

## Case Report



# Awareness on Common Diseases Encountered in Pet Dogs and Constraints Faced in Prevention of Diseases

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**Abstract** | Adopting ex post facto research design, the present study was conducted on awareness of pet dog owners on common diseases of pet dogs and constraints faced in prevention of diseases. The study was conducted purposively in Bengaluru district of Karnataka with the total sample size of 240 pet dog owners selected randomly. The results revealed that, cent percentage of the pet owners had awareness on rabies disease and majority of the respondents observed skin diseases in their dogs. Majority of the owners carried out vaccination against rabies (76.67%) and followed combined vaccinations (63.33%) against canine distemper, canine hepatitis, leptospirosis, parainfluenza and parvoviral disease. Majority (80.83%) of the respondents expressed lack of training on scientific rearing of dogs as the major constraint. Therefore, there is urgent need to enhance the knowledge of the dog owners regarding scientific rearing of dogs by effective dissemination of the information based on prioritization of the information needs of the dog owners. Development of need based information and expert system using more interactive ICT (Information and Communication Technologies) tools for pet owners is the need of the hour.

**Keywords** | Awareness, Disease, Management, Dogs, Pet owners, Constraints

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## INTRODUCTION

India is one of the fast growing economic country in the world and adopting western life style leading to more of nuclear families, which eventually increases the adoption of companion animals. This change in socio-cultural values of humans resulted in change of attitudes towards companion animal ownership, with higher expectations and demands for greater and timely information for management of these companion animals (Basarajappa, 2013). Indian household dog population is increasing by 26 percent every year and about 17 percent of the households own a pet dog (Sudarshan et al., 2006). Presently, India's dog population is 11.672 million. Out of them, 9.494 million and 2.177 million are present in rural and urban areas, respectively. Among all states in India, Tamil Nadu, Maharashtra and Karnataka stand first (11,13,031), second (10,77,856) and third (10,28,869) in dog population respectively (BAHS,

2012). Innovation in veterinary care and a better understanding of canine healthcare management through each phase of dog's life cycle such as growth, maintenance, reproduction, lactation and senility have helped in contributing to welfare and a longer life expectancy for dogs. Pet owners are becoming increasingly more knowledgeable when it comes to pet care. As a result, they have number of enquiries towards veterinarians than ever before and are expecting a greater personal involvement in the care and treatment of their pets. Most of the pet dog owners resort to unscientific management practices, because of convenience. In this background, it was felt that in the present scenario there is a need for understanding the existing knowledge of pet owners on common diseases encountered/noticed in pet dogs and constraints faced in prevention of diseases which are necessary to identify the strength and weaknesses of the dog rearing system and to formulate suitable intervention policies. Hence, the present study

**Table 1:** Awareness of pet dog owners regarding different diseases and vaccination

Sl. No.	Awareness on different diseases and vaccination	Category	Respondents, N=240	
			Frequency	%
1	Awareness on different zoonotic diseases	i) Rabies	240	100
		ii) Leptospirosis	62	25.83
		iii) Parasitic disease	78	32.50
		iv) Mycotic disease	71	29.58
		v) Tuberculosis	5	2.08
		vi) Salmonellosis	2	1.00
		vii) Brucellosis	1	0.50
		viii) Listeriosis	0	0
		ix) Campylobacteriosis	0	0
2	Diseases/condition pet have suffered	i) Unaware of disease name	77	32.08
		ii) Skin diseases	145	60.42
		iii) Parvoviral gastro enteritis	102	42.50
		iv) Ehrlichiosis	52	21.67
		v) Leptospirosis	59	24.58
		vi) Skeletal disease	7	2.92
		vii) Kidney disease	18	7.50
		viii) Liver disease	2	1.00
		ix) Heart disease	3	1.25
		x) Babesiosis	1	0.50
		xi) Worm infestation	6	2.50
3	Vaccination for infectious diseases	i) Rabies	184	76.67
		ii) Combined vaccination (Canine hepatitis, leptospirosis, parainfluenza, canine parvovirus)	152	63.33
		iii) Corona virus	0	0
		iv) Kennel cough	0	0

was designed to identify the awareness on common diseases encountered/noticed in pet dogs and constraints faced in prevention of diseases.

## MATERIALS AND METHODS

Adopting ex-post facto research design, the present study was conducted on awareness of pet dog owners on common diseases of pet dogs and constraints faced in prevention of diseases in Bengaluru district of Karnataka purposively because of considerably high density of pet dog population and pet practitioners. Two hundred and forty pet dog owners were selected randomly from Bengaluru district and collected the information with interview schedule from door to door to find out the awareness on common diseases encountered/noticed in pet dogs and constraints faced in prevention of diseases. The data collected were statistically analysed for frequency and percentage and finally, the rankings were given based on it.

