Recent Apprises on Predominant Disease and Disorders Detected in BAU Vet Clinic, Mymensingh, Bangladesh

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ABSTRACT

The present study was accompanied at the Veterinary Teaching Hospital, BAU Mymensingh, since November 2023 to January 2024, to acknowledge the three months clinical study on animals. A total of 1765 clinical cases of which 427 goats, 211 cats, and 1127 cattle were examined. The clinical cases were divided into three groups: surgical, gynecological, obstetrical, and medicinal cases. In contrast with gynecological and obstetrical (cattle 3.82%, goats 7.26%, and cats 7.11%) and surgical (cattle 15.17%, goats 22.48%, and cats 19.91%) cases, the most significant percentage of cases were medicinal (cattle 81.01%, goats 69.79%, and cats 72.99%). Among the medicinal cases in cattle, parasite infestation most significant was (65.72%), than other infectious diseases (17.09%), general systemic (6.57%), and digestive disorders (3.83%). Additional cases counted like skin conditions (1.75%), respiratory disorders (1.64%), metabolic diseases (1.53%), eye disease (0.33%), urogenital disorders (0.55%), and musculoskeletal disorders (0.99%). In case of goats, general systemic diseases were maximum significant (24.16%), then parasitic diseases (21.14%), infectious diseases (20.13%), and digestive disorders (19.46%). Moreover, eye disease (5.37%), respiratory disorder (5.37%), skin conditions (2.68%), and musculoskeletal disorders (1.68%) were observed. In pet animals like cats infectious diseases were utmost significant (25.97%), compared to parasitic diseases (20.13%) and digestive disorders (19.48%). Additionally, skin diseases (11.69%), respiratory disorders (8.44%), eye disease (2.60%) and musculoskeletal disorders were (1.30%). The most prevalent gynecological and obstetric problems among the gynecological and obstetric cases were identified as repeat breeding (30.23%) in cattle, retained placenta (35.48%) in goats, and dystocia (60.00%) in cats. Hernia (26.32%) in cattle, Bone fracture (28.13%) in goats, and Bone fracture (23.81%) in cats were documented. In conclusion, the represented percentage of diseases was observed in BAU Vet Clinics and we hope that these data will support in the development strategies to regulate the most important diseases in the study area.

INTRODUCTION:

Bangladesh is one of the world's most overpopulated, rural, and agricultural nations. Also, it has the world's highest density of companion animals and livestock, including sheep, goats, buffalo, cattle, cats, and dogs. Currently, livestock population density in Bangladesh

is the highest (145/sq. km) as compared to that of India (90/sq. km) (BARC, 2015). The livestock subsector provides up to 1.85% of the national economy and 11.20% of the agricultural GDP (BER, 2023). Live-stock is important for meat and milk, and there is much demand for livestock products and by-products throughout the country. Companion animals are valuable companions that support children's physical, social, and mental growth and their owners' well-being (Robertson ID, 2000; Hayle *et al.*, 2020). Animal disease pre-valence in Bangladesh is increasing because of improper management techniques and environmental conditions suitable for disease development (U, 2014). Veterinary Teaching Hospital (VTH), Bangladesh Agricultural University (BAU), is a perfect and believable place to learn about local animal disease patterns and how to treat them. Surrounding community residents bring their sick animals to the VTH, BAU daily. Analysis of the Case data provides a complete knowledge about the disease pattern in surrounding areas.

(Zakaria Al Noman I. H., 2018) The reported 16.3% prevalence of hernia was higher among surgical cases, and crossbreeds are more susceptible than indigenous breeds in the Veterinary Teaching Hospital, Bangla-desh Agricultural University. The overall prevalence of animal disease was higher at 45.23% among animals aged 1-3 years, followed by 25.11% in animals from the 0-1year age group in Veterinary Teaching Hospital, Bangladesh Agricultural University (Y. A. Sarker, 2015). The Overall clinical incidence of medicinal cases was higher (cattle 84.1%, goat 81.0%) among surgical, gynecological, and obstetrical cases in the Veterinary Teaching Hospital, PSTU (M. A. Rahman, 2012).

This study was conducted in the Veterinary Teaching Hospital, Bangladesh Agriculture University, Mymen-singh, during a 2.5-month internship program. There-fore, this study aimed to investigate the occurrence of disease conditions in the Veterinary Teaching Hospital, Bangladesh Agricultural University in the Mymen-singh district of Bangladesh and determine the effects of diseases. The livestock and pet owners can use these statistics to help take the required preventive steps to control the disease.

MATERIALS AND METHODS:

The present study was conducted at the Veterinary Teaching Hospital, Bangladesh Agricultural Uni-versity, Mymensingh-2200, from November 1, 2023, to January 31, 2024. One thousand one hundred twenty-seven cattle, 427 goats, and 211 cats were treated at the Veterinary Teaching Hospital, Bangla-desh Agricultural University, for various diseases and conditions.

