

Final Report

Development of Models for Rabies Prevention Education in Sukabumi District



**Alliance for Rabies Control
Livestock Service Office of Sukabumi District
Center for Indonesian Veterinary Analytical Studies**

FINAL REPORT

Title	:	Development of Models for Rabies Prevention Education in Sukabumi District
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INTRODUCTION

Background

Rabies is a disease that could be transmitted from animals to human (zoonosis). It is very dangerous and until now there is no cure. The presence of clinical signs is always followed by death, both in animals and human. Data from the Ministry of Health (Depkes 2010) shows that rabies is present in 24 provinces in Indonesia, with highest Lyssa incidences (rabies in human) found in Bali, North Sumatra, Maluku, and East Nusa Tenggara . The remaining 9 provinces that are still free from rabies are Bangka Belitung, Riau Islands, DKI Jakarta, Central Java, East Java, DI Yogyakarta, West Nusa Tenggara, West Papua, and Papua.

Sukabumi district is a district within the province of West Java with a considerably high incidence of rabies. In 2007 there were 192 bite cases and in 2008 a rabies outbreak was declared after the discovery of 451 cases with 36 suspects and 2 human fatalities (Disnak Jabar 2008). In early January 2009, the Livestock Service Office of Sukabumi declared rabies alert in seven subdistricts, which were Jampang Tengah, Jampang Kulon, Lengkong, Cidolog, Surade, Cimanggu, and Cikembar, after the occurrence of 19 bite cases (Anonymous 2009).

In 2008, CIVAS, a non government organization concerned in animal health and veterinary public health, was asked by the district government of Sukabumi to assist mass rabies vaccination in pet animals and rabies education in 4 subdistricts in Sukabumi district using more informative and targeted approaches with designed methods. The subdistricts involved were Palabuan Ratu, Cisolok, Purabaya, and Nyalindung subdistricts. Palabuan Ratu and Cisolok are tourist areas where there are many pet animals, such as dogs and cats, while Purabaya and Nyalindung have hunting communities with hunter dogs that frequent the forests. CIVAS managed to vaccinate 1600 rabies host animals, but in the process there have been refusals from the hunting community. People in these in general refuse believe that rabies vaccination will cause their dogs to be weakened, prone to illness, and in the end could no longer be used for hunting, when in fact the dogs are at high risk of contracting rabies because they are in high contact with other hunting dogs and feral dogs. This belief developed because of lack of information on the rabies vaccine itself and post-vaccination treatment. Therefore, with our new program we hope to achieve the best ways for rabies education and how to overcome challenges we met in the field.

In this program, activities were focused on public education. The main target audiences were children and the wild boar hunting society. Children were focused in the program because they are generally more open, could easily receive new information, and are the future generation (agents of change). Also important is the fact that 30-60% of dog bite victims are children under the age of 15 years old (WHO 2009), therefore they need sufficient education on rabies and how to avoid it.

The wild boar hunting society was also focused in the program because of their incorrect belief on rabies vaccination. As long as the misunderstanding is not corrected, rabies prevention efforts within the society will always be challenged, while the hunters themselves are at risk of contracting the disease from their dogs, which could also spread the disease to other dogs and animals around them.

Several models for rabies education were applied to both target audiences with hope that the best method could be discovered. The success of this program will

benefit rabies prevention in Indonesia because the issues faced in the program are similar to those also found in other rabies infected regions in Indonesia.

Objective

The objective of this program is to:

1. Develop effective rabies education models for elementary, junior high, and senior high school students.
2. Assess the knowledge level of respondents related to the education methods given.

MATERIAL AND METHOD

Time and Location

The program was conducted from December 2009 until December 2010 in Jampang Tengah subdistrict in Sukabumi district.

Target Population

Target populations for the program were school children and the wild boar hunting society. In schools, the program targets 5th grade elementary school students, 2nd grade junior high school students, and 2nd senior high school students.

