

RESEARCH ARTICLE

Role Performance of Para Veterinarians in Rendering Livestock Health Service in Kalyana Karnataka Region**Channappa¹, Goudappa, S.B², Chandargi D.M³, Shivanand K⁴, Jag JiwanRam⁵ and Reddy B. S⁶****ABSTRACT**

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Para veterinarians are the pillars of public veterinary services which makes them an important part of animal health care and animal husbandry services. The potential para veterinarians influenced by the availability livestock health services. In this regard the present study was conducted during 2021-22 to assess the role performance of para veterinarians. An exploratory and ex-post facto research design was employed for the study. The study was restricted to sample size of 120 para veterinarians based the highest number of para veterinarians working in 2 districts i.e., Bidar and Kalaburagi. Data collection was done by using the questionnaire method. The overall role performance of para veterinarians in curative services, productive services, preventive services, diagnostic and miscellaneous services it was found that 71.68 per cent of para veterinarians had high level of role performance followed by medium (19.16 %) and low (09.16 %) the possible reason might be of services, such as identifying heat signs, artificial insemination, vaccination, record keeping, first aid for injured animals, disease diagnosis. To increase the role performance of para veterinarians, need to provide infrastructure facilities, regular training program, motivate them with rewards, educate them and to create awareness among the para-veterinarians for performing confined activities.

Key words : Para veterinarians; Performance; Animal health services.

Livestock is the life line for the farming community. It acts as a storehouse of capital insurance against crop failure and a coping mechanism against livelihood shocks. Therefore, it is considered as a 'moving bank' for the farmers' income. Animal waste like dung and urine are excellent sources of major and minor nutrient for plant production and protection measures. Despite of all these schemes and programmes livestock farmers are facing lot of challenges like Improving the productivity of farm animals, frequent outbreaks of diseases that majorly includes Foot and Mouth Diseases, Black Quarter infection, Influenza. Shortage of fodder, lack of access to markets may act as a disincentive to farmers to adopt improved technologies and quality inputs. due to shortage of veterinary staff member in the department of Animal Husbandry and veterinary services. Para veterinarians play an auxiliary role by assisting in delivery of various animal healthcare facilities services. They also work

independently by providing treatment and essential animal healthcare services. There exists an acute shortage of veterinarians in the country with merely 34,500 veterinary graduates against the requirement of around 67,000 in numbers. Against the estimated need for 259,000 para veterinarians, their availability has been limited to a current population of 52,000, leading to a deficit of 207,000 para-veterinarians manpower (Anonymous, 2017-18).

In the study area the total number of veterinary hospitals/polyclinics, veterinary dispensaries, primary veterinary centers and mobile veterinary centers were 140, 373, 192 and 31 in number respectively (Anon., 2017-18). Though NCA (1976) had recommended one veterinarian for every 5000 cattle unit and one veterinary institution for four villages, it is estimated that only one veterinary institution exists for 11 villages covering about 62 sq. km area (VCI, 2008). On an average one veterinarian exists for every 7000 animals

in India. To overcome the problems there is a need of para veterinarians in smooth rendering of livestock services in order to increase production and productivity of livestock sector. Animal health services delivery was largely seen as the responsibility of the public sector in most of the developing countries. Increase in fiscal constraints raised the government concerns about the efficiency and efficacy of the public sector veterinary services. Implementation of the performance will create a positive working environment in the institution, these performances depend on the higher officer's actions and behavior towards the employee, the working environment and the facilities available at the work place.

METHODOLOGY

The study was conducted in the Kalyana Karnataka during 2021 to 2022. The *exploratory* and *ex-post-facto* research designs were used in the present study. This region had seven districts. Among seven districts, Kalburgi and Bidar were selected for the study due to the highest number of para veterinarians working at the time of investigation in these districts. In selected talukas of Kalaburgi, Alanda and Chitapur, 20 para veterinarians and at block level constituting 60 samples of the Kalaburgi district and the same of Bidar district. A total from both districts constitute 120 para veterinarians were selected for the study.

Role performances of para veterinarians was operationalized as the degree to which they accomplish the task and role assigned to them in terms of efficiency and coverage. A set of statements covering the livestock service delivery by the para-veterinarians. The opinion of advisory members was also taken into consideration in finalizing the statements. The scoring orders for the response were 5, 4, 3, 2 and 1, respectively for positive statements and reverse in case of negative statements. Thus, the possible role performance score of the individual respondent about livestock health related services could range from 30 to 150. Further, the respondents were categorized into three categories *viz.*, high, medium and low based on mean and standard deviation as the measure of the check.