The clinical cases were categorized into three main groups: (1) Medicinal cases, (2) Gynecological and obstetrical cases, and (3) Surgical cases. The medicinal cases were further classified into major diagnostic groups for precise clinical diagnosis, including (i) systemic states, (ii) digestive disorders, (iii) respiratory disorders, (iv) eye diseases, (v) musculoskeletal dis-orders, (vi) skin conditions, (vii) parasitic diseases, (viii) infectious diseases, (ix) metabolic diseases, (x) urogenital disorders, and (xi) nutritional deficiency diseases. All data was analyzed by Microsoft Word and Excel by Student's t-Test.

RESULT AND DISCUSSION:

Among the 1127 clinical cases of ill cattle, 81.01% required medicinal treatment, 3.82% were related to gynecological and obstetric Cases and 15.17% required surgical intervention (**Table 1**). The previous report by (M. A. Rahman, 2012), which stated that 84.1% of cases were medicinal, 4.7% were gynecological and obstetrical, and 11.2% were surgical in cattle, is supported by this observation. Of the 427 clinical cases of ill goats, 69.79% required medicinal treatment, 7.29% were related to gynecological and obstetric Cases, and 22.48% required surgical intervention (**Table 2**). The previous report (MA, 2001) stated that 76.91% of medicinal, 3.67% of gynecological and obstetrical, and 19.42% of surgical cases in goats from 1999 to 2001 from the Bangladesh Agricultural University (BAU) Veterinary Clinic, Mymensingh, is supported by this observation. Of the 211 clinical cases of ill cats, 72.99% required medicinal treatment, 7.11% were related to gyneco-logical and obstetric Cases and 19.91% required surgical intervention (**Table 3**). The previous report (Bupasha1, 2015), which stated that 68.67% of cases were medicinal and 16% were surgical in cats, is supported by this observation.

Table 1: Monthly distribution of cattle diseases that were recorded at the BAU Veterinary Teaching Hospital from November 2023 to December 2024.

SL no	Diseases (Cattle)	Case no.	Nov (%)	Dec	Dec (%)	Jan	Jan (%)	Overall	Overall (%)
1	Systemic states	28	7.18	22	7.56	10	4.33	60	6.57
i.	Fever	2	0.52	1	0.34	1	0.43	4	0.44
ii.	Malnutrition	11	2.82	8	2.74	3	1.30	22	2.41
iii.	Weak calf	7	1.79	4	1.37	5	2.16	16	1.75
iv.	Ill thrift	8	2.05	9	3.08	1	0.43	18	1.97
2	Digestive disorders	17	4.36	6	2.05	12	5.19	35	3.83
i.	Bloat	8	2.05	2	0.68	4	1.73	14	1.53
ii.	Enteritis	3	0.77	0	0.00	2	0.87	5	0.55
iii.	Non-Specific Diarrhea	6	1.54	4	1.37	6	2.60	16	1.75
3	Respiratory disorders	5	2.28	5	1.71	5	2.16	15	1.64
i.	Epistaxis	1	0.26	0	0.00	1	0.43	2	0.22
ii.	Pneumonia	4	1.03	5	1.71	4	1.73	13	1.42
4	Eye diseases	1	0.26	1	0.34	1	0.43	3	0.33
i.	Bovine keratoconjunctivitis	1	0.26	1	0.34	1	0.43	3	0.33
5	Musculoskeletal disorder	2	0.51	3	1.03	4	1.73	9	0.99
i.	Arthritis	2	0.51	3	1.03	4	1.73	9	0.99
6	Skin conditions	5	1.28	6	2.05	5	2.16	16	1.75
i.	Dermatitis	3	0.77	5	1.71	5	2.16	13	1.42
ii.	Mange	2	0.51	1	0.34	0	0.00	3	0.33
7	Parasitic diseases	266	68.21	186	63.70	148	64.07	600	65.72
i.	Helminth infection	196	50.26	138	47.26	96	41.56	430	47.10
ii.	Ectoparasitic infestation	6	1.54	7	2.40	5	2.16	18	1.97
iii.	Babesiosis	2	0.51	1	0.34	3	1.30	6	0.66
iv.	Coccidiosis	2	0.51	3	1.30	4	1.73	9	0.99
v.	Balantidiasis	60	15.38	37	12.67	40	17.32	137	15.01
8	Infectious diseases	58	14.87	55	18.84	43	18.61	156	17.09
i.	Foot-and-mouth disease	8	2.05	4	1.37	3	1.30	15	1.64
ii.	Papillomatosis	4	1.03	7	2.40	8	3.46	19	2.08
iii.	Lumpy Skin Disease	36	9.23	37	12.67	28	12.12	101	11.06
iv.	Hemorrhagic septicemia	3	0.77	1	0.34	0	0.00	4	0.44
v.	Bovine ephemeral fever	7	1.79	5	1.71	4	1.73	16	1.75
vi	Rabies	0	0.00	1	0.34	0	0.0	1	0.11
9	Metabolic diseases	5	1.28	6	2.05	3	1.30	14	1.53
i.	Mastitis	3	0.77	3	1.03	2	0.87	8	0.88
ii.	Milk fever	2	0.51	3	1.03	1	0.43	6	0.66
10	Urogenital disorders	3	0.77	2	0.68	0	0.00	5	0.55
i.	Semen out	2	0.51	2	0.68	0	0.00	4	0.44
ii.	Balanoposthitis	1	0.26	0	0.00	0	0.00	1	0.11
	Sub-total (Medicinal cases)	390	82.98	292	80.66	231	78.31	913	81.01
1	Repeat breeding	5	29.41	4	30.77	4	30.77	13	30.23
2	Anestrus	3	17.65	2	15.38	4	30.77	9	20.93
3	Retained placenta	4	23.53	4	30.77	2	15.38	10	23.26
4	Uterine prolapsed	1	5.88	2	15.38	1	7.69	4	9.30
5	Dystocia	4	23.53	1	7.69	2	15.38	7	16.28
	Sub-total (Gynaeco-obstetrical cases)	17	3.62	13	3.59	13	4.41	43	3.82
1	Abscess	2	3.17	5	8.77	4	7.48	11	6.43
2	Navel-ill	20	31.75	14	24.56	6	11.76	40	23.39
3	Upward patellar fixation	1	1.59	0	0.00	2	3.92	3	1.75
4	Myiasis	7	11.11	3	5.26	2	3.92	12	7.02
5	Nasal polyps	1	1.59	0	0.00	0	0.00	1	0.58
6	Urolithiasis	1	1.59	4	7.02	2	3.92	7	4.09
7	Dermoid cyst	3	4.76	3	5.26	4	7.84	10	5.85
8	Tumor	1	1.59	0	0.00	0	0.00	1	0.58
9	Dog biting	0	0.00	3	5.26	5	9.80	8	4.68
10	Hernia	18	28.57	12	21.05	15	29.41	45	26.32
11	Atresia Ani	2	3.17	3	5.26	2	3.92	7	4.09
12	Bone fracture	6	9.52	10	17.54	8	15.69	24	14.04
13	Knuckling	1	1.59	0	0.00	1	1.96	2	1.17
	Sub-total (Surgical cases)	63	13.40	57	15.75	51	17.29	171	15.17
	Overall	470		362		295		1127	