The program involved six elementary schools, three junior high schools, and one senior high school in Jampang Tengah subdistrict. The number of junior high schools involved was more than proposed because there were too few students in the schools to be divided. Only one senior high school was involved because it was the only one in the subdistrict. Senior high school students were divided into 3 groups by class to provide for all 3 methods.

For the wild boar hunting society, hunters were gathered from all 10 villages in the subdistrict.

Education Media

The education media used were comic books and flash movie for elementary school students, booklets and rabies incident film for junior high school students, senior high school students and hunters, and power point presentations for all students and hunters. The contents of the presentation were adjusted differently for each student level and hunter.

Program Design

Rabies education was given by CIVAS staff assisted by an officer from the local Livestock Service Office.

In school students, each level (elementary, junior high, senior high) was divided into 3 groups based on the education method received. Each method consisted of two schools for elementary students, one school for junior high students, and a couple of classes for senior high students.

In Method 1, students were only given one session of oral presentation. In Method 2, students were given two sessions with comic books (elementary) or booklets (junior high & senior high) and oral presentation. While in Method 3, students were given 3 sessions with a flash movie (elementary) or a dubbed rabies incident film "If Only I Knew" produced by the Directorate of Agriculture Information for the Directorate of Animal Health South Africa in 1995 (junior high & senior high), comic books (elementary) or booklets (junior high & senior high) and oral presentation. The interval between sessions in method 2 and 3 was one month. Below is the program design scheme for all student levels (Table 1).

Table 1. Program Design Scheme for All Schools and Education Methods

School	Education and Discussion		
	Session 1	Session 2	Session 3
Method 1			
SDN Ciareuy ^E	Presentation	-	-
SDN Cimapag ^E	Presentation	-	-
SMPN 2 Jampang Tengah ^{JH}	Presentation	-	-
SMU 1 Jampang Tgh Social Class ^{SH}	Presentation	-	-
Method 2			
SDN 2 Bojong Jengkol ^E	Comic	Presentation	-
SDN Pasir Angin ^E	Comic	Presentation	-
SMP YPI ^{JH}	Booklet	Presentation	-
SMU 1 Jampang Tengah Science Class 1&2 ^{SH}	Booklet	Presentation	-
Method 3			
SDN Ciguna ^E	Flash Movie	Comic	Presentation
SDN Bojong Lopang ^E	Flash Movie	Comic	Presentation
SMPN 1 Jampang Tengah ^{JH}	Film	Booklet	Presentation
SMU 1 Jampang Tengah Science Class 3 & 4 ^{SH}	Film	Booklet	Presentation

Note : ^E = Elementary school, ^{JH} = Junior high school, ^{SH} = Senior high school

With the wild boar hunting society, hunters from all 10 villages were gathered in Bojong Jengkol village hall in Jampang Tengah subdistrict. Hunters were gathered to minimize disturbance to their everyday activity. Education of hunters was conducted in two sessions, where all education media, such as presentation, flipchart, booklet, and film, were given.

Data Collection

Pre-tests and post-tests were given to school students to measure their knowledge level on rabies, while hunters were not subjected to pre-tests and post-tests. Pre-tests were conducted before the first session, while post-tests were conducted 1 month after every session and 3 months after the very last session. The pre-test and post-test scheme for school students is shown in Table 2.

Table 2. Pre-Test and Post-Test Scheme for School Students

School	Pr	Sess. 1	Ps1-1	Sess. 2	Ps1-2	Sess. 3	Ps1-3	Ps3
Method 1								
SDN Ciareuy ^E	√	√	√	-	-	-	-	√
SDN Cimapag ^E	√	√	√	-	-	-	-	√
SMPN 2 Jampang Tengah ^{JH}	√	√	√	-	-	-	-	√
SMU 1 Jampang Tengah Social Class 2 ^{SH}	√	√	√	-	-	-	-	√
Method 2								
SDN 2 Bojong Jengkol ^E	√	√	√	√	√	-	-	√
SDN Pasir Angin ^E	√	√	√	√	√	-	-	√
SMP YPI ^{JH}	√	√	√	√	√	-	-	√
SMU 1 Jampang Tengah Science Class 1 & 2 ^{SH}	√	√	√	√	√	-	-	√
Method 3								
SDN Ciguna ^E	√	√	√	√	√	√	√	√
SDN Bojong Lopang ^E	√	√	√	√	√	√	√	√
SMPN 1 Jampang Tengah ^{JH}	√	√	√	√	√	√	√	√
SMU 1 Jampang Tengah Social Class 1 & 3 ^{SH}	√	√	√	√	√	√	√	√

