Rabies - Communication in practice, investments and regional outlook

Chika Nwosuh
National Veterinary Research Institute,
Vom, Nigeria

RABIES SITUATION IN NIGERIA

- > Rabies is endemic in Nigeria
- > Actual death rate is unknown because
 - of poor record keeping
 - under reporting
 - poor coordination or cooperation between the medical and veterinary sector
- The National rabies control program is no longer there and as such rabies awareness is virtually non existence.

- There is little or no wildlife in Nigeria
- ➤ We have not been able to identify rabies in bats
- Thus rabies exists only in dogs and cats and these animals maintain the circulation.
- ➤ There are no stray dogs all dogs are owned
- ➤ And therefore we expect that control will be easier

THE OVI/NVRI RABIES TWINING PROJECT

- The idea was first conceived early 2009 following a cell culture training mounted by the OIE Rabies Reference Laboratory, Onderstepoort Veterinary Institute (OVI), South Africa at Vom.
- ➤ By the end of 2009 the OIE approved the project
- ➤ March 2010 it effectively took off with the planning meeting

NVRI'S DREAM

- The objective of this twinning project was to assist the National Veterinary Research Institute Vom build its human capacity and scientific expertise in rabies diagnosis and research with an eventual aim of becoming an **OIE Reference Laboratory**.
- ➤ If this happens Vom will be pivotal in the surveillance and control of rabies in West Africa as Nigeria is best suited due to its geographical location, abundant manpower and well equipped laboratories.



TRAINING

- Training started with some staff travelling to OVI for 2weeks for a particular program followed by a return visit by the South African team
- FAT, FAVNT, RTCIT and Mab Typing,
- > Inter-analyst testing of panels of samples

AUDITING

- Reliable and quick communication channels.
- Management support for training and collaboration.
- Critical mass for undertaking rabies diagnosis and research available [molecular epidemiology, pathology, cell culture and surveillance, diagnosis.



AUDITING

- Lack of a non-working fluorescent microscope.
- Facilities not available in one locality.
- No one individual assigned for equipment maintenance.
- Reach of sample collection –very low
- Increase research activity in the area of rabies



FACTORS FOR SUCCESS

- Communication was very easy and prompt
- ➤ Eager and willingness to teach
- ➤ Reciprocal visits
- Relationship between the OVI and NVRI staff was very cordial

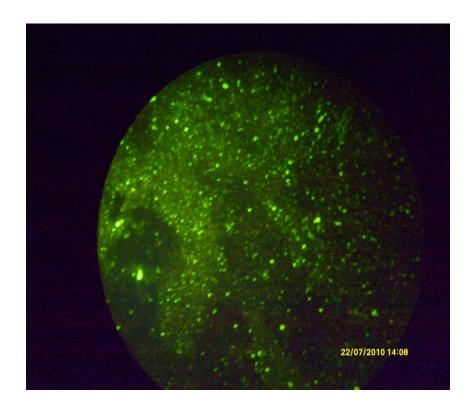


ACHIEVEMENTS

- About 8 staff have had various technical trainings on rabies FAT, FAVNT, RTCIT, Mab typing and development of SOPs.
- There is a tremendous and accurate improvement in our rabies diagnosis.
- ➤ We have been working closely with OVI and CFIA Canada to select appropriate panel of Mabs for use.
- ➤ Proficiency test with OVI lab and NANCY Lab France were as expected

Rabies Diagnosis 2006 – 2011

	2006	2007	2008	2009	2010	2011
Samples	195	224	238	304	322	344
Positive	95	56	175	291	179	147
Negative	100	168	63	13	143	197



SOME OF THE MEASURABLE OUTPUTS

- Improved understanding and better technical handling of diagnostic procedures for rabies both in terms of standard and new methodology
- ➤ Increased awareness, knowledge and implementation of the quality control procedures for purposes of standardization of the relevant diagnostic procedures
- ➤ Increased confidence and quality outputs in performing the various laboratory diagnostic techniques through inter-laboratory comparison and inter-analyst testing of panels of samples
- Exchange scientific information and visits between the South African and NVRI teams

CHALLENGES

- ➤ Inability to work under one roof
- ➤ Low sample size
- Underreporting and lack of good data on rabies
- ➤ Lack of public awareness of rabies prevention in humans and animals
- > Lack of political commitment

WAY FORWARD

- Pursue vigorously the renovation and equipping of the rabies laboratory
- Accreditation body to certify the laboratory
- Encourage states' veterinary services and the Universities to send rabies cases samples to NVRI for diagnosis and/or confirmation
- > Research on data base of rabies in Nigeria

AND THANK YOU FOR YOUR ATTENTION