This study involved 913 medical cases in cattle; the cases were divided into ten groups. The results showed that parasite infections accounted for the most significant percentage of cases (65.72%), followed by systemic states (6.57%%) and digestive disorders (3.83%). Respiratory disorders comprised 1.64% of the cases, while skin conditions, infectious diseases, and eye diseases comprised 1.75%, 17.09%, and 0.33% of the total, respectively. The least common instances were musculoskeletal disorders (0.9%), urogenital disorders (0.55%), and metabolic diseases (1.53%) (**Table 1**).

The cases with the fewest records where this observation contradicts the previous report by, (M. A. Rahman, 2012), which identified 65.72% of parasitic diseases, 6.57% of systemic states, 3.83% of digestive disorders, and 17.09% of infectious diseases as related to these conditions. It is well known that disease incidence varies with geographic location. However, other diseases and conditions recorded by (M. A. Rahman, 2012) were almost similar in the occurrence with the present study. In a study involving 427 medical cases of cats, the cases were divided into eight groups. The results showed that systemic states accounted for the most significant cases (24.16%). This study involved 298 medical cases in goats, divided into eight groups. The results showed that systemic states accounted for the most significant percentage of cases (24.16%), followed by parasitic diseases (21.14%), digestive disorders (19.46%), infectious diseases (20.13%), respiratory disorders (5.37%), and eye diseases (5.37%) cases, respectively. The cases with the fewest records were skin diseases (2.68%) and Musculoskeletal disorders (1.68%) (**Table 2**). The cases with the fewest records where this observation contradicts the previous report by, (M. A. Rahman, 2012), which identified 16.8% of respiratory disorders, 13.5% of eye diseases, 11.8% of infectious diseases, and 9.6% of systemic states as related to these conditions. It is well known that disease incidence varies with geographic location. However, other diseases and conditions recorded by (M. A. Rahman, 2012) were almost similar in the occurrence with the present study. This study involved 154 medical cases in cats, divided into eight groups. The results showed that infectious diseases accounted

for the most significant percentage of cases (25.97%), followed by parasitic diseases (20.13%), digestive disorders (19.48%), skin diseases (11.69%), systemic states (10.39%), and respiratory disorders (8.44%) cases, respectively. The cases with the fewest records were eye diseases (2.60%) and Musculoskeletal disorders (1.30%) (**Table 3**). The cases with the fewest records where this observation contradicts the previous report by, (U. Yadav, 2017) which identified 9.30% of infectious diseases, 24.42% of parasitic diseases, 4.65% of respiratory disorders, and 11.69% of skin diseases are not as related to these conditions. It is well known that disease incidence varies with geographic location and season. However, other diseases and conditions recorded by (U. Yadav, 2017) were almost similar in occurrence to the present study.

