

Upstream Rabies prevention: Experiences and lessons from rabies elimination campaigns in Tanzania, Mozambique and Zambia

Owen Glenn^{1,2,3}, Linda Glenn^{2,3}, Jim Bond⁴

¹ Royal (Dick) School of Veterinary Studies, The University of Edinburgh, Edinburgh, Scotland, ² Glenn Veterinary Clinic, Bangor, Co. Down, Northern Ireland, ³ One Health Usambara, Mambo, Lushoto, Tanzania, ⁴ TrExMed Travel Clinic, Edinburgh, Scotland

Background:

The WHO target of zero human deaths by dog-mediated rabies by 2030 requires a determined One Health approach. Dog vaccination campaigns are an essential and cost-effective method of achieving this.

Materials:

The veterinarian and medical presenters lead highly successful dog rabies vaccination programmes in Tanzania (OG, LG), Mozambique and Zambia (JB). They have brought together 16 years of on-the-ground experience of how to successfully implement rabies elimination campaigns in Africa.

Results:

Challenges faced included vaccine hesitancy, lack of dog ownership, dog nervous aggression, previous dog deaths from poor vaccination programmes, and the crucial operational target of 70% population coverage.

Keys to success included early community involvement, use of respected local individuals, pre-vaccination educational seminars, promotion of dog handling and welfare, persistence over time, professional training of feral dog capture and vaccination teams and training on animal examination and professional methods.

For example, the Tanzania project, One Health Usambara, now vaccinates 1800 dogs/year at £2.56/dog and enjoys high levels of trust and community interest for continued expansion.

Further reflections on their various experiences of One Health integration between dog and high-risk human vaccination, post-exposure treatment and dog-bite reporting systems, strengths as well as mistakes, and future plans will be presented by the local Northern Irish vets and Scottish-Zambian doctor.

Conclusion:

Mass dog vaccination is required to end human rabies deaths and fear of this dreadful disease. These narratives give valuable lessons for creating successful rabies elimination programmes and demonstrate opportunities for further constructive collaborative One Health working.