RESULTS AND DISCUSSION

The result observed from the Table 1 represents the role performance of para veterinarians. The role performance was divided into five categories namely productive services, preventive services, curative services, diagnostic services and miscellaneous

services in rendering of livestock services. The data represents activity wise role performance of para veterinarians. With respect to productive services 73.83 per cent para veterinarians expressed strongly agree for statements like conducted proper artificial insemination at accurate time followed by, guided the farmers on fodder crops and preparation of balances diet (67.50%), identified heat sign in animal (66.67%) and identified the pregnancy disease and disorders of animal (37.50%). However, 49.17 per cent the para veterinarians expressed strongly disagree on the statement, not necessary to assist farmers in selection of quality animal. Feasible rate artificial insemination conception, identifying unproductive disorder, timely supply of feed and fodder products to the livestock farmers may all be contributing factors. These reasons help in the perception of para veterinarians for providing quality livestock services to the farmers. Regular counselling and advice in the productive services to livestock farmers plays an important role in the control of disease, reducing the incidence of disease and curing reproductive disorders. The above findings are in line with *Shabeer (2013)* and *Vikash et al. (2021)*.

The data presented in Table 1 indicates concerning preventive services cent per cent of para veterinarians strongly agree for statements like administer drug according to the instruction given by doctors in the immediate situation, isolation of sick animals prevents spread of disease/infection and took care the risk of transmission of diseases from animal to human followed by, involved in control of deworming (91.67%) and responsible for proper and regular cleaning and disinfection of equipment and vehicles (59.17%). However, 73.33 per cent the para veterinarians expressed strongly disagree on the statement, am not assisting in implementation of pre and post vaccination scheduled program. The hospital's timely and effective drug delivery may be the reason, as this aids in providing services for animals including pre- and post-vaccination and deworming. They were also conscious of the importance of disinfecting veterinary tools as well as the significance of keeping sick animals isolated. The above findings are in line with the findings *Sasidhar (2017)*.

The data presented in Table 1 indicates curative services majority 91.66 per cent of para veterinarians expressed strongly agree with respect to statements like proper first aid to an injured animal followed by, up the treatment for prolonged disease animals (76.67%),

Table 1. Distribution of para veterinarians based on their productive role performance (N =120)