Medicinal Cases
General Systemic States
Under the general systemic states, fever and malnutrition in cattle and goats, Weak calves and ill-thrift in cattle, and anemia in goats were identified (**Tables 1** and **2**). It was determined that 7.05% of goats and 0.44% of cattle were affected with fever of unknown cause. The percentages of fever occurrence in this study are significantly lower than the 5.1% in cattle reported in the previous report (M. A. Rahman, 2012) and significantly higher than the 4.4% of occurrences of fever in goats reported in the previous report (M. A. Rahman, 2012)

Malnutrition was recorded in 2.41% of cattle and 11.41% of goats (**Tables 1** and **2**). (M. A. Rahman, 2012) Who reported higher percentages of 4.9% malnutrition in cattle and lower percentages of 8.2% in goats. In this study,1.75% of weak calves and 1.97% of ill thrift were recorded in cattle (**Tables 1** and **2**). (Samad, 2019) Who reported higher percentages of 3.14% weak calves and 3.62% ill thrift in cattle.

Digestive disorders
This study recorded 1.75% of non-specific diarrhea in cattle (**Table 1**), which is much smaller than (Samad, 2019), which reported 19.53%. The result supports (R. Majumder, 2022), who reported 2.52% of non-specific diarrhea in cattle. In the case of goats, 8.72% of non-specific diarrhea was recorded (**Table 2**), which is smaller than (M. A. Rahman, 2012) who reported

12.1%. The result supports (M.A. Hossain, 2021), who reported 9.54% of non-specific diarrhea in goats. It was determined that 0.34% of goats and 0.55% of cattle were affected by enteritis (**Tables 1** and **2**). The percentage of enteritis in this study is significantly lower than the 6.1% and 3.6% occurrence in goats and cattle reported in the previous report (M. A. Rahman, 2012). This study recorded 1.53% of bloat in cattle (**Table 1**), which is almost similar to (M. *et al*., 2012) and (Samad, 2019), who reported 2.2% and 2.86%, respectively. In the case of cats, 19.48% of digestive disorders were recorded (**Table 3**). The result supports (U. Yadav, 2017), who reported 17.44% of digestive disorders in cats.

Respiratory disorders
This study recorded 1.42% of pneumonia in cattle (**Table 1**), which is smaller than the previous report (Samad, 2019); (M. A. Rahman, 2012) who reported 3.03% and 5.1%, respectively. However, the result supports (Juli Most Sogra Banu, 2015) who reported 1.76% of pneumonia in cattle. 0.22% of epistaxis was

Eye diseases
This group included goats with corneal opacity and conjunctivitis and cattle with bovine kerato-conjunctivitis (**Tables 1** and **2**). Goats (5.37%) had a comparatively more significant percentage of eye diseases than cats (2.60%%) and cattle (0.33%). This study recorded 3.36% of corneal opacity in goats (**Table 2**) and supports the finding of (M.A. Hossain, 2021) who recorded 4.70% corneal opacity in goats. The study recorded 2.06% of conjunctivitis in goats (**Table 2**), which is lower than (M. A. Rahman, 2012) Who reported 3.6% and higher than (M.A. Hossain, 2021) Who reported 0.36% of conjunctivitis in goats. In the case of cats, 2.60% of eye diseases were recorded (**Table 3**), which is lower than (BUPASHA, 2015) and (Md. Anowar Parvez, 2020) Who reported 6% and 4% eye diseases in cats, respectively.

Musculoskeletal disorders
This study recorded 0.99% of arthritis in cattle (**Table 1**), similar to the previous report. (M. A. Rahman, 2012) Which recorded 0.99% of arthritis in cattle. In the case of goats, 1.68% of arthritis was recorded (**Table 2**), the result lower than the reports of (M. A. Rahman, 2012) Who recorded 3.3% of arthritis in

goats. Musculoskeletal disorders were reported in 1.30% of cats (**Table 3**), and the absence of comparable inland reports made it difficult to compare this observation.

Skin conditions
This study recorded 1.75% and 0.33% of dermatitis and mange in cattle, respectively (**Table 1**), which is lower than (Samad, 2019) who reported 2.97% and 2.99% of dermatitis and mange in cattle, respectively. On the other hand, 2.86% of dermatitis in goats was higher than the previous report. (M. A. Rahman, 2012) Who recorded 0.6% of dermatitis in goats. In the case of cats, 11.69% of skin diseases were recorded (**Table 3**), the result higher than the observation of (BUPASHA, 2015) and (U. Yadav, 2017) who recorded 4% and 7.56%, respectively.

