

A Study on Utilization of Services and Technical Information Delivered by Pet Practitioners

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Received: 20.02.2017 | Revised: 26.02.2017 | Accepted: 27.02.2017

ABSTRACT

Adopting *ex-post facto* research design, the present study was carried out to identify the services and technical information received from pet practitioners towards management of pet dogs and to identify the constraints faced by pet practitioners in delivering the services and technical information to pet owners. The study was conducted purposively in Bengaluru district of Karnataka with the sample size of 240 pet owners and 60 pet dog practitioners. The results revealed that cent percentage of the pet owners received information through personal verbal communication from pet practitioners and 73.85 per cent of the respondents availed pregnancy diagnosis. Blood analysis was availed by 60.42 per cent of the respondents among diagnostic services. Majority (76.67%) of the owners received vaccination and deworming among prophylactic services and cent per cent of the owners availed management advisory services from pet practitioners among health care services. Majority (81.25%) of the respondents availed information on type of food that should be offered to their dogs followed by advise on feeding of sick/ill dogs (73.75%), balanced feeding (67.08%) and feeding supplementary ration during different stages of dogs (47.50%). About 2.08 per cent of the pet owners availed information on type of housing that should be provided to their dogs but none of the respondents got advice on information regarding importance of ventilation and adequate light, proper drainage facility and cleanliness in kennels. Majority (55.42%) of the owners received information on sterilization of dogs regarding technical information on breeding management from pet practitioners. Further, majority of the respondents availed information about importance of regular vaccination (62.09%) and regular deworming (57.08%). Most of the pet practitioners expressed lack of drugs and diagnostic equipments for some diseases (81.66%) and absence of efficient diagnostic-laboratory support (81.66%) as the major constraints. So there is a need for pet owners to receive information from pet practitioners through various sources like bulletins, leaflets, magazines and webpage for more effective information. Training of the pet practitioners in preparation of the communication aids to give credible and authentic information regarding scientific dog rearing is the need of the hour.

Key words: Services, Technical, Dogs, Pet Practitioners.

Cite this article: Sakshi, S., Satyanarayan, K., Jagadeeswary, V. and Shilpa, S.J., A Study on Utilization of Services and Technical Information Delivered by Pet Practitioners, *Int. J. Pure App. Biosci.* 5(1): 970-979 (2017). doi: <http://dx.doi.org/10.18782/2320-7051.2616>

INTRODUCTION

India being the fastest growing economic country in the world, is adopting western life style in a swift manner leading to more of nuclear families, eventually the demand for adoption of companion animals such as dogs is increasing day by day. 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 animals¹. Indian household dog population is increasing by 26 per cent every year and about 17 per cent of the households own a pet dog¹³. 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 stands first (11,13,031), second (10,77,856) and third (10,28,869) in dog population respectively². Unfortunately, some of the constraints do not always allow practitioners to provide a thorough explanation of a pet's medical problems and discharge instructions and, in some cases, their teaching capabilities may fall far short of owner's expectations¹⁰. 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, the present study was designed to identify the services and technical information received from pet practitioners and to identify the constraints faced by pet practitioners in delivering the services and technical information to pet owners.

MATERIALS AND METHODS

The present study was conducted purposively in Bengaluru district of Karnataka because of considerably high density of pet dog population and pet practitioners. Two hundred and forty pet owners were selected randomly to study the utilization of services and technical information delivered by pet practitioners and sixty pet practitioners were selected randomly to identify the constraints faced by pet practitioners in delivering the services and technical information to pet owners. The data collected were statistically analysed for frequency and percentage. Finally, the rankings were given based on frequency and percentage.

RESULTS AND DISCUSSION

Utilization of services delivered by pet practitioners

The various services utilised by pet owners delivered by pet practitioners were depicted in Table 1.

Breeding services

Among 240 respondents, only 65 pet owners had breeding animals. The distribution of respondents utilising breeding services delivered by pet practitioners was depicted in the Table 1. The results showed that, majority (73.85%) availed pregnancy diagnosis and none of the respondents availed service like selection of stud dog from the pet practitioners. To detect safe pregnancy, to know approximate number of puppies in the womb, to get information on required care that need to be adopted during this period and to get the due date of parturition, majority of the owners availed pregnancy diagnosis services. Peer communication among breeding female dog and male dog owners has lessened the necessity of the female dog owners to avail service like selection of stud dog by pet practitioners.

