Awareness and use of ICT tools by paravets in Telangana

Pratikshya Panda, Rupasi Tiwari*, Pragya Joshi and Rakesh Roy

ICAR-Indian Veterinary Research Institute, Izatnagar, Uttar Pradesh 243122 India *E-mail: rtiwarirupasi@gmail.com

ABSTRACT

The present study was conducted in Telangana to ascertain the use of ICT tools for information access, sharing and utilization. A total of 40 paravets were selected from three districts of the state. The selection was purposive according to the accessibility of the researcher. Questionnaire and telephonic survey were used for data collection. The results showed that the awareness of ICTs i.e. Websites, Social media, software and Mobile apps was high among the para-vets The use of the ICTs showed that use of social media was very high i.e. 85 percent were using social media whereas use of software packages was almost nil. The most serious constraints faced by majority of the paravets in using ICT are ignorance in use of various mobile apps related to veterinary service, unavailability of information through ICTs, technical incompetency, slow functioning of tools and lack of training.

Keywords: Constraints, ICT tools, Mobile Apps, Paravets, Telangana.

Livestock sector is sharing one-fourth of its contribution to the national GDP. India being the leading milk producer in the world accounts for 176 million tonnes of milk per year (DAHD&F, GoI). One of the major challenges which India faces in livestock sector at present is low productivity of livestock and decrease in cattle population.

The major players that shape the livestock services sector are Veterinarians and veterinary para professionals as they act as the only veterinary extension personnel available at the village or block. Up-to-date, relevant and quality information on livestock is crucial for the management and development of the livestock sector which is now the biggest challenge in-front of Veterinarians and Paravets to get. Hence, ICT can be a very efficient media as it can prove to become a very important tool for spreading awareness about latest scientific managemental practices among the Veterinarians and Paravets which will surely prove to improve the production performance and health status of the animals of the country. Since the veterinary services

suffer from a clear-cut deficit of qualified personnel (Working group Report, 12th five year plan), there arises a number of dares in front of every animal health personnel in general. Hence, ICT can be the best solution as it plays an important role in timely information access and delivery. The acceptance of mobile application as an extension services delivery tool, by livestock service providers, is an important element for its wider application. Therefore, the study was conducted in Telangana state with the specific objective of to ascertain the use of ICT tools by paravets for information access, sharing and utilization.

MATERIALS AND METHODS

Locale of the study and sampling procedure: The study was conducted in the state of Telangana purposively. The sample for the study was para-vets (working in field condition) of the selected areas. A total of 40 para-vets were selected purposively from three districts of the state.

Tools and techniques of data collection: The basic

tool used for the study was the questionnaire/telephonic conversation. For constraints, schedule was developed containing 10 statements respectively and views were noted. Rank was given by the respondents according to their perceived seriousness from 1 to 10. Garrets Ranking Technique (Garret, 1981) has been used to analyse the constraints in using ICT tools by the respondents. The respondents were asked to rank the factors given. The order of merit, assigned by the respondents was converted into ranks by using the following formula,

Percent position of each rank = $100 (R_{ij}-0.05)/N_{j}$, Where R_{ij} = Rank given for the i^{th} factors for the j^{th} respondent.

N_i= Number of factors ranked by the jth respondent

The percentage position of each rank obtained was transformed into scores by referring to the table given by Henry Garret. Then for each factors the scores of individual respondents were added together and divided by the total number of the respondents for whom the score were added. These mean scores (MS) for all the aspects were arranged in order of merit and interpretation was drawn. The percentage position and their corresponding Garret's table value are shown in Table 1.

Table 1. Percentage position and their corresponding Garret Value

Rank	Percentage Position		Garret's Table Value	
1	100(1-0.5)/10	=5	82	
2	100(2-0.5)/10	=15	71	
3	100(3-0.5)/10	=25	64	
4	100(4-0.5)/10	=35	58	
5	100(5-0.5)/10	=45	53	
6	100(6-0.5)/10	=55	48	
7	100(7-0.5)/10	=65	43	
8	100(8-0.5)/10	=75	37	
9	100(9-0.5)/10	=85	30	
10	100(10-0.5)/10	=95	19	

RESULTS AND DISCUSSION

It is inducible from Table 2 that the awareness about

ICTs among paravets was quite good i.e. Websites (95.00%), Social media (100%), Software (57.50%) and mobile app (95.00%). When it came to use of ICT tools, it also showed good results indicating 73.68 per cent were using Websites, Social media (85.00%), mobile Apps (76.31%). This goes in contrary with Baig's (2015) findings which shows that the majority (66.67%) of the respondents had medium level of ICT utilization. None of the paravets under the present study were using any kind of software packages.

Table. 2: Awareness & use of ICT tools by Paravets

Awareness and use	Para-vets (n=40)		
	Aware	Use	
Websites	38 (95.0)	28 (73.68)	
Social media	40 (100.0)	34 (85.00)	
Software packages	23 (57.50)	0 (0.0)	
Mobile apps	38 (95.0)	29 (76.31)	

The result from the current study (Table 3) on mobile phone used showed that cent percent of the para-vets were having smart phone which is a very good pointer of ICTs popularity among them as any kind of websites or apps can be effectively accessed through smart phone.

