A Retrospective Case Study of Clinical Cases Presented From January to June, 2022 at Gollis University, Veterinary Teaching Clinic in Hargeisa, Somaliland

Abdihakim Ahmed Ismail[1]
[1]Dean, School of Agriculture and Veterinary Medicine,
Gollis University, Hargeisa, Somaliland

Amal Abdulkadir Ali[2]
[2]Indepedent researcher

Abstract:- The present case studies described different clinical cases of various infectious and non-infectious diseases and their therapeutic management in different species of animals presented to Gollis University Veterinary Teaching clinic. The main aims of this study was to assess the Prevalence of clinical cases presented at Gollis University Veterinary Teaching clinic, Hargeisa, Somaliland. This study was conducted by using a retrospective case study design. The current study reveals cases of animals admitted to Gollis University Veterinary Teaching Clinic; in species were Caprine 36(57.1%), Feline 12(19.0%), Ovine 7(11.1%), Bovine 4(6.4%), Camel 2(3.2%) and Canine 2(3.2%). The sex of the animals of 50(79.4%) were females, where the rest 13(20.6%) were males. In Breed, local animals were 62(98.4%), where the exotic was 1(1.6%). The age of the animals presented in the Gollis university Veterinary clinic, 48(76.2%) were less than two years while the 2-4years were 6(9.5%) and the rest 9(14.5%) were greater than four years. The prevalence rate was observed for Dystocia 24(38.1%), trauma 9(14.2%), fracture 9(14.2%), internal parasite 5(7.9%), bloat 2(3.2%), prolapses 2(3.2%), hoof over growth 2(3.2%), local abscess 2(3.2%), wound 2(3.2%), retained placenta 1(1.6%), mastitis 4(6.4%), castration 1(1.6%). The most cases animals admitted to Gollis University Veterinary Teaching Clinic was dystocia. This may be due lack of exercise of pregnant animals and feeding of high fermented feeds. This study revealed that Caprine was the most prevalent species presented in the clinic followed by feline. Animals aged less than 2 years are most prevalent where females are predominant than males. Most cases came from Ibrahim koodbuur and 26- June. Animal owners should visit the veterinary clinics early as possible, give care and regular monitoring for pregnant animals; government should improve veterinary service provision.

Keywords:- Cases; Dystocia; Gollis University; Veterinary Clinic.

I. INTRODUCTION

Globally Livestock contributes 40% of the value of agricultural production, employs 1.3 billion people, and supports the livelihood and food security of one billion of the world's poor, most of them living in rural areas of Africa and Asia. Beyond their direct role in generating food and income, livestock are a valuable asset, serving as a store of wealth, collateral for credit and an essential safety net during times of crisis. Livestock are also central to mixed farming systems. They consume waste products, produce manure for soil fertilization and provide draught power for ploughing and transport [1].

In Somaliland the most important sector is livestock production which is predominately pastoral and agro-pastoral in Somaliland employing over 70% of the population. Livestock is the major export of Somaliland accompanied by its byproducts i.e., hides and skins while the country heavily depends on imports of food, fuel and manufactured products. Livestock production in Somaliland contributes to 60% of GDP and around 85% to foreign export earnings Based on 1998 FAO estimates of livestock numbers and past growth rates, Somaliland has about 1.69 million camels, 0.40 million head of cattle, 8.4 million goats and 8.75 million sheep in 2011. The Sool, Sanaag and Togdheer regions account for about 75% of all livestock. This is still the case in 2018 for Somaliland's economy. Somaliland's major livestock exports are sheep and goats, accounting for 91% of all animal exports. In 2010 a total of 2.352 million shoats were exported through the Berbera port (including from Ethiopian sources). Of this total, 1.612 million (69%) were exported between September and November for the Hajj festivities. Assuming an average export price of US$70, the estimated total value would be over US$160 million. Somaliland, and to a certain extent the other exporters from the Horn of Africa, depends on only a few countries for exports. For instance, of the 2.585 million head of sheep and goat exported through the Port of Berbera in 2010, about 78% went to Saudi Arabia, 20% to Yemen and the rest to Egypt and Oman [2].

However, availability and quality of animal health services is greatly affected by the efficiency and effectiveness of the governance of veterinary services. The OIE has noted that implementation of good governance depends on goods veterinary education and training [3]. It is argued that a combination of governance approaches; hierarchical, dispersed and participatory is needed for animal health services and control of diseases [4]

The present case studies described different clinical cases of various infectious and non-infectious diseases and their therapeutic management in different species of animals brought to Gollis University Veterinary Teaching clinic. Animals of different age and different species with different physiological status were examined. The examination method involved owner complaint/anamnesis, detail clinical examinations of animals and usage of differential diagnosis and investigation center smart phone as a diagnostic tool. Animals were treated and managed based on tentative diagnosis using broad-spectrum antimicrobials and supportive drugs based on the manufacturer guideline. Parallel to treatment, samples from the diseased animals were collected and processed following laboratory procedures to reach on definitive diagnosis.

