

Common Diseases of *Capra Hircus* in Malumfashi, Katsina State, Nigeria

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ABSTRACT: This study attempted to identify the common diseases of *Capra hircus* (Goats) diagnosed at the zonal veterinary clinic Malumfashi, Katsina Nigeria from 2013 to 2017. The data was obtained from the clinical records of diseases diagnosed at the zonal veterinary clinic during the stated period. The result shows that 143 goats were diagnosed with various diseases. Infectious diseases were the most recorded with 24.5% of the total number of cases reported. Parasitic diseases and surgical conditions made up 21.7% and 18.2% of the diseases recorded respectively. The common clinical cases of goats include helminthiasis (13.3%), Traumatic Injuries (9.1%), Mastitis (5.6%), Pes des petis ruminant (5.6%), and mange (6.3%). Goats diagnosed with traumatic injuries were the highest (9.1%) recorded after cases of helminthiasis. The low number of goats diagnosed at the clinic indicates their hardy nature and their adaptability to their environment. It is recommended that regular deworming programmes should be carried out to expel possible infestation by helminths. Proper record keeping should also be maintained in the veterinary clinics.

Keywords: goat, diseases, Veterinary clinic, record

I. INTRODUCTION

Goats have proven to be useful through the ages due to their productivity, small size and because they don't compete for food with humans. Popularly known as the poor man's cow, goats hold tremendous potential for rural prosperity under changing agroclimatic conditions and depleting resources for crop-based livelihoods. World population of goats was put at over 875.5 million by FAO in 2011 [1], while the report of National Agricultural Sample Survey cited by [2] said the population of goats in Nigeria was 72.5 million in 2011. African goat population represents 30% of Africa's ruminant livestock and produce about 17 and 12% of its meat and milk, respectively. According to the data of Food and Agriculture Organization of United Nation in 2014, the West

African population of goats was approximately 150 million heads accounting for 14.82% of goat population in the world. Nigeria (48.34%), Mali (12.76%), Niger (9.93%) and Burkina Faso (9.27%) host a large number of goats [3]. Although it's crucial importance, goats still remain largely marginalized, even at the household level [4]. [5] had asserted that 80-90% of the nation's livestock is in the hand of small holders or other traditional groups. [6] has also opined that 96.97% of animals in Nigeria are traditionally managed.

West African area involves a wide range of indigenous goat breeds well adapted to harsh environmental and precarious husbandry conditions but have low genetic potentials. The geographical distribution of the different breeds in West Africa is almost exclusively determined by the presence or absence of the tsetse fly in the region. The vast majority of sheep and goats in the areas of high tsetse challenge are the West African dwarf trypanotolerant breeds. In the savannah and the semi-arid zone, the larger sized, long-legged Sahelian breeds thrive well [7; 8]. The West African Sahelian goat is a long leg breed mainly raised mainly for meat, skin and milk production. Red Sokoto is also known as Maradi goat is used for the good quality skin production in Nigeria and Niger.

Mismanagement and high prevalence of diseases and parasites are one of most limiting factors in the development of goat farming in West Africa. Diseases cause important direct and indirect losses of the high reproductive performance diminishing the benefits for farmers. The common diseases which affect goats in sub-Saharan countries are helminthosis, peste des petits ruminants, contagious ecthyma, goat pox, pneumonia, anthrax, blackquarter, footrot, caseouslymphadenitis and brucellosis [9]. Other diseases include heartwater, coccidiosis, trypanosomiasis, Rift Valley fever, blue tongue, mastitis and tuberculosis. Mange mites, fleas, ticks, lice and *Oestrusovis* are the major ectoparasites in

feasting small ruminants in the region [10]. Physical injuries and chemical or plant poisoning are reported to occur in occasional incidences. Malnutrition is the major non-infectious cause of un-thriftiness in goats.

The aim of this paper is to identify the diseases of goat diagnosed at the zonal veterinary clinic Malumfashi during the years 2013 to 2017.

II. METHODOLOGY

Study Area

The survey was conducted at Zonal Veterinary Clinic, Malumfashi Local Government Katsina. Malumfashi, Katsina state, Nigeria. Katsina state is located in the north-western part of Nigeria between latitude 11000'N and 13020'N and longitude 7000'E and 8055'E. Katsina state shares border with Zamfara state to the west, Kaduna state to the south, Kano and Jigawa states to the east and Niger Republic to the north. It has a land size of about 24,971.215km² with a population of 5,801,584 as at 2006 national census. Katsina state falls under the tropical wet and dry climate type (Tropical Continental Climate). The average annual rainfall varies from 550 mm in the northern part to about 1000mm in the southern part of the state between May and September with high intensity between the month of July and August. The annual mean temperature is about 27⁰C. The highest air temperature normally occurs in April/May and the lowest in December through February.

Data Collection and Analysis

The data was collected from medical records of the zonal veterinary clinic Malumfashi, all cases reported were extracted and recorded accordingly.

Data collected was analyzed and summarized in tables using descriptive statistics. The occurrence

of disease diagnosed was calculated using percentages.

