ANVR: Filling the gap in VC in the African Region

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Outline

- African Network on Vector Resistance (ANVR)
- Mapping & addressing regional & national needs - ANVR 18 years on
- Major challenges
- Conclusion
African Network on Vector Resistance (ANVR)
What is ANVR

- Established in Dec 2000 (Yaoundé, Cameroon)
- Network of RIs, Academia, VBDCP (Institutional)
  - Members (RIs., Univ, VBDCPs)
  - Core members 13 RIs/Universities (revised)
- WHO/AFRO is Secretariat
- Steering Committee
- 4 sub-network coordinators
The Rational

- Only 30% of med entomologists work in the health system
- 70% Med Entomologists
  - Research institutes
  - Academia/universities
- Retention capacity HS weak
- Vector control not supported with OP
The goal of the ANVR is to enhance integrated vector surveillance and control for vector borne diseases (VBDs) and to promote operational and advanced research in the WHO African region.
## Current members

<table>
<thead>
<tr>
<th>CREC, Benin</th>
<th>NIH, Mozambique</th>
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<tbody>
<tr>
<td>IPD, Senegal</td>
<td>NIMR, Tanzania</td>
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<tr>
<td>IPR, Cote d’Ivoire</td>
<td>NIMR, Nigeria</td>
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<tr>
<td>KEMRI, Kenya</td>
<td>Noguchi, Ghana</td>
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<td>MRTC, Mali</td>
<td>OCEAC, Cameroon</td>
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<td>NICD, SA</td>
<td>TIDRC, Ethiopia</td>
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<td>Centre Muraz</td>
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Structure - Management

TA:
Info sharing:
Coordination:
Coordination

• Annual meetings (16), (ad-hoc meetings)

• Countries, RIs, partners

• Core member institutes
Coordination

- Joint planning and review of progress/achievement of activities
- Sharing information
- Reports
- Progress
- ANVR meeting
- Email
Partners

- Funding and/or technical collaboration
- The International Resistance Action Committee (IRAC)
- The Liverpool School of Tropical Medicine
- The Public Health Project Team, Croplife International
- UNEP (funding)
- BMGF (funding)
TORs 1

- Assist WHO/AFRO Member States in monitoring & management of IR.
- Strengthen capacity of AFRO Member States for vector surveillance and use of the information
- Build consensus on approaches to the management of IR, prepare/adapt practical guidelines for national use
- Provide TA to AFRO Member States in capacity building for vector control and epidemic preparedness and response including malaria and arbovirus diseases
TORs 2

- Create platform for medical entomologists in research institutions/academia and public health workers in VBDCPs to collaborate to strengthen OR and VC

- Collaborate with and support AFRO in standardization and harmonization methodologies, protocols and guidelines for analysis of surveillance data and interpretation of results

- Work with national VBDCPs in identifying research agenda and conduct OR to enhance evidenced-based VC policy and strategy development

- Co-ordinate Network activities and facilitate and promote the dissemination and exchange of information particularly outcomes of vector surveillance and research
Mapping & addressing Needs

ANVR: 18 Years on
Institutional capacity building

- Supplies/logistics
- SANA
- Equipment/kits
- Cars
- Vector Control Reference Units
Institutional capacity building 2

- Training
- Orientation/ Concepts/ strategies etc
- Field/ lab
Program Capacity building 1

Training

- Ph.D. (2): M.Sc (7)

- Short term training of field entomologists (2 weeks–3 months) (IVM, IRM, vector surveillance): >1500
Program Capacity building 2

- Finance & logistics/equipment
  - 2003 – 2010: $250,000 (to countries for IR monitoring activities)
  - Supplied IR test kits and other basic entomological supplies (> $250,000)
Operational research 1

- Implemented research projects
  - Multi country survey on IR (2000-2002)
  - MAL VC: Filling the gap between product development and effective delivery: 2008-2012
Operational research 2

- Supported research projects
  - Demonstrating Cost-effectiveness and Sustainability of Environmentally Sound and Locally Appropriate Alternatives to DDT for Malaria Vector Control
  - Effectiveness of diversified, environmentally sound and sustainable interventions, and strengthening national capacity for innovative implementation of IVM for disease prevention and control (ongoing)
Documentation & Info/knowledge sharing 1

- Databases and rosters
  - Regional roster of medical entomologist
  - Pool of trained experts: TOTs, TA
  - IR and entomological databases
Documentation & Info/knowledge sharing 2

IR and entomological database
IR data sites in 2002

IR data sites in 2016

VECTOR SUSCEPTIBILITY SURVEY SITES IN AFRICA

KEY
- Surveyed location
- Surveyed countries
- AFRO
- Non AFRO

World Health Organization
Africa

African Network on Vector Resistance
## IR monitoring

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<th>2002</th>
<th>2005</th>
<th>2010</th>
<th>2016*</th>
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<tr>
<td>No. site</td>
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<tr>
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*Contribution from PMI, ANVR institutes*
Documentation & Info/knowledge sharing 5

- Strategy development and planning
- SOPs for vector surveillance (VBDs)
- Revised IRM protocol
- Updated entomological profile in Cameroon, Congo, DRC, Ethiopia, and Nigeria (2005)
- Criteria for selection of sentinel sites
- Developed implementation Framework for GVCR in Africa
- Supported development of IRMM plans - 26 countries
Major Challenges
ANVR (Regional)

- Limited functionality of sub-network coordinators
- Limited/absence of funds
Country

- Inadequate commitment to VC M & E, surveillance
- Shortage of funds for vector surveillance
- Under utilization of surveillance/IR data for decision making
- Weak human, infrastructural, supply capacity
- Lack of career development path
Conclusion
- Provides opportunity for utilization of regional capacity for national benefit – technical resource
- Contributes significantly to the increasing capacity for VS and VC in the region
- Increases the possibility of evidence-based VC planning and implementation
- Support for research and control of VBDs beyond malaria
Thank you