Ethnoveterinary Knowledge and Practice among the Pastoralists of Baringo District, Kenya.

R.S. Shivairo¹, L. M. Musalia², C.I. Muleke³

- 1. Department of Clinical Studies, P.O. Box 536, Egerton, Kenya.
- 2. Faculty of Agriculture & Environment, Chuka University, Kenya
- 3. Department of Clinical Studies, P.O. Box 536, Egerton, Kenya. Email of the corresponding author: shivairo2000@yahoo.com

Abstract

A study was carried out in Marigat and Nginyang Divisions of Baringo District to document the role of Ethnoveterinary practice amongst the pastoralists. A cross-sectional survey involved administration of a questionnaire to 60 smallholders households.

The results indicated that 83% of the respondents regularly practiced ethnoveterinary in treatment of their livestock. There were 8 basic categories of disease conditions frequently treated. Coughs/Pneumonias were the most frequently treated (58.3%) followed by diarrhoeas (55%) worms (40%) and skin diseases (28.3%). A total of 32 remedies were recorded, some of them used for a wide range of disease conditions.

There were both plant-based and non-plant remedies with the Neem tree appearing as the most frequently used plant remedy, while soda ash was the most frequently used non-plant remedy.

Keywords: Ethnoveterinary, pastoralists, plant-based, non-plant based remedies. Pneumonia / coughs, diarrhoeas and skin diseases

1.0 INTRODUCTION

Baringo district is classified as 90% under Arid and Semi-arid Lands (ASAL) ALRM (1997). The mainstay of the people is livestock, especially the small ruminants, cattle and camels. Diseases are however, a major constraint to livestock production (Shivairo & Musalia, 2002).

Access to veterinary services in this district is constrained by the long distances to the nearest government veterinary offices and drug shops, and the generally high cost of the drugs.

It has been established through research that some pastoral communities such as the Samburu and the Turkana, overtime, have learnt the disease symptoms and their corresponding remedies which are developed from local and naturally occurring substances in their area (Wanyama, 1997). This knowledge which has accumulated over the years is referred to as Ethnoveterinary knowledge (EVK), defined as peoples beliefs, knowledge, skills and practices pertaining to animal health. Their study is referred to as Ethnoveterinary knowledge research and development (McCorkle *et al.*, 1992). Intermediate Technology Development Group (ITDG) has since 1986 been collecting information on EVK, especially amongst the Samburu and the Turkana communities of Kenya. A study was carried out in Marigat and Nginyang divisions of Baringo district whose objectives was to document the role of Ethnoveterinary practice amongst the pastoralist of Baringo district.

2.0MATERIALS AND METHODS

A cross-sectional survey involving the administration of a questionnaire to 60 households randomly selected was carried out. Two ASAL divisions out of the 13 were randomly selected, they were Nginyang and Marigat. Thirty households with a mean herd of 44 heads of cattle, 36 sheep and 90 goats were randomly interviewed. The key questions were on the naming and classifying of commonest diseases and the types remedies popularity used against them.

3.0 RESULTS

The results indicated that 83% of the respondents regularly practiced ethnoveterinary. Table 1 shows that the diseases could be grouped into eight categories. What the respondents referred to as 'diseases' are infact disease conditions. The local names were translated into scientific equivalents with the help of local Animal Health Assistants who participated in the exercise. The category of coughs / pneumonias was the most frequently mentioned (58.3%). In this category the stockowners appeared to be quite familiar with Contagious Caprine Pleuropneumonia (CCPP) which is known for frequent outbreaks and high mortalities in goats. There was no attempt to distinguish the actual diseases, for example, which manifest through diarrhoeas. It also emerged that the disease conditions and remedies were the same for all the animal species.

A total of 32 remedies were mentioned, some of them repeated for different disease conditions. Most of t hem were plant based. Those plants which were easily available were collected for expert botanical identification of the Botany Department, Egerton University. A number of the plants are however listed in the local language because they were said to be obtainable only from distant forests, their botanical classification could not

therefore be ascertained. There were also a number of none-plant remedies, amongst them salty soils, soda ash, oils, cowdug and python fat.

DISCUSSION AND CONCLUSION 4.0

It can be concluded from these results that EVK and practice is widespread in this community and is a community property, openly practiced unlike some communities where it is limited to a few traditional healers. The results also show striking similarities with results of work done by ITDG (Wanyama, 1997) for example, the naming of the disease conditions and the plant based remedies. 'Sukuroi' is a local Aloe plant (Aloe Secundiflora Aloeaceae) widely used to treat coughs/pneumonias, skin diseases and wounds in Baringo. The plant bears the same local name and is used to treat the same disease conditions amongst the Samburu. "Sekotei" (Salvadora Persica Salvadoraceae) and umuruai" (Plectranthus sp. - Labiatae) are other common plant remedies bearing same names and are used to treat similar disease conditions in both communities. The list of similarities includes non-plant remedies like salty soils, oils and cow dug. These examples demonstrate that EVK and practice is not only widespread, the identification of diseases and remedies may have a universal pattern, a factor which requires further research.

ACKNOWLEDGEMENTS

The authors wish to gratefully acknowledge the funding from-ILRI facilitated by Prof. S.H. Lebbie, and Egerton University for allowing me time to carry out the research.

REFERENCES

Arid Lands Resource Management (ALRM), (1997). Drought status report, April 1997. McCorkle C., Mathias-Mundy, Everlyn (1992). Ethnoveterinary Medicine in Africa, Africa 62 (1). Shivairo R.S., Musalia L.M., (2002). Coping with Production Constraints among Smallholder Pastoralists in Baringo district, Kenya. - Bull. Anim. Hlth. Prod. Afri. 50: 116 - 118.

Wanyama J. B.	., (1997). Ethnoveterinary	y knowledge. ITDG Publication	ns.
---------------	----------------------------	-------------------------------	-----

Disease conditions	Frequency	Remedy types
Coughs / Pneumonia	35/60 (58.3%)	- Azardrachta Indica (Neem tree)
		- Aloe Secundiflora Aloeaceal (Sukuroi)
		- Groton browaii
		- Soda ash
		- Others – local names koloswo, Songowowo
Diarrhoeas	33/60 (55%)	- Azardrachta Indica
		- Zizi plus Muronate
		- Acacia tortilis
		- Aloe secundiflora Alocaceae
		- Soda ash
		- Others – local names Legoiwe, Tirioni,
		Okoirwet, Ngirimen, Kamakiten
Worms	24/60 (40%)	- Azardrachta Indica
		- Soda ash
		- Salty soils
		- Others – local names Ngirimen, Kamakiten
Skin diseases	17/60 (28.3%)	- Aloe Secundiflora Aloeaceae
- Mange		- Salty soils
- Fleas		- Oil, diesel
- Lice		- Others – tobacco leaves, python fat
Retained placenta	9/60 (15%)	- Salvadora persica salvadoruceae (sekotei)
- Dystokia, infertility		- Plectranthus sp – Labiatae (Sumuruai)
Eye diseases	5/60 (8.3%)	- Cardia sinensis (salapani)
Wounds	2/60 (3.3%)	- Oils (Kinyotwo)
	· · · ·	- Aloe plant
		- Soda ash
Bloat	2/60 (3.3%)	- Oil's
	. ,	- Stomach spear / knife puncture

Table 1: Results of the survey

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage: <u>http://www.iiste.org</u>

CALL FOR JOURNAL PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <u>http://www.iiste.org/journals/</u> The IISTE editorial team promises to the review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <u>http://www.iiste.org/book/</u>

Recent conferences: <u>http://www.iiste.org/conference/</u>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

