

Title: SYSTEMATIC REVIEW OF ORIGINAL ARTICLES ON KNOWLEDGE AND PRACTICES REGARDING ANIMAL BITES TREATMENT AND PREVENTION

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Keywords Systematic review, APCRI Journal, Knowledge, perception, animal bites treatment and prevention

Abstract Programs to create awareness among the public on rabies prevention can be a stepping stone in making India rabies free. This systematic review was conducted to get an overview of the awareness levels about knowledge and practices regarding animal bites treatment and prevention in India..

Original Article

SYSTEMATIC REVIEW OF ORIGINAL ARTICLES ON KNOWLEDGE AND PRACTICES REGARDING ANIMAL BITES TREATMENT AND PREVENTION, PUBLISHED IN APCRI JOURNAL.

Dr. Poornima S*

Abstract

Background:

Programs to create awareness among the public on rabies prevention can be a stepping stone in making India rabies free. This systematic review was conducted to get an overview of the awareness levels about knowledge and practices regarding animal bites treatment and prevention in India.

Objectives:

To systematically review the published articles of APCRI Journal on knowledge, awareness and practices regarding animal bites treatment and prevention and summarize the findings.

Methodology:

Data source: Manual and online search of all the 14 issues of APCRIJ from 2006-2013 was undertaken for original articles on knowledge and practices regarding animal bites treatment and prevention. Search yield 13 articles, 10 articles qualified for the systematic review.

Observations:

All the studies were cross-sectional surveys. Cumulative sample size of the review was 3,486 subjects. 14.91% of the sample subjects were exclusively from rural areas and 27.79% from urban areas. 57.28% of the sample subjects were targeted homogeneous population like college students, medical students, ASHA workers, AYUSH doctors, etc. 29.43% of the subjects were aware about rabies as a viral disease. 50.22%, 25.41% and 4.18% of the subjects were aware that dog, cat and monkey bites can cause rabies respectively. 14.69% were aware of hydrophobia as a symptom of rabies. 10.47% were aware of washing the site of bite with soap and water for 10 mins. 15.15% of the subject had precise knowledge of 5 doses of anti rabies vaccines to be given to the deltoid region for animal bites.

Conclusion:

Systematic review has established that appropriate knowledge and practice regarding animal bites is abysmally poor.

Keywords: Systematic review, APCRI journal, Knowledge, perception, animal bites treatment and prevention

Introduction:

Rabies is almost always a fatal yet 100% preventable disease. Prevention and control of rabies in India required combined collaborative efforts from Medical, veterinary, public health officials, animal welfare activities, local administration and non governmental organizations. Programs to create awareness among the public on rabies prevention can be an economical and sustainable strategy in making India Rabies free.

The Association for Prevention and Control of Rabies in India (APCRI) has been striving hard towards the goal of making India Rabies free. The association is performing many multi-centric studies to both generate epidemiological data on problem statements and rabies treatment both individually and in collaboration with reputed international agencies. In the year 2003-2004, under the aegis of World Health organization, Association for Prevention and Control of Rabies in

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Table: 1
Summary table of the original article included in the systematic review

Sl. No.	Authors	Year of Publication	Study of method	Subjects	Focus Topics
1.	Vinay M et al	July 09	questionnaire	College Student	awareness on Rabies
2.	Jairaj Singh Hanspal et al	Jan 11	interview	Community	Perception on animal bite
3.	Harish BR et al	July 11	questionnaire	Doctors	Awareness on Rabies & treatment
4.	Vinay M et al	Jan 12	questionnaire	Medical Students	Awareness on Rabies
5.	SR Haldar et al	Jan 12	interview	Paramedical Students	Perception on Rabies
6.	Sangeeta Das et al	July 12	questionnaire	Doctors	Knowledge and awareness on treatment
7.	Subhas BP et al	July 12	questionnaire	Doctors	Awareness on Rabies & treatment
8.	Megha Luthra et al	July 13	interview	Community	Knowledge and awareness on treatment
9.	Tiwari Ranjana et al	July 13	interview	Community	Knowledge and awareness on treatment
10.	Vinay M et al	July 13	questionnaire	ASHA Workers	Perception on dog bite

India (APCRI) conducted a multi-centric rabies survey and had estimated that every year there are about 1.7 million cases of animal bites and 20,000 deaths due to rabies in India^[1,2]. The association has been regular in bringing out a scientific literature on recent advances in the field of rabies through its indexed official publication the APCRI journal and APCRI newsletter which are published bi-annually. These literatures are available as open source and accessible to everyone free of cost. This systematic review was conducted to get an overview of all the published literature on knowledge and practices regarding animal bites treatment and prevention in APCRI journal.

