

# **Ethnoveterinary Medicine in Ormaland - Kenya**

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## **CHAPTER 6            DISCUSSION**

### **6.1 Constraints on Methodology**

The community animal health volunteers used as translators were young Orma men who had just started training on modern veterinary medicine and had little community standing. Moreover, most of the CAHVs and a few government veterinary staff although of Orma origin because they had received formal training often did not recognize the traditional veterinary knowledge as did the local healers. Therefore the old men have basic knowledge of both EVM and MVM could have been better translators than the young men.

It is difficult to have individual interviews with Orma pastoralists, especially if interviews are in trading centers. Calling one informant means expecting a group of 4 to 8 may join and participate in the discussion. This sounds quite advantageous in getting quality information but it takes a longer time to complete one questionnaire. In addition, the author found that in such a group discussion it was impossible to separate the informants on the basis of their home areas. The author thinks that it was easier to have individual interviews if conducted in manyattas rather than in trading centres.

Banditry was a major constraint and significantly affected the survey. Although the local people have been used to such constraints fear prevented some from participating in the interviews. The Author had such experience in Garsen on 3<sup>rd</sup> of July 1999, which affected the survey for 5 days. The Kenyan government is trying to combat such vices. Research

needs a calm environment and once the government solves this problem then more researches can be implemented. Some researches in NGOs have shown great interest in Ormaland (Dolan and Mutero pers. comm.).

Logistics was the other major problem encountered in this study. Although, the author purposely selected villages near centres, he still had to either walk or hire motorcycle/bicycle to reach the Orma's manyattas about 8 to 15 km away. Lack of transport hindered access to areas of high potential for ethnoveterinary medicine such as Assa and Waldena. Therefore the author had to search for Assa stock-keepers in Garsen, the divisional headquarters, where a good number of them do shopping or come and settle with their animals at times of drought.

## **6.2 Discussion of main findings.**

The veterinarians and animal health assistants all agreed that lack of transport, limited availability of modern drugs and vastness of working territory as the major problems affecting the efficiency of veterinary services. This is in line with the Orma pastoralists on their negative perception of government veterinary services, when 73% indicated the state veterinary staff did not visit them. Therefore, it clearly shows that the government veterinary staffs have been unable to provide the service they would like to have. The reason is probably due to government having insufficient resources to run the state veterinary services despite privatisation of veterinary services in Kenya. The private veterinarians who are willing to work in pastoral areas are very few and probably going towards zero.

One of the major constraints facing the veterinary staff and the community animal health volunteers is payment for drugs by the Ormas herders. This finding gives clear implication on the poor financial ability of animal owners who cannot afford to pay for the treatment of their animals; therefore a need for alternative animal health delivery systems is indicated for future planning.

Orma pastoralists were reluctant to give the number of animals in their possession and their insight of traditional veterinary knowledge. Nevertheless the study shows that the Orma are still culturally rich and therefore the researchers working in such areas should be making particular attention to future studies and their implementation should be socially and culturally sensitive to the community they are working with (Sollod, *et al.*, 1984). This information is very important if findings are to be truly useful in shaping development interventions especially in pastoral areas.

One of the informants argued that their women are more knowledgeable than they are in terms of plant identification and its medicinal uses. This is probably due to cultural influence where the women are responsible for collecting firewood from the nearby bush. Mostly the teen group is involved in such activities and learns in the process. Despite their knowledge of ethnobotany, the Orma women cannot give details on preparation and dosage of EVM. Heffernan (1996) reported similar finding among the Samburu pastoralists.

Traditional healers were hesitant to relay the information on local treatments. There might be two possible reasons for this: one is that the knowledge is widely valued and taken as secret only to be known by

traditional healers. The second reason might be that the healers are not comfortable especially when the interviewer is an outsider or a government employee. Usually they think that in giving such information they will appear superstitious and backward. However, the healers were '*fine-tuned*' to give the information by mentioning the name of one of the famous healers who willingly delivered the information. For the healer to give a sample of the medical plants usually cost a small amount of money. The amount of money varied according to the healer or other people who had the knowledge of plants with medicinal properties. This money is placed at the bush of the plant before it is cut or uprooted as a sign of Ormas' traditional rites. The healer eventually takes the cash.

The results of the survey in Ormaland revealed that the stockowners use their own traditional medicines to treat eye infections, CBPP, blackquarter, fractures, dystocia (difficult birthing), calf adoption, uterine prolapse and oestrus ovis infestation. Herders said that trypanosomiasis is a major problem affecting their animals. This agrees with the finding by Irungu et al., (1999). The majority of the stockowners use conventional drugs such as trypanocides rather than the traditional ones. The results reveal that orthodox remedies are more effective against trypanosomes. This also reflects that the Orma livestock keepers are willing to integrate modern and traditional veterinary knowledge. The local vaccination used for CBPP by using infected lungs has been similarly found among the Somalis and the Samburus (ITDG/IIRR, 1996) except that the Ormas seem to be more advanced by using injections instead of giving orally. The reason may be probably to simplify the inoculation process, and could act as a good opening for scientists working with CBPP vaccines. The use of *mader* (*Cordia sinensis*) for treating eye infection is also reported among the

Somali herders (ITDG/IIRR, 1996). Tobacco infusion is also widely used for ophthalmic treatment by Kikuyus, Somalis and Kipsigis. (ITDG/IIRR, 1996). However, 'ophthalmic cream' made from salt and *hadano* (traditional butter) used by Ormas has not been reported elsewhere. The pastoralists seem to opt for traditional treatment when found effective.

