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# Killing Off India's Dogs is Not the Way to Get Rid of its Rabies Problem

BY KRITHIKA SRINIVASAN, SMITHA RAO AND RAJESH KASTURIRANGAN ON 17/09/2015 • LEAVE A COMMENT



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A few weeks ago, the National Human Rights Commission (NHRC) issued a call for a public debate on street dogs in India. Presenting it as a 'human rights versus animal rights' issue, the NHRC's notice questions neutering and vaccination (of dogs) as a strategy

(http://nhrc.nic.in/dispArchive.asp?fno=13702) for controlling dog bites and rabies. The NHRC is not alone in raising such questions; time and again, local authorities and some sections of the public in India have debated street dogs, often calling for eradication to prevent dog bites and rabies. Such debates are typically sparked off by sporadic incidents of dog bites or mauling, as was recently seen in New Delhi (http://nhrc.nic.in/dispArchive.asp?fno=13702%20(retrieved%2016/09/2015)).

Why does India, despite more than a hundred years of government-led dog control efforts, continue to witness to recurring debates on these decidedly serious issues? We think the public health risks of bites and rabies associated with dogs continue to be ongoing problems because of the prevalence of an incomplete and flawed understanding of street dogs, their interactions with people, and the risks that may emerge from these interactions.

## Dog control in colonial and independent India

In India, the British colonial administration introduced government-led dog eradication programmes in the 1800s at about the same time that rabies became a public health concern (http://onlinelibrary.wiley.com/doi/10.1111/j.1475-5661.2012.00501.x/abstract) in England's cities. Post-independence, dogs continued to be killed by local authorities — both regularly and in response to complaints. More than a hundred years of street dog eradication, however, did not make much of a difference to dog population sizes and the incidence of human rabies. This is because when dogs are removed from a neighbourhood, dogs from other areas end up moving into the ecological niche (simply put, food and space) that becomes available.

In a large, complex place like India, such influx is inevitable – the administrative boundaries based on which dog control is carried out do not prevent the movement of dogs. The strategy of eradication in India thus was resplendent in its failure to address the public health concerns of bites and rabies. It is in recognition of the ineffectiveness of eradication, and in keeping with World Health Organisation advice, that street dog neutering and

vaccination programmes were authorized by Central law in the year 2001.

## The logic of neutering and vaccination

Since 2001, local authorities seeking to control street dog populations are required to implement animal birth control (neutering) and anti-rabies vaccination (ABC-ARV) programmes. These are recommended by the WHO (http://apps.who.int/iris/handle /10665/85346) as a key tool for the control of rabies transmission.

The purpose of neutering and vaccination is to ensure that dog populations are small, stable, healthy and safe. Vaccination reduces the incidence of rabies. Neutering – castration in male dogs and ovario-hysterectomies in female dogs – reduces fighting related to reproductive activities and makes dogs more sluggish and docile. This in turn reduces the incidence of dog bites. Moreover, the territorial nature of dogs means that the retention of a neutered and vaccinated population of dogs in a locality prevents new dogs from occupying the area. When street dogs are removed or eradicated, new dogs enter the neighbourhood which heightens the incidence of dog bites due to fear and fighting.

In India, research shows ten years of implementation of the ABC-ARV programme resulted in a 28% decrease (http://www.hisindia.in/reports\_stories/reece.pdf) in dog population size in Jaipur. In Jodhpur, dog populations either decreased or remained stable (http://www.ncbi.nlm.nih.gov/pubmed/20696487) in areas where the programme was implemented. Similarly, in Chennai, where the ABC-ARV programme was adopted in 1996, human deaths due to rabies declined from 120 in 1996 to five in the mid-2000s (http://www.fao.org/ag/againfo/themes/animal-welfare/news-detail /en/c/45487/). In India as a whole, while the public sphere is awash with estimates of around 20,565 (http://www.ijcm.org.in /article.asp?issn=0970-0218;year=2005;volume=30;issue=3;spage=100; epage=101;aulast=Sudarshan) to 20,800 (http://journals.plos.org/plosntds /article?id=10.1371/journal.pntd.0003709) rabies deaths per year, the number of reported rabies cases has come down from 534 in 2004 (http://www.strays.in/index.php/2013/01/rti-response-on-rabies-in-india-apcri-

lifts-data-off-who-and-the-condemns-indian-dog-whereas-the-ministry-of-health-and-family-welfare-mohfw-central-bureau-of-health-intelligence-cbhi-data-is/) to 212 in 2012 (http://cbhidghs.nic.in/index2.asp?slid=1256&sublinkid=1163). The reasons for the stark differences between the various extrapolations and the number of confirmed cases are complex; but at the very least, what this suggests is that there has been a decrease in the reported incidence of human rabies.

