

STATUS OF CAT MANAGEMENT IN CHATTOGRAM METROPOLITAN AREA BASED ON THE CASES ATTENDED AT BIRDS AND PET ANIMAL CLINIC (BPAC), CHATTOGRAM



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Abstract

Domestic cats are common household pets and are widely recognized as an invasive species. Cat populations have been growing in many areas, so it is crucial to work on management techniques that reduce the threats brought on by cats. Based on cases seen at the Birds and Pet Animal Clinic (BPAC), Chattogram, the investigation was conducted to ascertain the frequency of cat diseases in the area. This information would be useful for future research in building an adequate framework for the prevalence of pet cat diseases. A group of 20 ordinary cat owners was used as a random source to choose the study's participants. Face-to-face discussions with cat owners utilizing a questionnaire about management practices, disease preventive methods, and circumstances for animal wellbeing. All of the information gathered from 20 sources was entered into an MS Excel spreadsheet. The information gathered from 20 different cat owners was organized, assessed, and classified. The three most common cat breeds in Chattogram were Persian (65%), local (25%) and mixed (10%). The majority of cat owners (40%) gave their cats' commercial food, boiled chicken, and fish three times a day rather than a balanced diet. They gave their cat's irregular vaccinations and deworming due to their socioeconomic circumstance and lack of understanding about these procedures. By evaluating several welfare-related aspects, the majority of owners were unaware of effective welfare management strategies. The majority of them were also uninformed about the value of routine vet visits to prevent pet illness and other issues.

Keywords: cat, frequencies, animal welfare, pet, owner

Introduction

For a very long time, humans have kept cats as pets, and in recent years, pet cat populations have grown significantly in Asia. Despite the fact that pet ownership differs by country, they are increasingly regarded as "family members" in homes. In the contemporary world, pets have important emotional and social roles. According to earlier research (Stull et al., 2012; Chomel and Sun, 2011; O'Neil, 2018; Over gaauw et al., 2020), owning a pet has both spiritual and physical health benefits. Lowering blood pressure and even cholesterol levels, reducing depression, and reducing feelings of loneliness are just a few of the health advantages. Despite the advantages of pet ownership, household pet like cats can infect people with a variety of pathogens, including as viruses, germs, parasites, and fungi. Zoonoses, or diseases and infections spread naturally between vertebrate animals and humans, are what these infections are known as (WHO). Concerns regarding the potential for disease to spread from companion animals to people through direct or indirect contact are growing. Zoonotic infections can spread to humans through contact with animal urine and other bodily fluids or secretions, ingestion of animal feces, inhalation of aerosols or droplets, and biting, licking, scratching, sneezing, or coughing (Stull et al., 2012; Chomel and Sun, 2011; Stull et al., 2015; Steele and Mor, 2015; Overgaauw et al., 2012).

It has been claimed that proper animal care and preventative measures can reduce the danger of zoonoses. The majority of pet-associated illnesses have been linked to poor hand hygiene and careless pet handling (Whitfield and Smith, 2014). Kissing, sleeping, being licked, or sharing food or kitchen utensils all increase the risk of zoonoses, which can even be fatal for high-risk individuals like very young children, pregnant women, the elderly, and people with compromised immune systems (Stull et al., 2012; Chomel and Sun, 2011; O'Neil, 2018).

The goal of this study is to identify the disease frequencies in cats admitted to the Birds and Pet Animal Clinic in Bangladesh's Chattogram Metropolitan Area. The results of this study will help reduce zoonotic infections as well as prevalent clinical disorders in animals. Additionally, the development of marketing strategies will benefit from these findings for the pet food and pet pharmaceutical businesses. Additionally, pet owners will discover a handbook to help them manage their pet's hygiene.

Objectives

1. To make sure cats have the necessary vaccinations, check-ups and parasite preventive measures in place.
2. To give a balanced food according to the age, health and nutritional requirements to each cat.
3. To cure numerous diseases or medical conditions of the body.
4. To improve the cats general health.

Materials and Method

Study area and study Period

Patients registered at the Birds and Pet Animal Clinic (BPAC) were the subjects of the study. Pets of many kinds, such as dogs, cats, rabbits, and birds, such as parrots, pigeons, were prevalent in BPAC. However, only cat data were collected for this study. The study was place from April to May 2023.