Table 1: Utilization of breeding services delivered by pet practitioners

Sl. No	Breeding services delivered by pet practitioners	Category	Respondents, n=65	
			F	%
1	Breeding services	i) Determination of time of mating	19	29.23
		ii) Assisted mating	2	3.07
		iii) Artificial insemination	1	1.54
		iv) Pregnancy diagnosis	48	73.85
		v) Selection of stud dog	0	0

Diagnostic services

The data (Table 2) revealed that, majority (60.42%) of the owners considered blood analysis (haematology and serum biochemistry) a vital part of the diagnostic process which helps veterinarian to make the correct diagnosis and determine the appropriate course of treatment.

Prophylactic services

The perusal of Table 2 disclosed that, services like vaccination and deworming by the pet practitioners were used by 76.67 per cent each by the respondents. Timely availability of vaccinations, well spread hospital/facility and adequate knowledge of owners regarding importance of carrying out vaccination and deworming which in turn influences their own health could be attributed to the above observed results. Pfukenyi *et al*⁹., reported partially similar findings to the present study where majority of the pet owners visited veterinarian for vaccination.

Curative services

The data (Table 2) revealed that, majority (84.58%) of the owners availed medical treatment followed by surgical treatment (54.17%). Timely availability of veterinarian services could be the possible reason for the observation of these findings. Results of the

present study are partially in agreement with the findings of Lue *et al*⁷.

Supply/marketing services

A glance at Table 2 revealed that, about 25.83 per cent of the respondents acquired pet food followed by 15 per cent acquired pet accessories from pet practitioners as pet owners resort to purchase of pet food and accessories from pet shops/pet stores/breeders because of choice of accessories displayed. Findings of the present study are in partial consonance with the findings of Basarajappa¹.

Other services

Cent per cent of the respondents availed management advisory services (Table 2). Impression of pet owners on veterinarian as experts, for acquiring authentic and valid source of information might be the possible reason for cent per cent of the owners to avail advisory services regarding management. Findings of the present study are in contrary to the findings of Chamala and Crouch³ who reported that only 3.30 per cent availed management advisory services whereas Fernandezmehler *et al*⁴., reported in their study that, for majority of the pet owners, veterinarian was the primary informant concerning the disposal of pet remains.

Table 2: Utilization of services delivered by pet practitioners

Sl. No.	Services delivered by pet practitioners	Category	Respondents, N=240	
			F	%
1	Diagnostic services	i) Blood analysis-haematology and biochemistry	145	60.42
		ii) Urine analysis	1	0.50
		iii) Faecal analysis	0	0
		iv) Ultra sound scanning	62	25.83
		v) ECG	74	30.83
		vi) Endoscopy	0	0
		vii) MRI	0	0
2	Prophylactic services	i) Deworming only	184	76.67
		ii) vaccination only	184	76.67
3	Curative services	i) Medical treatment	203	84.58
		ii) Blood transfusion	1	0.50
		iii) Surgical treatment	130	54.17
		iv) Gynaecological and obstetrical treatment	19	7.91
4	Supply/marketing services	i) Pet food	62	25.83
		ii) Pet accessories	36	15.00
5	Other services	i) Management advisory services	240	100
		ii) Supply of publications	0	0
		iii) Round the clock services	88	36.67
		iv) Issue of health certificate	24	10.00
		v) Home visits/home consultancy services	68	28.33
		vi) Ambulatory services	1	0.50
		vii) Cremation service/funeral service	0	0

Mode of information received from pet practitioners by pet owners:

The data furnished in Table 3 revealed that, cent per cent of the respondents received information through personal verbal communication from pet practitioners followed by phone verbal communication (44.17%) and charts (0.50%). None of the respondents received information through books, bulletins, leaflets, magazines and webpage. Impression of the pet owners regarding face to face communication with veterinarian gives authentic information as it paves the way for better interaction and clarification, well spread veterinary

hospitals/facility and also faith of the owners in veterinarians regarding veterinary health care services could be the possible reasons for the above observed results. As pet practitioners lacked in preparing and supplying various types of publications which may be due to lack of time could be possible reason for none of the respondents to avail information through bulletins, leaflets etc. The findings of the present study are in partial agreement with the findings of Kogan *et al*⁵, but contrary with the findings of Kogan *et al*⁶, where majority of the owners accessed the suggested webpage by the pet practitioners.