Note: ^E = Elementary school,

^{JH} = Junior high school,

^{SH} = Senior high school

Sess. 1 = Session 1,

Sess. 2 = Session 2,

Sess. 3 = Session 3

Pr = Pre-test,

Ps1-1 = Session 1 post-test,

Ps1-2 = Session 2 post-test,

Ps1-3 = Session 3 post-test,

Ps3 = Final post-test 3 month after last session

Data Analysis

Test results were scored by giving 3 points for correct answers, 0 point for incorrect answers, and 1 point if respondents did not know the answer. The pre-test results of each school and method group was compared with Analysis of Variance (ANOVA) and continued with Duncan's Multiple Range Test if there was significant difference to determine the homogeneity of the student's knowledge level before education was given. Homogeneity of the baseline knowledge needs to be measured so the effectiveness of the intervention (method 1, 2, and 3) could be determined without biases from certain factors, such as the starting knowledge level on rabies, student quality, and others. Schools and groups with equal knowledge baselines are compared with Independent T-test or ANOVA continued with Duncan's Multiple Range Test, while schools and groups with different baselines could only be compared using the score difference between the average pre-test score and the average post 3 month test score of each method, without any statistical comparison.

RESULT

Program Location

Sukabumi district is a region with 4,128 km² of land and 45 subdistricts. The program was moved from previously proposed Cidolog subdistrict to Jampang Tengah subdistrict because the Livestock Service Office of Sukabumi District. The service office has already conducted rabies public awareness and education in that area. Besides, the social cultural aspects of Jampang Tengah are similar to Cidolog with high dog population, rabies cases, and a hunting community.

The program was focused in five villages in the subdistrict, which were Bojong Jengkol, Jampang Tengah, Panumbangan, Bojong Lopang, and Cijulang.

