Pan-African Network for Rapid Research, Response and Preparedness for Infectious Diseases Epidemics

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1. Objectives and organisation of PANDORA
2. Activities
3. Challenges
PANDORA ID-NET is a ‘ONE Human and Animal HEALTH’ multidisciplinary consortium of 24 partner institutions (15 African and 9 European) derived from 9 African and 4 European countries. Coordinator: FCRM, Rep of Congo
Overall Aim

To strengthen regional and pan-African capacities and systems for enabling rapid and effective response to emerging and re-emerging infectious diseases threats arising from within Africa, or those imported from overseas.
Specific objectives

• To develop and setup robust ‘ready to go outbreak rapid response teams, at each of the four African regions (West, Central, East and Southern Africa)
• To strengthen capacities for conduct of research (multidisciplinary operational, anthropological, social science)
• To train and empower scientists, healthcare workers, laboratory personnel, clinical trialists, ethicists and social scientists
• To engage stakeholders and global public health agencies at the highest level during all stages of our program.
Implementation - Activities

• **Areas:**
  - Human Health
  - Animal health
  - Ethics and social sciences
  - Policy makers and community involvement

• **Cross-cutting activities**
  - Epidemiology and surveillance
  - Laboratory
  - Training and improvement of infrastructure
  - Dissemination and information
Key Actions & synergies

• To strengthen networks with existing agencies already active in this field to ensure synergy and maximum collective benefit (Regional health organizations (OCEAC, WAHO, etc.) International organization (WHO/AFRO, NEPAD, AFRICA-CDC)

• Between outbreaks, to conduct epidemiological studies
Prior Community Engagement activities

- RVC Njala IRRUA seed activities (MSc and Post Doc) in Sierra Leone and Nigeria to explore potential gaps in research on socioecological drivers for LFV July/August 2018
- Identified poor epidemiological knowledge and absence of serological tools especially of domestic animals and LFV.
- Identified Target 2-3 communities in Sierra Leone (Bambara) and Nigeria for specific research and pilot interventions.

Proposed Surveillance study – Sierra Leone and Nigeria – Pilot interventions on risk factors.

- Validate range of screening tests for antibody from range of species. Focus on LIPS.
- Testing bio-banked sera from animals and humans.
- Exploring epidemiology in target sites through serology of peridomestic animals and humans.
Chikungunya in Congo

>10,000 cases confirmed in Brazzaville – 23rd January 2019

- Surveillance
- Entomology
- Serology
- Rapid testing
- Sequencing
- Socioecology

Monkeypox in Nigeria

2018: 76 cases reported, 37 confirmed

- Surveillance
- Serology

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Capacity Development

First Responder Training workshops in Zambia - 2018

HerpeZo
Infection Research & Training in Zambia

Site assessments - Republic of Congo - 2018

Health care workers training in 2019: sites in Gabon

MinION training

TB diagnostics training

Assay validation training 2019
Ethics and Community engagement

Study on diagnostics for adult viral encephalitis
Include social science aspects

Engaging with policy makers

Ethics committee members and regulatory authorities training workshop in Brazzaville – for evaluation of research protocols in emergency situations: June 2018
Face to COVID-19 pandemic

• First cases mid March
• Lockdown End of March
• All PANDORA staff involved in the national response committees
• All PANDORA labs involved in diagnostic
• Sero-epidemiological studies
• SARS-COV-2 sequencing
• Therapeutic and vaccine Clinical trials in European PANDORA sites

In Africa (19th May)
• 4.709 921 cases
• 127 001 Deaths
https://africacdc.org/covid-19

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Stronger and better coordination and collaboration

- Africa-Centers for Diseases Control
- WHO (World Health Emergency Programme)
- WHO/AFRO
- Regional networks and initiatives
  For sharing protocols, Data, reagents, SOPs, training support
3. Challenges

- Poor communication with the population
- Poor Local health research capacities
- Supply difficulties (reagents, protective equipment, lab equipment)
- Training urban and local healthworkers
- Development of disease-surveillance programs focused on humans, livestock and wildlife
- Poor involvement of social scientists
- Limited data provided and published
- Monitoring variants emergence and spread
- Sequencing capacity limited but being increased
- Follow up of vaccine effectiveness in the different countries
For long-term sustainability of on-going efforts, there is a need to increase political commitment and more investments in ONE-HEALTH activities across the continent to meet the challenges of future infectious diseases outbreaks.
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THANK YOU FOR YOUR ATTENTION