

**“VIRUS WAR”  
COMPARISON OF  
INTERNATIONAL  
NETWORK ON  
INFECTIOUS DISEASE  
IN ASEAN REGION**

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**INTRODUCTION**

1. Emerging infectious diseases and reemerging infectious diseases
2. Competition between international networks on infectious diseases in Asian region
3. Analysis: The problems of J-GRID  
(Comparison with Oxford & Wellcome Trust)
4. Conclusion

**1. EMERGING INFECTIOUS  
DISEASES AND REEMERGING  
INFECTIOUS DISEASES**

- (1) Infectious diseases have existed since ancient time.
- Pest, malaria, tuberculosis ,  
Spanish flu (1918~1921, death toll 20~40 million)
  - Until 1950s, infectious diseases used to be the main cause of death, but now there are more death caused by cancer, cerebrovascular , and cardiac disease.
  - Infectious diseases seem to be “history” (things of the past).  
e.g. In 1980, WHO declared “eradication of smallpox”.

- (2) Pandemic in the new era:  
Human beings face the fear of pandemic again.
- Infectious diseases was localised epidemic in previous time.  
→Globalisation results in outbreak of virus across the world.
  - Emerging infectious diseases:
    - 1) Ebola hemorrhagic fever (1976)
    - 2) HIV (1981)
    - 3) SARS (2003)

**2. COMPETITION BETWEEN  
INTERNATIONAL NETWORKS ON INFECTIOUS  
DISEASES IN ASIAN REGION**

- (1) SARS (severe acute respiratory syndrome) was emerged (2003):
- In France, Institut Pasteur started to study SARS.
  - China and Vietnam rejected to provide virus strain (pathogenic organism) to Japan.  
→Japan could get only one virus strain from WHO which restricted the usage of data.
  - Japan could not get information on SARS.

- Why Japan could not get virus strain?
  - a. Virus strain is considered “intellectual property”.  
Country, which has it, do not want to provide it to other countries.
  - b. Vietnam government did not permit Japan to use virus strain even though Japan provided ODA to Vietnam.  
⇔ France has kept close relationship in the study of infectious disease with Vietnam even though it withdrew from Vietnam which was former French colony.

- Ministry of Education, and RIKEN (The Institute of Physical and Chemical Research) started to make a new project for infectious disease.  
“Japan Initiative for Global Research Network on Infectious Diseases (J-GRID)”

⇔Japan's situation:

Infectious diseases seem to be things of the past.

- 1) The number of young doctors decreased.
- 2) The budget for the study of infectious disease was small.

→They made a plan to establish research institutes in the regions where were high possibility of emerging infectious disease.

(3) Japan Initiative for Global Research Network on Infectious Diseases (J-GRID):

- Funded by JICA (public funds)
- Schools of Medicine in Japanese universities established research centre to undertake joint research in China, Vietnam, Thailand, Indonesia, and so on.

• The Strategies:

- 1) Using network which universities have developed in foreign countries.
- 2) Using hospitals and medical institutes which was provided through JICA's assistance

- Formation of research centre (2005):  
Support office was established in RIKEN.  
1) OSAKA University —National Institute of Health (Thailand)  
2) Nagasaki University —National Institute of Hygiene and Epidemiology (Vietnam)

- 3) University of Tokyo —Institute of Biophysics, Chinese Academy of Sciences, Harbin Veterinary Research Institute, Chinese Academy of Agricultural Science
- 4) National Center for Global Health and Medicine — Bach Mai Hospital and other hospitals (Vietnam)
- 5) National Institute of Animal Health — National Institute of Animal Health (Thailand)

- Forming research centre by using research institute constructed through JICA's assistance (2006):  
1) National Institute of Cholera and Enteric Diseases(JICA's grant assistance in 1998)  
→Okayama University  
2) Samora Machel School of Veterinary Medicine, University of Zambia (JICA's financial assistance in 1985)  
→Hokkaido University  
3) Tropical Disease Centre, Airlangga University (JICA's grant assistance in 1991-3)  
→Kobe University

→10 research centres in 6 countries were established.

(4) Competition between international networks on infectious diseases in Asian region:

- Several research networks deployed in Asian region.  
1) Institut Pasteur (France)  
2) Oxford University & Wellcome Trust (UK)  
3) WHO, CDC (USA)

- Oxford University & Wellcome Trust:
  - 1) History: British Empire had studied infectious disease in its colonies to protect settlers' health.
    - British Empire recognised infectious disease was security issue.
  - 2) In 1970, Oxford started joint study in Thailand.
    - expanded to Myanmar, Sri Lanka, Kenya, Vietnam, Nigeria, and so on
  - 3) In 1991, Oxford Centre for Tropical Medicine was established through funding of Wellcome Trust.
    - It formed research centres in Kenya, Vietnam, and Thailand.

