PREVENTING CHILD RABIES

ONE HEALTH IN SCHOOLS: MISSION RABIES INDIA EDUCATION PROGRAMME

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Children are a primary risk group for dog bites and rabies fatality; in 40% of cases recorded globally and over 50% in India the victims are children. Over 99% of rabies cases are transmitted through dog bites. Mission Rabies was launched to aid global elimination of rabies through mass canine vaccination and to protect human communities against fatality. The charity has vaccinated one street dog every 4 minutes since September 2013, as scientifically monitored through Rabies App mobile GPS technology to ensure 70% vaccination coverage is achieved. Collaboration with Worldwide Veterinary Service (WVS), has delivered 20,414 sterilisations of street dogs in Goa during a six month window. Human rabies can be directly prevented through reduction of dog bite incidence, increased timely use of PEP and immunoglobulin, as well as reducing prevalence in dogs. Mission Rabies’ education programme teaches primary prevention and One Health theory to children as young as five, trains teachers, and conducts awareness outreach to communities. To date the team have reached 208,000 children, 25,000 teachers, medical students and members of the public in India since January 2014.

Education Approach and Evaluation Methods

Over a 6-month pilot 67,515 children in 274 schools across Goa State, India received the Mission Rabies education programme. It’s impact was measured in 40 schools by a Knowledge, Attitude and Practice Survey. Lessons were delivered through talks, a play performed by the children, a cartoon video shown on a portable pedal-powered cinema, and a pack to be delivered by teachers. The content of all methods aim to: increase understanding of rabies and its control, improve the perception of dogs and their care, reduce behaviours that lead to dog bites and ensure appropriate treatment is sought.

Rabies Schools Education Programme, Goa - KAP Results

Children exposed to the education, as opposed to the control group, tested significantly higher; as confirmed by one-way ANOVA F(1) = 9.84, p=.002. The control group and education group were not significantly different at baseline F(1)=0.4, p=0.508 but by the post KAP, results were highly divergent and showed a large effect F(1)=7.81, p=0.005. We are confident to a population representative level that the education programme significantly increased the knowledge, attitudes and practice of children who took part. In terms of message retention, linear regression showed no significant relationship p=.107, thus lessons were memorable even when tested after a period of up to 86 days post lesson delivery. One-way ANOVA comparison of education method used in the schools programme showed a significant difference between the groups (4)=56.10, p=.000. Our control group (μ=59.75, SE=0.457) score significantly lower than those who delivered a play (μ=76.53, SE=7.65), watched the video (μ=72.10, SE=8.27), received a talk (μ=67.49, SE=9.65), or benefitted from the teacher’s lesson pack (μ=66.54, SE=7.45) indicating all methods add value and inform children, however methods that actively involve direct participation of children are most effective.

Implications for One Health Awareness & Future Global Replication

Community awareness and education are fundamental cornerstones to our integrated One Health philosophy with regards to rabies. Thanks to the support of Dogs Trust, Mission Rabies is due to launch several mass vaccination project sites throughout Africa and Asia in 2015. The successful strategies measured in our Indian education programme will form the basis of replication in Blantyre, Malawi; to directly reduce child fatalities surrounding Queen Elizabeth Hospital where the highest number of paediatric fatalities from rabies in Africa have been recorded.

Mission Rabies would not be possible without the generous support of:

For more information please visit: www.missionrabies.com
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