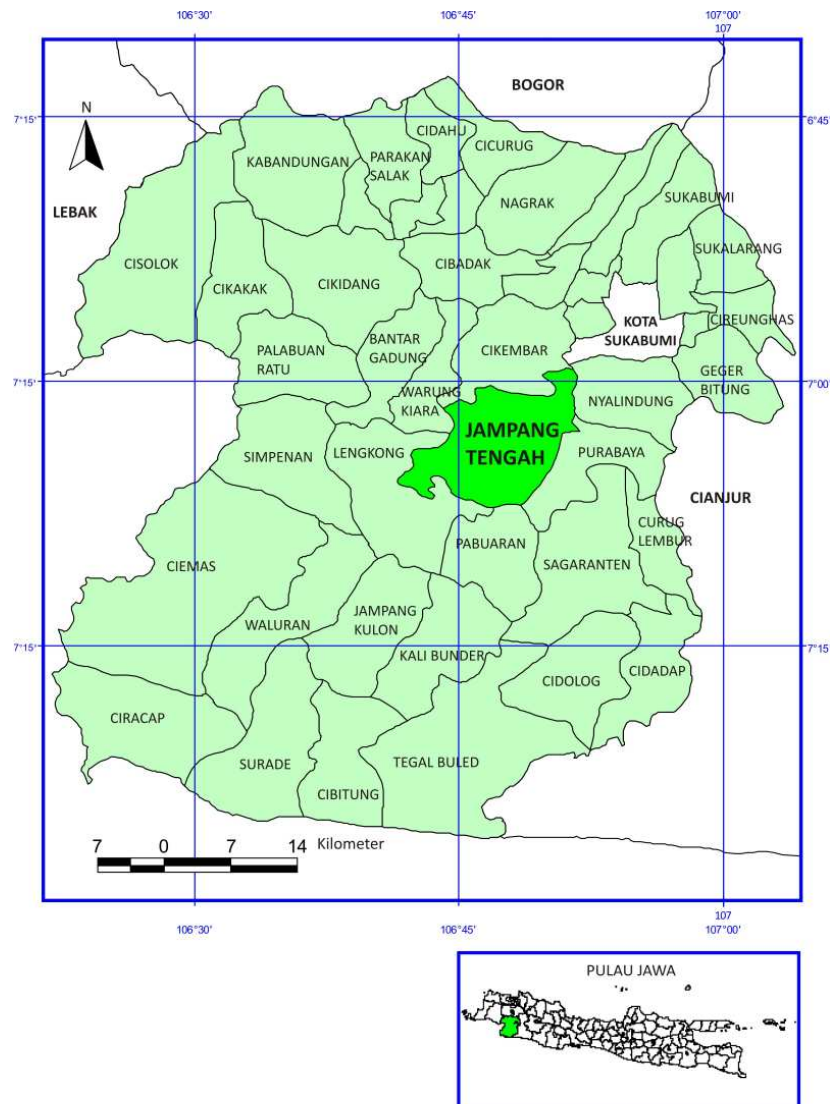


Figure 1. Map of Jampang Tengah Subdistrict in Sukabumi

Baseline Condition

Overall, 6 elementary schools, 3 junior high schools, and 1 senior high school participated in the program. Each school level was divided into 3 methods. Statistical tests were conducted on pre-test results to determine the baseline condition of each school. Only 3 of 6 elementary schools had the same/homogenous baseline conditions, while for both junior and senior high school only 2 groups for 2 methods had the same baseline value. Statistical results on school pre-tests are shown in Table 3.

Table 3. Pre-Test Results of All School Levels

School	Average \pm SE		
	Method 1	Method 2	Method 3
Elementary School	25.03 \pm .95 ^b	25.02 \pm .81 ^b	25.09 \pm .65 ^b
	29.52 \pm .68 ^c	28.80 \pm .72 ^c	22.68 \pm .73 ^a
Junior High School	32.15 \pm .52 ^a	31.17 \pm .98 ^a	35.49 \pm .35 ^b
Senior High School	34.82 \pm 1.2 ^a	40.23 \pm .87 ^b	36.16 \pm .91 ^a

Note: different superscripts in the same line indicates statistical difference

At elementary school level, only 3 schools with the same baseline condition could be analyzed statistically. For junior and senior high school levels only method 1 and 2 in junior high school level, and method 1 and 3 in senior high school level have similar knowledge baselines and could be statistically tested using the independent T-Test. For groups in junior and senior high school that have different starting points, the effectiveness of the methods is measured by calculating the difference between the average starting score and average final score of each method.

Rabies Education in Elementary School Student

The average knowledge level of elementary school students on rabies is shown in Table 4 below.

Table 4. Average Knowledge Level of Elementary School Students on Rabies with Standard Error

Perlakuan	Rataan Nilai Tes \pm SE				
	Pre Test	Post Test 1	Post Test 2	Post Test 3	Post Test 3 Bln
Metode 1	25.03 \pm .95 ^a	31.55 \pm .87 ^b	-	-	29.31 \pm 1.36 ^b
Metode 2	25.02 \pm .81 ^a	29.86 \pm 1.28 ^b	33.18 \pm 1.07 ^c	-	33.08 \pm .91 ^c
Metode 3	25.09 \pm .65 ^a	29.71 \pm .95 ^b	31.41 \pm .77 ^{bc}	32.75 \pm .60 ^c	33.16 \pm .64 ^c

Note: different superscripts in the same line indicates statistical difference

Data in Table 4 shows an overall significant increase in the knowledge level of elementary school students until post test 3 months ($P < 0.05$). The maximum achievable test score for elementary school students is 39. In general, the average test result of students in method 1 had increased in post test 1 and was maintained until the final post test 3 months later. The average test result of students in method 2 also increased significantly until the final post test. In method 3, the average test result continued to increase and was maintained until the final post test. Comparison of the post test 1 results and final post test results of all methods are shown in Table 5.

