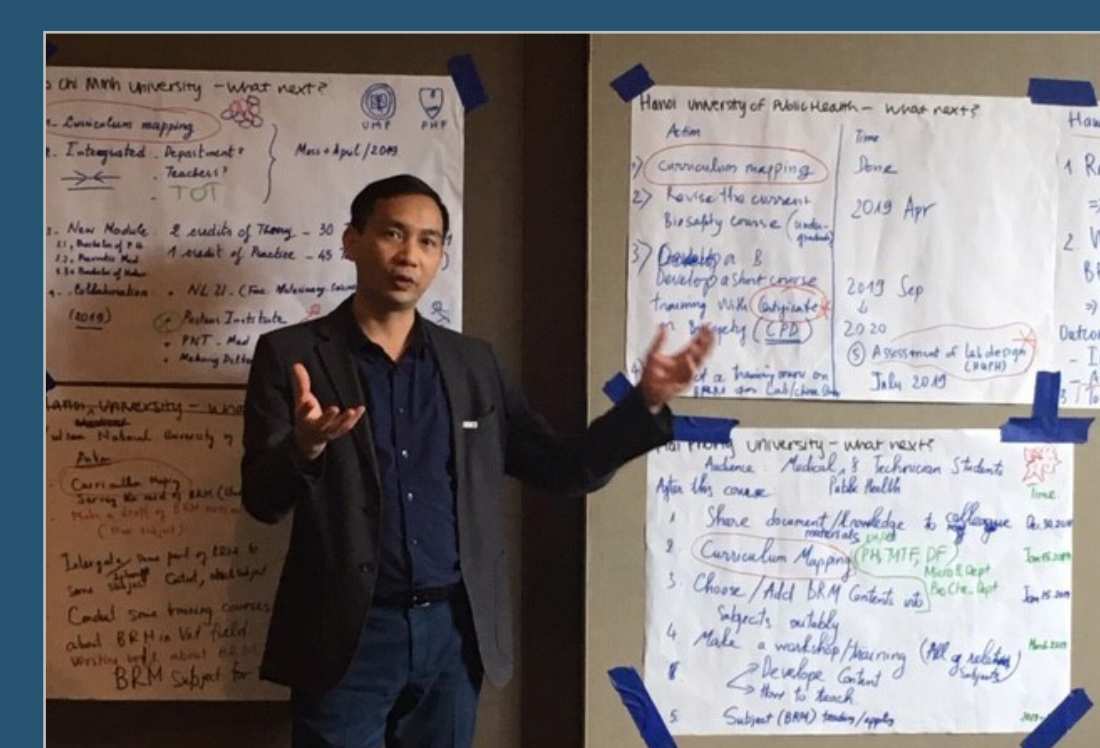
Even with its many population hazards, Biorisk Management (BRM) is rarely mentioned in veterinary medicine. To combat these hazards, Sandia National Laboratories (SNL) partnered with Vietnam One Health University Network (VOHUN) and Nong Lam University (NLU) to integrate BRM into their veterinarian university curriculum. This integration assists in the development of a One Health (OH) approach across Vietnam and develops a network of countries to address OH issues.

Objectives:

SNL sought to assist Vietnam in adding BRM concepts to their veterinary medicine curriculums assisting in the development of a OH approach across Vietnam. SNL also assisted in the development of Remote Engagement Sessions in hopes of bringing together a network of countries to address BRM issues.

Methods:

- Developed BRM Curriculum within VOHUN
- Explored Remote Engagement Tools within VOHUN
- Developed BRM Curriculum outside VOHUN



BRM Training for VOHUN lecturers from the Biological Threat Reduction Program (BTRP) and SNL experts.



VOHUN lecturers discussing curriculum mapping and how to introduce BRM into veterinary education.

Results:

Curriculum Building and Education

- BRM mapped into 7 existing university programs: HUPH, HMU, VNUA, Hai Phong UMP, NLU HCM, Hue UAF, and Tay Nguyen University.
- BRM course integrated at Hanoi University of Public Health; Vietnam National University in Hanoi; and Thai Nguyen University of Agriculture & Forestry, Can Tho.
- NLU 2 hours of class time for lectures and group discussion on BRM during 2 undergraduate classes with over 590 students completing the curriculum since its inception and has created a 2 credit hour BRM course into their new Master's program in Veterinary Public Health.

BRM Network Building

- SNL, in collaboration with the VOHUN and the Biological Threat Reduction Program (BTRP), held the 4th One Health Biorisk Management case-based learning remote engagement ECHO session, on August 22, 2019.
- 68 remote sites participated linking 10 animal and public health universities from VOHUN with other academic universities from Democratic Republic of Congo and three new Libyan Universities (Benghazi University, Tripoli University and Omar al-Mukhtar University)



Remote Engagement Sessions: 300 participants from 11 universities discussing OH clinical cases (veterinarian and medical) and linking BRM issues. Zoom was the platform, with SNL as the hub.

Conclusion

NLU has successfully integrated BRM concepts into veterinary undergraduate and graduate curriculum building an educated OH workforce in Vietnam.

Outcomes

- BRM concepts are integrated into NLU's veterinary medicine undergraduate curriculum
- A BRM course has been developed for and integrated into NLU's Master's degree in Veterinary Medicine Specializing in Public Health
- Over 390 students have been through the newly designed curriculum, with 190 more expected by the end of 2020