Misunderstanding more about the clinical in veterinary practice and people do not focus on animal health care. Animals faced different challenges such Children are playing with animals and sometimes beat and harm, car accident, eating plastic bags and fermented leftover feed, lack of exercise, lack of health care.

The major challenges that facing animal health care and welfare is to describe prolonged absence of a central government has hindered the establishment of economic management institutions in animal health. Therefore, the this study was conducted to assess the prevalence of clinical cases handled and the major risk factors associated at Gollis University Veterinary Teaching clinic, Hargeisa, Somaliland.

II. RESEARCH METHODOLOGY

A. Study Area
This study was carried out at Gollis University Veterinary teaching clinic in Hargeisa. Gollis University is located in the center of the city (down town). Hargeisa is a capital city of Somaliland. It is located in a valley in the northwestern part of the country. The city is situated in a mountainous area; the temperature ranges between 13 and 32 o degrees Celsius (55- and 89-degrees Fahrenheit). It has a semi-arid climate. The city receives the bulk of its precipitation between the months of April and September, averaging just less than 600 mm of rainfall annually.

B. Study Design
A retrospective case report study design was carried out on Animals presented Gollis University veterinary teaching clinic from January to June 2022, for different purpose to determine the prevalence of clinical cases handled in the study area.

C. Study Animals
Study animals were Animals reared in and around Hargeisa district, presenting to Gollis University veterinary teaching clinic for different purpose.

D. Sampling Method and Sample Size Calculation
All cases presented in Gollis University Veterinary Clinic from January to June, 2022 were selected to assess prevalence of clinical cases.

E. Data Collection
Secondary data was collected from Gollis University veterinary clinical case report book from January to June, 2022, Veterinary teaching clinic. The records include all animal information, owner name, sex, species, case history, tentative, final diagnosis and treatment.

F. Data Analysis
Data was entered into Microsoft Excel spread sheet 2007 and descriptive statistics were used to determine the prevalence. All statistical analysis was performed using STATA software package version 13.

III. RESULTS AND DISCUSSION

A. Species of Animals admitted to Gollis University Veterinary Teaching Clinic
Demographic characteristic of the study animals such as species, sex, age, breed, locations were collected. This research was carried out to find the Prevalence of clinical cases presented at Gollis University Veterinary Teaching clinic, Hargeisa, Somaliland. As shown in Table 3, the species of animals. The most prevalence species were caprine 36(57.1%), Feline 12(19.0%), Ovine 7(11.1%), Bovine 4(6.4%), Camel 2(3.2%), Canine 2(3.2%). The most species presented in the clinic was caprine with different cases. This is may be due to that most people in Hargeisa rear or kept in goats for milk and meat and it may adapt to survive in the city.

TABLE I.   TABLE 1 SPECIES OF ANIMALS ADMITTED TO GOLLIS UNIVERSITY VETERINARY TEACHING CLINIC

Species	Frequency	Percentage (%)
Caprine	36	57.1
Ovine	7	11.1
Bovine	4	6.4
Camel	2	3.2
Feline	12	19.0
Canine	2	3.2
Total	**63**	**100**

B. Sex of Animals admitted to Gollis University Veterinary Teaching Clinic
As shown in Table 2, the sex of the animals out of 50(79.4%) were females, where the 13(20.6%) were males, the total number were 63 of animals. The most sex were females, animals admitted to Gollis University Veterinary Teaching Clinic, this could be that males are sold immediately while females are kept for production and reproduction.

TABLE II.   SEX OF ANIMALS ADMITTED TO GOLLIS UNIVERSITY VETERINARY TEACHING CLINIC

Sex	Frequency	Percentage (%)
Female	50	79.4
Male	13	20.6
Total	63	100

C. Breed of Animals admitted to Gollis University Veterinary Teaching Clinic

As shown in Table 3, the breed of animals. In local were 62(98.4%), where the exotic was 1(1.6%). The breed animals were in local. This could be that local animals are well adapted in the environment and brought from near rural areas.

