Infuenza at the Human-Animal Interface in Africa

Coordination at African Union Level

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Structure of Presentation

- Background
- Some epidemiological features relevant to Africa
- Current status in Africa
- Role of AU and its structures
  - IBAR interventions & Achievements
- Lessons Learned
- Conclusions

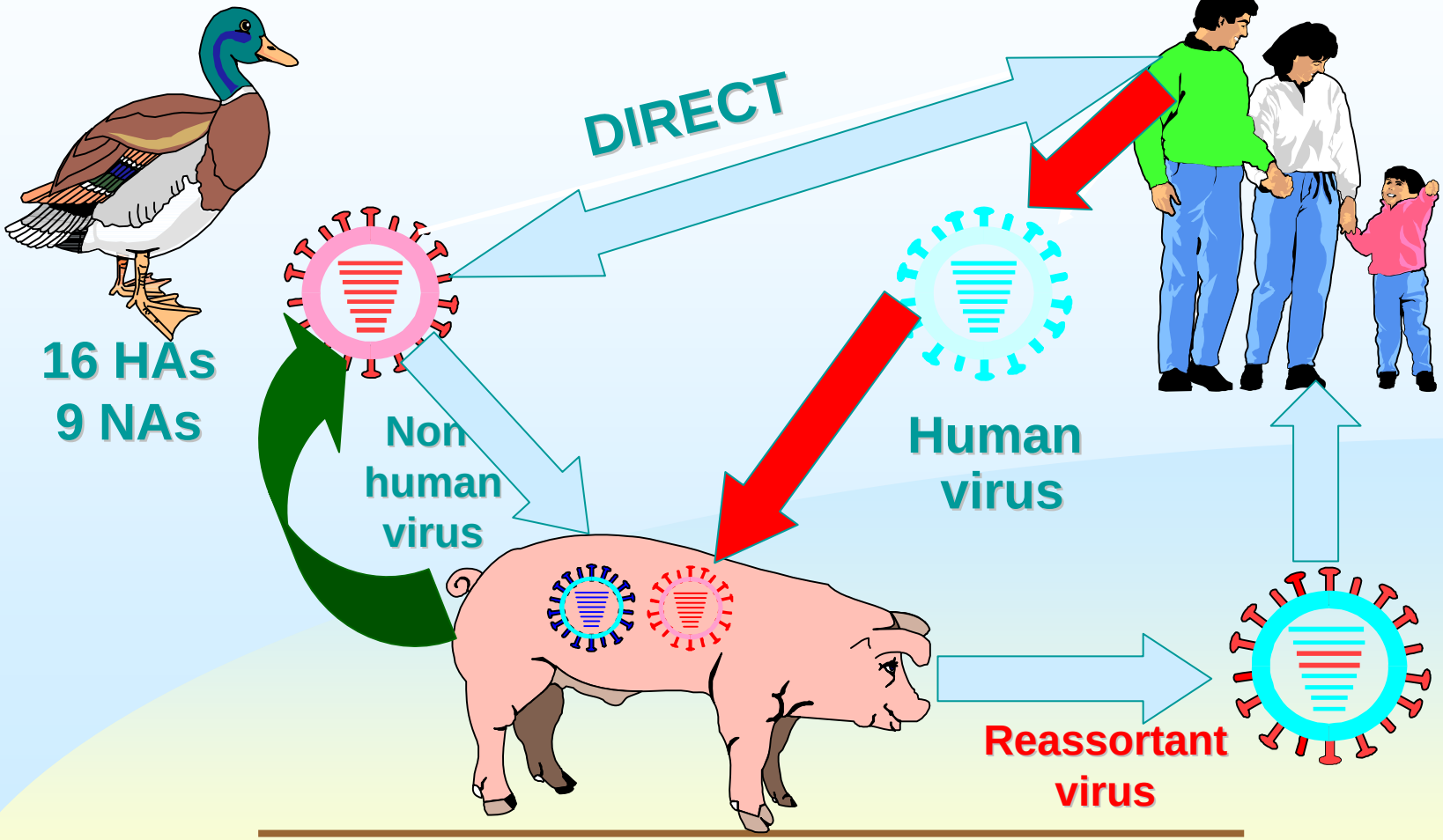
Background

- Influenza or flu is an acute respiratory disease that has afflicted man and other animals since ancient times
- Caused by viruses from the family *Orthomyxoviridae* - single stranded RNA viruses that bind to mucus membranes
- Influenza A is most important
- First isolated from poultry
  - A disease causing extremely high mortality in domestic fowl was first described in 1878
  - Close relationship between new "agent" and mammalian influenza A viruses was demonstrated in 1955
- Isolation of influenza virus from pigs also preceded that from man - the causative agent of a 'new' disease of pigs, termed 'swine influenza (showed similar clinical signs similar to those observed in man during the 1918 human pandemic).