Parasitic diseases
In this study, parasitic infections at 65.72% were observed as the highest in cattle across the various major diagnostic categories. Within this category, the prevalence of helminth infestation was observed to be highest in goats and cattle; this observation recorded 47.10% and 11.74% of helminth infestation in cattle and goats (**Tables 1** and **2**). Previous study report (M. A. Rahman, 2012) who recorded 32.2% and 11.74% of helminth infestation in cattle and goats, respectively. The present study recorded 0.66% and 0.99% of babesiosis and coccidiosis in cattle, respectively (**Table 1**), and supports the findings of (Samad, 2019) and (A. T. M. Badruzzaman, 2015) Who recorded 0.81% and 0.46% of babesiosis and coccidiosis in cattle, respectively. In this study, balantidiasis and ectoparasitic infestations were 15.01% and 1.97% in cattle (**Tables 1** and **2**), which is higher than (Samad, 2019) Who recorded 1.51% of balantidiasis infestation in cattle, and lower than (Samad, 2019) Who recorded 4.97% of ectoparasite infestation in cattle. In the case of goats, 4.36% of ectoparasitic infestations, 1.34% of babesiosis, and 3.69% of coccidiosis were recorded (**Table 2**). This observation supports the previous report of (M. A. Rahman, 2012) Who reported 2.5% ectoparasitic infestations, 0.6% babesiosis, and 1.4% coccidiosis. In the case of cats, 20.13% of parasitic diseases were recorded (**Table 3**), which supports the finding of (U. Yadav, 2017) Who recorded 24.42% of parasitic diseases in cats.

Infectious diseases
This study recorded 2.08% papillomatosis, 0.44% hemorrhagic septicemia, and 0.11% rabies in cattle (**Table 1**), which supports the previous report (A. T. M. Badruzzaman, 2015) Who recorded 1.41% papillomatosis, 0.27% hemorrhagic septicemia, and 0.12% rabies in cattle. This study recorded 1.64% FMD and 1.75% bovine ephemeral fever cases in cattle (**Table 1**). The result supports (Juli Most Sogra Banu, 2015) who recorded 1.02% FMD and 2.50% bovine ephemeral fever in cattle. This study recorded 11.06% Lumpy skin disease in cattle (**Table 1**), which is higher than (Hemayet Hossain, 2023) Who recorded 4.67% of the cases of lumpy skin disease in cattle. According to **Table 3**, the most common infectious diseases affecting goats were tetanus (1.01%), PPR (10.40%), foot root (1.68%), and contagious ecthyma (7.05%) in goats. Tetanus was estimated to be 0.98%, and foot root was 0.98%, according to the previous report (Hemayet Hossain, 2023) Which supports this observation (Kazi Abdus Sobur, 2024) A 9.43% PPR was reported in goats, which supports this observation. In the case of cats, 25.97% of parasitic infestations (**Table 3**), which is higher than (Md. Anowar Parvez, 2020) Who recorded 14% of parasitic infestations in cats.

Metabolic diseases
Cattle in this group were diagnosed with mastitis (0.88%) and milk fever (0.66%) (**Table 1**). This observation supports the previous report of (Juli Most Sogra Banu, 2015) and (M. A. Rahman, 2012) Who reported 0.73% mastitis and 0.4% milk fever in cattle.

Urogenital disorders
This study recorded 0.44% of semen out and 0.11% of balanoposthitis in cattle (**Table 1**) and supports the finding of (M. A. Rahman, 2012) who recorded 0.6% of semen out and 0.1% balanoposthitis in cattle.

Gynecological and obstetrical cases
Repeat breeding
This study was recorded in 30% of cattle and 3.23% of goats (**Tables 1** and **2**). This observation is higher than the previous report (M. A. Rahman, 2012) Who recorded 16.2% in cattle and lower than in goats (M. A. Rahman, 2012) Who recorded 20%.

Table 2: Monthly distribution of goat diseases that were recorded at the BAU Veterinary Teaching Hospital from November 2023 to December 2024.

