

ASSESSMENT OF TYPES AND UTILIZATION OF ETHNO-THERAPEUTIC REMEDIES ON SOME DISEASES OF SHEEP IN MAIYAMA LOCAL GOVERNMENT AREA

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ABSTRACT

The study surveyed the types and utilization of ethno-therapeutic remedies on some diseases of sheep in Maiyama Local Government Area. Sixty (60) sheep keepers were interviewed from four (4) districts in the study area using a structured questionnaire. Results on demography, experience and flock size indicated that majority of the sheep keepers are males (91.67%) and are between the age of 61 and above, with 1 – 5 years rearing experience. Results on ethno therapeutic practice indicated that most of the sheep keepers use both traditional and conventional remedies (45%) for the treatment of livestock diseases have practiced for the past 11-20 years (38.34%). Results on alternative therapeutic remedies indicated that the majority of sheep keepers use conventional remedies (83.34%) more than traditional remedies. Result shows that the sheep keepers source their ethno therapeutic remedies from the market. The common diseases affecting livestock in the study area were identified to include diarrhoea, foot and mouth disease, milk reduction, placenta retention, ecto-parasites, muscular weakness, worm or internal parasites, dysentery, mange, catarrh, pox, contagious ecthyma, mastitis, constipation, respiratory disorder, and foot pain. The ethno-therapeutic remedies commonly used were *Khaya senegalensis*, roasted maize, salt and warm water, *Grewia mollis*, *Hibiscus esculentus*, *Balanites aegyptiaca*, dried grasses, *Polio stigma thoningi*, *Azadiracta indica*, *Guirrea senegalensis*, *Parkia biglobosa* (locust bean), wood ash, cow dung, donkey faeces, groundnut oil, shea butter, *Citrus aurantifolia*, *Carica papaya*, *Mangifera indica* and *Adansonia digitata*. It was concluded that though the sheep keepers in the study area practice ethno-therapy, they however utilize more conventional drugs for treating their animals.

Keywords: Utilization, Ethno-Therapeutic, Remedies, Diseases, Sheep

INTRODUCTION

Ethno-therapeutic research is defined by Carkle (2005) as the systematic investigation and application of animal or veterinary folk knowledge of curing, healing and managing livestock. Traditional veterinary drugs are very important in developing countries, where conventional remedies for animal health care are inaccessible or unaffordable to poor rural farmers (Mc Carcle, 2005). About 80% of the people in the world today rely on folk (or traditional medicine) for treating both human and animal diseases and infections (Sindhu *et al.*, 2010).

According to the United States or United Nations food and Agricultural organization (FAO) the lack of drugs to treat diseases and infections results in losses of 30 – 35% in the breeding sector of many developing countries where poor animal health remains the major constraint to increase production (FAO, 2002). Problem of service delivery of conventional veterinary drugs to such locations in developing countries are often exacerbated by multitude of other factors and that these factors have contributed to maintaining traditional veterinary treatment practices in these countries (Muhammad *et al.*, 2005). The extension of conventional medical veterinary service is particularly different and costly in developing world nations where necessary infrastructure (roads, clinics, labs, cold chains etc.) is poorly developed and where much of the populace and its livestock reside, in remote rural areas or may be nomadic or transhumance (Carkle and Green, 1998).

Nonetheless, much effort is needed in research and integration of the ethno-therapeutic practice activities in developing countries (Mathians *et al.*, 1997). In many native and local stock raising communities, if not all, a considerable proportion of useful ethno – knowledge and traditional animal health delivery system is available for a wider use by rural and peri – urban communities (Wabzala *et al.*, 2005). However, there is still a wide gap. Because traditional native medical practices have been in most cases either discontinued or greatly modified, there is much about them that will never be known (Lawrence, 1998). There is scarce documented information on the traditional medicine used in treating some sheep disease in this part of the country. Hence, the main aim of this research is to evaluate the ethno-therapeutic remedies of sheep in Maiyama Local Government area, Kebbi state, Nigeria.

Materials and Methods

The experiment was carried out at Maiyama Local Government Area in Kebbi state Nigeria. In this study, a survey method was used. Structured questionnaires were administered to solicit responses from the respondents. A population of this study included sixty (60) sheep keepers drawn from four (4) districts in Maiyama Local Government area. The purposive sampling technique was used to select sixty respondents across Maiyama local government area. The questionnaires were administered to the respondents in order to aid responses on the ethno-therapeutic remedies of some diseases of sheep in the study area.