Important Epidemiological features

- Waterfowls are the main natural hosts of influenza A viruses
  - All 16 HA and 9 NA virus subtypes circulating among them.
- Virus targets GIT in waterfowl rather than the respiratory tract (environmental contamination)
- Infections are almost without exception sub-clinical (though shedding viruses)
- Direct virus transmission from waterfowl to pigs, horses, mink, domestic poultry and aquatic mammals
- Pigs serve as mixing hosts for influenza viruses
- Avian-derived influenza A viruses occasionally transmitted directly to man **(H5N1)**

Transmission of Influenza A



Scenario in Africa

- High level of vulnerability
  - All important animal hosts present
  - Production systems are largely bio-insecure, providing close contact between domestic animals, wildlife and humans
  - People live in close contact with their animals and therefore can freely exchange pathogens
  - Weak sanitary controls (within & across borders)
  - High risk attitudes, behaviour and practices amongst producers – esp. home slaughter, sharing premises with animals, mixing species, etc
  - Paucity of resources for rapid response

Current Status in Africa

- H5N1 outbreaks in 11 countries
  - **Fresh outbreaks ongoing in Cote D'Ivoire (wild birds) and Egypt (birds &humans)**
  - **89 human cases with 27 fatalities – mostly in Egypt**
- H1N1 outbreaks in 32 countries so far with over 14,872 infected & 77 deaths
- H5N1 has become endemic in Egypt
- Both H1N1 and H5N1 existing in the same countries/populations especially Egypt
- Pandemic threat may become worse due to potential for H5N1/H1N1 reassortment
- No clear surveillance strategy in animals – esp. for H1N1

Role of the African Union

- AU and its various organs and structures play largely coordination and harmonization roles among member states and have created structures within with other actors can effectively coordinate their actions
- Among its key objectives, is to ”work with relevant international partners in the eradication of preventable diseases and the promotion of good health on the continent”
- Two of its portfolios play significant roles in the coordination of health issues at the human-animal interface;
  - Social Affairs – human health etc
  - Rural Economy and Agriculture – esp. animal resources (including animal health)

Role of the African Union 2

- Both work closely on in addressing health issues at the human (SA) - animal (REA) interface
- Following outbreaks of avian and human influenza on the continent, the AU through its technical Offices initiated activities to assist its member states institute coordinated actions on the prevention and control of the disease
- The Inter-African Bureau for Animal Resources, a technical office with a continental mandate over animals resources, took the lead on avian and human influenza

Role of the African Union 3

- Key actions are guided by the global AHI/PI strategy that advocates the integrated approach
- Main emphasis put on coordination of resource mobilization, preparedness planning, risk awareness creation, early detection & rapid response
- Strengthening of coordination capability is a continuing and challenging target

Key principles Applied

- Prevention & containment of outbreaks at animal source
- Use and strengthen existing platforms (ALIVE)
- Support the creation of coordination mechanisms at regional, sub-regional and national levels (RAHCs, RECs, NTF, INAPs etc)
- Work closely with other partners/actors
- Strengthen institutional capacities at national and regional levels
- Promote close collaboration between animal and human health sectors

Approach to Co-ord. 1

The African Union has developed and signed Treaties & Protocols to guide harmonization & coordination functions among member states and regional economic communities

- Binding to MSs and RECs

2. Establishment of regional coordination mechanisms for Intra and Inter RECs coordination (and capacity building) of AHI and zoonoses activities
   - Also to strengthen and mainstream the tri-partite coordination mechanism established with the FAO and OIE through the RAHCs
3. Development of MOUs with resourceful organizations to strengthen technical inputs
   - CDC Atlanta – IBAR level
   - WHO Afro – AU level
   - Developing agreements at RAHC level (FAO & OIE)
4. Inter-sectoral meetings (sub-regional and continental levels)
   - Promotes inter-sectoral coordination, formation and training of RRTs at national level
   - 3 Regional technical Coordination Workshops
   - Pan African technical Workshop on AHI

Approach to co-ord. 2

1. Inter-agency meetings – sub-regional and continental
2. Participation in the establishment of regional networks (Lab, Epidemiology)
3. Advocacy during events for information sharing and joint planning between projects & Agencies
4. Consultations & information sharing with stakeholders at point of execution – SPINAP experience

Interventions

Several actions launched with support by various donors

- Assessment of financial needs and gaps to guide resource mobilization efforts – with Alive partners
- RA process to develop INAPs – participation with FAO, WHO, OIE, WB
- AfDB grant for emergency support to 14 countries – with WHO & national authorities
- Training of Laboratory technicians (85 from 37 countries) – with ILRI
- TCP Technical Cooperation Projects – with FAO
- SPINAP-AHI Program – in 47 countries with national authorities
  - Flagship program funded by the EU

