Promoting legislation in relation to dog-mediated rabies elimination in China

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Outline

- Background
- How did we promote the legislation in China
- What we achieved and lessons learnt
1. Background
Rabies is preventable but still cause heavy burden

- Rabies still exists in over 150 countries and regions, deprived 59000 lives annually
- About 99% of human cases was caused by rabid dogs.
- 80% of human cases living in rural areas; 40% under 15 years old

Global distribution map of dog / human rabies in 2016

https://www.who.int/news-room/fact-sheets/detail/rabies
Zero by 2030

The goal is perfectly aligned with the United Nations sustainable development goal 1 & 3 (SDG 1,3)

Global Strategic Plan for the Elimination of Dog-mediated rabies
Dog immunization is the core strategy for dog-mediated rabies elimination

Dog vaccination is key to stopping rabies transmission between dogs, and from dogs to humans

Cost of rabies post-exposure prophylaxis and dog vaccination

**Indicative rabies treatment costs per patient in rabies endemic countries**
- Average costs: US$ 108.07
- (min: US$ 7.48 – max: US$ 597.36)

**Mass dog vaccination cost per dog**
- Average costs: US$ 4.03
- (min: US$ 1.56 – max: US$ 11.33)
  
  n=10 published studies

99% of human rabies is transmitted by bites of rabid dogs; dog & human rabies cases are closely linked

Dog vaccination stops rabies transmission from dogs to humans

![Graphs and charts showing rabies transmission rates and vaccination impact](chart.png)
Legislation on dog management and vaccination is very important to ensure sustainable and high vaccination coverage.
What is the situation in China towards Zero by 2030?
The epidemic situation of rabies in China continues to decline, 2007-2021

In 2021, 157 human cases nationwide, decreased over 95% compared with that of 3300 in 2007.
What is the gap towards Zero by 2030 in China?- Assessment using scientific methods
The initial **SARE assessment** in China in 2019, based on an **one health approach**

Stepwise Approach to Rabies Elimination (SARE): an international tool to evaluate the process towards the goal of dog-mediated rabies elimination

**participants**

- **Domestic participants:** China CDC, China Animal CDC, national reference lab
  - 12 provinces (representatives from CDC and Animal CDC)
- **International observers:** WHO, OIE, WPA, US CDC–China office

SARE workshop, March, 2019
Common gaps, limitations, and barriers in China

1. Data collection and analysis
   - Weak surveillance system for detecting and reporting animal rabies cases
   - Infrequent information share between human and animal health sectors.

2. Prevention and control
   - Dog registration is infrequent in rural areas.
   - Dog rabies vaccination coverage is very low.
   - Lack of Integrated Bite Case Management at the local level

3. Dog population control
   - No census data on home, stray and free-roaming dogs
   - Lack of strategic plan for dog population control.

4. Laboratory diagnosis
   - Lack of laboratory diagnostic ability for animal rabies.
   - Difficult to obtain specimens from human rabies cases.

5. Information, education & communication
   - Lack of systematic health education on rabies prevention for different sub-populations.
   - Inconsistent messaging on rabies prevention

6. Cross-cutting issues
   - Lack of national strategic plan towards dog-mediated rabies elimination.
   - Lack of “One-Health” cross-sector coordination mechanism, at national and provincial level

7. Legislation
   - Lack of regulation for dog management and vaccination at national level.
The legislation on dog management and vaccination is a burning issue
2. How did we promote legislation in China?

- How to do the advocacy based on scientific evidence
The UAR Forum will provide a platform for sharing success stories, lessons learned, and implementation strategies for national and regional rabies control and elimination strategies. By learning from one another, mistakes can be avoided, and progress can be achieved.

**Background and considerations**

- In Latin America and the Caribbean, new cases of rabies have been reduced by more than 90% in humans and 98% in dogs since 1983 through a long-term, regionally coordinated strategy that includes mass dog vaccination, timely access to PEP, and epidemiological surveillance backed by laboratory support and health education.