Objectives:

To systematically review the published articles of APCRIJ on knowledge, awareness and practices regarding animal bites treatment and prevention and summarize the findings

Data sources:

APCRI journal is the official publication of Association for Prevention and Control of Rabies in India. APCRI Journal is a bi-annual, open access, peer reviewed, indexed journal publishing original articles, editorials and reviews in the field of rabies prevention. It has a print ISSN 0973-5038 and is also accessible online through the website of APCRI.

There were a total of 14 issues of APCRI Journal from 2006-2013. Efforts were made to retrieve all the issues in print also. The APCRI website was visited and all the issues were downloaded from the inception of the journal from 2006 till 2013. Separate soft copy and hard copy search was undertaken for original articles on knowledge and practices regarding animal bites treatment and prevention. Original articles on perception or awareness on rabies, knowledge on rabies

management were also included for pre-review. Combined search yielded 13 articles. The hard copies of all the 13 articles were retrieved. These articles were subjected to pre-review to check for eligibility to be presented for systematic review. Pre-review was conducted by two separate researchers independently. 10 articles qualified for the systematic review. 3 articles did not address the issue of knowledge or practice regarding animal bites treatment or prevention, hence were not included in the systematic review. A summary table of the original articles was prepared as given in Table 1. Systematic review addressed five basic questions for example the causative agent of rabies, animals that spread rabies, symptoms of rabies in humans, first aid following animal bite and anti rabies vaccination for the treatment of animal bites.

Data Summary:

Distribution of the studies:

Of the 10 original articles included in the systematic review. 5 (50%) were from Mandya city of Karnataka state. 2 (20%) studies were from the states of Orissa and Madhya Pradesh. Only 1 (10%) study was from the state of Uttar Pradesh.

Description of the study subjects:

Of the total 3,486 subjects, 14.91% and 27.79% the study subjects were exclusively from rural and urban population respectively. 57.28% of study subjects were targeted homogeneous population like college students, medical students, ASHA workers, AYUSH doctors, etc

Type of the studies:

All the studies were cross-sectional studies. 3 out of 10 were community based studies.

Cumulative sample size of the review was 3,486 subjects. Most common method of sampling used was

purposive non probability sampling technique. All the studies has used either interview or questionnaire methods for data collection. All studies had used descriptive statistics like percentages and proportions for presentation and interpretation of results.

Observations from the data synthesis:

1026 (29.43%) of the subjects had knowledge as to rabies is a viral disease. 1751 (50.22%) of the subjects were aware dog bites can causes rabies. 886 (25.41 %) and 146 (4.18%) subjects had knowledge about cat bites and monkey bites can causes rabies. 512(14.69%) had knowledge that hydrophobia was a symptom of rabies in humans. 365 (10.45%) had knowledge on correct wound wash practices as use of soap and running water for ten minutes. 528 (15.15%) had precise knowledge on appropriate doses of anti rabies vaccination for animal bite as 5 doses of vaccine given to deltoid region.

Conclusion:

Systematic review of the published literature has shown that appropriate knowledge on animal bites and animals that can spread rabies is lacking. The knowledge on symptoms of rabies, practices of First aid and correct doses of vaccination after animal bites is abysmally poor among the targeted study subjects and hence the general public at large.

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Announcement

The APCRI Newsletter is published every six monthly, in October and in April. APCRI members and the members of the Scientific Community are requested to contribute News Clippings, Photographs and Reports on Scientific activity on Rabies and Related matter for publication in the Newsletter.

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