Data Collection

Data were collected on demographic characteristics, years of experience and practice of ethno therapeutic remedies, level of utilization of traditional medicine, methods of utilization, types of ethno-therapeutic remedies and their mode of utilization, common diseases found and other necessary information useful to the study.

Data analysis

The data collected from respondents was analyzed through the use frequency distribution tables, and sample percentage.

RESULTS AND DISCUSSION

Demography, Experience and Flock size of sheep keepers in Maiyama Local Government Area

Results on Table 1 shows the distribution of respondents according to demographic characteristics, experience in sheep keeping and flock size. The result indicated that majority (91.67%) are males and they are within 61 and above years (33%). Most of them have 1-5years experiences in sheep keeping (31.67%) and the people that possess sheep are (35%) and they are within 11-20 years of experience in sheep keeping.

Table 1: Demography, Experience and Flock size of sheep keepers in Maiyama Local Government Area

S/N	Question	Responses			
1.	Gender	Male	Female		
		55(91.67%)	5(8.34%)		
2.	Age	20-30years	31-40years	41-60years	61and above
		10(16.67%)	13(21.67%)	17(28.34%)	20(33.34%)
3.	Years of experience in sheep keeping	1-5years	6-10years	11-20years	21 and above
		16(31.67%)	14(23.34)	19(35%)	14(23.34%)
4.	Numbers of sheep possessed	1-5years	6-10years	11-20years	21 and above
		12(20%)	14(23.34%)	21(35%)	13(21.67)

Source: Field survey, 2019.

From the result, it was observed that male (91.67%) were involved in sheep rearing more than female. This might be as a result of the scarcity of the income and resources of female. The 11-20 years (35%) experience could indicate that sheep keeping has been an old practice of most households in the communities. Majority of the respondents having 21 sheep might be as a result of lack of or the scarcity of income and resources of farmers to increase flock size which conforms to the claim that most animals are owned by resource poor farmers (Dharani *et al.*, 2015)..

Ethno Therapeutic Practices of Sheep Keepers in Maiyama Local Government Area

The results on table 2 indicated that the majority of respondents are using conventional remedy (35%) better than traditional remedy and they have been using it for 11-20 years (38.34%) and the effect of the traditional remedy are quick recovery (55%) and their sources of traditional remedies are free (51.67%) when treating their animals.

Table 2:- Ethno-therapeutic practice of sheep keepers in Maiyama local government area.

S/N	Question	Responses			
1.	With what do you use in treating your sheep or sick sheep?	Traditional	remedy	Conventional remedy	Both
		12(20%)		21(35%)	27(45%)
2.	For how long have you been using traditional remedies?	1-10years	18(30%)	11-20years	>12
				23(37.34%)	19(31.67%)
3.	What are the results of using traditional remedies?	Quick recovery		Not recovery	
		31(51.67%)		27(45%)	
4.	What is your source of traditional remedies	Free		market	
		31(51.67%)		29(48.28%)	

Source: Field Survey, 2019

The respondents used both traditional and conventional remedy for disease treatment. This might be as a result of lack of awareness on ethno-therapy. While majority of respondents have been practicing ethno-therapy for up to 11-20 years (37.34%), they reported that quick recovery (51.67%) is usually observed when they used traditional remedy. Majority of respondents reported that the traditional remedies are sourced free (51.6%) probably as a result of its natural existence in the study area.

Alternative Therapeutic Remedies of Sheep Diseases in Maiyama Local Government Area.

The results on Table 3 shows that the majority (83.34%) of the respondents uses conventional remedies. And also utilizes conventional remedy (55%) better than traditional remedies in treating sheep diseases.

Table 3: Alternative therapeutic remedies of sheep keepers in maiyama local government area.

S/N	Question	Responses	
1.	Do you use conventional remedies?	Yes	No
		50(83.34%)	10(16.67%)
2.	Between traditional and conventional remedies which one do you used regularly?	Traditional remedy	Conventional remedy
		27(45%)	33(55%)

Source: Field survey, 2019

Based on the findings of the current research, most of the respondents in the study area are using conventional remedies to cure or prevent sheep from various diseases. This might be as a result of complicated mode of utilization of traditional remedies since there is no standard composition or dosage which could limit its utilization. The respondents also reported that they utilize conventional remedies regularly (55%) more than ethno-therapy which could be as a result of lack of its complete reliability (Jacob *et al.*, 2004).

Common Diseases and their Ethno therapeutic Remedies in Maiyama Local Government Area.