Sl. no.	Diseases (Goat)	Nov	Nov %	Dec	Dec %	Jan	Jan %	Overall	Overall %
1	Systemic states	26	23.01	21	23.86	25	25.77	72	24.16
i.	Fever	7	6.19	5	5.68	9	9.28	21	7.05
ii.	Malnutrition	14	12.39	9	10.23	11	11.34	34	11.41
iii.	Anemia	5	4.42	7	7.95	5	5.15	17	5.70
2	Digestive disorders	18	15.93	21	23.86	19	19.59	58	19.46
i.	Bloat	4	3.54	8	9.09	6	6.19	18	6.04
ii.	Simple indigestion	3	2.65	4	4.55	6	6.19	13	4.36
iii.	Enteritis	1	0.88	0	0.00	0	0.00	1	0.34
iv.	Diarrhea	10	8.85	9	10.23	7	7.22	26	8.72
3	Respiratory disorder	4	3.54	7	7.95	5	5.15	16	5.37
i.	pneumonia	4	3.54	7	7.95	5	5.15	16	5.37
4	Eye diseases	7	6.19	3	3.41	6	6.19	16	5.37
i.	Conjuntivitis	4	3.54	1	1.14	1	1.03	6	2.01
ii.	Corneal opacity	3	2.65	2	2.27	5	5.15	10	3.36
5	Musculoskeletal disorder	2	1.77	2	2.27	1	1.03	5	1.68
i.	Arthritis	2	1.77	2	2.27	1	1.03	5	1.68
6	Skin condition	1	0.88	5	5.68	2	2.06	8	2.68
i.	Dermatitis	1	0.88	5	5.68	2	2.06	8	2.68
7	Parasitic condition	30	26.55	12	13.64	21	21.65	63	21.14
i.	Helminth infection	21	18.58	5	5.68	9	9.28	35	11.74
ii.	Ectoparasitic infestation	4	3.54	2	2.27	7	7.22	13	4.36
iii.	Babesiosis	2	1.77	1	1.14	1	1.03	4	1.34
iv.	Coccidiosis	3	2.65	4	4.55	4	4.12	11	3.69

8	Infectious diseases	25	22.12	17	19.32	18	18.56	60	20.13
i.	Tetanus	1	0.88	0	0.00	2	2.06	3	1.01
ii.	PPR	14	12.39	10	11.36	7	7.22	31	10.40
iii.	Foot-rot	1	0.88	2	2.27	2	2.06	5	1.68
iv.	Contagious ecthyma	9	7.96	5	5.68	7	7.22	21	7.05
	Sub-total (medicinal cases)	113	74.34	88	67.69	97	66.90	298	69.79
1	repeat breeding	1	8.33	0	0.00	0	0.00	1	3.23
2	Uterine prolapsed	2	16.67	1	11.11	1	10.00	4	12.90
3	Dystocia	4	33.33	2	22.22	3	30.00	9	29.03
4	Retention of Placenta	4	33.33	3	33.33	4	40.00	11	35.48
5	Anestrus	2	16.67	4	44.44	2	20.00	8	25.81
	Sub-total (Gynaeco-obstetrical cases)	13	7.24	10	6.92	10	6.90	33	7.26
1	Abscess	4	16.00	3	9.09	3	7.89	10	10.42
2	Traumatic wound	0	0.00	2	6.09	1	2.63	3	3.13
3	Castration	2	8.00	3	9.09	7	18.42	12	12.50
4	Myiasis	4	16.00	4	12.12	6	15.79	14	14.58
5	Fracture	8	32.00	9	27.27	10	26.32	27	28.13
6	Gid disease	2	8.00	3	9.09	1	2.63	6	6.25
7	Urolithiasis	5	20.00	2	6.06	4	10.53	11	11.46
8	Dog biting	0	0.00	7	21.21	6	15.79	13	13.54
	Subtotal surgical cases	25	16.45	33	25.38	38	26.21	96	22.48
	Overall	152		130		145		427	

Anestrus

This study was recorded in 20.93% of cattle and 35.48% of goats (**Tables 1** and **2**). This observation is lower than the earlier report (M. A. Rahman, 2012) who recorded 59.5% of anestrus in cattle.

Retained placenta

This study was recorded in 23.26% of cattle and 35.48% of goats (**Tables 1** and **2**). This finding does not support the previous report (M. A. Rahman, 2012) and (M.A. Hossain, 2021) Which reported 8.1% for cattle and 1.39% for goats, respectively.

Uterine prolapsed

This observation was recorded in 9.30% of cattle, 12.90% of goats, and 40% of cats (**Tables 1, 2,** and **3**) (M. A. Rahman, 2012) Who reported 8.1% for cattle and 20% for goats?

Dystocia

This observation was recorded in 16.28% of cattle, 29.03% of goats, and 60% of cats (**Table 1, 2,** and **2**) (M. A. Rahman, 2012) Who reported 1.1% for cattle and 20% for goats?

Surgical cases
Abscess

Abscess was recorded in 6.43% of cattle, 10.42% of goats, and 14.29% of cats (**Tables 1, 2,** and **3**). This observation almost supports the report of (Zakaria Al Noman I. H., 2018) Who reported that 7.16% of goats. (Zakaria Al Noman I. H., 2018) Who Reported a high percentage of abscesses, 14.54% in cattle. In the case of cats, 14.29% of abscesses were significantly lower than previously reported (U. Yadav, 2017) Who recorded 0.58%.

