Ethno-veterinary practices followed by Raika pastoralists of Rajasthan: A descriptive study

Deepak Chand Meena, Sanchita Garai, Sanjit Maiti, Ninad Bhatt and BS Meena

Abstract

The present study describes the traditional knowledge, practices, belief and skills of Raikas for treating their animals like goat, sheep and camels. Raikas are the nomadic livestock rearing group of Marwar region in Rajasthan. This study was conducted in Marwar region of Rajasthan which is highest populated region of Raikas. Raikas were seen using their traditional knowledge for treatment of many diseases like Bloat, Surra, Jaundice, Khurpak (foot and mouth diseases), Gogla (bottle neck), Camel Pox etc. The majority of Raikas have been using local shrub, root of plant, stem, local spices and condiments and offering pray to deity for treating their animals.

Keywords: Ethno-veterinary, pastoralists.

Introduction

Ethnoveterinary medicine (EVM) is the study of traditional practices of veterinary medicine and validating their use, benefits and using them further for treatment purpose. (Köhler-Rollefson and Bräunig, 1998) [13]. Ethno-veterinary medicine comprises the traditional management of veterinary diseases, their remedies, and the spiritual elements associated with the healing procedures practiced by a local community (Mathias, 2004; Mathias-Mundy and McCorkle, 1996; Yineger et al., 2008) [18, 19, 20]. EVM is famous due to cost effective and dynamic role (Warren, 1991). EVM can provide useful alternatives to conventional animal health care (Kumar, 2002) [17]. The mode of transfer and documentation of indigenous veterinary knowledge has been, and still is, oral and chances of partial or total loss of accumulated medical heritage is more likely (Longuefosse and Nossin, 1996; Yineger et al., 2008) [21, 20]. In Marwar region the use of Ethnoveterinary medicine is mostly followed by pastoralists. Marwar (also called Jodhpur region) is a region of southwestern Rajasthan state in North Western India. A total of 9 pastoral communities are found in Rajasthan and they are Raika, Charan, Sindhimuslim, Ahir, gujar, Gairi, Rajput, Jat, Meghwal. The Raika is the biggest pastoralists in whole India (Rollefson et al., 2004). There are two types of Raika described during the colonial period that is Maru and Godwar Raika. Maru Raika known as camel rearers and Godwar Raika known as sheep rearers (Rollesfson 2000) but nowadays both Raika types are rearing camel as well as sheep. The Raika are distributed in Haryana, Madhya Pradesh, Rajasthan etc., but, maximum population of the Raika pastoralists are found in Rajasthan. The Raika also known as Rebari, Rabha, Bhopa, Devyasi, Uwalle. Total population of the Raika is 107000 (2011 census) and amongst which population of the Raika in Rajasthan is 650000. The Raika is one of the largest groups of livestock herders inhabiting in the western districts of Rajasthan (Geerlings, 2001) [1]. The Raika rear camel not just for earning but they also believe its heritage for them. (Rathore 2001) [19]. Raikas have been using camel at the time of marriage for Toran (Entrance at bride home) and giving camel as a dowry (Rollesfon 1995, Khanna 1998) [11]. Raikas have made use of large number of indigenous plants for treating their animals especially sheep in their route of migration (Martin, M et al., 2009; Bachmann, F. 1998) [15, 14]. Due to less fertile soil in Marwar region, Raikas are well suited in agriculture along with livestock rearing. The origin of the Raikas according to Hindu mythology is from the goddess Parvati, who created first camel animal from lump of a clay. She was unable to control the beast and requested her husband Shiva for help. Shiva used piece of his skin and drops of his sweat to make the Raika to control the animal (Rollesfon, natural history). The Raika from Rajasthan are divided into two groups, the Maru and Godwar. The Maru Raikas are distributed throughout the state with major concentration around Jodhpur, Bikaner, Pali district of Rajasthan. The Godwar Raikas are concentrated in southern part of Pali district, Jalore, Sirohi, Barmer district of Rajasthan. The Raika are believed to be the sub caste of Rajput because they share many clans similar to "Rajput like Rathod, Solanki, Bhati, Parmar"
etc. These clans are called ‘NAKH’ in the Raika. These clans are further sub-divided in SHAKHS (branches). The shakhs are also known as ‘VIHOTAR’ which means Vis+Sau+Ter (20+100+13=133) e.g. Aal, Bhopu, Bhim, Chauhan, Devasi, Hathol, Garsar, Jamla, Navor, Pahwala, Patval, Ranva, Shilora etc. every year for monsoon. It is very interesting to see that Raika have good traditional knowledge regarding use of shrub, local plant at local condition for treatment of their diseases using their traditional knowledge that has been passed from generations. Rajasthan is divided in nine regions, Marwar region was further sub divided into nine regions. Among these nine regions, Marwar region was developed a variety of livestock breed based on their traditional knowledge and they are selling their developed breed in all around the India. The Raika provides service to village near their grazing land and through migratory route they supply manure to farmers. The Raikas are disseminating their traditional knowledge regarding animal’s disease treatment to another community. The Raikas are helping to conserve the biodiversity of the local ecosystem. (Raika bio-cultural protocol, 2009)

**Materials and Methods**

The aim of this study was general understanding of ethno-veterinary practices followed by Raikas. The information was collected regarding treatment of their animals for different diseases using their traditional knowledge that has been passed from generations. Rajasthan is divided in nine regions. Among these nine regions, Marwar region was selected purposively for this study. Two districts namely Pali and Jodhpur were selected and Bali and Bilara tehsils was selected from each district, respectively. From each district three villages were selected randomly and from each village twenty respondents were selected randomly. So a total of 120 respondents were selected for whole study and participatory method and personal interviewing method was followed for collecting the information. Each participant was confronted with several questions and thorough discussion was done about the practices followed in their particular tract. Villages were visited around 9-10 times for collecting and recording the data by performing personnel interview of all the participants. Finally the data was compiled based on the information collected and results were interpreted as shown in the table.