Table 3: Mode of information received from pet practitioners by pet owners

Sl. No.	Mode of information received from pet practitioners by pet owners	Respondents, N= 240	
		F	%
1	Personal verbal communication	240	100
2	Phone verbal communication	98	40.83
3	Charts	1	0.50
4	Books	0	0
5	Bulletins	0	0
6	Leaflets	0	0
7	Magazines	0	0
8	Web page	0	0

Technical information delivered by pet practitioners to pet owners

The utilization of technical information on feeding, housing, breeding and healthcare management by pet owners delivered by practitioners was depicted in Table 4.

Technical information on feeding management

The present study (Table 4) found out that, majority (81.25%) of the respondents availed information on type of food that should be provided to their dogs followed by advice on feeding of sick /ill dogs (73.75%) and balanced feeding (67.08%). Influence of type of food on dogs health, importance of feeding sick/ill dogs which helps in fast recovering and knowledge of importance of feeding balanced feed which influences on dogs health could have led majority of the owners to avail information regarding type of food, advise on feeding sick/ill dogs and balanced feeding.

Technical information on housing management

About 2.08 per cent of the respondents took information regarding type of housing that should be provided to their dogs and none of the respondents availed information regarding importance of ventilation and adequate light, proper drainage facility and cleanliness in kennels (Table 4) indicating the unfelt need of the pet dog owners to avail information regarding housing of dogs.

Technical information on breeding management

The data furnished in Table 4 revealed that, majority (55.42%) of the owners received information on sterilization of dogs to avoid unwanted pregnancy, minimize dogs for susceptibility to disease related to reproductive organs, availability of the veterinary services, majority of the respondents neutered their dogs

during which they availed information regarding sterilization of dogs.

Technical information on healthcare management

A glance at Table 4 disclosed that, majority (62.09%) of the respondents availed information about importance of regular vaccination followed by regular deworming (57.08%) as majority of the respondents followed vaccination and deworming in their dogs due to adequate knowledge regarding

importance of vaccination and deworming, timely availability of vaccination and deworming practices and veterinary services could be attributed to the above observed results. Stull *et al*¹², reported partially similar findings but the findings are not in agreement with the findings of Palmer *et al*⁸, who revealed that majority of the pet owners received information regarding zoonotic diseases from dogs.

Table 4: Utilization of technical information delivered by pet practitioners

Sl. No.	Technical information delivered by pet practitioners	Category	Respondents, N=240	
			F	%
1	Technical information on feeding management	i) Balanced feeding	161	67.08
		ii) Type of food	215	89.58
		iii) Frequency of feeding	84	35.00
		iv) Feeding of sick/ill dogs	177	73.75
		v) Importance of feeding vitamins and minerals	129	53.75
		vi) Feeding of supplementary ration during different stages of dogs	114	47.50
2	Technical information on housing management	i) Type of housing	5	2.08
		ii) Importance of ventilation and adequate light in kennels	0	0
		iii) Importance of proper drainage facility in kennels	0	0
		iv) Importance of cleanliness in kennels	0	0
	Technical information	i) Detection of heat symptoms /oestrous in dogs	19	7.92

3	on breeding management	ii) Sterilization of dogs	133	55.42
		iii) Different breeding problems	0	0
		iv) Pregnancy diagnosis	48	20.00
4	Technical information on health care management	i) Importance of regular deworming	137	57.08
		ii) Importance of regular vaccination	149	62.09
		iii) Different disease that are caused due to not vaccinating	59	24.58
		iv) General precautions that need to be taken regarding sick/illness	67	27.92
		v) Frequency and importance of grooming	65	27.08
		vi) Importance of regular walk/exercise	0	0
		vii) Regular health check up	20	8.33
		viii) Different zoonotic diseases	94	39.16

