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The breeder behavior toward the helminthiasis treatment with medicinal worm candy

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Abstract. The final task activity is conducted at Ngudi Rahayu Farming Groups, Giyanti Village, Candimulyo District, Magelang Regency from May^{3th} to June 30th 2019. The purpose of this research is to know the breeder's behaviour about the knowledge level, attitude level, and skill level of *Helminthiasis* treatment in cattle with routine and periodic treatment of worms. The methods of collecting samples of 30 respondents is purposive sampling method. That means the determination of the number of samples are the member of Ngudi Rahayu Farming Groups that qualify. The qualification are the member of farming groups that still active, educated, have a cattle, and following the counselling. Observed variables are the knowledge level, attitude level and skill level, than measured by linkert scale, data analyzed by descriptive analyse method. The results of this research show that the knowledge level is at know category with average score is 37,57, the attitude level is at agree category with average score is 22,6, the skill level is at skilled category with average score is 17,5. The behaviour with average score 77,6 is at very high category, effectiveness of counseling is 86, 30 is at effective category. The behaviour with average score 77,6 is at very high category, effectiveness of counseling is 86,30 is at effective category and has met the target with the purpose of agricultural extension program at 25%.

1. Introduction

Giyanti Village, Candimulyo District, Magelang Regency is a potential agricultural and livestock area. The large availability of grass for cattle feed makes Giyanti Village a potential area for developing cattle. Based on information from the District Counseling Center (BPK) of Candimulyo District that the livestock sector in Giyanti Village has the potential to be developed. To support the development of existing potential, the quality of breeder's HR must be improved. Improving the quality of breeder's HR can be done through changes in breeder behavior at the level of knowledge, attitudes and skills. Based on the primary data of the identification of regional potential (IPW) through observation and interview of farmers in the Ngudi Rahayu Farmer Group in Giyanti Village, it was obtained the data of regional potential identification (IPW) with the PRA method that the number of cattle in the Ngudi Rahayu farmer group in Giyanti Village was 61 heads, 70% of cattle are attacked by Helminthiasis with physical characteristics of thin animals, coarse and dull fur, standing fur, and cattle appear weak. Helminthiasis disease treatment activities have not been done routinely and periodically. The level of knowledge and skills of farmers in preventing and treating Helminthiasis is still low. Lack of knowledge of breeders on the treatment of Helminthiasis disease routinely and periodically is a major factor in the number of cattle in the Ngudi Rahayu Farmers Group Giyanti Village was attacked by Helminthiasis disease to be the main factor that must be addressed immediately. Based on the above



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data and the conditions in the field the author in the Final Assignment report chooses the title "Behavior of Cattle Farmers Against the Treatment of Helminthiasis with Candy Worm Medication in the Ngudi Rahayu Farmer Group, Candimulyo District, Magelang District. The aim of Kajiam is to know the behavior in the form of the level of knowledge, attitudes and skills of farmers towards the treatment of Helminthiasis in cattle with candy worm medicine routinely and periodically.

Behavior Change according to Mardikanto (2009) is a manifestation of a person's knowledge, attitudes and skills that can be observed by other people or parties directly (in the form of speech, actions, body language, etc.) or indirectly (through the performance and / or results of his work) [1].

Husna (2013) argues that behavior is all human behavior whose essence has a motive, which includes knowledge (P), attitude (S), and skills (K) [2]. Human activities can be single or double patterned. Usually the act is driven by a main motive and some supporting motives which are the details of the main motive.

Age is very influential on the process of receiving information, the older the farmer the slower the adoption of innovation [3]. According to Dinikomalasari (2014) a higher level of education will make it easier for a person or community to absorb information and implement it [4]. Personal experience of farmers causes farmers to take risks on the decisions taken in managing their farming business. The longer a farmer is experienced in trying to farm, the more experience so that his farming business can advance [1]. The higher the number of livestock ownership, the higher the desire to receive more profitable innovations [5].