Achievements 1

- **AU-IBAR has made significant achievements in the coordination of influenza activities at the human-animal interface in Africa**

1. **Strong inter-sectoral approach gaining acceptance in AU MSs**
   - **All influenza projects designed to address both animal and human aspects**
2. **Functional linkages with other organizations with animal and human health mandates (ILRI, FAO, OIE, WHO and CDC)**
   - **MOU signed between WHO and AU**
   - **MOU signed between AU-IBAR and CDC**
   - **Regional coordination mechanism established with FAO and OIE (RAHC)**

Achievements 2

3. Regular forums bringing together animal and human health professionals organized
   i. Successful workshops between animal health actors at national, regional and international levels held
   ii. Issues impacting coordination of actions at the human-animal interface identified and corrective actions recommended
4. Effective mechanisms for coordinating actions with countries established with;
   i. Technical, financial and administrative procedures
   ii. Monitoring processes defined
   iii. Terms of engagement between AU-IBAR

Achievements 3

- **AU-IBAR has developed a 5 year strategy capturing key lessons learned from its work on AHI and other TADs**
  - **Improved targeting of zoonoses, TADs and food safety concerns among others**
  - **Better management of coordination and linkages with other organizations**

Key challenges1

- **Weak Vet & Public health systems**
  - Low capacities and weak governance
  - Low level of skills by majority personnel
  - Weak funding / Resource base
  - Weak inter-sectoral linkages (AH-HH)
  - Weak private-public collaboration
  - Weak targeting of animal-human interface problems (zoonoses, food safety, ecosystem health, etc) in Africa – Capacity?. Resources? Or why?

Key challenges 2

- **Multiple diseases problems at the human-animal interface in Africa; Influenza is just one of them!**
  - **Huge burden of endemic/epidemic zoonoses**
  - **Emerging and re-emerging diseases**
  - **Current experience only with Influenza**
  - **Broad rather than narrow strategies needed**
- **Weak institutions and institutional capacities - AUC, RECs and national levels**
  - Governance structures in regional and national level institutions
  - Weak HR capacities
  - Weak co-ordination/networking & capacities
  - Weak resource base/funding etc
- Rapidly evolving scenario
  - Complicated by climate changes impacts
  - Challenges of globalisation

Lesson 1 - Inter-sectoral coordination

- **The fight against AHI has re-ignited the one health debate. Programs developed and executed by AU-IBAR have sought to enhance collaboration between national animal and human health sectors**
  - **Collaboration between the 2 sectors remains weak. Both capacity building and closer collaboration between animal and human health sectors is essential to effectively manage health challenges at the animal -human interface in Africa**
  - **National veterinary services especially require support to fully execute their mandates both in animal production and public health**

Lessons 2: Inter-agency Coordination

- **There are many actors at different levels of the animal-human interface. Coordination among them remains poor and a big challenge to effectiveness and efficiency in the use of available resources.**
  - **The African Union has invested in efforts to bring HPAI actors together to enhance synergy building and coordination. Inter-agency coordination is neither easy nor desired by all, but is a good practice which should be adopted for efficiency in the use of available resources**

Lesson 3 – Increasing Demand for Integrated Actions

- **The epidemic of AHI has increased demand for animal and human health sectors to work together in the delivery of public health goods. This demand is further emphasized by the upsurge of emerging and re-emerging diseases at the human-animal interface.**
  - **Are African health services ready/capable of handling these demands?**
  - **Greater investment is required to improve capacities and effectiveness**

Conclusion 1

- **The African Union provides sustainable structures for the coordination of social and economic affairs of the African continent**
  - **Through AU departments**
  - **Through Regional Economic Communities**
  - **Through specialized technical offices – e.g. IBAR**

Utilization of these structures is both value adding and provides mechanisms for sustainability

Conclusions 2

- Avian and human influenza has brought the global community to think and act together at strategic, operational, institutional and sectoral levels.
  - This unity of purpose should be sustained beyond the influenza threat to develop a truly global community that is safer from preventable diseases in all its geographic areas. The OWOH framework can be a useful vehicle for this purpose

Conclusions 3

- AU-IBAR has gained significant experience in the coordination of various actors as well as national authorities in the fight against influenza
  - Although still consolidating our experience and expertise to become even better, it has rapidly evolved into a favourable organizing platform for inter-agency and inter-sectoral coordination of actions at the animal-human interface that can be utilized to advance OWOH philosophy in Africa

More Information

- **Available at the following websites;**

1. AU – IBAR: www.au-ibar.org

2. African Union HQ: www.africa-union.org

Thank you for you Attention

- **AU-IBAR –** ***Improving human well-being through enhanced animal health, production & marketing in Africa***