- 4) Oxford's deployment in South East Asia:
  - Vietnam:
    - a. Establishment in 1991
    - b. British staff : 6 people
      - Prof. Nicolas White (Director of Asian Region)
      - Prof. Jeremy Farrar (Director of Vietnam Centre)
    - c. Vietnamese Staff: 60 people
    - d. Achievements:
      - The Centre has studies malaria and dengue fever. As a result, it constructed theoretical framework to apply Human infection of bird flu.

- Thai Centre (Mahidol University's Faculty of Tropical Medicine):
  - a. British staff: 9 people
    - Director: Prof. Nicholas White
  - b. Local staff: 183 people
  - c. Financial Base:
    - It was established through Wellcome Trust's fund.
    - Total amount of budget is 9 million pounds.

### 3. ANALYSIS: THE PROBLEMS OF J-GRID (COMPARISON WITH OXFORD & WELLCOME TRUST)

- (1) The problems of JICA assistance:
  - Now, many medical institutes, which were constructed by JICA's assistance, bear a tenuous relationship to Japan.
  - JICA's contributions have been forgotten even in Ghana (the Noguchi Memorial Institute for Medical Research).
  - JICA's technical assistance was effective in early phase of development.
  - JICA has to withdraw when the institutes developed their research ability and became independent.
  - Japan needs to establish continuous relationship with the institutes after JICA withdraws.

- (2) Funding ability:
  - Oxford & Wellcome Trust:
    - Wellcome Trust's fund: 13 billion pounds (2.6 trillion yen)
    - ⇔Japan, the Budget through JICA: 2.5 billion yen per year
  - Wellcome Trust's funds: private funds
    - ⇔Japan: public funds
    - There are several restriction of budget implementation.

- Japan: restrictions of budget implementation
  - 1) Staff should be Japanese civil servant.
    - Japanese network cannot employ foreign people as full-time staff.
    - ⇔Oxford & Wellcome Trust: Small number of British staffs and huge number of host country staffs
  - 2) Foreign enterprises cannot participate in Japanese network.
  - 3) Japanese universities cannot take information out of Japan
- Japan: it is difficult to get private funds.
  - No culture of donation

- Oxford & Wellcome Trust:
  - Close relationship with Asian Universities
  - It accepted young researchers in Thailand and Vietnam as PhD candidates. After getting PhD degree, they return to home country and contribute on the network.

- (3) The relationship with public administration:
- Sectionalism in medical science
    - a. Ministry of Education “Research” versus MHLW “Prevention” “clinical practice”
      - In an extreme instance, one doctor is supervised by two ministries.
    - b. National Institute of Infectious Disease, which is supervised by MHLW cannot participate in the network of Ministry of Education.
    - c. Clinicians cannot participate in the network. Only university researchers can do it.


- ⇒Oxford & Wellcome Trust: It is not public administration.
- The purpose of the network is not “for helping Britain”.
- a. There is no regulation by ministries.
  - b. There is no division between “prevention” “research” and “clinical practice” in medical science.
  - c. Private funds, enterprises, social science in Oxford can freely participate in the network.
  - d. Oxford has build long-term relationship with Asia. e.g. Mahidol University in Thailand

#### 4. CONCLUSION

- (1) J-GRID is not competitive in the “virus war”.
- J-GRID could not build relationship of trust with Asian countries and get latest information of virus strain, cases, and vaccine.
    - Asian countries had forgotten Japan’s contribution after JICA withdraw from medical infrastructure building.
  - J-GRID’s funding ability is not so strong.
    - 1) J-GRID can use only public funds which were provided by MEXT.

- 2) There were several restrictions of budget implementation.
- a. Research institutes cannot employ foreign researchers as full time staffs.
  - b. Universities cannot award Ph. D degree to foreign researchers.
  - c. Foreign enterprises and NPO’s cannot join in J-GRID.
  - d. Japanese universities severely restricted to transfer information to their joint research centres in Asian countries.
- 3) The sectionalism between MEXT versus MHLW gives bad influence on J-GRID.

- (2) Japan’s strategies:
- Japan should construct “all Japan team” consists of MOF, MOFA, MOE, MHLW, JICA, universities, and so on, to overcome compartmentalised public administration.
  - Japan should construct the system that funds, information, infrastructure, and human resources can function well through deregulation.



Thank you