Retrospective Study on Prevalence of Parasitic Diseases of Sheep Diagnosed At Katsina Zonal Veterinary Clinic (2012-2015)

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ABSTRACT

A four-year retrospective study was conducted to determine the distribution of parasitic diseases of sheep encountered at the zonal veterinary clinic katsina from 2012 to 2015. A total of 391 cases were recorded during the time period, out of which 115 cases of parasitic diseases were identified. The obtained data were subjected to statistical analysis using descriptive statistics. The result indicated that the overall prevalence of parasitic diseases is 29.40%, with helminthosis (26.60%) as the most prevalent parasitic disease in the study area. Other parasitic diseases of sheep identified during the study are lousiness (0.77%), coccidiosis (1.53%), and tick infestation (0.24%). It is recommended that farmers should be enlightened on the menace of these parasitic diseases, with emphasis on routine deworming, and use of appropriate drugs for prevention and control of these parasitic diseases.

Keywords : Retrospective Study, Prevalence, Parasitic Diseases, Sheep.

I. INTRODUCTION

Sheep husbandry is an economic activity being practiced globally .It is a means of livelihood to many low income farmers. The contribution of sheep includes provision of meat, milk, manure, horns, skin, and hooves (Anon, 2009). Sales of the above mentioned products ensure income generation and employment activity throughout the year for the rural household. Sheep production also serves as savings and insurance against emergencies and probable crop failure. Sheep is a major component of ruminant industry in Nigeria with an estimated population of 22.1 million (Adebowale, 2012)

Factors affecting sheep production in sub Saharan countries include diseases, poor management, and lack of proper breeding policies (Adebowale, 2012). These have been observed as major constraints to livestock production in Nigeria. (Ogbaje et al, 2012)

Parasitism exerts great economic impact on production animals worldwide, especially in developing countries mainly due to sub-clinical gastrointestinal parasitism (perry & Randolph, 1999). Endoparasitism (helminthosis and coccidiosis) has a global distribution and is one of the major causes of morbidity and mortality in tropical and sub- tropical regions of the world, specifically where adequate water and hygiene are deficient (Singla, 1995; Nwoke et al.2015). In Nigeria, helminthoses is an important killer disease of small ruminants as about 20% of total sheep and goats in Nigeria are either slaughtered or died due to this condition (Kuil, 2009). Helminthoses is the most common cause of diarrhea in ruminants; as both young and old animals are susceptible (Singh et al, 2016). This is more associated with overgrazing the pastures which force animals to graze closely to faecal materials, where infective larva of helminth parasites are mostly concentrated (Agbajelola & Falohun, 2015).

Retrospective study of animal diseases is a quick and inexpensive means of identifying the strategy for effective diseases control when analyzed statistically (Abiola et al., 2016). Therefore, the objective of this study is to determine the prevalence of parasitic diseases of sheep diagnosed at Zonal Veterinary clinic Katsina, Katsina state. The knowledge of these findings will help in improving the management, prevention, and control measures against parasitic diseases of sheep in the state.

II. MATERIALS AND METHODS

This study was carried out in Katsina metropolis. It falls into Sudan savannah ecological zone which is characterized with short raining season (May to October) and long dry season (November to April). The annual precipitation is between 50-80mm. Relative humidity ranges between 20-40% in the dry season and rises to between 60-80% in the raining season.

A four-year clinical record (2012-2015) was collected from Katsina zonal veterinary clinic. Data on diagnosed parasitic disease cases were extracted from these records. Diagnosis of each disease was carried out based on case history, physical examination, clinical signs, post-mortem and laboratory tests

The data obtained was subjected to statistical analysis using simple descriptive statistics.

III. RESULTS AND DISCUSSIONS

Out of the 391 cases recorded, 115 (29.41%) cases were found to be parasitic diseases. The results indicated that Helminthosis (26.60%) is the most prevalent parasitic disease in the study area. Coccidiosis (1.53%), lousiness (0.26), and tick infestation (0.26%) were however the least prevalent parasitic diseases identified in this study. The incidence rate of most of the parasitic diseases was higher in 2015, when compared to other sampling periods.

Table 1 : Yearly distribution of parasitic diseases of sheep diagnosed at zonal veterinary clinic Katsina from 2012-2015.

Parasitic diseases	2012	2013	2014	2015	Total	percent (%)
Helminthosis	14	19	27	45	105	26.60
Lousiness	1	0	1	1	3	0.77
Coccidiosis	1	1	2	1	6	1.53
Tick infestation	1	0	0	0	1	0.26
Total	17	20	30	48	115	29.41

The highest number of clinical diseases and disorders in this study was recorded in 2015. This was probably due to increase awareness of the hospital location and the services provided by the hospital. Of the parasitic diseases identified in this study, helminthoses (26.60%) is the most prevalent parasitic disease. This could be attributed to the management system in the study area where free range is being practiced. This is in line with (Peter et al., 2005) who pointed out that peculiarity in the management system in their study area where animals roam freely within the environment, consuming garbage sometimes from refuse heaps may have resulted to the high prevalence of helminthoses recorded. Other parasitc diseases identified during this study are coccidiosis (1.53%) lousiness (0.77%)), and tick infestation (0.26%) which are found to be of low prevalence.

IV. CONCLUSIONS

The study clearly shows that parasitic diseases are among the common diseases in the study area. To overcome this problem, there is need to enlightened farmers to adopt management practices that will help in reducing parasitic infection in their animals, and to seek veterinary attention for them when the need arises. These when carried out will improve the health status and production potentials of these animals.

V. REFERENCES

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