2. Methods

Implementation of the study activity aims to determine the level of respondent behavior towards an innovation in the field of animal husbandry that is used as material for extension activities. The method used in this research is descriptive method which is a study that aims to describe the description of the numbers that are processed according to certain standards. The study process was carried out by giving a post-test after counseling activities were carried out to members of the Ngudi Rahayu farmer group as many as 30 respondents who had been counseled about the treatment of Helminthiasis. Retrieval of data using tools in the form of questionnaires that are used to collect data that have been tested for validity and reliability and use the interview method. The questionnaire contains aspects of knowledge, attitudes and skills and is measured using a Likert scale with 5 criteria.

3. Result and discussion

3.1. Knowledge aspects

Based on the results of the analysis of the knowledge aspect, the result is an average value of 37.57, this shows the behavior of farmers in the knowledge aspect of the Ngudi Rahayu Farmers Group towards the treatment of Helminthiasis with candy worm medicine in cattle in the tofu category.

3.2. Attitude aspects

Based on the analysis of attitudes aspects the results obtained are an average number of values of 22.6, this shows the behavior of farmers on aspects of attitudes in the Ngudi Rahayu Farmers Group against the treatment of Helminthiasis with candy worm medicine on cattle are in the category of very agree and are described in the continuum line.

3.3. Skills

Based on the results of the analysis of the skills aspects, the average value of 17.5 shows that the behavior of farmers in the skills aspect of the Ngudi Rahayu Farmer Group towards the treatment of Helminthiasis disease with lozenges in cattle is in the highly skilled category and is described in the continuum line.

3.4. Behavior

Behavioral aspects of respondents in the treatment of helminthiasis with worm medicine candy in cattle are assessed based on respondents' answers to 18 questions on the questionnaire on aspects of knowledge, attitudes, and skills after counseling. The value of the respondent's behavior is in the following table.

Table 1. Value of the aspect of respondent behavior.

Aspect	Post Test Value	Average Value
Knowledge	1127	37.57
Attitude	678	22.60
Skill	525	17.50
Amount	2,330	77.67

The behavioral score of the respondents is obtained based on the total score of the average aspects of knowledge, attitudes and skills. The total value obtained was 77.67, this shows the behavior of farmers in the Ngudi Rahayu Farmers Group towards the treatment of Helminthiasis disease with worm medicine candy in cattle is in the very high category and is described in the continuum line below.

The average cumulative score for the post-test results of the level of knowledge, attitudes and skills obtained from 30 respondents reached a score of 77.67. This shows the behavior of breeders in the behavioral aspects of the Ngudi Rahayu Farmers Group against the treatment of helminthiasis with worm medicine candy in cattle is very high.

Behavior of respondents in the very high category was obtained from the sum of the aspects of knowledge in the tofu category with an average score of 37.57, aspects of attitude in the category strongly agreed with the average score of 22.60, aspects of skills in the highly skilled category with the number average score of 17.50. The high average number of scores on aspects of knowledge, attitudes, and skills used to measure respondent behavior.

3.5. Knowledge aspects

Behavior of respondents in the aspect of knowledge is in the category of knowing because counseling activities carried out using group approaches and individual approaches. The group approach was carried out twice with the delivery of material and demonstrations on how to make worm medicine candy to treat helminthiasis in cattle. The individual or individual approach is carried out using the method of all members of the farmer group who were previously determined as respondents. This is in accordance with the opinion of Stefanie (2013) and Rahmah (2017) one of the efforts used in agricultural extension activities are use communication and information media as media agricultural information intermediaries to be provided to the farmers [6,7].

The success of counseling on the aspect of knowledge is also supported by appropriate media so that farmers are able to receive the information provided properly. The media used during the extension activity are power points, folders as print media and video viewing. In counseling activities, the delivery of information with words is not always well understood, the need for media to help him. The success of the extension activities carried out was also influenced by the respondent's internal factors in the form of the experience of raising members of the Ngudi Rahayu Farmer Group. Most farmer group members have more than 10 years of livestock experience. This is in accordance with the opinion of Soekartawi (2003) who said that experienced farmers will be more skilled and tend to produce a better result than inexperienced farmers. A more experienced breeder will absorb technology innovation faster than an experienced or less experienced breeder [8].