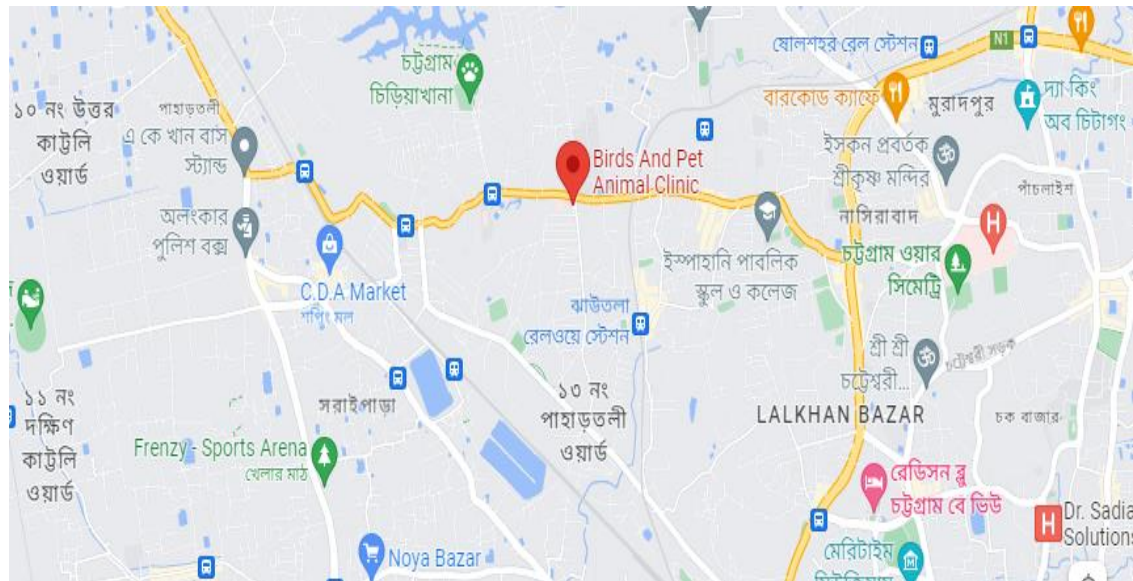


Figure 1: Map of Chattogram City Corporation area with Birds and pet animal clinic.

Data Collection

Patients who were brought to BPAC between April and May 2023 had their data collected. The author developed a standardized questionnaire with open-ended and closed-ended questions on management tactics and disease prevention measures using face-to-face interviews with the cat owners. Among the data gathered were the identity of the owner, including name, address, and contact information, as well as patient information, including age, sex, breed, length of illness, eating habits, vaccination and deworming histories, and other details. Following that, a comprehensive physical examination was performed in accordance with the owner's complaint and medical history. To confirm the diagnosis, the required laboratory tests were performed. Data on the many management techniques, such as the type of housing (confinement), nutritional diet and housing, food type, and other features, as well as welfare

management considerations, veterinary services, and other people's viewpoints on stray cat awareness. Data on 20 animals in total were gathered for this investigation.



Figure 2: Data collection from pet owner at BPAC

Statistical Analysis

The obtained data was entered in MS Excel 2010. The data was analyzed and the results expressed in percentages.

Results

Cat breeds, sex, and age

There were indigenous, hybrid, and exotic breeds among them, with the Persian cat having a higher percentage (65%) than the local (25%) and hybrid (10%) breeds. As cat parents prefer kittens, female cats are more common (60%) than male cats (40%).

Cats under one year old are more prevalent (75%) than cats between one and two years old (20%) and over two years old (5%). Young age (less than one year) is therefore more raised since young are much easier to control, and as young get sick because of their low immunity, they need to visit hospitals more frequently. Age has a significant impact on how the immune system develops and degrades.

Table 1: Information about breeds, sex, and age of cats admitted to BPAC in April–May 2023

Explanatory variable	Co-variable	Cat	
		Frequency (n)	Percentage (%)
Breed	Persian	13	65
	Local	5	25
	Cross	2	10
Sex	Female	12	60
	Male	8	40
Age	<1 year	15	75
	1-2 year	4	20
	>2 year	1	5

Cat vaccination and deworming

The fact that 15% of the cats registered for this study were the only vaccinated cats and that 85% of the cats in the study were unvaccinated is concerning for the health of the pet community because vaccination can prevent the majority of cat ailments.

Only 30% of cats have been dewormed, leaving 70% untreated. The ignorance of pet parents is the driving force behind this plot.

Table 2: Information about vaccination and deworming of cats admitted to BPAC in April–May 2023

Explanatory variable	Co-variable	Cat	
		Frequency (n)	Percentage (%)
Vaccination	Yes	3	15
	No	17	85
Deworming	Yes	6	30
	No	14	70

Cats feeding system

The feeding habits of cat owners were examined, and it was found that the majority of them gave their pets processed cat food (40%), with boiled meat and fish coming in second (35%). In this study, it was also found that the maximum number of cats were fed three times (65%).

Table 3: Feeding practices of cat owners

Explanatory variable	Co-variable	Frequency(n)	Percentages (%)
Types of feed	Boiled meat, fish	7	35
	Kitchen residue and others	3	15
	Commercial food	8	40
	Milk	2	10
Frequency of feeding per feed	Once	2	10
	Twice	5	25
	Thrice	13	65

Cat Diseases

Among registered cat patients, parasitic illnesses, including ecto and endoparasites, account for 20% of cases. By deworming, these parasitic infections can be avoided. Therefore, the high frequency of parasitic disorders is caused by low deworming rates. Feline panleukopenia, with a 10% prevalence among reported cat patients, is the second most common disease. There are also accidental cases, systemic infections, accidental pain, eye infections, allergic infections, digestive disturbances, and fungal infections, paracetamol poisoning, gastritis, indigestion, and spaying cases are gradually increasing by 5%.