III. RESULTS AND DISCUSSION

143 cases of goats were registered at the clinic. When the year-wise distribution of goats' diseases was done, the highest number 38 (26.6%) of goat diagnosed was recorded in the year 2014 while the lowest 17 (11.9%) was in the year 2013 (Table 2). Common clinical cases of goats include helminthiasis (13.3%), traumatic injuries (9.1%), dog bites (63%) and mange (63%; Table 3).

Helminthiasis presents itself as the most common disease condition in goats. This agrees with reports by [11] who reported helminthiasis as the prevalent case at a private clinic in another northern city (Kaduna) in Nigeria, among cattle, dog and sheep. The management system tenable in Malumfashi may predispose goats to helminthiasis. It is a common sight to see animals roaming freely within most parts of the city consuming garbage sometimes from refuse heaps. Gastro intestinal helminth infection has been known to cause lowered productivity [12], mortality [13] and huge economic losses [14] Thus affecting income of small resourced farming communities. To plan an effective helminthes control program, a periodic surveillance of the prevalence of gastrointestinal helminths in Malumfashi and associated risk factors that influence their transmission is required. Disease occurrence during the dry season tends to rise. This may be associated with inadequate pasture which may lead to starvation. The available pasture tends to have lost their nutritive value. It is thus evident that this condition affects animals and this lack of nutrients during such seasons impairs the ability of animals to mount an immune response to fight infections. Other common diseases diagnosed in the zonal vet. clinic are traumatic injuries, bites, bloat and mastitis.

Table 1: Diseases of goat diagnosed at zonal veterinary clinic Malumfashi 2013-2017.

Disease	2013	2014	2015	2016	2017	Total	%
Infectious Diseases	1	9	7	10	8	35	24.5
Parasitic Diseases	2	3	9	8	4	31	21.7
Surgical Conditions	6	6	6	5	3	26	18.2
Digestive Disorders	1	4	6	2	3	16	11.2
Reproductive Diseases	2	4	1	3	2	12	8.4
Bites	0	3	0	4	2	9	6.3
Eye Problem	1	3	1	1	1	7	4.9
Lameness	2	2	0	0	0	4	2.8
Metabolic Diseases	0	0	0	1	0	1	0.7
Poisoning	1	0	0	0	0	1	0.7
Nervous Disorders	0	0	0	1	0	1	0.7
Total	17	38	30	35	26	143	100

Table 2: Specific diseases of goats diagnosed at the zonal veterinary clinic Malumfashi during the years 2013-2017.

Types of diseases	2013	2014	2015	2016	2017	Total	%
Infectious diseases							
Mastitis	1	3	1	3	0	8	5.6
Listeriosis	0	1	0	0	0	1	0.7
Tetanus	0	2	1	4	0	7	4.9
Metritis	0	1	0	0	0	1	0.7
Foot rot	0	1	0	0	0	1	0.7
Septicemia	0	0	0	1	2	3	2.1
PPR	0	1	2	1	4	8	5.6
Pneumonia	0	0	3	1	2	6	4.2
Parasitic diseases							
Helminthiasis	2	2	6	4	5	19	13.3
Coccidiosis	0	0	0	1	0	1	0.7
Fleas	0	0	0	0	1	1	0.7
Dermatophilosis	0	0	1	0	0	1	0.7
Mange	1	2	2	3	1	9	6.3
Surgical conditions							
Abscess	1	1	1	0	1	4	2.8
Fracture	4	2	1	1	0	8	5.6
Traumatic Injury	1	3	4	3	2	13	9.1
Atresia ani	0	0	0	1	0	1	0.7
Digestive Disorders							
Bloat	0	2	1	1	2	6	4.2
Inappetence	0	0	2	0	0	2	1.4
Constipation	0	1	0	0	0	1	0.7
Diarrhoea	1	1	3	1	1	7	4.9
Reproductive Disease							
Dystocia	1	1	0	1	1	4	2.8
Vaginitis	0	1	0	0	0	1	0.7
Retained Placenta	0	1	1	1	1	4	2.8
Orchitis	1	0	0	0	0	1	0.7
Abortion	0	1	0	1	0	2	1.4
Bites	0	3	0	4	2	9	6.3
Eye Problem	1	3	1	1	1	7	4.9
Lameness	2	2	0	0	0	4	2.8
Metabolic Diseases							
Poisoning	1	0	0	0	0	1	0.7
Nervous Disorder	0	0	0	1	0	1	0.7
Total	17	38	30	35	26	143	

IV. CONCLUSION

From the results obtained, it can be said that the low number of goats attended at the zonal Vet. clinic. However, the fewer goats presented to the clinic for treatment might be due to their hardy nature or because they are resistant to common diseases, especially in the area where they are kept.

The nature of diseases in goats in Malumfashi is similar during the years investigated. This may be due to management system thereby predisposing these animals to similar clinical disease and disorders. It has been

pointed out that animals managed under semi intensive system are predisposed to diseases and other disorders as compared to those managed under intensive system of management [16]. This is further compounded by extremes of weather conditions and other environmental factors that impair the innate or adaptive resistance of these animals and thus increase their susceptibility to these diseases and disorders [15].

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