End Rabies: Collaborate and Vaccinate - A Perspective

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The focus for this year's theme for the World Rabies Day is on vaccination and collaboration. World Rabies Day is the only global day of action and awareness for the prevention of rabies which provides an opportunity to unite as a community and help individuals, Non-governmental Organisations (NGOs) and the Governments to collaborate, connect and share their experiences and work.¹ Globally, the World Health Organisation (WHO), World Organisation for Animal Health (OIE) and the Food and Agriculture Organisation (FAO) are committed to facilitating the operationalisation of the 'One Health' approach to combat against this disease. This approach aims to connect human, animals and environmental health interventions which in the case of rabies calls for a coordinated investment in mass dog vaccination as a public health initiative along with improved surveillance, data collection and community awareness for raising and ensuring access to affordable rabies treatment for humans i.e. Post Exposure Prophylaxis (PEP).²

This fatal disease is estimated to cause around 59,000 human deaths per year in over 150 countries across the world with 95% of cases occurring just in Asia and Africa only. Due to reasons like underreporting and uncertain estimates, this number is likely to be a gross underestimate of the exact statistics. The burden of the disease is disproportionally borne by the rural poor population, with around half of the cases occurring in children less than 15 years of age.³ The disease is endemic throughout India with the exception of Andaman & Nicobar and Lakshadweep Islands.⁴ According to the reports about 18,000 to 20,000 cases of deaths due to rabies occur in India annually which contributes to about one third of the total deaths occurring due to rabies in the world. The number of dog bite cases in India has been estimated to be 17.4 million bites per year.⁵ Incidence of rabies in India has been constant for close to a decade now without any change or a decline in the trend. However, the reported incidence is probably an underestimation of the true burden as rabies is still not a notifiable disease in India.⁶

Perception of Common People in Seeking Timely Care Following Animal Bite

Following the incident of animal bite, it has been found that people usually approach their nearby dispensaries to avail any first-aid treatment
in the first instance from where they are redirected to the tertiary care centres for administration of Anti Rabies Vaccine (ARV) and Anti Rabies Serum (ARS). It has also been identified that people usually apply some homemade remedies to the wound (application of chilli paste, turmeric paste, herbal paste, lime etc.) before visiting the ARCs. This is also accompanied by poor wound washing practices. Further, those belonging to the lower socioeconomic class are often misguided by their relatives and neighbours for the same for which their reporting to the ARCs gets delayed.

**Message to the General Public about Rabies Prevention through Awareness Program**

General public should be cautious enough while walking on the road/streets/parks etc. and should not provoke stray dogs, cats and monkeys by throwing stones, teasing them etc. Utmost care should be taken for the children as they are more vulnerable to dog/cat/monkey bite since they play outdoors and tend to provoke dogs/cats/monkeys by teasing them or throwing objects towards them. As with the general public, they should refrain from throwing food waste, garbage and any other wastes into the open as this attracts a lot of stray animals. With respect to proper wound management practices to be followed post animal bite incident, common man should be made aware of effective and proper wound washing practices, following animal bite, which includes washing the open wound for at least 15 minutes under running water using soap. They should also be made aware of seeking proper medical care at the first place following any incident of animal bite. Animal bite patients should be made aware of refraining themselves from applying any kind of irritants or any household remedies like chilli paste, herbal paste, turmeric paste, lime etc. over the wounds. They should completely refrain from approaching any faith healers and quacks and instead should approach a medical care centre and consult a medical professional in the first instance. Animal bite patients shouldn’t delay and should report to the health care centres for seeking proper medical care as soon as possible following animal bite. Most importantly, they should complete the full course of Anti-Rabies Vaccination without fail as it is the only and the most effective way of preventing themselves from a 100% fatal disease like rabies. As far as the pet owners are concerned, they should ensure periodic vaccination of their pets.

**Critical Government and Public Health Interventions needed to Eliminate Rabies from India**

In order to eliminate this preventable disease from India a number of interventions need to be ensured and enforced strictly. The government/authority should ensure the continuous and uninterrupted supply of rabies biologicals i.e. rabies vaccine and anti rabies serum. Along with that, mass stray dogs vaccination campaigns (targeting up to 70% coverage), which is the need of the hour, need to be carried out quite effectively as it is impossible to eliminate Rabies without controlling the Dog-mediated rabies. Accordingly, there is a need for integration of human health and animal health components of the National Rabies Control Program and strong intersectoral coordination among the National Centre for Disease Control (NCDC), Animal Welfare Board of India (AWBI), Municipal Authorities of various areas, NGOs and veterinary organisations to achieve the objective of “One Health”. Emphasis should be directed to take appropriate steps towards dog sterilization measures in order to reduce dog population. Responsible pet dog ownership and timely vaccination of pet dogs to prevent Rabies should be encouraged. IEC activities in schools, colleges, offices and in places of public gatherings need to be carried out to emphasise the message of proper wound washing practices following animal bite and to take full course of anti-rabies vaccines following animal bite as stated above. As open garbage attracts a lot of stray animals, therefore effective solid waste management measures and practices should be undertaken.

It is the multi-faceted nature of this disease which complicates its prevention and control and hence, a multi-sectoral “One Health” approach could be a better strategy to cope up with the same. Securing the right amount of political will, adequate funding mechanism and resource mobilisation for effective programme implementation together with execution of extensive Information, Education and Communication (IEC) awareness campaigns and integrating it with the ongoing school and adolescent health programmes, will go a long way in fighting against this preventable disease effectively and facilitate in taking appropriate steps towards elimination of this fatal disease.

**References**