Table 3: Monthly distribution of cat diseases that were recorded at the BAU Veterinary Teaching Hospital from November 2023 to December 2024.

Diseases (Cat)	Nov	Nov %	Dec	Dec %	Jan	Jan %	Overall	Overall %
Systemic states	5	10.87	7	12.28	4	7.84	16	10.39
Digestive disorders	10	21.74	12	21.05	8	15.69	30	19.48
Respiratory disorder	2	4.35	4	7.02	7	13.73	13	8.44
Eye diseases	2	4.35	1	1.75	1	1.96	4	2.60
Musculoskeletal disorder	1	2.17	0	0.00	1	1.96	2	1.30
Skin conditions	4	8.70	6	10.53	8	15.69	18	11.69

Parasitic diseases	12	26.09	10	17.54	9	17.65	31	20.13
Infectious diseases	10	21.74	17	29.82	13	25.49	40	25.97
Sub-total (Medicinal cases)	46	66.67	57	78.08	51	73.91	154	72.99
Uterine prolapsed	3	60.00	1	20.00	2	40.00	6	40.00
Dystocia	2	40.00	4	80.00	3	60.00	9	60.00
Subtotal (Gynaeco-obstetrical)	5	7.25	5	6.85	5	7.25	15	7.11
Abscess	2	11.11	3	27.27	1	7.69	6	14.29
Traumatic wound	2	11.11	1	9.09	0	0.00	3	7.14
Castration	5	27.78	2	18.18	2	15.38	9	21.43
Spaying	3	16.67	2	18.18	4	30.77	9	21.43
Myiasis	1	5.56	2	18.18	1	7.69	4	9.52
Fracture	4	22.22	1	9.09	5	38.46	10	23.81
Tumor	1	5.56	0	0.00	0	0.00	1	2.38
Sub-total (Surgical cases)	18	26.09	11	15.07	13	18.84	42	19.91
Overall	69		73		69		211	

Traumatic wound

This study was recorded in 3.13% of goats and 6.98% of cats (**Tables 2** and **3**) and supported the finding of (Zakaria Al Noman I. H., 2018) and (U. Yadav, 2017) Who reported that 3.34% of goats and 6.98% of cats, respectively.

Navel ill

This study was recorded in 23.39% of cattle (**Table 1**), which is lower than (M. A. Rahman, 2012) and (Zakaria Al Noman I. H., 2018) Who reported 10.1% and 5.85%, respectively.

Hernia

This study was recorded in 26.32% of cattle (**Table 1**), which is lower than (Zakaria Al Noman I. H., 2018) who reported 16.13%.

Myiasis

This study was recorded in 7.02% of cattle, 14.58% of goats, and 9.52% of cats (**Tables 1, 2,** and **3**) (Zakaria Al Noman I. H., 2018) who reported 10.46% in cattle and 9.31% in goats.

Gid disease

This study recorded 6.25% of cattle (**Table 1**), which is higher than the previous report (Zakaria Al Noman I. H., 2018) who recorded 2.63% in cattle.

Castration

Around 12.50% of castration cases were recorded in goats (**Table 1**), which is lower than the previous report. (Zakaria Al Noman I. H., 2018) Who recorded 32.46% in goats. In the case of cats, 21.43% of castration cases were recorded (**Table 3**), which is

significantly higher than (U. Yadav, 2017) who recorded 1.16%.

CONCLUSION:

The represented data will provide an overall idea regarding the prevalent diseases of cattle, goats, and cats in the Mymensingh district. However, this study would provide foundations for further extensive studies related to these clinical conditions, which are necessary to design preventive and control measures against these clinical conditions in Bangladesh.

ETHICAL STATEMENT:

All of the methods and experimental procedures were conducted according to the approved guidelines by the ethical committee of PSTU.

AUTHOR CONTRIBUTIONS:

M.M.S.; and M.R.M. Performed the data collection, Writing and drafted the whole manuscript; N.A.; M.I.H.; M.T.R. Helped in data collection; M.K.K.; M.J.A.; B.A. Helped in data collection; A.A. Helped in data analysis, Review & English editing; M.M.R.C. Supervise, methodology, conceptualization. Developed the research idea and conducted the analysis of data, and helped in data collection, writing the whole manuscript and also review & editing.

CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

REFERENCES:

1) Badruzzaman ATM. (2015). Prevalence of infectious and non-infectious diseases in cattle population in Chittagong district of Bangladesh. *International Journal of Biological Research*, 1-4.
https://doi.org/10.14419/ijbr.v3i1.3760

2) BARC. (2015). Agriculture Research Priority: Vision-2030 and Beyond (Sub-sector: Livestock)*.* Dhaka: Bangladesh Agriculture Research Council, Farmgate, Dhaka.

