Effectiveness of On-Campus Training Programme on Knowledge Enhancement of Extension Functionaries Regarding Reproductive Management

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ABSTRACT

This study was conducted at Krishi Vigyan Kendra, Banda, Uttar Pradesh. Three days on-campus training programme entitled "Reproductive management of dairy animals for enhancing profitability of farmers" was conducted in 9-11 July, 2018. Total 26 A.I. technicians from BAIF Development Research Foundation working in Banda district; have been participated in the training programme. All the respondents were male and already undergone training programme. Majority of respondent were middle age (53.85%) having qualifications up to graduation (46.15%). 65.38 per cent of respondent were having low level of knowledge regarding reproductive management of dairy animals. Effectiveness of training programme was assessed through knowledge gain and pre-post score of participants on reproductive management. The knowledge gain was highest in case of heat detection (19.58%) followed by feeding management aspect (17.79%), health care and management (17.28%) and method of breeding (16.52%) respectively. Therefore it could be concluded that the training programme organized by Krishi Vigyan Kendra, Banda was found effective in disseminating the information regarding reproductive management of dairy animals.

Key words: *Reproductive management; A.I. technicians; Training programme; Knowledge gain;*

Breeding, feeding, health-care and management practices are four basic pillars of milk production in dairy farming (*Bharadwaja et al, 2017*). Out of these, breeding in general plays a pivotal role in producing good quality of germplasm and better stock replacement. However reproductive management of dairy animals also plays a crucial role in enhancing profitability through dairy farming. Knowledge on reproductive management of dairy animals can be imparted though training programme. Training is a crucial and continuous requirement for capacity development. Indian Council of Agricultural Research (ICAR) established Krishi Vigyan Kendra (KVK) throughout the country in the middle of 70's by adopting the recommendations of the Mohan Sinha Mehta Committee (*Senthilkumaret al, 2014*). Normally KVKs have conducted different types of trainings namely, training for farmers/farm women, training for rural youths and training for extension functionaries. Training for extension functionaries was mainly conducted for upgrading their knowledge, skills, practice related to any agricultural related activities. Hence the present study was undertaken with the objective to find out the effectiveness of on campus training programme on knowledge enhancement of extension functionaries regarding reproductive management of dairy animals in Krishi Vigyan Kendra, Banda, Uttar Pradesh.

METHODOLOGY

Present study was conducted at KVK, Banda. Three days on campus training programme on reproductive management organized where 26 A.I. technicians from BAIF Development Research Foundation working in Banda district have taken part in training. Data were collected personally, from participants of the training by interview schedule method.

Knowledge is operationalized as the amount of information and understanding of A.I. technicians in pre and post exposure of training programme regarding reproductive management. The respondents were classified in terms of having low, medium and high knowledge level on the basis of cumulative square root frequency method. Apart from this knowledge index was measured using the following formula

$$\text{Knowledge index} = \frac{\text{Score obtained}}{\text{Max. obtainable score}} \times 100$$

Knowledge gain has been operationalized as the amount of information and understanding, which was gained by the respondents after exposure to training programme for reproductive management in dairy animals. Experimental research design before- after have been employed to test the effectiveness of training programme was assessed through knowledge gain and pre-post score of participants on reproductive management. Same methodology was used by *Meena et al. (2014)* for assessing effectiveness of multimedia digital video disk on knowledge gain of improved dairy farming practices.

Knowledge gain=Post exposure score-pre exposure score

In order to test the effectiveness of training programme statistically, paired 't' test was applied to know whether there existed any significant difference between the pre-exposure and post-exposure knowledge due to the treatment i.e. exposure to the training programme. The collected primary data were tabulated and statistically analysed by using various statistical tools like descriptive statistics, Cumulative Square Root of Frequency (CSRF) method and paired't' test.

