ETHNO-VETERINARY ZOO-THERAPIES AND OCCULT PRACTICES IN GREATER CHOLISTAN DESERT (PAKISTAN)

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ABSTRACT: To gather information about ethno-veterinary zoo-therapies and occult practices, prevalent in Greater Cholistan desert (Pakistan), a survey was made from May-December 2009. Semi-structured open-ended interviews with the native veterinary zoo-therapists cum medicine men were used. Eleven animal species, that include Acanthodactylus cantoris, Bos primigenius indicus, Bufo stomaticus, Camelus ferus bacterianus, Eryx johnii, Homo sapiens sapiens, Hoplobatrachus tigerinus, Oligodon taeniolatus and Oligodon arnensis, Pavo cristatus, Uromastyx hardwickii and Varanus griseus koniecznyi were commonly used for the preparation of zoo-therapeutics. The reported nostrums were indicated for more than fifteen ailments of cholistani livestock. Occult practices are performed either on the verge of disease outbreak or to counteract the effect of evil eye or to incur financial loss to fellow pastoralists. These occult practices were mostly executed by medicine men of higher spiritual intelligence and status. It is of public good to promote those efficacious nostrums, the ingredients of which can be acquired without killing the animals.

Key words: Cholistan, Ethno-veterinary, Occult practices, Zoo-therapy.

INTRODUCTION

Zoo-therapy is the use of animal's derived medicaments to promote or safeguard or restore health. This aspect of ethno-veterinary lore is progressively gathering importance on the fronts of sustainable management and conservation of natural resources, public health policies and patents. The use of zoo-therapeutics is very old. Ancient Papyri archives (of Egypt and Mesopotamia), Chinese Traditional Medicine, *Ayurveda*, Bible, Talmud, Medicine of the Prophet[PBUH] (*Tibb al-Nabawi*) document the zoo-therapy. Even today, the use of zoo-therapeutics is in currency as sarcodes, nosodes and isodes in Chinese, *Ayurvedic*, *Unani*, Allopathic and Homeopathic medical systems. It is an established fact that ethno-medicine is the source of basic health care for 80% of the global population [1]. Everywhere in the world where zoo-therapy is in practice, occult practices (magico-religious/medico-religious) are their pivotal part [2]. Although such practices are anathemas in the civilized Islamic culture of Pakistan yet are alive in the animist tribes of Cholistan (lies between latitudes 27º42´ and 29º45´N and longitudes 69º52´and 75º24´E). These tribes include: *Maingwal*, *Boodhay*, *Gundheer*, *Banoori*, *Gepal*, *Hahni*, *Jatani*, *Baidh*, *Bhail*, *Tharkay*, *Pharhadh* and *Sayjee*. Present study was carried out to glean ethno-veterinary intelligence about zoo-therapies and occult practices from Cholistani zoo-therapists cum medicine men.

SURVEY AND INTERVIEW CONDUCTED

Participatory rural appraisal was used to glean information about ethno-veterinary zoo-therapies and occult practices from May to December 2009. During this survey, semi-structured open-ended interviews and guided dialogues with 12 selected zoo-therapists cum medicine men were used to glean intelligence regarding zoo-therapies and occult practices. The key respondents of the present study were identified during the study of Khan [3] from January 2007 to December 2008. The *aide mémoire* included the detail of animal's derived products used in zoo-therapy, production and administration protocols of medicaments and the detail of occult practices for healing. Scientific nomenclature was updated in accordance with the Integrated Taxonomic Information System [4].

These nostrums are produced under unsanitary conditions and, according to De Smet [5], are capable of producing serious adverse reactions. Furthermore, the claims of the zoo-therapists of the present study demand validation on the touch of both *in vivo* and *in vitro* scientific protocols, which will allow the utilization of zoo-therapeutics in a more scientific manner.

Although the validation of effectiveness of these occult practices is difficult yet it must be realized that any attempt to improve the lives of Cholistani pastoralists through livestock industry must begin by understanding and recognizing the evolution, application and management of these ethno-veterinary practices in their cultural and social milieus. This approach will offer sustainable strategies for the development of animal husbandry system suitable to Cholistan. Regulatory measures are also required for the use of wild fauna. In some parts of the world hunting of wild animals has brought some species on the Red List of International Union for Conservation of Nature and Natural Resources (IUCN). Fortunately, none of the species mentioned above is present on the Red List of IUCN [6](Sheikh and Molur, 2004). Nevertheless, there is need to promote those efficacious nostrums, the ingredients of which can be acquired without killing the animals.

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PREVAILING ZOO THERAPIES PRACTICES

The various animal species used by zoo-therapists of Greater Cholistan are enumerated alphabetically in Table 1.

Table 1: Nostrums Used in Zoo-therapy in Greater Cholistan Desert (Pakistan).

