

## Editorial

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The theme for this year's world rabies day commemoration couldn't be more appropriate: Vaccinate to eradicate! Despite rabies disease being 100% vaccine preventable, an average of 20 human rabies deaths are recorded annually in Zambia. Studies in similar settings as Zambia indicate that the number of human rabies deaths can be 10 to 100-fold that captured by health facilities [1]. This could indicate that several community deaths are occurring unnoticed, or even when attended to, these deaths are not being reported into the nation's integrated disease surveillance and response system.

What then can be done about this, is vaccination the answer? Surprisingly, the solution to the burden of human rabies chiefly lies with merely carrying out vaccination campaigns. The domestic dog, largely regarded as man's best friend, continues to account as the cause of human rabies. Globally, dog-mediated human rabies has been responsible for nearly 60,000 deaths annually, with nearly half of these deaths occurring in rural settings [2]. WHO and partners recommend that vaccination campaigns targeting 70% and above of the dog population can effectively disrupt occurrence of rabies outbreaks in dog populations [3, 4]. Vaccinating at least 70% of the dog population means there is a large enough number of immune dogs in the dog population able to prevent the occurrence of an outbreak. Chances are that if an infected dog is introduced, the infectivity cycle will reach as a dead end as the next dog the rabid will attempt to infect will be immune to the disease having been vaccinated. This offers a simple yet effective way of protecting not only dog populations, but importantly human communities.

Zambia, with the rest of the global community has pledged to eradicate dog-mediated human rabies by the year 2030 [4]. This stems from the realization that it is unacceptable to continue losing lives to rabies disease when it is a fully vaccine preventable disease. If the 2030 goal is to be attained, it is important to introspect and critically decide what measures need to be actualized and set into motion. While human anti-rabies vaccines are available, their costs and availability make it an unsustainable option. This leaves dog vaccination as the only viable option.

Presently, Zambia's dog population stands at 960,000. Vaccination coverage in dog populations continue to decline sharply. Vaccination coverage for the years 2015 to 2018 were reported at 7.5%, 35.8%, 0.4% and 4.5% respectively. The less than 5% of vaccination coverage presently reported is a far cry from the 70% coverage needed to break rabies transmission in dog population. The rates of dog bites are equally high. In 2018 alone, about 16,000 people reported to have been bitten by a dog to the Veterinary department. As of June 2019, the ministry of health reported a total of 19 cases of rabies in humans, a number that equals the annual average in just a six-month period.

Truly, a solution to all this lies in breaking this vicious cycle. While government may provide vaccines for dog vaccinations and while by-laws are in place, it all comes down to responsible dog ownership. Every dog owner must ensure their pet is fully vaccinated. An initial single shot, followed by a booster at 6 months and then annual vaccination is all it takes to protect a dog from rabies. Let us vaccinate our dogs to end rabies in Zambia.

# LIST OF REFERENCES

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