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ETHNOVETERINARY HERBAL MEDICINE USED BY TRIBAL'S FOR RETENTION OF PLACENTA IN WESTERN MADHYA PRADESH, INDIA

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ABSTRACT
Present study confined to five district of mp namely Alirajpur, Barwani, Dhar, Jhabua and Khargone and densely populated by Bhil, Bhilala, Patelia and Barela tribes. Present paper deals with 16 plant species which are used in retention of placenta by tribals. These plants are distributed in 10 family and 15 genera.

KEYWORDS: Ethnoveterinary, Tribals, District, Traditional knowledge.

INTRODUCTION

Ethnoveterinary medicine is defined as system of folk believes, skills, techniques and practices related to healthcare of animals that transmitted orally from generation to generation (MC Corkle 1986). An Ethnoveterinay medicine (EVM) is a part of the traditional knowledge system that comprises of two distinct forms. One form is formal codified system of knowledge of diseases and healing for both human and animal whose principles and practices were formulated and codified in the form of Ayurveda, Sidha, and Unani. Ethnoveterinary practices are old practices perhaps started before domestication of animals. Veterinary medicine was documented in India as long as 5000BC (Saxena et al, 1998). There are local healers who are knowledgeable and experienced in traditional veterinary healthcare. These healers are called "Badwa" or Ojha they treat both human as well as animal.

STUDY AREA AND ETHNIC PEOPLE

Present study was carried out on five districts of Western Madhya Pradesh which are namely Alirajpur, Barwani, Dhar, Jhabua, and Khargone.

Geographically study area is divided into Malwa plateau, Vindhyan scaps and Narmada Valley. Most part of the study area is covered by Malwa plateau. Northern part of Dhar, Badnawar and Sardarpur tehsils of Dhar district and Jhabua district confined to Malwa plateau. Alirajpur, Bhabra, northern part of Kukshi and northern part Khargone are included in Vindhyan ranges. South-east part of Manawar and Kukshi tehsils of Dhar, part of Jobat tehsils of Alirajpur district and northern part of Barwani comes under Narmada valley. This valley is situated to south of the Vindhyan ranges. Satpura ranges lies to the southern part of Barwani and Khargone district. Main geographical formations are Deccan trap, Bagh beds, Nimar sandstones, Brown loam and laterite soils are main types of soil occupying the area. Vindhyan system, Bijawar series and granitod. The main rock types are granites, Basalt, shale, Gneisses, Quartzite, Limestone. Alluvial, Black Cotton,

The area exhibits climatic conditions ranging from dry humid to semi arid. The coldest month is the January when the average temperatures fluctuate from 22^{o}C to 32^{o}C. May-June is the hottest months and temperature varies from 41^{o}C to 47^{o} C. The annual average rainfall of study area is 822.4 mm. The main tribals inhabiting in the study area Bhil, Bhilala, Patelia and Barela. Most part of study area is dominated by Bhil tribe and its sub tribes Bhil resides in a small hut in the fringe of forest and rear cows, buffaloes, goats, cock, and dogs."Kadaknath" a local breed of chicken found in Jhabua and Alirajpur district.

METHODOLOGY

Present investigation deals with extensive ethnoveterinary survey and laboratory works. Field study was carried out among the ethnic people during 2015-2016 in different remote villages and forest area. Regular field visits were made in different selected study sites covering different seasons. Plant specimen were collected and preserved following standard method (Jain and Rao, 1977).

After establishing a good relationship with informants, interviews were conducted and a set of questions were asked. The information was further cross checked from experienced persons and veterinary doctors to determine

the authenticity. Voucher specimens were deposited in the herbarium of PMB Gujarati science college, Indore M P.

RESULT AND DISCUSSION

The placenta is expelled out in 3-6 hours in normal parturition of cattle's and buffaloes. Difficult parturition, atony of uterine muscles, improper feeding, infections and inflammation of uterus are some of reasons for retained placenta. Present study reports a total of 16 plants which are used by local inhabitants and tribals in retention of placenta. These plants are distributing in 10 family and 15 genera (Table-1). Cultivated 3 and wild 13 plants are used for retention of placenta in animals. Most frequently used plants are *Abrus precatorius* L, *Acacia nilotica* (L.) Delile, *Butea monosperma* (Lam.) Taub., *Caesalpinia bonduc* (L.) Roxb, *Ceiba pentandra* L., *Cissus quadrangularis* L., Cucumis melo var. agrestis *Naudin* Ann. *Cyamopsis tetragonoloba* (L.), *Dendrocalamus strictus* (Roxb.) Nees, *Eclipta prostrata* (L.) ,*Eclipta prostrata* (L.), *Euphorbia neriifolia* L., *Ficus hispida* L.f., *Ficus religiosa* L, *Gossypium herbaceum* L, *Hibiscus rosa-sinensis* L.