3) BER. (2023). Bangladesh-Economic-Review-2023. Retrieved from mof.portal.gov.bd:
https://mof.portal.gov.bd/site/page/28ba57f5-59ff-4426-970a-bf014242179e/Bangladesh-Economic-Review-2023

4) Bupasha MS. (2015). Prevalence of Clinical Conditions in Dogs and Cats at Central Veterinary Hospital (CVH) in Dhaka, Bangladesh. *Van Veterinary Journal*, 101-105.
http://vfdergi.yyu.edu.tr

5) Hemayet H. (2023). Epidemiological Assessment of Some Infectious and Non-Infectious Diseases and Disorders of Cattle and Goat at Certain Milk-Pocket Area of Sirajganj, Bangladesh. *Veterinary Sciences: Research and Reviews*.
https://dx.doi.org/10.17582/journal.vsrr/2023/9.1.25.37

6) Banu JMS. (2015). Bovine diseases at Dinajpur district of Bangladesh: Epidemiological status with relation to age and season. *Annals of Veterinary and Animal Science*.
http://naturepub.org/index.php/journal/navas

7) Hayle WA, Ahmed R, and Uddin ME. (2020). Prevalence of subclinical mastitis among small ruminants and isolation of some bacterial pathogens in Jimma Town, Ethiopia, *Eur. J. Med. Health Sci*., **2**(6), 107-124.
https://doi.org/10.34104/ejmhs.020.01070124

8) Hossain MA. (2021). Prevalence of Various Clinical Diseases and Disorders in Goats at Kasba Upazilla, Bangladesh. *Agricultural Science Digest - A Research Journal*, 482-487.
https://doi.org/10.18805/ag.D-361

9) Majumder RMS. (2022). Retrospective study of farm animal diseases presented to Atpara Upazila veterinary hospital, Netrakona, Bangladesh. *Bangl. J. Vet. Med.*, 89-98.
https://doi.org/10.33109/bjvmjd2022fam2

10) Parvez MA. (2020). Prevalence of Clinical Conditions in Dogs and Cats at Teaching Veterinary hospital (TVH) in Chittagong Veterinary and Animal Sciences University, Bangladesh. *Research Journal for Veterinary Practitioners*, 99-104.
http://dx.doi.org/10.14737/journal.rjvp/2014/2.6.99.104

11) Rahman MA. (2012). Clinical diseases of ruminants recorded at the Patuakhali Science and Technology University Veterinary Clinic. *Bangl. J. Vet. Med*, 63-73.
https://doi.org/10.3329/bjvm.v10i1-2.15648

12) Robertson IP. (2000). The role of companion animals in the emergence of parasitic zoonoses. *International Journal Parasitology*, **30**: 1369-1377.
https://doi.org/10.1016/s0020-7519(00)00134-x

13) Samad, MA. (2019). A 50-year review on the prevalence of clinical diseases and disorders of cattle in bangladesh. *J. Vet. Med. OH Res.*, 1-16 .

14) Sarker YA (2015). A retrospective study of common diseases at veterinary teaching hospital, Bangladesh Agricultural University, Mymensingh. *Bangladesh Journal of Veterinary Medicine*, 55-61.

15) Sen A., Muhit S., Avi RDT., Das R., Akther M., & Shagar AAM. (2018). Clinical prevalence of diseases and disorders in cattle and goat at the Upazila Veterinary Hospital, Beanibazar, Sylhet, Bangladesh. *Journal of Animal Science and Veterinary Medicine*, **3(1)**, 18-23.
https://doi.org/10.31248/JASVM2017.081

16) Sobur KA. (2024). Diseases and diseases conditions of treated animals at Upazila Veterinary Hospital, Kaliganj, Jhenaidah, Bangladesh. *Journal of Bioscience and Environment Research*, 16-20.
https://doi.org/10.69517/jber.2024.01.01.0004

17) U.O. (2014). Recent Trends of Growth in Agriculture, Industry and Power. *Bangladesh Economic Update*.

18) Yadav U. (2017). Epidemiological investigation of clinical diseases and conditions of pet animals at Chittagong city area, Bangladesh.

Bangladesh Journal of Veterinary Medicine, 63-70. https://doi.org/10.3329/bjvm.v15i1.34058

19) Zakaria Al Noman, IH. (2018). Retrospective study of surgical cases of ruminants at Veterinary Teaching Hospital, Bangladesh Agricultural University. *A periodical of the Network for the Veterinarians of Bangladesh*, 81-87. https://doi.org/10.5455/javar.2018.e252

20) Zakaria Al Noman, IH. (2018). Retrospective study of surgical cases of ruminants at Veterinary Teaching Hospital, Bangladesh Agricultural University. *Journal of Advanced Veterinary and Animal Research*, 81-87. http://doi.org/10.5455/javar.2018.e252