Sr. No.	Scientific Name (Demotic Name)	Nostrums with Indications for Usage
1	***Acanthodactylus cantoris* (*Neel Kirrah*)**	Collyrium made of dried skin is used in cases of conjunctivitis.
2	***Bos primigenius indicus* (*Gawnh*)**	Dung mixed in flowers of Rose (*Rosa damascene* Mill.) and *Neem* (*Azadirachta indica*) oil is used as a lotion in cases of dermatitis and as an acaricide in the treatment of mange. Smouldering dried dung is used as a repellent for midges and mosquitoes. Fresh dung boiled in *Neem* Oil with *Hinghot* (*Balanites aegyptiaca* Linn.) is given to camels as an anthelmintic. In case of foot rot in goats, hooves are dipped in the urine. Melted suet, mixed with *Haing* (*Ferula assafoetida* L.), *Huldhi* (*Curcuma longa* L.) and melted fat of *Sano* (*Uromastyx hardwickii*), is used as an embrocation for contused wounds, arthritis and rheumatism.
3	***Bufo stomaticus* (*Dahdar*)**	The skin of the toad is triturated with *Thoom* (*Allium sativum* L.) and the product is mixed in luke-warm water. Freshly prepared daub is used in cases of thelitis, dermatitis, decubital wounds and ripened abscess. In case of thelitis associated with desquamation, immersion of the affected teat into this solution for 5 minutes is done after the complete evacuation of udder. Oil of *Uromastyx hardwickii* is topically applied on the teat after dipping. In case of dermatitis and decubitus ulcers, the solution is applied after washing the affected surface with liquor. In case of ripened abscess, after drainage of the abscess, the cavity is packed with cotton gauze soaked in above-mentioned solution.
4	***Camelus ferus bacterianus* (*Oonth/ Dawchi*)**	Bones are calcined and the ash is mixed with powder of dried fruit of *Taroo* (*Citrullus colocynthis* Schard) and black salt. This preparation is given to cattle in cases of general weakness, pica, as appetizer and in rheumatism. Ash of the hairs is placed inside the nostrils to treat epistaxis.
5	***Eryx johnii* (*Doh Moohi*)**	Glass plates were spread with a thin layer of fat, upon which the milk of *Peela Dhatoora* (*Argemone maxicana* Linn.) is doused. These are left in the sun for about 7 hours. The preparation is vulnerary in cases of chronic cutaneous wounds.
6	***Homo sapiens sapiens* (*Minuk, Manoh*)**	Urine of male is splashed directly in the eyes of animals in case of conjunctivitis. Urine is used as a haemostatic agent in case of wounds. Spittle is spitted out into the eye in cases of excessive lacrimation. Fresh milk is expressed into the eye with excruciating conjunctivitis (*Malaish* in local dialect). In case of otorrhoea (*Poon/ Pawn* in local dialect), potash alum is mixed in the milk of woman and the solution is instilled in the ear canal.
7	***Hoplobatrachus tigerinus* (*Dahdara*)**	Paste made of powder of dried skin, litharge and honey is used for the dressing of broken horn and avulsion of horn.
8	***Oligodon taeniolatus* and *Oligodon arnensis* (*Silvee*)**	The oil derived from its fat is believed to be antirheumatic and nervine.
9	***Pavo cristatus* (*Mor*)**	Powder obtained from pulverization of dried gizzards acts as carminative, roughage and physic medicament.
10	***Uromastyx hardwickii* (*Sano*)**	The long strips of fat on each side of the backbone are boiled down and the resulting grease, after mixing with a dash of *Haingh* (*Ferula assafoetida* L.) and *Huldhi* (*Curcuma longa* L.), is used as an embrocation for contused wounds, strain, stone garget (*Bungli* in local dialect) and for ripening of an abscess.
11	***Varanus griseus koniecznyi* (*Goh*)**	Fat is used as an embrocation in arthritis (*Katchbadar* in local dialect), rheumatism (*Tut* in local dialect) and muscle-fatigue (*Raig Taal* in local dialect).

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REFERENCES

[1] Alves RRN and IL Rosa, 2005. Why study the use of animal products in traditional medicine? J Ethnobiol Ethnomed, 1: 1-5.

[2] Wanzala, W, KH Zessin, NM Kyule, MPO Baumann, E Mathias and A Hassanali, 2005. Ethnoveterinary

medicine: a critical review of its evolution, perception, understanding and the way forward. Livestock Res Rural Dev, 17: Article #119. Retrieved January 19, 2011, from http://www.lrrd.org/lrrd17/11/wanz17119.htm

[3] Khan, FM, 2009. Ethno-veterinary medicinal usage of flora of Greater Cholistan Desert (Pakistan). Pak Vet J., 29: 75-80.

[4] Anonymous, 2009. Integrated Taxonomic Information System's "Catalogue of Life: 2009 Annual Checklist" http://www.catalogueoflife.org/search.php. Accessed on 14/02/2011.

[5] De Smet, PAGM, 1991. Is there any danger in using traditional remedies? J Ethnopharmacol, 32: 43–50.m

[6] Sheikh, KM and Molur, S, 2004. (Eds.) Status and Red List of Pakistan's Mammals, Based on the Conservation Assessment and Management Plan. IUCN Pakistan, PP: 20-312.