Constraints faced by pet practitioners in delivering the information to pet owners

The data furnished in Table 5 indicated that, lack of drugs and diagnostic equipments for some diseases (81.66%) and absence of efficient diagnostic-laboratory support (81.66%) were the major constraints expressed by the pet practitioners followed by pet owners poor management techniques (80.00%), cases reported at final stage (76.67%), weak regulatory framework to deal with competition from illegal practitioners and the use of veterinary drugs (75.00%), lack of trained nursing/assistant to work (71.67%), non-availability of disposable materials as

compared to other countries (70.00%), frequent switching of pet owners from one practitioner to another (68.33%), lack of adequate training in disease diagnosis and updation of new diagnostic skills (65.00%), lack of time for home visits (60.00%), lack of logistic support from authority (58.33%), some service design discourages home visit (55.00%), lack of time for educating the pet owners in management of pets (53.33%), lack of co-operation from clients in evaluation of treatment (51.67%). Partially similar constraints were expressed by the earlier findings of Sen and Chander¹¹ and Turkson¹⁴.

Table 5: Constraints faced by pet practitioners

Sl. No.	Constraints faced by pet practitioners	Respondents, N=60		Ranking
		F	%	
1	Lack of drugs and diagnostic equipments for some diseases	49	81.66	I
2	Absence of efficient diagnostic-laboratory support	49	81.66	I
3	Lack of adequate training in disease diagnosis and updation of new diagnostic skills	39	65.00	VIII
4	Weak regulatory framework to deal with competition from illegal practitioners and the use of veterinary drugs	4	75.00	IV
5	Frequent switching of pet owners from one practitioner to another	41	68.33	VII
6	Owners inability to pay for services	19	31.67	XX
7	Owners unwillingness to pay for services	17	28.33	XXII
8	Less opportunity for post graduations in subjects of interest/ choice	23	38.33	XVII
9	Lack of trained nursing/assistant to work	43	71.67	V
10	Lack of time for home visits	36	60.00	IX
11	High operating costs: drugs, office space, housing, vehicle	27	45.00	XV
12	Non-availability of materials for preparation of communication aids (Ex. Leaflet, folders etc.)	5	8.33	XXVI
13	Non-availability of needed literature	15	25.00	XXIV
14	Lack of opportunities to interact with expert in concerned area of specialization	28	46.67	XIV
15	Lack of time for preparing communication aids	13	21.67	XXV
16	Lack of expertise in preparation of communication aids	20	33.33	XIX
17	Lack of co-operation from clients in evaluation of treatment	31	51.67	XIII
18	Lack of time for educating the pet owners in management of pets	32	53.33	XII
19	Cases reported at final stage	46	76.67	III
20	Cost recovery is not always successful	21	35.00	XVIII
21	Non-availability of relevant information from reliable resources	16	26.67	XXIII
22	Non-availability of advanced medicine in market	25	41.67	XVI
23	Some service design discourages home visit	39	55.00	XI
24	High overhead costs for home visits	18	30.00	XXI
25	Pet owners poor management techniques	48	80.00	II
26	Non-availability of disposable materials as compared to other countries	42	70.00	VI
27	Lack of logistic support from authority (Eg. Space, equipment etc.)	35	58.33	X

CONCLUSION

Cent per cent of the respondents received information through personal verbal communication from pet practitioners followed by phone verbal communication but

none of the respondents received information through books, bulletins, leaflets, magazines and webpage, so there is a need for pet owners to receive information from pet practitioners through various sources like bulletins, leaflets,

magazines and webpage for more effective information utilization related to dog rearing. Training of the pet practitioners in preparation of the communication aids to give credible and authentic information regarding scientific dog rearing is the gap that need to be bridged. In general there is a need to improve communication skills by verbal and nonverbal communication aids in disseminating better information dissemination to dog owners for dog rearing. The major constraints which were expressed by the pet practitioners like lack of drugs and diagnostic equipments for some diseases followed by absence of efficient diagnostic-laboratory support and weak regulatory framework to deal with competition from illegal practitioners need to be addressed as it aids in providing quality services by the pet practitioners towards management of pet dogs. Development of need based information and expert system using more interactive ICT tools for pet owners is the need of the hour.

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