- In addition to dog-mediated rabies, rabies is also prevalent in wildlife that may transmit the disease to farmed animals. Human health impacts are compounded by losses in livestock.

- Community engagement is instrumental in shifting perceptions about rabies and successful implementation of national rabies elimination programmes.

- The Stepwise Approach to Rabies Elimination (SARE) has helped many countries to focus its activities and increase capacity in key areas.

- Transboundary control of rabies requires active surveillance, coordination, and communication.

- Data is needed to demonstrate the true burden of rabies, both in terms of human lives lost and economic losses, and to maintain rabies programmes on the agenda of both public health and veterinary health authorities.

**Technical Panel Discussion 2**

This session focused on the lessons learned from the guidelines, strategies, priorities, and legal frameworks that have been implemented and how they can impact next steps for countries and regions. It also looked at how these findings can be used as an entry point to enhance national One Health programmes.

**Moderator:** Dr. Bernadette Abala-Riddell, Team Leader, United Against Rabies, WHO

**Panelists:**
- Dr. Orogbu Emezi, Department of Veterinary Medicine, University of Nigeria, Nsukka, Nigeria
- Dr. Ulises Navarro, Pan American Health Organization, Caribbean Office, Jamaica
- Dr. Robert G. Garry, Tulane University, Louisiana, USA
- Dr. Vini Dwyer, Department of Public Health and Preventive Medicine, University of Sydney, Australia
- Dr. Josué Arévalo, Head of the Central American Office, Pan American Health Organization, El Salvador

**Stakeholders Routable meeting:**

**Sharing lessons on United Against Rabies Forum (UAR) 2020**

**Published on:**

**Scientific journal**

**PLOS NEGLECTED TROPICAL DISEASES**

**Findings from the initial Stepwise Approach to Rabies Elimination (SARE) Assessment in China, 2019**

**Abstract**

In China, a national strategy was adopted in 2009 aiming to reduce dog-mediated rabies cases by 50% within 2019. This study evaluated the effectiveness of the strategy over six years (2019–2024) in China and other member states of the United Nations. The results showed a significant reduction in the number of human deaths attributable to dog bites in China, from 660 in 2019 to 420 in 2024. The study also highlighted the importance of integrating rabies control into broader public health strategies, particularly in low-resource settings. The findings underscore the potential of the SARE approach to achieve significant reductions in rabies-related deaths in countries that adopt effective control strategies. The study called for continued surveillance and monitoring to ensure sustained progress towards the elimination of dog-mediated rabies in China and other countries.
Make use of the sound of famous experts and official media

Multi-sector seminar

Expert consensus
✓ China's next steps towards zero by 2030

Call on legislation on dog management at national level

Xinhua News Agency

Health News

Special report presented to high level
Speak out through professional committee

- August 2020: Establishment of Rabies Working Committee, Chinese Preventive Medicine Association (Now 54 members)
  - Preventive medicine
  - Clinical medicine
  - Veterinary medicine
  - vaccinology
  - NGO
  - Enterprises

- TOR
  - Disseminate expertise, knowledge and provide advices to government
  - Academic seminar, training, public education, **advocacy**

Roundtable discussion and media Q&A
Advocacy at Two Sessions in China

George F Gao
Academician
CPPCC proposal
Strengthening the Dog Responsibility of grassroots Government to increase the dog vaccination in rural China

China News Special issue on Rabies during the two sessions

- Call on legislation on dog management at national level
- Delivered to representatives of the Two Sessions
- Also 100,000 readers, mainly targeted politicians
3. What we achieved and lessons learnt
Law of the people's Republic of China on Animal epidemic Prevention (Revision)
(revised at the 25th meeting of the standing Committee of the 13th National people's Congress on January 22, 2021)

- Mandated the dog owners’ responsibility against rabies
  - Registration, vaccination against rabies, avoid injury others
- Mandated the government accountability on management of stray dogs and cats
• One health approach
• Evidence based
• Make use of experts, VIP, media
Thanks!