

## An End to Human Rabies Deaths: Are We on the right track?



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Rabies has been a major public health problem in Sri Lanka for a long time. Presently, around 20 people die due to rabies annually. The mortality is highest among the working age group in whom the nation has invested heavily. Therefore, the social and economic losses from this public health problem are substantial. In addition, Ministry of Health, Sri Lanka spends more than 300 million rupees annually to provide rabies post exposure therapy (PET) for dog bite victims. Sri Lanka has set a target to eliminate dog transmitted human rabies by 2020 in keeping with the WHO target of elimination by 2030.

As rabies is a typical zoonotic disease, it has a vast reservoir of viruses from wild to semi domestic and domestic animals. Eradication of rabies virus from this vast animal reservoir is impossible. However transmission of rabies virus from domestic animals (dogs and cats) to human could be prevented through an integrated approach of medical and veterinary sectors through one health policy.

About 99% of human rabies cases originate by rabid domestic dog bites. Therefore, reduction of human rabies depends substantially on prevalence of dog rabies. Rabies in dogs could be controlled through periodic campaigns of dog vaccination throughout the country. World Health Organization (WHO) recommends recurrent vaccination campaigns covering at least 70% of the dog population to control and potentially eliminate dog rabies. However, progress in preventing human rabies through control of the disease in the dog reservoir has been slow in our country due to technical, inter-sectorial, organizational and financial constraints.

Therefore, human rabies in Sri Lanka is curtailed mainly via timely administration of anti-rabies post exposure prophylaxis (PEP). However lack of education and awareness about rabies limits the use of PEP in some instances. Human rabies death analysis of past four years shows that most rabies patients were victims of negligence and ignorance especially in the uneducated, lower socio economic population.. As a result incidence of human rabies in our country has remained fairly static over the past few years.

Successful elimination of human rabies requires a multi-sectoral, collaborative approach. Prevention of animal rabies, better public awareness and improved access to cost-effective and high-quality human rabies biologicals are essential for the elimination of human rabies. A reduction of any of these components will result in a failure to achieve rabies elimination by 2020.