Special Report

Indian Rabies Position Paper, 2011

Prepared Jointly by

Indian public health association [IPHA],
Association for prevention and control of rabies in India [APCRI],
Rabies in Asia [RIA] Foundation
Animal welfare board of India [AWBI]

1. Introduction

India is a democratic republic nation. It is a multireligious, multilinguistic and multicultural society and is eulogized for its unity in diversity. The Constitution of India envisages the establishment of a new social order based on equality, freedom, justice and dignity of the individual. It aims at elimination of poverty, ignorance and ill-health and directs the State to regard the raising of the level of the nutrition and the standard of living of its people and the improvement of public health among its primary duties, securing the health and strength of workers, men and women, specially ensuring that children are given opportunities and facilities to develop in a healthy manner. The successive five year plans have been providing the framework within which the States may develop their health services and meet the health needs of the people.

Indian heritage: India has a rich, centuries-old heritage of medical and health sciences. The philosophy of Ayurveda and the surgical skills enunciated by Charka and Shushruta bear testimony to our ancient tradition in the scientific health care of our people. The approach of our ancient medical systems was of a holistic nature, which took into account all aspects of human health and disease. Over the centuries, with the intrusion of foreign influences and mingling of cultures, various systems of medicine evolved and have continued to be practiced widely. However, the allopathic system of medicine has, in a relatively short period of time, made a major impact on the entire approach to health care and pattern of development of the health services and infrastructure in the country.

2. About Rabies

This is primarily a disease of animals i.e. zoonotic and afflicting mammals. The disease is caused by a virus and is found in the saliva of rabid animals. Following a bite or scratch or lick on wounds or mucus membranes by a rabid animal the virus travels from the site of its entry through the nerves to the brain and other parts of the body and invariably results in death of the afflicted animal or man. The incubation period viz. time interval between bite and onset of clinical signs in man consists of viz. fear of water (hydrophobia), aerophobia (fear of air) and photophobia

(fear of light) is usually about three weeks to three months and sometimes could be even longer. Till date there is no cure for rabies either in man or animals. It is only the preventive therapy in man and preventive vaccination in animals which are life saving.

3. The Current Scenario

India is endemic for rabies and only the islands of Andaman & Nicobar and Lakshadweep are historically rabies free. The disease is neither notifiable nor reportable and there is no proper surveillance either. As a result in 2003, a special survey of assessment of burden of rabies in India revealed that annually about 17 million animal bites and 20,000 human rabies deaths are estimated to occur. Dog (97%) is the main reservoir and transmitter of rabies to man and others (3%) including cats, jackals, mongoose, etc. There was one rabies death every thirty minutes and one animal bite every two seconds in the country. The annual man days lost due to animal bite was about 38 million and the annual medicinal cost [vaccines and other drugs for animal bite management was about Rs. 2 billion approximately. The sheep brain vaccine which was the main stay of antirabies vaccination was discontinued in 2004. In 2006, to overcome the shortage of modern rabies vaccines in Government hospitals, intradermal rabies vaccination (IDRV) was introduced. Currently modern rabies vaccines and immunoglobulins both indigenously produced and imported are in use both in Government and private sectors.

The assessment of burden of rabies in India done in 2003 which also included obtaining laboratory data from Institutions in the country showed that rabies positivity was largely found in domestic and peridomestic animals like dogs, cats, cattle, goats, horses and pigs and from the wild in mongoose, jackal and deer. The affliction of cattle, sheep, goat and other animals of economic importance by rabies in rural areas is an important public health concern. The common man, more so in rural areas is largely ignorant of the disease. The myths and traditional practices further compound this problem. The curriculum in the medical, veterinary and other health sciences colleges should emphasize more on importance of this deadly disease. The approaches to and effectiveness of dog population control needs to be strengthened.

Some countries in Asia such as Thailand, Sri Lanka and Philippines have demonstrated greater commitment and drastically reduced the human rabies burden and its elimination appears imminent in these countries. India accounts for about 36% of global rabies burden and hence in the context of overall economic progress made it is important that this ancient disease is eliminated to send a message that the country is safe for travelers /tourists and thus improve the image of the country in the League of Nations.