Statements	SA		A		UD		DA		SDA	
	No.	%	No.	%	No.	%	No.	%	No.	%
<i>Productive services</i>										
I have conducted proper artificial insemination at accurate time	85	70.83	25	20.83	10	8.33	00	00.00	00	00.00
I have identified the pregnancy disease and disorders of animal	45	37.50	39	32.50	36	30.00	00	00.00	00	00.00
It is not necessary to assist farmers in selection of quality animal	00	00.00	00	00.00	21	17.50	40	33.33	59	49.17
I have identified heat sign in animal	80	66.67	29	24.16	11	9.17	00	00.00	00	00.00
I have guided the farmers on fodder crops and preparation of balances diet	81	67.50	24	20.00	10	8.33	05	4.17	00	00.00
I am responsible for management of unproductive animals	70	60.00	21	12.50	14	11.67	15	17.50	00	00.00
<i>Preventive services</i>										
I have involved in control of deworming	110	91.67	10	8.33	00	00.00	00	00.00	00	00.00
I took care the risk of transmission of diseases from animal to human	120	100.00	00	00.00	00	00.00	00	00.00	00	00.00
I am not assisting in implementation of pre and post vaccination scheduled program	00	00.00	00	00.00	08	06.67	24	20.00	88	73.33
I administer drug according to the instruction given by doctors in the immediate situation	120	100.00	00	00.00	00	00.00	00	00.00	00	00.00
The isolation of sick animals prevents spread of disease/infection.	120	100.00	00	00.00	00	00.00	00	00.00	00	00.00
I am responsible for proper and regular cleaning and disinfection of equipment and vehicles.	71	59.17	29	24.16	20	16.67	00	00.00	00	00.00
<i>Curative services</i>										
I am working with less stress and injury to the animal	74	61.67	34	28.33	12	10.00	00	00.00	00	00.00
I do proper first aid to an injured animal	110	91.66	10	8.34	00	0.00	00	00.00	00	00.00
I don't have confidence in handling critical situations like poisoning, sunstroke, electric shock and burn injuries	00.0	00.00	00	00.00	00	00.00	20	16.67	100	83.33
I have assist in Gynaecological and obstetrical treatment	77	64.17	43	35.83	00	00.00	00	00.00	00	00.00
I have provided drugs for all kinds of diseases	75	62.50	20	16.67	25	20.83	00	00.00	00	00.00
I follow up the treatment for prolonged disease animals	90	76.67	20	16.67	10	8.33	00	00.00	00	00.00
<i>Diagnostic services</i>										
I have assessed contagious disease and their sign	60	50.00	26	21.67	20	16.67	14	11.67	00	00.00
I assisted in castration, dehorning, debeaking and hoof trimming	95	79.67	25	20.83	00	00.00	00	00.00	00	00.00
I am handling laboratory equipment properly	75	62.50	25	20.83	20	16.67	00	00.00	00	00.00
It is not an important to assess the behavior of animals while treatment	00	00.00	00	00.00	00	00.00	31	28.33	89	74.17
I assist in postmortem process	80	66.67	26	21.67	14	11.66	00	00.00	00	00.00
I assist in major and minor operation to the animal	70	58.33	32	26.67	12	10.00	06	05.00	00	00.00
<i>Miscellaneous service</i>										
I am responsible for drug stock management and disposal of carcass and other residual material	100	83.33	20	16.67	00	00.00	00	00.00	00	00.00
I have the computer knowledge and tab-based data recording	45	37.50	35	29.17	28	23.33	12	10.00	00	00.00
I assist to livestock farmers about insurances and subsidies	75	62.50	29	24.17	16	13.33	00	00.00	00	00.00
No need to promote awareness about government programs/ schemes to the farmers	00	00.00	00	00.00	00	00.00	30	25.00	90	75.00
I have guided farmers on scientific livestock management practices	90	75.00	16	13.33	14	11.67	00	00.00	00	00.00
Regular maintenance of records is necessary	100	83.33	20	16.67	00	00.00	00	00.00	00	00.00

SA=strongly agree, A= Agree, U=Undecided, DS= Disagree, ADS= strongly disagree

assist in Gynecological and obstetrical treatment (64.17%), provided drugs for all kinds of diseases (62.50%) and working with less stress and injury to the animal (61.67%). However, 83.33 per cent the para veterinarians expressed strongly disagree on the statement, I don't have confidence in handling critical situations like poisoning, sunstroke, electric shock and burn injuries. The difficulty in understanding the stress

and harm that animals experience and a medium degree of experience is one potential explanation. Treatment involving gynecology and pregnancy calls for extensive knowledge and experience. Sometimes lack of follow-up in the treatment of prolonged diseases might be due to insufficient staff. It is also worth to note that services like medicinal and gynecological treatment immediately with the help of veterinary professionals

had a higher role perception and aspiration for these services, has been reflected in the responses. The findings are in line with the findings of *Shabeer (2013)* and *Vikash et al. (2021)*.

The data presented in Table 1 indicates diagnostic services 79.67 per cent of para veterinarians were expressed strongly agree on statements like assisted in castration, dehorning, debeaking and hoof trimming followed by, assist in postmortem process (66.67%), handling laboratory equipment properly (62.50%), assist in major and minor operation to the animal (58.33%) and assessed contagious disease and their sign (50.00%). However, 74.17 per cent the para veterinarians expressed strongly disagree on the statement, it is not an important to assess the behavior of animals while treatment. Para veterinarians need proper training in diagnosing disease and disorder of the animals and etiology aspects. Proper feedback from farmers and veterinary professionals will help them to assess their weakness and strength so that they can improve their performances. A deeper look at the role perception of para veterinarians depicts a need to educate and create awareness among the para veterinarians, their authorities and exact activities to be performed by them for delivering various services for avoiding any sort of ambiguity that might affect the livestock sector in some way or the other. The findings are similar with the findings *Gopalkrishna., (1997)*, *Shabeer (2013)* and *Vikash et al. (2021)*.

