

Cultural Practices and Risk of HPAI Infection in Human

Wantanee Kalpravidh
Karoon Chanachai

Definition of Culture

- **Culture** has been called "**the way of life for an entire society**" that are **passed down from generation to generation**.
- As such, it includes codes of manners, dress, language, religion, rituals, art, **norms of behavior**, and **systems of belief**.

Risk Factors Being Associated with HPAI Infection in Human in Asia

- **Having close contact to sick or dead poultry**
 - Contact during slaughtering process, working in live bird market and taking care of fighting cock were mostly reported
- **Living in the area where sick or dead poultry being reported**
 - Backyard poultry raising
- **Eating raw duck blood**
- **Having close contact to another human case**
- **Unknown**

Key cultural practices considered linked to risk factors for HPAI infection in human:

Traditional poultry production

- **Traditional poultry production including**
 - Backyard poultry
 - Free-range ducks
 - Small commercial poultry
- **Bring human to be in close proximity/contact usually not only to poultry but also other animals like pigs**
- **For small commercial poultry farming, it is usually found that there will be someone living/staying in the poultry house to guard for their animals.**



- This picture shows the close proximity of backyard poultry and human. Sometimes other animals may be included.



People are sharing their living areas with animals.



...and it is very common to see them in close contact with children...

Key cultural practices considered linked to risk factors for HPAI infection in human:

Live bird market

- Apart from physical requirements for live bird market, certain practices being undertaken in Asia are considered at risk of HPAI infection including:
 - The way people/workers moving things within the market
 - Presence of other facilities within the market such as restaurant or food stall
 - Presence of family members in the LBM
 - Traditional slaughtering process



This picture shows worker in LBM moving poultry from one area to another area in the market carrying a bamboo cage full of poultry over his head.



Not only having the poultry trading business in the LBM but also a restaurant or food stall.



A mother nursing her child on the top of the cages full with poultry at a LBM.



Traditional slaughtering process that is not only concerned about hygiene but also may pose risk to their family members.

Key cultural practices considered linked to risk factors for HPAI infection in human:

Cock Fighting

- **Cock fighting** is one of a major concern that is not only a means for disease spread but also pose risk to those who involve closely through production and cock fighting event.
- Certain practices especially during cock fighting event pose high risk not only to HPAI but also for other diseases/health problems.



Cock fighting has been adopted as a way of life in several communities long time ago not only in Asia but also in other places.



Cock fighting event starts from massaging the chicken and very often that massaging during the fighting break will be offered.

Gamble with blood and life



A kiss for luck before fighting.



Sucking out the blood being congested on the head due to the fight.



Mouth-to-mouth practices to clear the airway for the chicken to breath better and last longer in the fight.

What drive society to adopt their ways to life to be their cultures?

- **Money/Benefit**
 - Traditional poultry production at the backyard level aims at recycling their household left-over/waste but resulting in cheap protein source being available at home.
 - Traditional poultry production at commercial level aims at reducing cost resulting reasonable outputs.
 - Other possible benefits for free-range duck:
 - **Biological control to “apple golden snail” in the rice paddy field**
 - **Rice farmers earn extra money from allowing ducks to be raised in their land being fed on left over rice.**



What drive society to adopt their ways to life to be their cultures?

- **Convenience:**
 - Presence of restaurant or food stall in “HPAI-risk places”
 - Taking family members to “HPAI at-risk places”
 - Backyard poultry production does not require much attention or special care
- **Necessity:**
 - LBM may be necessary to the area where cold-chain is not available
 - Workers need to stay in the poultry house to guard the property
- **Recreation/Art:**
 - Usually being referred for activities like cock fighting, but benefit may be behind
- **Belief due to lack of knowledge:**
 - Not believe in “germ theory” but believe that crisis is due to “bad luck” or “Karma”, therefore, not considering for any changes or improvement

What have been done and did them work?

- Extensive campaigns on **public awareness and communication** including **biosecurity improvement** are available, and several studies showed that even though public has better knowledge in HPAI and how to protect themselves, **but**
 - Practices may not be undertaken according to what they have learned due to:
 - Inconvenience
 - High cost/loose benefit
 - Not practical
 - Require additional supplies, equipment or facilities or need physical changes of existing facilities

What have been done and did them work?

- Certain practices have become **community behavior** to majority of community members especially those involved with benefit.
 - This may not be only difficult to change by normal public campaign but also prohibit other members of community who want to participate in changes.
 - Those member reporting disease in poultry to authority or having family member being sick from disease were blamed/sanctioned by the community as causing community poultry to be stamped out or causing restriction of fighting cock movement or cock fighting event.

Can these be done to deal with culture issues?

- **Need better understanding on:**
 - **How much benefit** is behind these practices and how to compromise in “win-win situation”
 - **Critical points** related to culture along production and market chain including recreational event (cock fighting)
- **Continue “Behavior Change Communication”**
 - **More targeted** at each stakeholder for each critical point along the chain
 - May need **follow up activities** such as physical changes
 - Introduction of any changes needs to consider **practicality**
 - Need **“community participation”** to manage with “community’s discipline”
 - Need continuing **impact assessment**

Conclusions

- Individual's and community's **discipline** are as or even more important than **knowledge**.
- It is difficult and takes time to deal with culture issue as it is complicated and needs **package of interventions** as well as community's discipline.
- **Unknown** source of human infection still requires attention to improve country capacity in "**joint outbreak investigation and/or closely exchanging outbreak investigation information**".
- Impacts from interventions can be **expanded** from HPAI to other zoonotic diseases/public health problem related to animal.

Grazie mille