The results in Table 4 indicated that the most common diseases affecting livestock in the area are diarrhea, foot and mouth diseases (FMD), milk reduction, placenta retention and ecto-parasite (like lice, tick, mites) Muscular weakness worm/Intestinal parasite (i.e. endo-parasite (Haemanchus, worms. Helminthes), catarrh, contagious ecthym (Orf), conjunctivitis, mastitis, foot pain, respiratory disorder, mange infestation and constipation. The ethnotherapeutic remedies that respondents are using in curing, treatment and preventing disease and illness of their animals are *Khaya senegalensis*, (Mahogany) roasted Maize, salt and warm water, *Grewia mollis* (Kamomowa), *Hibiscus esculentus* (Okra), *Balanites aegytraca* root (aduwa) dried grasses *Poliostigma thonigil* (camels foot), *Azadirachta indica* (Neem tree), *guirrea senegalensis* (sabara) *Pakia bigiobossa* (locust bean tree), wood arsh, cow dung, donkey faeces, ground nut oil, shea butter, *citrus aurantifolia* (lime oranges) *carica papaya* (paw paw), *Mangifera indica* (mango tree) and *Adansonia digitata* (Baobab tree).

Table 4: Common Diseases and their Ethno therapeutic Remedies in Maiyama Local Government Area.

S/N	Name of Diseases	Ethno therapeutic remedies and they are used
1.	Diarrhoea	* Using <i>Khaya senegalensis</i> bark (mahogany) and drench the animal. * Using <i>Adansonisa digitata</i> (baobab tree and give to the animal in fresh or dried form. * Using <i>citrus aurantifolia</i> (lime orange) leaves * By using <i>Magnifera indica</i> and drench the animal give to the animal.
2.	Foot and mouth disease	*By roasting of maize and give to the animal. *By washing the affected area with warm water and salt.
3.	Milk reduction	*By using <i>Grewia mollis</i> leaves (Kamomowa) and pound and extracts are drench to the animal. *By giving small amount of fresh maize to the animal.
4.	Placenta retention	*By using <i>Hibiscus esculentus</i> (okra) pound and dry the stem and extracts are drench to the animal. *By using <i>Balanites aegyptiaca</i> roots (aduwa) and extracts are drench to the animal.
5.	Ectoparasite (lice)	*By burning the dried leaves of <i>carica papaya</i> (pawpaw) and pour on the body of infected animal. *By burning the leaves of <i>Guirea senegalensis</i> (sabara) and smoke the animals with fumes.
6.	Muscular weakness	*By tie of the affected area with the twigs of <i>polistigma thoningii</i> (camel's foot Kalgo)
7.	Internal parasites	*By using <i>Azadirachta indica</i> bark (neem tree or dogonyaro) and drench the animal.
8.	Dysentery	*by using <i>Azadirachta indica</i> tree (neem tree) leaves and bark and drench the animals.
9.	Mange	*By rubbing of engine oil on the affected area Of the body. *By using shea butter oil on the affected area.
10.	Catarrh	*By smoking the fumes of <i>Azadirachta indica</i> (Neem tree) in the animal premises.
11.	Pox	*Mix half a cup of salt with I litre of warm water and wash the affected area. *By using seed of <i>Azadirachta indica</i> and make paste and aply to the affected area.
12.	Contagious ecthyma	*By using salt and warm water to wash the affected area. *By using <i>Acacia nilotica</i> pods and mix with water and wash the affected area.
13.	Mastitis	*By making paste of non-poisonous wood ash and rub to the affected udder and massage. *By burning dung of cattle and donkey faeces and apply to the udder and massage.
14.	Constipation	*By drenching small amount of groundnut oil.
15.	Respiratory disorder	*by sucking a rhizome of a <i>Zingiber officinale</i> (ginger) in water and drench the animals
16.	Foot pain	*By using locust bean seed and make paste and rub the affected area properly.

Source: Field survey, 2019

CONCLUSION

The majority of sheep keepers were male (91.67%) with 1-5 years working experience, having between 11 – 20 heads of sheep. The ethno-therapeutic remedies identified were *Khaya senegalensis* (mahogany), roasted maize, salt and worm water, *Grewia mollis* (kamomowa), *Hibiscus esculentus* (okra), *Balanites aegyptiaca* (aduwa), dried grasses, *Poliostigma thoningi* (camels foot), *Azadiracta indica* (neem tree), *Guirrea senegalensis* (sabara), *Parkia biglobosa* (locust bean), wood ash, cow dung, donkey faeces, groundnut oil, shea butter, *Citrus aurantifolia* (lime oranges), *Carica papaya* (pawpaw), *Mangifera indica* (mango), and *Adansonia digitata* (baobab tree). The sheep keepers practice ethno-therapy but are utilizing more conventional drugs for treating their animals.

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