3.6. Attitude aspects

Behavior of respondents in the aspect of attitude is in the category of very agreeing, this is because respondents consider the material presented in the form of treatment of Helminthiasis with worm medicine candy on cattle is in accordance with the needs of respondents. This is in accordance with Law No. 16 of 2016 which states extension materials are extension materials that will be delivered by extension agents to the main actors or business actors in various forms which include information, technology, social engineering, management, economics, law and environmental sustainability. Furthermore, extension materials are made based on the needs and interests of the main actors and business actors by taking into account the benefits and sustainability of agricultural, fisheries and

forestry resources. Counseling material contains the development of human resources and increasing social capital and science.

Internal factors of respondents in the form of the number of family dependents also affect the acceptance of an invasion. The average number of family dependents of the Ngudi Rahayu Farmers Group is 3 people. The number of family dependents has little effect on the respondent's economy and influences respondents in decision making so that the material presented is received by the respondent. This is in accordance with the opinion Situngkir (2007), Family dependency is one of the main reasons for household members to participate in helping the head of household to decide to work for income [9].

3.7. Skills

The success of the counseling activities in the aspect of skills is due to the extension activities carried out using visual aids and equipped with demonstration methods. The teaching aids used were video screenings of making and giving worm medicine candy to cattle and demonstrations on how to make and giving worm medicine candy to cattle. This is in accordance with the opinion of Wahyuni (2015) which states the factors that influence the success of counseling include competency of the instructor, target characteristics, extension time and location of counseling as well as assistive devices and teaching aids used [10].

The success of extension activities is also supported by internal factors of respondents in the form of age of members of farmer groups in the productive category. Someone who is at productive age will produce higher productivity in work. Age has a positive effect on creativity. The older someone is, the more they will be have experience, knowledge and skills that can help him to find more effective and efficient working methods. Besides that, people who older more experienced in dealing with problems that appear.

The presence of something new will be harder for parents to accept compared to the younger generation. On the other hand, for those who are younger, they feel less experience compared with those who are older. Age affects someone in thinking and acting. At the productive age of 15-65 years have a high ability of understanding in counseling and in learning.

3.8. Evaluation of agricultural education

The results of evaluating the effectiveness of counseling and the effectiveness of behavioral change are as follows:

$$EP = \frac{\text{Number of post test score}}{\text{Maximum Value}} \times 100 \%$$

$$EP = \frac{77,67}{90} \times 100 \% = 86,30 \%$$

Effectiveness of Counseling from the above calculation results obtained a value of 86.30% and in the effective category. The effectiveness of extension activities that have been carried out is achieved by using the group approach and individual approaches. The tools used to get the effectiveness of counseling are power point media, folders and video views and using discussion, interview and demonstration techniques. The effectiveness of counseling by 86.30% has reached the goal of the agricultural extension program about the treatment of Helminthiasis in cattle by 25%.

This is in accordance with the opinion of Kusnadi (2011) which states the evaluation of extension activities, the analysis can be calculated by referring to the Effectiveness of Counseling (EP) [11]. Categories achieved 90% - 100% = very effective, 80% - 89% = effective, 70% - 79% = quite effective, <70% = less effective.

4. Conclusion

Behavior of cattle ranchers in the Ngudi Rahayu Farmer Group regarding the treatment of Helminthiasis with worm medicine candy in cattle includes knowledge levels in the tofu category with

an average score of 37.57, the level of attitude is in the category of strongly agree with the average score of 22.6 and the skill level is in the highly skilled category with an average score of 17.5. Behavioral aspects seen from all levels are in the very high category with a total score of 77.67. The effectiveness value of extension is 86.30% in the effective category and has achieved the objectives of agricultural extension program at 25%.

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