**Result and discussion**

Life of Raikas of Rajasthan is very difficult due to unavailability of feed and fodder for their animals so they used to migrate other places like Madhya Pradesh, Uttar Pradesh, and Haryana in search of fodder and in rainy season they used to stay in their native places. Group of their family is known as “Dera” and group of 8-10 families migrates together, there are 3000-4000 sheep’s in one dera. Out of 8-10 families they choose one leader who is known as Patel or numberdar. Patel should have a good relation with other community members and government officers. Marwar region of Rajasthan among the Raika pastoralists have migratory life, so they are far away from modern ethno-veterinary practices. They believe in treating their animal disease through their traditional knowledge like use of roots of plants and home spieces and for some disease they are offering pray to god Singh et al. (2013) [9]. This study was conducted among Raikas of Rajasthan and found that most of the Raikas are illiterate and their primary source of income was from animals. They are earning income through selling animals, milk, wool etc. but due to unavailability of modern technology they are treating their animal through traditional knowledge. A total of 24 practices were followed by Raikas for treating their animals like sheep, goat and camel. Raikas were mostly using alum for treatment of many diseases and alum is also known as “Ramban” among them due to many uses. They were using turpentine oil, black salt etc. for treating Bloat, Surra disease in animals. The disease was mainly seen in rainy season and in these disease animal stops to intake fodder and water. So treatment of this disease mainly followed four practices. For fatigya disease they used arid fruit kachri such kind of result also found by Dheeraj et al. 2013. In case of camel pox mix of vanaspati ghee and camel milk was used by them. They were using Adusa tree flower tea mostly for treating Jaundice and in case of outbreak they offer pray to God (IIRR 1998). So there were many traditional practices followed by them which are enlisted below in table 2.

<table>
<thead>
<tr>
<th>Sr no.</th>
<th>Animals</th>
<th>Breeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Camel</td>
<td>Mewar, Marwari, Malvibikaneri, Jaisalmeri</td>
</tr>
<tr>
<td>2</td>
<td>Goat</td>
<td>Marwari, Sirohi</td>
</tr>
<tr>
<td>3</td>
<td>Sheep</td>
<td>Boti (Marwari), Bhagali (Sonadi)</td>
</tr>
</tbody>
</table>

**Table 1: Livestock Breeds reared by the Raika pastoralist**

**Contribution of the Raika pastoral community**

- The Raika pastoralists developed a variety of livestock breed based on their traditional knowledge and they are selling their developed breed in all around the India.
- The Raika provides service to village near their grazing land and through migratory route they supply manure to farmers.
- The Raikas are disseminating their traditional knowledge regarding animal’s disease treatment to another community.
- The Raikas are helping to conserve the biodiversity of the local ecosystem.

(Raika bio-cultural protocol, 2009)

<table>
<thead>
<tr>
<th>Sr no.</th>
<th>Purpose</th>
<th>Animal</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bloat</td>
<td>Camel, Goat, Sheep</td>
<td>Turpentine oil-100 ml, Black salt-100gm, Hing-30gm, Linseed oil-500ml. First take 500ml linseed oil than mix turpentine oil after that 100gm black salt mix with turpentine oil and linseed oil than mix Hing. After that shake all the materials in 1 bottle than provide drink to animals and should not be provide water up to 2hrs</td>
</tr>
<tr>
<td>2</td>
<td>Swelling in intestine</td>
<td>Camel</td>
<td>Boil kali jiri (Centratherum Anthelminticum) with water up to 30 min than provide to animal</td>
</tr>
<tr>
<td>3</td>
<td>Broken the legs (Difficult to walk)</td>
<td>Camel</td>
<td>Cut the bark of babul (Vachellia nilotica) and mix with boil water for 1hrs and then that boiled water is provided to animals for 3 days</td>
</tr>
<tr>
<td>4</td>
<td>Neck sprain</td>
<td>Camel, Goat, Sheep</td>
<td>Applied hot iron on neck</td>
</tr>
</tbody>
</table>

**Table 2: Ethno-Veterinary Practices followed by Raikas for treating their animal**
Conclusion
From this study, it can be concluded that Raika pastoralists of Rajasthan have sufficient traditional knowledge about treating and rearing of their animals. Traditional knowledge used for treatment of animal is useful for livestock healing and methods are suitable for local environment. In addition they must be educated further so that they can take advantage of modern knowledge for rearing and treating diseased animal. The potency of this traditional medicine must be researched further in labs. The one that will be providing good results to the farmers should be used. For rearing and treating diseased animal. The potency of this traditional medicine must be researched further in labs. The one that will be providing good results to the farmers should be used.

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