RESULTS AND DISCUSSION

It is evident from Table 1 that nearly half of the respondents (53.85%) were belongs to middle aged category followed by young age category. None of the respondents were found to be female, all the respondents were male (100%). Nearly equal percentages of respondents were found to have formal education up to intermediate (42.31%) and graduation (46.15). Mostly respondent were graduated in B.Sc. and B.A. degree. 11.54 per cent of respondents were found to have post-graduation degree. A considerable percentage of respondents were found having high experience categories (42.31%) followed by medium level of experience (38.31%). All the respondents were previously undergone training with varying numbers of trainings.

Table 1. Socio-personal profile of Extension functionaries (N=26)

Variables	Categories	No.	%
Age	Young (upto 35 Years)	12	46.15
	Middle aged (36-50 years)	14	53.85
	Old aged (>50 Years)	0	0.00
Gender	Male	26	100.00
	Female	0	0.00
Education	Intermediate	11	42.31
	Graduate	12	46.15
	Post graduates	3	11.54
Experience	Low (< 5 yrs)	5	19.23
	Medium (5-10 yrs)	10	38.46
	High (>10 yrs)	11	42.31
Total training received	No training	0	0.00
	<2 training	6	23.08
	2-3 training	8	30.77
	>3 training	12	46.15

Knowledge of extension functionaries regarding reproductive management : It can be easily observed from Table 2 that majority of respondents were having low level of knowledge regarding reproductive management of dairy animals. Followed by 23.08 per cent and 11.54 per cent of medium and high level of knowledge categories respectively. It might be due to fact that many concepts they were not aware of earlier. All the respondents belongs of B.Sc. and B.A. or M.Com. background so they might not have developed that much knowledge and skill in the animal reproductive management aspects.

Table 2. Knowledge index of extension functionaries regarding reproductive management

Knowledge (% categories)	No.	%
Low (<40.96)	17	65.38
Medium (40.96-50.53)	6	23.08
High (>50.53)	3	11.54

Knowledge gain through training programme on reproductive management: The knowledge gain of the respondent was assessed by taking the pre exposure score and post exposure score. Difference in pre and post exposure score was taken as an indicator for effectiveness of training programme. The mean gain in knowledge also expressed in terms of percentage of

Table 3. Effectiveness of training programme on knowledge gain of respondents regarding reproductive management

Practices	% Knowledge			t-value
	Pre-test	Post-test	Knowledge gain	
Heat detection	41.20	60.78	19.58	32.29**
Method of breeding	40.11	56.63	16.52	15.98**
Feeding management	41.06	58.86	17.79	20.90**
Health care and management	39.69	56.97	17.28	18.70**
Overall mean knowledge	40.52	58.31	17.79	21.20**

** indicate significant at the level of 1 per cent

knowledge gain. It was observed from Table 3, all the respondents have been benefitted by training programme on reproductive management.

Table 3 showed that the overall mean knowledge gain with regard to reproductive management through the training was found to be 17.79 per cent. It might be due to their need of information on reproductive management of dairy animals. The training courses and content were designed as per their need and interest for their better understanding and more grasping of knowledge. The knowledge gain was highest in case of heat detection (19.58%), followed by feeding management aspect (17.79%), health care and management (17.28%) and method of breeding (16.52%) respectively. This can be because of the reason that they have considerable low knowledge in the covered aspects under training.

It was seen from the table that there is significant gain in knowledge by the respondent. Paired‘t’ test was applied to test the significance level between the pre and post knowledge score. The null hypothesis was formed as there was no significant difference between knowledge obtained before and after the exposure of training programme on reproductive management. From the Table 3, it could be inferred that significant‘t’ values at 1 per cent level of significance suggest that the training pogramme was effective in terms of knowledge gain.

CONCLUSION

It could be concluded that breeding of dairy animals is very important aspect of profitable dairy farming. Heat detection, method of breeding, nutrition and health care management is very important aspects of reproductive management of dairy animals. There was found of significant difference between pre and post knowledge score of respondents. Therefore it could be concluded that the training programme by Krishi Vigyan Kendra, Banda was found effective in disseminating the information regarding reproductive management of dairy animals among A.I. technicians of BAIF, India.

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