Table 4: Information about the tentative diagnosis of cat disease admitted to BPAC in April-May 2023

Explanatory variable	Co-variable	Cat	
		Frequency (n)	Percentage (%)
Disease	Accidental case	1	5
	Systemic infection	1	5
	Accidental pain	1	5
	Spaying	1	5
	Allergic infection	1	5
	FPL (Feline Pan leukopenia)	2	10
	Parasitic infestation	4	20
	Digestive disturbance	1	5
	Eye infection	1	5
	Fungal infestation	1	5
	Paracetamol poisoning	1	5
	Gastritis	1	5
	Indigestion	1	5
	Vaccination	2	10

Discussion

Thousands of people in Chattogram city rear cats of different breeds. This study was conducted In April and May 2023, a total of 20 cat cases were recorded for this investigation by face-to-face interviewing in Chattogram metro city.

There were indigenous, hybrid, and exotic breeds among them, with the Persian cat having a higher percentage than the local and hybrid breeds. We also learned that Persian cats were favoured over other breeds because they are seen as dignified and delicate, as well as affectionate and tranquil (Bhowmik et al., BJVAS, 2020). Pet animals offer unconditional love, company, and a sense of purpose, which can be very helpful for lonely, elderly, or mentally ill people. Numerous studies have proven that having pets teaches kids responsibility, compassion, and commitment (Bhowmik et al., BJVAS, 2020).

Since male cats are less popular than female cats, cat parents prefer female cats. Male cats are sometimes more aggressive and difficult to handle, so urban people are more interested in raising female cats, which is why female cats are more popular than male cats.

Cats under one year old are more prevalent than cats between one and two years old and over two years old. Young age (less than one year) is therefore more important since young are much easier to control, and as young get sick because of their low immunity, they need to visit hospitals more frequently. Age has a significant impact on how the immune system develops and degrades. All young mammalian species are more susceptible to disease (Schultz et al., 2010).

The majority of the cats included in the study were not vaccinated, which is alarming for the health of the pet community because vaccination can stop the majority of cat illnesses. However, only a small percentage of the animals registered for this study were immunized. Pet owners who are not knowledgeable about vaccinations are to blame for this scenario (William et al., 2004).

When it comes to deworming, only a small percentage of cats have been treated, leaving the majority untreated. The driving force behind this plot is the lack of knowledge among pet parents.

The feeding habits of cat owners were examined, and it was found that the majority of them gave their pets processed cat food, with boiled meat and fish coming in second. One reasonable, well-balanced cat food is called "Lara," and it is typically the most affordable of the nine commercial diet varieties. Rice, poultry meal, corn gluten meal, soybean meal, chicken oil, beetroot pulp, flax seed, dried whole egg, brewer's dried yeast, lecithin, fish oil, milk replacer, iodized salt, vitamin and mineral supplements, food colouring, and antioxidants with CP-26 percent, CF-4 percent, fat-10 percent, and moisture-10 percent are all ingredients in dry food. Additionally, compared to soft, moist foods and canned foods, dry foods are much more convenient to package, transport, store, and feed. This study also discovered that the majority of the cats were fed at least three times, which is consistent with the findings made by Bhowmik et al. in their article for BJVAS in 2020. In order to slow down the ageing process and reduce the risk of cancer, renal illness, arthritis, and immune-mediated diseases in pets, essential nutritional demands must be met (Baldwin et al., 2010; Freeman et al., 2011).

The majority of parasitic diseases, including ecto and endoparasites, are experienced by cats who have been registered as patients. This parasitic infection can be prevented by deworming. Therefore, low deworming rates are to blame for the high occurrence of parasitic illnesses. The disease with the second-highest prevalence among cats with recorded cases is feline panleukopenia. An earlier study (Islam et al., 2010) estimated the prevalence of FPL in Bangladesh to be 22.4%, which is very similar to the findings of the current study. This lethal condition can be avoided with vaccination (Jakel et al., 2012). Consequently, low vaccination rates are to blame for the high prevalence of FPL.

Conclusion

The goal of this study is to identify the disease frequencies in cats admitted to the Birds and Pet Animal Clinic in Bangladesh's Chattogram Metropolitan Area. The results of this study will help reduce zoonotic infections as well as prevalent clinical disorders in animals. Additionally, the development of marketing strategies will benefit from these findings for the pet food and pet pharmaceutical businesses. Additionally, pet owners will discover a handbook to help them manage their pet's hygiene. However, a lack of data makes it impossible to demonstrate a correct presentation, so it is advised that researchers carry out a comprehensive investigation to determine the most efficient technique to identify the disease frequencies in cats.

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Biography

I am Borhan Uddin Rabby, son of Kamal Uddin and Sherin Akter. I completed my secondary school certificate from Government Chattogram Collegiate School in 2015 and my higher secondary school certificate from Government Hazi Muhammad Mohsin College in 2017. I am an intern veterinarian at Chattogram Veterinary and Animal Sciences University, Bangladesh, under the Faculty of Veterinary Medicine. I have a keen interest in veterinary medicine and field research and wish to contribute to the development of my country by making use of my skills and imagination. That way, we can overcome the difficulties this field is currently facing.