Herders are adept at basic prenatal procedures such as in assisting normal deliveries, while elders with specialised knowledge of obstetrics are called upon to attend to more complex needs such as dystocia. Some pastoralists believe that some traditional healers have obstetric skills as good as or even better than the veterinarians.

Inadequacy of government veterinary services in Ormland is a major hindrance to animal production in the area. Traditional healers could be incorporated into the official veterinary services if trained as has been suggested by Schwabe and Kuoajok, (1989). Although some magico religious practices have no scientific interpretation, at times they lead to effective therapeutic or management action often paralleling western practice. For example, bloodletting, until recently was a common western world procedure (Mathius Mundy and McCorkle, 1989). Often most of these beliefs are overseen by scientists and taken as dubious. But if scientists can give a second thought in terms of incorporating the traditional healers then possibly a lot can be achieved in the field of animal production and health.

Ethnoveterinary medicine has stimulated a renewed interest in respect to the efficiency, advantages and inherent sustainability of some traditional veterinary and husbandry management practices. Traditional veterinary

practices have several advantages over orthodox medicine. In most they are easily available, cheap, readily accessible and culturally appropriate (Mathias et al., 1996). However, not all animal health problems are treated by EVM such as viral diseases like rinderpest and Foot and Mouth Disease (FMD). Plant harvesting and preparation can be laborious, also can be difficult to treat large herds like washing the wounds of FMD infected herd using brine. But it can be possible if the animals are near the ocean and herded along the seashore. On the other hand conventional medicines have been losing their reputation in the face of resistance as a result of drug abuse and exorbitant prices. Internationally, problems of chemotherapy resistance are compounded by the fact that the conventional drugs continue to be the corner stone of parasite control (Soll, 1997). For instance, Jackson (1993) indicated that there are a growing number of reports showing resistance to even the most recently developed dewormers. In Kenya, the drug sellers, tend to adulterate dewormers in order to make them cheaper for quick sale. There is little evidence of developing a new anthelmintic drug to replace the resistant ones (Donald, 1994). It has been reported that out of approximately 7500 compounds shown to have anthelmintic activity, only 3 are submitted for registration and eventually only one is approved for commercial sale (Soll, 1997). Such problems in the line of orthodox medicine have made most scientists renew interest in Ethnoveterinary medicine.

### **6.3 Validation and Recording**

The EVM information has been elicited among the Orma pastoralists and what remains is the validation to know which works and which does not. However, Fielding, (1999) argues that in one sense it is needless to have formal validation since the stock raisers

have been using EVM for long time and have already validated in their own ways, through many trials. Agarwal (1995) noted that indigenous knowledge differs from western scientific knowledge on substantive, methodological as well as contextual grounds, arguing that indigenous knowledge is deeply rooted in its environment and based on different values, and is assessed by different methods. In contrast, McCorkle and Bazalar (1996), argue that validation should be grounded in trial designs that are scientifically sound and credible.

EVM validation in Ormaland can be effectively done with co-operation of traditional healers and the local veterinary staff to ascertain the effectiveness of EVM. The experimental validation of traditional veterinary therapies can be appropriately conducted on farms and the integration of MVM and EVM can possibly come up with promising results. The traditional healers, the professional veterinary staff and the herders can probably be encouraged to use positively validated plants. The plants in Ormaland that are of great concern at the moment are those claimed to treat blackquarter. An example is that of *midankajibu* (*Momordica spinosa*). Such plants are widely used and need validation. Validation should be done at farm level and at the government level. Accordingly, validation and preservation of indigenous knowledge should be done internally rather than ex situ. Ex situ preservation is likely to benefit the outsiders. The scientists and pharmaceuticals companies are always screening and validating plant chemicals obtained from rural people through out the world for either publications or manufacturing of drugs, while the poor rural people giving out the traditional knowledge rarely benefit. It is because of these pathetic imbalances that intellectually property rights should be strictly considered.

## CHAPTER 7 CONCLUSIONS

Delivery of veterinary services in Ormaland is a major constraint to the livestock herders. The study confirms the hypothesis that the Government veterinary services are inefficient and therefore cannot reach most of the stock raises and that there is some ethnoveterinary knowledge that could be integrated with the modern medicine.

The poor veterinary services are due to several factors such as limited drug availability, lack of transport and lack of staff incentives. Although Orma herders appreciate the work done by community animal health volunteers, the high cost of drugs remains an issue of concern. Integrating ethnoveterinary and orthodox medicine is an important approach to achieving a sustainable animal health delivery system in the pastoral areas of Kenya.

This study has shown that there is potential ethnoveterinary knowledge that had not been previously unearthed and there is a high possibility that the Orma indigenous veterinary knowledge could disappear in the near future if not fully documented.