The data presented in Table 1 indicates miscellaneous service an equal 83.33 per cent of para veterinarians expressed strongly agree with statements such as responsible for drug stock management and disposal of carcass and other residual material and regular maintenance of records is necessarily followed by, guided farmers on scientific livestock management practices (75.00%), assist to livestock farmers about insurances and subsidies (62.50%) and computer knowledge and tab-based data recording (37.50%). However, 75.00per cent the para veterinarians expressed strongly disagree on the statement, no need to promote awareness about government programs/ schemes to the farmers. The animal record and drug stock register were maintained by senior para veterinarians, which might be the cause. They were actively involved in creating awareness about insurances, programs and schemes and some them perceived that they lag in computer operating and tab-based data recording. This might be due to lack of facilities and training regarding

Table 2. Distribution of para veterinarians based on their overall role performance in rendering livestock services (N=120)

Range	No.	%
Low (mean - 0.425 SD)	11	09.16
Medium (mean \pm 0.425 SD)	34	28.33
High (mean + 0.425 SD)	75	62.51
Mean= 73.83; SD= 3.23		

computer knowledge. The above findings are on par with the findings of *Gopalkrishna, (1997)*, *Vikash et al. (2021)* and *Shabeer (2013)*.

The data presented in Table 2 indicates the overall role performance of para veterinarians in rendering livestock services, it depicts that majority (62.51%) of para veterinarians belonged to high level of role performance followed by medium (28.33%) and low (9.16%) level of performance. The services assigned to them as a part of their job descriptions, such as identifying heat signs, artificial insemination, vaccination, record keeping, first aid for injured animals, and disease and disorder diagnosis, showed that they understood their responsibilities. A deeper look at the role performance of para veterinarians depicts that there is a need to provide infrastructure facilities, motivate them with rewards, educate them and to create awareness among the para-veterinarians for performing confined activities. Performing extra activities by them for delivering various services could create a sort of ambiguity in their role that might affect the livestock sector. The above findings are on par with the findings of *Gopalkrishna., (1997)*, *Shabeer (2013)*, *Kadian K.N (2006)*, *Sarnaik et al. (2022)*, *Vikash et al. (2021)*, *Anshida et al. (2022)*, *Manisha (2022)*, *Deekshit (2017)*.

The results lamented in Table 3 shows the association of selected independent variables with the role perception of para veterinarians and found that, work experiences and training received, achievement motivation and job involvement are significant at one per cent level of significance followed by, age, education, distances of working place, kinds of livestock services, infrastructure facilities, mass media utilization, job satisfaction are significant at five per cent level of significances and self-associated risk, perceived workload, job stress, are negatively significant

CONCLUSION

The overall role performance of para veterinarians

Table 3. Relationship of independent variables with the role performance of para veterinarians (N=120)

Independent variable	"r"
Age	0.125*
Education	0.203*
Work Experiences	0.583**
Distances of working	0.411*
Kinds services provided	0.472*
Training received	0.245**
Infrastructural facilities	0.421*
Mass media utilization	0.495*
Organizational linkage	0.250
Self-associated risk	-0.181
Achievement motivation	0.760**
Perceived work load	-0.465
Job involvement	0.600**
Job stress	-0.391
Self-confident	0.247
Job satisfaction	0.465*

*Significant at 5%, **Significant at 1% level of significance, NS= Non significant

was found high. In productive para veterinarians were good in conduct proper conduct of artificial insemination and guided the farmers on fodder crops and preparation of balances diet. In preventive services they took care the risk of transmission of diseases from animal to human, administer drug according to the instruction given by doctors in the immediate situation and isolation of sick animals prevents spread of disease. In case of curative services do proper first aid to an injured animal and follow up the treatment for prolonged disease animals. In diagnostic services para veterinarians assisted in castration, dehorning, debeaking and hoof trimming, assist in postmortem process. In case of miscellaneous services, they are responsible for drug stock management and disposal of carcass and other residual material and regular maintenance of records is necessary, in order to develop a high role performance extension agency should further intensify educational efforts teaching methods like, refresher training programmes, demonstration, meeting, literatures, pamphlets and on latest veterinary and livestock practices such as hydroponics, silage making *etc* quarterly action review and reflection meeting with the para veterinarians to discuss their issues and challenges along with sharing of knowledge and best practices among them.

CONFLICTS OF INTEREST

The authors have no conflicts of interest.

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