## The desire for dog-free streets

Nonetheless, tragic incidents related to dog bites or mauling still occur. The sporadic nature of such tragedies is evident in the media and public attention they garner. By contrast, deaths due to more common hazards, such as automobiles, do not attract so much public ire. In 2011, there were 165072 (http://cbhidghs.nic.in /index2.asp?slid=1256&sublinkid=1163) reported deaths due to traffic accidents, compared to 253 (http://www.cbhidghs.nic.in /index2.asp?slid=1208&sublinkid=944) reported deaths due to rabies. In other words, whereas hazards such as automobiles that cause deaths more frequently go unremarked, the depth of anxiety about the risks associated with dogs seems to be correlated to the very sporadic character of the risks they pose.

Such anxiety leads to demands by some sections of society for a revival of the colonial practice of eradication through killing or removal. Local authorities have also occasionally flouted the law and resorted to eradication in the mistaken belief that this will produce a sanitized, dog-free locality – and thereby address the concerns of bites and rabies.

Advocates of dog-free streets argue that countries like the United Kingdom have successfully eradicated free-living dogs. However, what they do not realize is that the ecological niches freed up because of the removal of dogs are now inhabited by other animals such as foxes (http://www.bbc.co.uk/programmes/po32opkf) and seagulls (http://www.telegraph.co.uk/news/earth/wildlife/11749045/Killer-seagulls-The-seaside-gets-seriously-scary.html) (in the UK) and coyotes (http://www.nytimes.com/2015/06/24/nyregion/coyotes-create-dangers-and-divisions-in-new-york-suburbs.html?\_r=o) (in the United States) which

pose similar risks. Indeed, the UK is currently debating foxes and seagulls and the threats they pose to people, including to children; these animals have occupied niches that would be inhabited by dogs if they hadn't been eliminated.

# A multi-dimensional problem needs a multi-pronged approach

Street dogs, urban foxes, urban coyotes and seagulls are all liminal animals that live in or near human settlements and that thrive on the food wastes generated by people. It is specific types of interactions between humans and these animals, mediated by certain conditions created by human lifestyles (such as food waste) that lead to risks to public health and safety. As such, these risks cannot be addressed by killing alone.

It is here that there has been a collective failure on the part of human rights, public health, and animal control organizations in addressing the multidimensional nature of the risks associated with street dogs in India. Whether through the strategy of eradication or that of ABC-ARV, the emphasis has been on the dogs alone. This emphasis does not recognize that dogs are just one component of a multifaceted set of variables that lead to mauling, bites and rabies. Most dogs rarely bite, and dog bites rarely cause rabies or major wounds or death. Rather, it is the intersection of certain fundamentally social factors with particular dog behaviours that lead to these public health problems. Thus, a multi-pronged approach that addresses these multiple factors is required, and not one that focuses narrowly on managing dog populations. New York City is currently implementing such an approach to facilitate the safe coexistence of coyotes and people (http://www.nytimes.com/2015/03 /08/nyregion/that-howling-just-new-yorks-neighborhood-coyotes.html).

At the minimum, an effective public health programme to tackle dog bites and rabies will have to include four components: a) proper waste management underpinned by appropriate infrastructure; b) public education and behaviour change with regard to live safely with free-living dogs and what to do when bitten, and also in relation to waste management; c) systematic and

carefully-designed neutering and vaccination programmes that take into account dog territoriality; d) adequate facilities for post-exposure prophylaxis and treatment. This is true of any public health concern. For example, one cannot tackle AIDS without education, awareness, and infrastructure (e.g., availability of condoms and HIV testing) relating to safe sex practices. Similarly, when it comes to human-dog interactions, there needs to be as much of an emphasis on educating people and children on how to interact safely with dogs, and on proper waste disposal as on the consistent implementation of neutering and vaccination programmes and provision of medical care.

## **Destructive modernity**

A One Health approach (http://veterinaryrecord.bmj.com/content /175/8/188) that couples ABC-ARV programmes with public awareness and education is recognized internationally as the best public health strategy for dealing with dog bites and rabies. Given this, to what extent do calls for dog-free streets stem from a mindless aping of the destructive 'development' displayed in the West, and which has only led to different kinds of risks, as is currently witnessed in the UK and US? It is easy to dismiss dogs as pests that can be eliminated without worry. However, it is important to remember that many creatures that were persecuted in the past as pests – for example, wolves and bats – are now protected as endangered animals or reintroduced for their ecological role. Snakes once killed as pests are now being reintroduced in rural Karnataka to control rats (http://www.thehindu.com/news/national/karnataka/snakes-roped-in-to-fightrats/article7649984.ece).

Even if one believes dogs are creatures that can be killed without compunction, doing so is not an effective means of safeguarding human wellbeing. There may be many situations where human and animal rights are in conflict, but this particular situation – dog bites and rabies – is *not* one of them. What is required is a multipronged, One Health approach that addresses the public health issues of dog bites and rabies through carefully implemented neutering and vaccination programmes, public education and

behaviour change, and proper waste management. Without such a multi-pronged approach, any programme to address dog bites and rabies will remain ineffective.

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Shanvi Rawat • 15 minutes ago

Through this article, I got to know that such a thing is being contemplated by the policy makers. But it really should not be the only solution to this problem and it is not that grave a problem to not be able to control through vaccine and neutering. Can such a solution be acceptable for people residing on streets?

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