The Orma pastoralists have their own confidently used traditional remedies for eye infections, blackquarter, CBPP vaccination, reproductive problems like dystocia and uterine prolapse.

There is a need for further research in Ormland since there is little documented information on ethnoveterinary medicine, in particular its scientific validation.

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## APPENDIX 1

### QUESTIONNAIRE FOR VETERINARIANS/ANIMAL HEALTH ASSISTANTS IN ORMALAND

Name of Veterinarian/Animal Health Assistant .....

Name of Village ..... Job Position .....

Location ..... Qualification .....

District ..... Date ...../...../

**1. Do you offer veterinary services to Orma Pastoralists?**

Yes	
No	

**2. What type(s) of animals do you treat most frequently?**

Sheep	
Goat	
Cattle	
Camels	
Others specify	

**3. How often do you provide veterinary service?**

Once a week	
Once in two weeks	
Once in three weeks	
Once in a month	
Others, specify	

**4. By what means do you reach your Pastoralists**

.....

**5. Do you charge for the veterinary services or is it offered free?**

Free	
I always Charge	
Sometimes I charge	
I never charge	
Others, specify	

**6. What problems prevent you from offering a more efficient veterinary service?**

- a. ....
- b. ....
- c. ....
- d. ....

**7. If the Orma Pastoralists do not come for your services what do they do with the sick animals?**

Treat	
Do nothing	
No idea	
Others, specify	

**8. If they treat, what veterinary medicine do they mainly use?**

Traditional medicine	
Modern medicine	
Others, specify	

**9. Do you use any traditional medicine when rendering your service?**

Yes	
No	

**10. If yes, what makes you use traditional medicine?**

.....

.....

.....

.....

**11. Which traditional medicines are most effective?**

- |         |         |
|---------|---------|
| a. .... | f. .... |
| b. .... | g. .... |
| c. .... | h. .... |
| d. .... | i. .... |
| e. .... | j. .... |

**12. How do you use the above medicines? Give details of each.**

a	
b	
c	
d	
e	
f	
g	
h	
I	
j	

**13. Where did you learn to use traditional veterinary medicine?**

.....

**14. What are the advantages and disadvantages of traditional over that of conventional veterinary medicines?**

Advantages	Disadvantages
1.	
2.	
3.	
4.	

**15. Are your activities pastoralist driven?**

Yes	
No	

**16. What problems if any do you face with the Ormas when delivering veterinary services?**

- a. ....
- b. ....
- c. ....
- d. ....

**17. What problems do you face from the government veterinary office when rendering your veterinary service?**

- a. ....
- b. ....

**18. What is the scope for integrating traditional and modern veterinary medicines?**

- a. ....
- b. ....

**19. What development would you like to see in veterinary services in Kenya over the next 10 years?**

- a. ....
- b. ....
- c. ....

**20. Any further comments?**

.....  
.....  
.....

## APPENDIX 2

## A SURVEY OF ETHNOVETERINARY MEDICINE IN ORMALAND

Name of Farmer .....

Name of Village .....

Location .....

District .....

Experience in Livestock farming (Years) ..... Date ...../...../

**QUESTIONNAIRE****1. Which specie(s) of animals do you keep?**

Animal Specie	Number
Sheep	
Goat	
Cattle	
Camel	
Donkey	
Chicken	
Others, specify	



**3. What traditional method do you use?**

Species: -----

No.	Health problems	Ingredient/Quantity used	Preparation and method of administration	Dosage	Level of confidence

Key for confidence level: 1. High      2. Medium      3. Low.

**4. How do you know that traditional treatments are effective?**

Fully recovery       Partial recovery       Symptomatic recovery

**5. Besides the traditional veterinary medicine (TVM), do you use modern veterinary medicine?**

Yes       No

**6. If yes, when do you prefer to use modern veterinary practices?**

- When TVM does not show improvement
- For vaccination
- When TVM is not known
- Others specify .....
- .....

**7. Why do you combine traditional and modern veterinary medicine?**

Reasons:

- a. ....
- b. ....
- c. ....
- d. ....

**8. What are the advantages and disadvantages of using TVM over that of MVM?**

Advantages	Disadvantages
1.	1.
2.	2.
3.	3.
4.	4.

**9. Is there any Government Veterinarian / Animal Health Assistant, coming to treat your animals?**

Yes	
No	

**10. If yes, what problems do you encounter using Government veterinary services?**

- a. ....
- b. ....
- c. ....
- d. ....
- e. ....

**11. Do you have traditional healers?**

Yes	
-----	--

No	
----	--

**12. Have you ever taken your animals to traditional healers for treatment?**

Yes	
No	

**13. How do they treat animal?**

- a. ....
- b. ....
- c. ....
- d. ....

**14. Are the treatments successful?**

Yes	
No	

**15. The government veterinary services are efficient.**

Agree	
Strongly Agree	
Disagree	
Strongly Disagree	



Fig.15 A circular branding around the mouth for the treatment of orf disease.



Fig. 16 Midankajibu plant with the fruit .used to treat blackquarter disease.