Although mode of administration uses of quantity of crude varies."Badwas" or Ojha use the locally available medicinal plants for treatment of animals. Ethnoveterinary medicines *are* cost effective and also dynamic (Warren, 1991). Significant contributions have been made in ethnoveterinary medicine in India (Borthakur & Sharma, 1996; Jain, 2000; Jain, 2003; Jain & Shrivastava, 1999; Pragad et al, 2012; Ghosh, 2002; Mukherjee, 2005; Power & Patil, 2006; Galav et al, 2005, 2007, 2010, 2011,2013).

Jain (1960) made intensive field studies among the tribals of central India. Later on several inventories and documentation of EVM plants used by ethnic people in Madhya Pradesh were recorded (Sikarwar, 1994, 1996; Kadel &Jain, 2006; Shukla et al, 2007; Dwivedi, 2009).

S No	Botanical name	Vernacular name	Family	Remedies
1	Abrus precatorius L.	Ghumchi, Ratti	Leguminosae	Seed paste of one or two seeds is given to cattle once for seven days to easy expulsion of placenta after delivery.
2	Acacia nilotica (L.) Delile	Bobliyo	Leguminosae	Decoction of 2 to 3 years matured thorns is given to cattle in removal of retained placenta after delivery.
3	Achyranthes aspera L.	Andhijhada	Amaranthaceae	Decoction of whole plant is given for removal of retained placenta after delivery.
4	Butea monosperma (Lam.) Taub.	Palas, Khakra	Leguminosae	Flowers are mixed with fodder of the animal for quick disposal of placenta after delivery.
5	Caesalpinia bonduc (L.) Roxb	Gatar	Leguminosae	20g roots and 5 pepper seeds are grinded and given before delivery for quick detachment of placenta.
6	Ceiba pentandra L.	Semal	Bombacaceae	Flowers are fed with fodder to Buffaloes for disposal of placenta after delivery.
7	Cissus quadrangularis L.	Haddijor	Viitaceae	100g stem nodes are ground and mixed in 1 liter water which is given twice a day for three day to quick detachment of placenta.
8	*Cucumis melo var. agrestis Naudin* Ann.	Kachra	Cucurbitaceae	Fresh fruit is fed with fodder for disposal of placenta after delivery.
9	Cyamopsis tetragonoloba (L.) Taub	Gawar	Legeuminosae	100g of this mixture is given to the animal with pearl millet for disposal of the placenta after the delivery.
10	Dendrocalamus strictus (Roxb.) Nees	Vashyang,	Poaceae	Decoction of stem is given to the animal for disposal of placenta after delivery.
11	Eclipta prostrata (L.) Mant	Brangharaj	Compositae	Dry seed powder is given for disposal of placenta after delivery
12	Euphorbia neriifolia L.	Danda thuar	Euphorbiaceae	Feeding of root paste with fodder is given to cow help expulsion of placenta after delivery.
13	Ficus hispida L.f.	Bhui Gular	Moraceae	Fresh leaves with Bamboo leaf (Dendrocalamus strictus) are given for quick removal of placenta after delivery.
14	Ficus religiosa L.	Pipal	Moraceae	Decoction of bark is given to cattle to remove of placenta.
15	Gossypium herbaceum L.	Kapas	Malvaceae	Paste of fruit and roots are mixed and given to cattle for the disposal of placenta.
16	Hibiscus rosa-sinensis L.	Gurhal	Malvaceae	Paste of roots is fed with fodder in retention of placenta.

Leaves (2), Seeds (3), Fruits (2), Roots (3), Stem (2,) flowers (2), Thorn (1) and whole plant (1) are most commonly plant parts used for retention of placenta by local tribals. Abrus precatorius L. is used as Ethnoveterinary remedies in retention placenta (Reddy et al, 1998; Galav et al, 2013). *Caesalpinia bonduc* (L.) Roxb is reported quick detachment of placenta in Koch Bihar district, WB (Banerjee, 2013) present study first time records *Ceiba pentandra* L., *Eclipta prostrata* (L.) L. Hibiscus rosa-sinensis L. for retention of placenta which are not reported earlier (Jain, 1999; Katewa, et al, 2003).