Progress Made

The highly reactogenic sheep brain vaccine [Semple vaccine] which formed the mainstay of antirabies vaccination in humans from 1911 was discontinued in 2004 and replaced by safer modern rabies vaccines. The intradermal rabies vaccination [IDRV] was introduced in 2006 to ensure wider availability of antirabies vaccination to dog bite victims in government hospitals. The animal birth control [ABC] programme was launched in 2001 in urban areas to control stray dog population. Under the aegis of WHO and Government of India to assess the burden of rabies in India, a special survey was done for the first time in 2003-04 by Association for Prevention and Control of Rabies in India [APCRI]. In 2008, Government of India launched a pilot project on "Human rabies prevention" in five cities in India.

4. Need For Evolving A Rabies Position Paper

The objective of this document is to propose to Government of India to evolve a national rabies policy for ensuring a" Rabies free India by 2030".

5. Prevention of Rabies In Man

It is important to establish antirabies clinics in all government hospitals and ensure continuous availability of life saving rabies vaccines and Immunoglobulins in these centers. The antirabies clinics must have wound washing facilities and manned by trained personnel. The private clinics and hospitals must be encouraged to treat or refer cases of animal bites to the antirabies clinics/emergency departments of the government hospitals.

6. Care of Human Rabies Victims

As rabies is practically 100% fatal it is important that all human rabies patients are encouraged to be referred to the nearest infectious diseases hospitals for admission and comfort care. It is necessary that they are given an opportunity and facility of a painless and dignified death in these hospitals. Consequently, these hospitals which are largely neglected need attention of the authorities for immediate upgradation of facilities and improvements in their infrastructure. The premier health institutions should be strengthened in the area of research and development.

This is an area where public and private partnerships must be encouraged.

7. Prevention And Control of Rabies In Animals

The Veterinary services in the state must be geared up to meet the challenge of prevention and control of rabies in animals particularly dogs. All efforts must be made to increase the manpower, improve the knowledge and skills and facilities especially rabies diagnostic facilities in Veterinary colleges and Government laboratory Institutions. It is important to establish facilities for early diagnosis of rabies in dogs and explore other measures such as oral rabies vaccination of dogs.

8. Rabies and Animal Welfare

It is important that as a nation, we inculcate the values of promoting animal welfare at all levels in the society and especially in schools. More emphasis needs to be given about responsible pet dog ownership. The promotion of animal welfare activities shall be through sound and well established ways and means and all care shall be exercised simultaneously to protect human safety and welfare. An independent evaluation of animal birth control (ABC) programme may be undertaken as recommended by WHO. In addition, newer methods of dog population management may be considered.

9. Public Awareness & Professional Education

The media and news agencies must give priority to the awareness programmes about responsible pet dog ownership, prevention of rabies in humans and its control in animals.

The medical colleges, state and central health/medical institutions must be encouraged to conduct CME programmes for medical, nursing, pharmacy and others in the care and prevention of rabies in humans. Besides professional associations like IMA, IPHA, IAP, API, ASI must encouraged to organize CME programmes. Likewise the veterinary colleges, IVA and others must conduct continuing professional development (CPD) programme for veterinarians. It is very important that particularly those working in the anti-rabies clinics and emergency departments of the hospitals are given preference.

10. Role Of Industry, NGOs And International Agencies

The pharmaceutical companies must be encouraged to support education, research activities and awareness campaigns. The nongovernmental organizations like Rotary International, Lion clubs and others are encouraged to participate in the public awareness campaigns. The national organizations like IMA, IVA, IPHA, APCRI, AWBI and others must coordinate and

cooperate. The international organizations like WHO, OIE, CVA, RIA and others must undertake more vigorous pursuit of both public and professional education campaigns in the country.

11. Role Of Government In Rabies Prevention And Control

The Government must set the goal of "Human and Canine Rabies free India by 2020 and rabies free India by 2030". To accomplish this goal, Government of India shall immediately launch a 'National Rabies Elimination Programme '. It shall ensure integration, coordination and intersectoral cooperation between the ministries of agriculture and animal husbandry, rural development, public health and medical services, social justice and empowerment, local civic bodies and others. A system of surveillance and measures to maintain rabies free status of rabies free areas is necessary. There is an urgent need to strengthen laboratory diagnosis of rabies both in humans and animals. The 28th of September of every year notified by UN/WHO as "World rabies day" must be observed in the country. The rabies vaccines and immunoglobulins are life saving and hence the Government must extend tax concessions for these drugs and ensure their wider availability, better affordability and greater usage.

12. Rabies And Legislation

It is important to make rabies a "Notifiable disease" both in humans and animals to know the magnitude of the problem and help plan its elimination.

Working Group*

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