

Veterinary Science in Ancient India: A Study on Historical Perspective

Jyotimonjuri Kalita
Research Scholar,
Department of History, Dibrugarh University
Dibrugarh-04, Assam

Abstract: *Medical science attained a high perfection in India during the ancient time. In several ancient Indian texts, detailed norms of health and hygiene can be found. Animals also received good medical care in ancient India. The history of veterinary medicine in India is closely related to the development of human medicine; because, the ancient Indian physicians treated not only human beings, but they were also trained in the care of animals. The treatment of animal diseases in ancient India was well-developed and carried out with great care by well-trained physicians. Atharvaveda provides interesting information about illness of animals, herbal medicines and cure of diseases. In ancient India, the greatest and most respected teacher of veterinary science was Salihotra, who is considered the father of Indian veterinary science. Palkapya and Atreyawas another two great veterinarians in ancient India. Almost all aspects of surgery and medicine including veterinary ethics were dealt in ancient Indian veterinary treatises.*

Key words: *Medical science, Veterinary, ancient India, animal care*

I. Introduction

From time immemorial, Animals have been occupying an important place in Indian culture, not only for the economic profits the animals offer, but also for cultural ethos. Animals received good medical care in ancient India. Ancient Indian physicians treating human beings were also trained in the care of animals. Indian medical treatises like *Charaka, Sushruta*, and *Harita Samhita* contain chapters or references about care of animals. In ancient India, the greatest and most respected teacher of veterinary science was Salihotra, the father of Indian veterinary science followed by Palkapya and Atreya. Almost all aspects of surgery and medicine along with veterinary ethics were dealt in ancient Indian veterinary treatises.

II. Methodology

The methodology used in this study is historical and analytical. The study is based on both primary and secondary data. Information on Veterinary and Animal practices in ancient India has been derived from excavation findings, old scriptures and edicts, paintings etc. I have collected data from books, research papers, articles, journals, paintings etc.

III. Discussion

1.01. Medical science in ancient India:

Medical historian Henry Ernest Sigerist has stated that every culture has developed their own system of medicine and medical history is one aspect of cultural history.¹ Along with many other branches of science, knowledge of medical science also attained perfection in ancient India. All the four Vedas contain information on different health and hygiene related issues and supply the references regarding various aspects of medicine. Atharvaveda is the earliest known Indian work in medicine.² The ancient Indian system of medical science known as Ayurveda (the science of life) contains the knowledge of medicine possessed by the Vedic saints. The knowledge of identification of the medicinal plants and its uses were mandatory for the *Ayurvedic* clinicians. The *Caraka Samhita* composed by Caraka, which is believed to have lived in the first century A.D. forms the bedrock of Indian *Ayurvedic* practices. The ancient sages and *Ayurvedic* surgeons also had good knowledge of the anatomy of body. Surgery is one of the eight branches of Ayurveda. The oldest Indian treatise dealing with surgery is the *Susruta Samhita* (Susruta's compendium). Susruta is called as the father of surgery and the first known surgeon in the world. In his book, he described over 120 surgical instruments, 300 surgical procedures and classifies human surgery into eight categories. Susruta is also known as the father of plastic surgery and cosmetic surgery. *Ayurvedic* literature provides references to holding of conferences of learned *Ayurvedic* sages to decide controversial *Ayurvedic* concepts in ancient India.

Apart from ancient Indian sages, medicinal relief and nursing were also strongly encouraged by Buddha. His followers built many health centers for men and animals. However, the use of surgery was discouraged by Buddhism. Buddhist scripture *Mahavagga Jataka* enforced

¹Sigerist, Henry. *A History of Medicine*, Oxford University Press, London, 1951

²Tyagi . R.P. S. and Jit Singh, (ed). *Ruminant surgery*. Delhi, CBS publishers, 1993, pp 1-4

strict prohibition on surgeons. Similar to Buddhists, Jains also had a fairly good knowledge of medical treatment. But, as the Jains were very much particular in observing the rules of conduct especially non-violence, so they did not encouraged the practice of surgery.

The progress of medical science in India can be understand from the announcement in the scientific journal 'Nature', April 2006 issue that the oldest (and first early Neolithic) evidence for the drilling of human teeth in a living person was found in Mehrgarh which is a Neolithic site of India (Present-day Pakistan) dated to 7000 BCE.

1.02. Nutrition and management of animals in ancient India:

Animals have occupied an important place in ancient Indian culture. People of the oldest Known civilization of India, the Indus Valley civilization (2600-1900 BCE) were familiar with different animals like dogs, bulls, sheep, goats, buffaloes, horses and elephants. Cattle husbandry was well developed during the *Rigvedic* period (1500–1000 BCE) and the cow (*Kamdhenu*) was adored and considered the ‘best wealth’ of mankind. The cow has been defined as '*Aghanya*' in the Vedic texts, indicating the holiness of cow in the Vedic period. *Aghanya* means not to be killed.³ Wars were fought for acquiring cow. Aryans laid great emphasis on protection of animals. In the epic *Mahabharata*, references have been made about many wild and domestic animals and their importance. The earliest Buddhist text “*Suttanipata*” describes that cattle give food, beauty and happiness and therefore they deserves to be protected. In *Arthashastra*, management and food habits of different animals have been described separately at several places.