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Interview with tribal medicine man with help of the drenching tube

Administration of traditional medicine

Abrus precatorius L.

***Butea monosperma* (Lam.) Taub**

REFERENCES

1. Mc Corkle, C.M.: *An introduction to ethnoveterinary research and development*, J.Ethnobiol, 1986; 6(1): 129-149.
2. Jain SK and Rao RR: A Handbook of Field and Herbarium Method, Today and Tomorrows. (1977) (Oxford and IBH Publishing company, New Delhi).
3. Galav, P.K., Nag, Ambika & Katewa, S.S.: *Traditional herbal veterinary medicines from Mount Abu, Rajasthan*, Ethnobotany 2007; 19: 120-123.
4. Galav, P., Jain, Anita and Katewa, S.S.: *Traditional veterinary medicines used by livestock owners of Rajasthan*, India, Indian Journal of Traditional Knowledge, 2013; 12(1): 47-55.
5. Galave, P., Jain, A., Katewa, S.S. and Nag, Ambika: *Animal healthcare practice by livestock owners at pushkar animal fair, Rajasthan, India*, Indian Journal of Traditional Knowledge, 2010; 9(3): 581-584.
6. Ghosh, Ashis:, *Ethnoveterinary medicines from the tribal areas of Bankura and Medinipur districts, West Bengal.* Indian Journal of Traditional Knowledge, 2002; 1(1): 93-95.

7. Jain, Anita and Jain, Ashok, K.: *Ethnobotanical studies in Rajasthan, India.* Ethnobotany 2012; 24: 59-74.
8. Jain, S.K. and Rao, R.R.: *A Handbook of Field and Herbarium Method, Today and Tomorrows.* (1977) (Oxford and IBH Publishing company, New Delhi).
9. Jain, S.K. and Shrivastava, Sumita: *Some folk herbal medicine for possible use in India.* Indian Journal of Traditional Knowledge, 2003; 2(2): 118-125.
10. Jain, S.K. and Pal, D.C.: *Tribal Medicine.* (1998) *Naya Prokas publication,* Calcutta.
11. Jain, S.K.: *Ethnobotany in Human welfare.* (1996) *Deep Publications,* New Dehli.
12. Jain, S.K.: *Credibility of traditional knowledge -The criterion of multilocational and multiethnic use,* Indian Journal of Traditional Knowledge. 2004); 3(2): 137-153.
13. Jain, S.K.: *Dictionary of ethnoveterinary plants of India.* (1999)Deep publications, New Delhi.
14. Jain, S.K.: *Methods and Approaches in Ethnobotany.* Society of Ethnobotanist, Lucknow, 1989; 1-192.
15. Jain, S.K.: *Plants in Indian ethnoveterinary medicine status and prospects.* Indian Journal veterinary med. 2000; 20(1): 11.
16. Kadel, C. and Jain, A.K.: *Folklore claims on snakebite among some tribal communities of central India,* Indian Journal of Traditional Knowledge, 2008; 7(2): 296-299.
17. Kadel, C. and Jain, A.K.: *Plants used in Ethnoveterinary practices in Jhabua District, Madhya Pradesh.* Ethnobotany, 2006; 18: 149- 152.
18. Powar, Shubhangi and Patil, D.A.: *Folk remedies against disorders in Jalgaon district, Maharashtra,* Indian Journal of Traditional Knowledge, 2006; 5(3): 314-316.
19. Pragada, Pragyamurthy and Rao, Narsimha Genddada Mohan: *Ethnoveterinary medicinal practices in tribal region of Andhra Pradesh, India,* Bangladesh, J. plant Taxon, 2012; 19(1): 7-16.
20. Reddy, K.N., Bhanja, M.R. and Raju, S.: *Plants used in ethnoveterinary practice in Warangal district Andhra Pradesh, India,* Ethnobotany, 1998; 10: 75-84.
21. Dwivedi, Sumeet, Dwivedi, Abhishek and Gupta, Paras: *Role of plants as veterinary medicine from Madhya Pradesh, India,* A status survey Journal of Pharmacy Research, 2009; 2(4): 688-690.
22. Warren, D M using indigenous knowledge Agricultural development Washington. World bank Discussion paper, 1991; 127: 46.