Table. 3: Distribution of respondents according to the type of mobile phone used

Type of phone	Para -vets	
	(n=40)	
Smart phone users	40 (100.00)	
Feature phone users	5 (12.5)	

^{*}Table shows multiple responses

The results of use of ICT tools by the paravets for information seeking and sharing among each other given in table 4 shows that Phone call were the most preferred media with utilization score of 2.77 used by 77.50 per cent of the para-vets as it was always used for information seeking and sharing followed by WhatsApp viz., 15.00 per cent of paravets were always using WhatsApp for this purpose next to phone calls with utilization score of 2.00. Use of Emails, SMS and Facebook was less frequents by the respondents. This goes in line with Karimuribo et al. (2016) who surveyed that mobile phone is currently used to support livestock production by communicating on animal health and Tamizhkumaran and Nathcimuthu (2016) who studied in Puduchery and found that mobile phones were mostly used by livestock owners to contact with service providers. When it came to the use of mobile apps related to veterinary services, none of the respondents were using any kind of apps related to this.

Table. 4: Distribution of respondents according to the usage pattern of different ICT tools for information seeking and sharing

Information socking	Para-vets (n=40)			
Information seeking and sharing	Always	Sometimes	Never	Utilization scores
Facebook	0	22	18	1.55
	(0.00)	(55.00)	(45.00.0)	
WhatsApp	6	28	6	2.00
	(15.00)	(70.00)	(15.00)	
SMS	0	33	7	1.82
	(0.00)	(82.5)	(17.5)	
Phone call	31	9	0	2.77
	(77.50)	(22.50)	(0.00)	
Email	0	0	40	1.00
	(0.00)	(0.00)	(100.0)	

Table 6 reveals the constraints perceived by the respondents while using ICT tools and that the most serious constraint faced by majority of the par-vets displayed that a great majority felt "ignorance in use

of mobile apps related to veterinary services" as the most serious constraint ranked 1st with Mean 69.13 followed by unavailability of Veterinary related information thorough ICT which was ranked 2nd (Mean=56.40) and Technical incompetency Ranked 3nd with Mean 50.65. Slow functioning of tool and lack of training were also perceived as serious constraints hindering the use of ICTs to the fullest by paravets. The results were in line with Baig (2015) and sireesha *et al.* (2014) who said that a great majority of the respondents felt that lack of knowledge in using ICT tools was the emerging problem in ICT utilization by veterinarians, followed by lack of training in ICTs, insufficient number of ICTs in V.Ds, interrupted power supply, internet connectivity problems.

Table 6: Constraints faced by Veterinarians and Para-vets in using ICT tool

S.	Constraints	Para-vets	
No.		(n=40)	
		Mean	Rank
1	Technical incompetency	50.65	III
2	Lack of training	49.85	V
3	Ignorance in use of mobile app related to veterinary services	69.13	I
4	Poor internet connectivity	48.10	VII
5	Unavailability of veterinary related information through ICT	56.40	II
6	Slow functioning of tools	50.53	IV
7	Lack of updating	49.00	VI
8	High cost	42.23	IX
9	Power failure	40.73	X
10	Time constraint	48.00	VIII

CONCLUSIONS

For accessing and sharing information in a greater rate, use of ICT can play a very crucial role. In

Telangana state the awareness of ICT among paravets is very high but the use of ICT by them revealed some variations. In case of use of veterinary related mobile apps, the paravets showed very poor result. This may be due to problems like ignorance in using various apps related to veterinary services, unavailability of veterinary related information through ICTs, slow functioning of tool, technical incompetency, lack of training etc. which can be further mitigated by taking necessary actions like giving up to date information time to time and making the tools simpler to operate. Also training is very much needed for improvement of technical competency. Almost all of them were possessing android phone which is a very good indicator for accepting the use of new tools like mobile apps which should contain useful and relevant information in a simpler way.

REFERENCES

Baig R. (2015) Extent of Utilization of ICT tools among field Veterinarians of Andhra Pradesh. M.V.Sc. Thesis, College of Veterinary Science, Sri Venkatesware Veterinary University, Tirupati.

Basic Animal Husbandry Statistics, 2017, DAHD&F,

Karimuribo E D, Batamuzi E K, Massawe L B, *et al.* (2016). Potential use of mobile phones in improving animal health service delivery in underserved rural areas: experience from Kilosa and Gairo districts in Tanzania. BMC Veterinary Research; 12:219.

Sireesha P, Rao B S, Raju Thammi and Raju D. (2014) Constraints encountered in the utilization of information and communication technology (ICT) tools by various Animal Husbandry (A.H.) Organizations in Andhra Pradesh. *International Journal of Innovative Research in Science, Engineering and Technology* 3(6):13693-13701

Tamizhkumaran J and Natchimuthu K. (2016) Effective usage of cell phone for availing livestock services. *Journal of Communication Studies* 36(1):28-37.

Working group on Animal Husbandry & Dairying-12th five year plan: 2012