TABLE III.   BREED OF ANIMALS ADMITTED TO GOLLIS UNIVERSITY VETERINARY TEACHING CLINIC

Breed	Frequency	Percentage (%)
Local	62	98.4
Exotic	1	1.6
Total	63	100

D. Age of Animals admitted to Gollis University Veterinary Teaching Clinic

As shown in Table 4, the age of the animals. Less than 2 years were 48(76.2%), where the two up to 4 years were 6(9.5%), the greater four years were 9(14.5%). The most cases animals admitted to Gollis University Veterinary Teaching Clinic were less than two years ages. This may be that immunity of young animals are not well developed and old animals may be sold.

TABLE IV.   AGE OF ANIMALS ADMITTED TO GOLLIS UNIVERSITY VETERINARY TEACHING CLINIC

Age	Frequency	Percentage (%)
< 2yrs	48	76.2
2-4yrs	6	9.5
> 4yrs	9	14.3
Total	63	100

E. Case of Animals admitted to GU Veterinary teaching Clinic

As shown in Table 5, the high overall prevalence rate was observed for Dystocia 24(38.1%), trauma 9(14.2%), fracture 9(14.2%), internal parasite 5(7.9%), bloat 2(3.2%), prolapses 2(3.2.%), hoof over growth 2(3.2%), local abscess 2(3.2%), wound 2(3.2%), retained placenta 1(1.6%), mastitis 4(6.4%), castration 1(1.6%). The most cases animals admitted to Gollis University Veterinary Teaching Clinic was dystocia. This may be due lack of exercise of pregnant animals and feeding of high fermented feeds.

TABLE V.   CASE OF ANIMALS ADMITTED TO GOLLIS UNIVERSITY VETERINARY TEACHING CLINIC

Clinical Case	Frequency	Percentage (%)
Dystocia	24	38.1
Trauma	9	14.2
Fracture	9	14.2
Retained placenta	1	1.6
Bloat	2	3.2
Prolapses	2	3.2
Hoof over growth	2	3.2
Local Abscess	2	3.2
Internal parasite	5	7.9
Wound	2	3.2
Mastitis	4	6.4
Castration	1	1.6
Total	63	100

TABLE VI.   ADDRESS (LOCATION) OF ANIMALS ADMITTED TO GU VETERINARY TEACHING CLINIC

Location	Frequency	Percentage (%)
Gacan libax	10	15.9
26-jue	14	22.2
Ibrahim Kodbur	17	26.9
Mohamed Moge	4	6.4
Mohamoud Haybe	5	7.9
31 May	1	1.6
Macalim Harun	4	6.4
Ahmed Dhagax	2	3.2
Out of Hargeisa	6	9.5
Total	63	100

As shown in Table 6, the location where animals came was Ibrahim Koodbuur 17(26.9%), 26-june 14(22.2%), Gacan libah 10(15.9%), Out of Hargeisa 6(9.5%), Mohamoud Haybe 5(7.9%), Macalim Harun 4(6.4%), Mohamed Mooge 4(6.4%) Ahmed Dhagah 2(3.2%) and 31May 1(1.6%). Ibrahim Kodbur was the most source of animals handled followed by 26 June, this may be due to proximity of the clinic for these districts.

IV.   CONCLUSION AND RECOMMENDATIONS

This study conclude different animals (species, age, sex and breed) were admitted to Gollis University veterinary teaching clinic for different purpose for different sources. This study revealed that Caprine was the most prevalent species presented in the clinic followed by feline. Animals aged less than 2 years are most prevalent where females are predominant than males. Al most all animals presented in the clinic were local breed. Most cases came from Ibrahim Koodbuur and 26- June districts. The most prevalent case found in this study was dystocia followed by fracture and trauma.

Based on above conclusion remark, the following recommendations were forwarded;

- Government should enhance public policy formulation about the veterinary practice and procedures which can increase animal health care and its management.
- Government should improve veterinary service provision both rural and urban.
- Farmers of livestock in Somaliland needs to have new clinical services practice that handling the animal health condition.
- Ministry of livestock and fisheries should be given public awareness and training to increase their skills towards the farmer's livestock animal health.
- Animal owners is suggested to visit the vet clinic early, for easy treatment and also care and regular monitoring should give the pregnant animals.

REFERENCES

[1]. Sansoucy, R., Livestock-a driving force for food security and sustainable development. World, 1995. 3074(5389): p. 1035.
[2]. Ministry of National Planning and Development, National Development Plan (2012-2016) https://www.refworld.org/docid/5b4310f34.html. 2011.
[3]. Seimenis, A. and G. Battelli, Main challenges in the control of zoonoses and related foodborne diseases in the South Mediterranean and Middle East region. Vet Ital, 2018. 54(2): p. 97-106.
[4]. Kitandu, L.Z., Animal health governance and services: a case of pastoralists in Ngorongoro district, Tanzania. ABC Res Alert, 2014. 2(10.18034).