Information on animal husbandry is available in ancient Indian sources. According to *Matsya Purana*, *Manu* and *Apastamba Samhitis* and *Kautilya's Arthasastra*, extreme and severe punishments were given for cruelty to animals. Great authors like Atri, Pardasara, Gautama framed definite rules for the care and management of cattle. In *AgniPurana*, we find that Kings were intended to preserve the cattle of the country. The *Arthasastra* mentions a government officer called ‘Superintendent of Cattle and Horses’ whose exclusive duties were to supervise livestock in the country. The superintendent was expected to maintain cattle census. Nursing of

³Garg, A. K. *Animal keeping in ancient India: the Vedic and Ashokan period*. Paper presented in the National Symposium on the overview on veterinary science and animal husbandry in ancient India, 16-17 April, 2002. Izatnagar: IVRI, 2002, p.16.

new born animals and their mothers are also mentioned in ancient Indian literature. Fa-hsien, the Chinese scholar who traveled in India during this period wrote that Indians did not kill animals and there were no butchers in India.⁴

1.03. Veterinary science in ancient India:

It is already mentioned that history of veterinary medicine in India is closely related to the development of human medicine. Ancient Indian literature is flooded with information on animal care. The treatment of animal diseases using *Ayurvedic* medicine has been mentioned in many ancient Indian texts. There had been evidence on the existence of literature on veterinary science in *Rigveda*. The nucleus of veterinary science (*PashuAyurveda*) existed in *Atharvaveda*. Before the advent of modern Veterinary science, the ethno-veterinary practices were popular in India since time immemorial.

The same physicians attended both man and animals in ancient India. Physicians treating human beings were also trained in the care of animals. During the early Vedic period Asvini Kumars, the well-known physicians of deities were also expert in *Pashu-Chikitsa*. Indian medical treatises like *Charaka Samhita*, *Susruta Samhita*, and *HaritaSamhita* contain chapters or references about care of diseased as well as healthy animals. There were, however, physicians who specialized only in the care of animals or in one class of animals only; the greatest of them was Shalihotra, first known veterinarian of the world and the father of Indian veterinary sciences. Shalihotra composed three texts in Sanskrit. Perhaps the practice of animal and human treatment acquired status of separate profession during later Vedic and epic period with the emergence of prominent veterinary experts including Shalihotra, Palkapya, Rajpaputra and Nakula.

The treatment of animal diseases using *Ayurvedic* medicine has been mentioned in *Agni Purana*, *Atri-Samhita*, *Matsya Purana*, *Skanda Purana*, *Devi Purana*, *Garuda Purana*, *Linga Purana* and many other texts. The veterinary treatment of infection of skins, horns, ears, tooth, throat, heart and navel, hemorrhagic problems, dysentery, digestive ailments, cold, parasitic diseases, stomach worms, rabies, anemia, wounds and medicines to increase milk production has been given in detail. The treatment of animal diseases in ancient India was well-developed and carried out with great care and accuracy by well-trained personnel. According to the *Susruta*

⁴Randhawa, M.S. *A history of agriculture in India*. New Delhi: Indian Council of Agricultural Research. 1980, p 412

Samhita skillful surgeons treated animals with great perfection. Various techniques of surgical operations along with instruments have been dealt in detail in Shalihotra's and Palakapya's works.

Medicinal herbs like *arjuna* (*Terminalia arjuna*), *kutaja* (*Holarrhena antidysenterica*), *kadamba* (*Anthocephalus cadamba*), *sarja* (*Vateria indica*), *neem* (*Azadirachta indica*), *ashoka* (*Saraca asoca*), *asana* (*Pterocarpus marsupium*) etc. were used widely to cure ailments of men and animals.

The earliest available works on elephantology were *Hasti-Ayurveda* and the *Gajasastra*. Both were attributed to sage Palkapya. Palkapya was the ultimate authority on elephants in India. He dealt with the anatomy, physiology, disease and management of elephants in detail. His *Hasti-Ayurveda* has 20,000 slokas, dealing with elephant medicine and surgery. In the post-Vedic literature came up *Asva-Ayurveda* - about horses, *Gau- Ayurveda*- about cows and *Ayurveda* about hawks. The veterinary science has been mentioned in the *Charakasamhita* also. It has further been elaborated in *Haritasamhita*. *GarudPurana* mentions a number of *Ayurvedic* medicines used against ailments of animals. The *AgniPurana* regarded the sage Palkapya as the expositor of the elephant science. Sage Gautama composed the *GautamSamhita* which dealt with the treatment and management of cow.

In the *Arthashastra* composed by Kautilya, the guide and political advisor of Emperor Chandragupta Maurya, a lot of information is available about different animal departments, grazing lands, rules of meat science, livestock products and veterinary jurisprudence.

Buddhism respects equality between human beings and animals and tries to solve everyday life difficulties. Biographies of the period of Buddha like *BuddhaCharita* authored by Asvaghosa reveal the fact that Lord Buddha was a great animal lover and conserver. Inscriptions, as those of Ashoka, provide information on the veterinary and animal husbandry practices in those times. During the regime of King Ashoka, many well equipped veterinary hospitals were built, probably the first ever in the world in 238 BC. During his reign, Veterinary hospitals were state institutions and medicinal herbs were made available for treatment. He arranged cultivation of herbal medicines for men and animals in his empire kingdom and adjoining kingdoms. The present-day Veterinary Council of India adopted its insignia, the sculpture of a bull and a part of

the text of the stone edict from the period of Emperor Ashoka (around 300 BC). Ashoka gave veterinary science a new turn in India.

IV. Conclusion:

According to Rene Jules Dubos ancient medicine was the mother of sciences and played a large role in the integration of early cultures.⁵From the foregoing discussion, it seems logical to conclude that the Ancient Indian civilization has one of the foremost contributors in the history of development of veterinary science and animal husbandry. In India, history of traditional Veterinary medicine dates back to the era of antiquity. Veterinary science was very well developed in ancient India. The management of various animals and care of their different diseases and disorders were attained perfection in ancient India. The literature on animal husbandry, feeding, managerial and nutritional practices in ancient India is vast and useful.

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⁵Dubos, R.J. *Man, Medicine and Environment*. New American Library, New York. 1969

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