## RESULTS AND DISCUSSION

Awareness on different diseases and vaccination of pets by

owners was depicted in the [Table 1](#). The results revealed that, cent percent of the pet owners had awareness on rabies. This high awareness on rabies might be because of its zoonotic importance and also due to emphasis of government schemes in creating awareness about rabies. The results are partially in line with the findings of [Basarajappa \(2013\)](#) and [Zanzani et al. \(2014\)](#).

The information provided in [Table 1](#) showed that, majority (60.42%) of the respondents experienced skin diseases in their dogs. Environmental conditions, poor management techniques followed by owners and susceptibility of dog's skin may be the precursor to skin diseases. The results are in partially agreement to the findings of [Sallander et al. \(2001\)](#) who reported that pets suffered from skin disorders, infections, ear diseases, worm infestation, canine distemper, parvo viral infection, leptospirosis and skeletal disease. The other diseases followed by skin diseases were parvoviral gastro enteritis (42.50%), leptospirosis (24.58%) and ehrlichiosis (21.67%) in their dogs. About 32.08 percent of the respondents were unaware of the disease/condition their dogs have suffered. It also revealed that, around 76.67

**Table 2:** Constraints faced in prevention of diseases in pet dog

Sl. No.	Constraints	Respondents, N=240		Ranking
		Frequency	Percentage	
1	Non-availability of veterinary hospital/facility	0	0	-
2	Distant location of veterinary hospital/centre	20	8.33	VIII
3	High cost of treatment	104	43.33	II
4	Insufficient information on deworming importance	72	30.00	V
5	Insufficient information about vaccination importance /vaccination schedule	55	22.92	VI
6	Timely vaccination facility is not available	0	0	-
7	High incidence of diseases	102	42.50	III
8	lack of manpower	16	6.67	IX
9	Difficult to teach/give basic trainings	9	3.75	X
10	Excessive shedding of hairs	47	19.58	VII
11	Non-availability of good insurance coverage for dogs	87	36.25	IV
12	Lack of training on scientific rearing of dogs	194	80.83	I

percent of the owners vaccinated their pets against rabies and 63.33 percent carried combined vaccination which constituted different diseases such as canine distemper, infectious canine hepatitis, leptospirosis, parainfluenza and canine parvovirus showing the regular advisory work of pet practitioners to pet owners regarding importance of vaccinations.

Less percentage of the respondents followed combined vaccination for their dogs when compared to rabies vaccination this may be due to cost factor and less awareness about diseases which can be prevented through combined vaccination. The result are in partial agreement with the findings of [Basarajappa \(2013\)](#) who opined that, majority of the owners carried rabies vaccinations and combined vaccinations. These results are partially in similar with the earlier findings of [Sambo et al. \(2014\)](#) who reported that majority of the owners vaccinated against rabies whereas [Jamett et al. \(2010\)](#) found out that owners vaccinated their dogs against canine parvovirus and canine distemper.

### CONSTRAINTS FACED IN PREVENTION OF DISEASES IN PET DOGS

The distribution of respondents based on constraints faced in prevention of diseases in pet dogs was depicted in [Table 2](#). Majority (80.83%) of the respondents expressed lack of training on scientific rearing of dogs as the major constraints followed by high cost of treatment (43.33%), high incidence of diseases (42.50%), non-availability of good insurance coverage for dogs (36.25%), insufficient information on deworming importance (30.00%), insufficient information about vaccination importance /vaccination schedule (22.92%), excessive shedding of hairs (19.58%), distant location of veterinary hospital/centre (8.33%),

lack of manpower (6.67%), and difficult to teach/give basic trainings (3.75%). None of the respondents expressed non-availability of veterinary hospital/facility and timely vaccination facility not available as the constraints. The findings are partially supported by the findings of [Vijayakumar et al. \(2006\)](#).

### CONCLUSION

Cent percentage of the pet owners had awareness on rabies disease and majority of the respondents observed skin diseases in their dogs. Majority of the owners carried out vaccination against rabies (76.67%) and followed combined vaccinations (63.33%) against canine distemper, canine hepatitis, leptospirosis, parainfluenza and parvoviral disease. Majority (80.83%) of the respondents expressed lack of training on scientific rearing of dogs as the major constraint. Therefore, there is urgent need to enhance the knowledge of the dog owners regarding scientific rearing of dogs by effective dissemination of the information based on prioritization of the information needs of the dog owners. Development of need based information and expert system using more interactive ICT (Information and Communication Technologies) tools for pet owners is the need of the hour.

### AUTHOR'S CONTRIBUTION

Sakshi S was the student researcher who had collected the primary data on Diseases Encountered in Pet Dogs and Constraints Faced in Prevention of Diseases. Satyanarayan K was the major chairman guided the student throughout the conduct of the study. Jagadeeswary V was the member of the advisory committee of the student and had guided

in the research design and tools constructed. Shilpa Shree J had assisted in analysing and interpreting the collected data.

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