Rabies Just Can’t Get Any Respect

By Thumbi Mwangi, WSU College of Veterinary Medicine, Paul G. Allen School for Global Animal Health Clinical Assistant Professor & Director of Rabies Free Kenya

WHAT DOES A KILLER disease have to do to get attention these days? Last year, people watched with horror as Ebola ravaged West Africa and spread fear around the globe. Now it’s the turn of the upstart Zika virus to grab the headlines as an international health emergency.

Meanwhile, I’ve just been quietly doing my thing, killing about 60,000 people per year in the most gruesome way imaginable. But hey, I’m just rabies — nothing to get worked up over, right?

I’ll admit Ebola and the Zika virus are particularly nasty. Aided by air travel they are capable of spreading at jet speed, infecting susceptible populations across the globe. Adding to the fear factor is the fact that at the start of the recent outbreaks, no vaccines were readily available.

Every death is devastating to family and friends, so maybe comparisons aren’t helpful. But just look at the numbers! Every year I am responsible for more than five times the number of deaths reported during the most recent Ebola outbreak and many of my victims are children younger than 15. Surely that deserves some proper recognition?

Like Zika and Ebola, I can jump from animals to humans. Yet somehow, I barely get a mention in the news. Rabies is one of many that the World Health Organization has referred to as Neglected Zoonotic Diseases.

Turning friend into foe.

Once I infect someone they die. End of story. The number of my victims that survive is almost always zero. My record is strongest in rural Africa and Asia where more than 95% of my victims live. I think of myself as a silent but smart killer.

My preferred partner in crime is the humble domestic dog. I turn man’s best friend into a ferocious, fearless foe. Most of my human victims are either bitten or scratched by an infected dog. Many are unaware of the seriousness of the threat and, in any case, in less developed areas, they probably lack access to life-saving rabies vaccines.

Yes, there is an effective vaccine that can beat me — it’s actually been around for more than 100 years, thanks to Louis Pasteur. But it remains expensive and has yet to find its way onto the Global Alliance for Vaccine Initiative list of life-saving vaccines for children living in the world’s poorest countries. And without the vaccine I can easily travel through the body to the brain. That journey takes about a month, by which time...
most of my victims have long forgotten the original bite.

After poisoning my victims’ minds, I make my way to their salivary glands. I make my victims want to bite. I make them scream. I make them fear water so much that they panic and sometimes violently shake at the sight of liquid. It’s an awful way to go, and yet still I don’t provoke the same level of panic as other diseases.

To catch a killer

Of course the irony is that my relatively low profile on the global viral “most wanted” list is precisely what allows me to continue to be so devastating.

People know I use the domestic dog as a gateway to human infection and it’s comparatively cheap to vaccinate dogs against rabies. To halt the spread of the disease, only 70% of dogs in a given region need to be vaccinated. In fact I am the poster child for diseases that are cheaper to control in animals than in humans. But nobody seems to be paying attention.

In Kenya for example, it costs less than a dollar to vaccinate a dog against rabies, but around a hundred dollars to vaccinate a single bite victim. Oh and the number of dogs in Kenya is approximately 5 million compared to a population of over 40 million people that are at risk.

Where there’s a will

But the truth is, I can’t afford to be complacent. Kenya is one of the many endemic countries that has committed to ending human deaths due to rabies by 2030. International bodies such as the World Health Organization, World Organization for Animal Health, Food and Agriculture Organization of the United Nations, and the Global Alliance for Rabies Control are also backing the target.

If more countries joined the movement and signed up to a Pan-African Rabies Control Network that is helping share experiences and coordinate efforts towards the elimination of rabies - well I’d be in serious trouble.

It could be done. Humans managed to eradicate smallpox, and rinderpest in cattle. Now even the end of polio is in sight. Nigeria has recently celebrated no new polio cases for two years, which leaves only two countries — Pakistan and Afghanistan — still afflicted by the transmission of wild poliovirus.

So on reflection, perhaps it is better for me that Zika and Ebola, and before them swine flu and bird flu, have hogged the spotlight. They are absorbing precious resources and attention that could otherwise be targeted at me.

Fame could be my downfall. Because rabies can be eliminated. But only if affected countries and the international health bodies choose to make it a priority.

Thumbi Mwangi teaches at Washington State University, is an Aspen New Voices Fellow and a Wellcome Trust Fellow leading research towards rabies elimination in Kenya.

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