Table 5. Comparison of Methods Using Average Knowledge Levels with Standard Error for Elementary School Level

Test	Average \pm SE		
	Method 1	Method 2	Method 3
Pre Test	25.03 \pm .95 ^a	25.02 \pm .81 ^a	25.09 \pm .65 ^a
Post Test 1	31.55 \pm .87 ^a	29.86 \pm 1.28 ^a	29.71 \pm .95 ^a
Post Test 2	-	33.18 \pm 1.07 ^a	31.41 \pm .77 ^a
Post Test 3	-	-	32.75 \pm .60
Post Test 3 Mo.	29.31 \pm 1.36 ^a	33.08 \pm .91 ^b	33.16 \pm .64 ^b

Note: different superscripts in the same line indicates statistical difference

Figures in Table 5 above show no statistical difference in all post test 1 results. This indicates that the increase in knowledge level achieved through the different education media used, which for method 1 was presentation, method 2 was comic book, and method 3 was flash movie, is statistically equivalent.

For long term achievement of the methods, as indicated by the final post test after 3 months, the average knowledge level of students in method 1, which is significantly lower compared the other methods, indicates that method 2 and 3 are better. But, the statistically identical results achieved by method 2 and 3 signify that method 2 is more efficient in the application, because it only needs 2 sessions to achieve the same result as 3 sessions.

Rabies Education in Junior High School Students

The average knowledge level of junior high school students on rabies is shown in Table 6 below.

Table 6. Average Knowledge Level of Junior High School Students on Rabies with Standard Error

Intervention	Average \pm SE				
	Pre Test	Post Test 1	Post Test 2	Post Test 3	Post Test 3 Mo.
Method 1	32.15 \pm .52 ^a	37.92 \pm .39 ^b	-	-	37.57 \pm .41 ^b
Method 2	31.17 \pm .98 ^a	35.57 \pm .74 ^b	37.56 \pm .71 ^b	-	36.65 \pm .67 ^b
Method 3	35.49 \pm .35 ^a	41.89 \pm .45 ^b	41.62 \pm .28 ^b	42.16 \pm .26 ^b	44.01 \pm .15 ^c

Note: different superscripts in the same line indicates statistical difference

Data in Table 6 shows an overall significant increase in the knowledge level of junior high school students until post test 3 months ($P < 0.05$). The maximum achievable test score for junior high school students is 51. In general, the average results of students in method 1 had increased significantly. In method 2 the average test results increased until the 2nd post test with a decreasing tendency in the final post test even though it is not statistically significant. In method 3 the average test results increased significantly until the final post test 3 months later. Comparison of post test 1 results and final method results are shown in Table 7.

Table 7. Comparison of Methods Using Average Knowledge Levels with Standard Error for Junior High School Level

Test	Average \pm SE		
	Method 1	Method 2	Method 3
Pre Test	32.15 \pm .52 ^a	31.17 \pm .98 ^a	35.49 \pm .35 ^b
Post Test 1	37.92 \pm .39	35.57 \pm .74	41.89 \pm .45
Post Test 2	-	37.56 \pm .71	41.62 \pm .28
Post Test 3	-	-	42.16 \pm .26
Post Test 3 Mo.	37.57 \pm .41	36.65 \pm .67	44.01 \pm .15
Score Difference	5.42	5.48	8.52

Note: different superscripts in the same line indicates statistical difference

Data in Table 7 shows that not all methods had homogenous baseline values, which is indicated by the pre test. Students in method 3 had better starting knowledge than students in method 1 and 2. This is most likely because students in method 3 came from a school known for its better quality compared to schools that supplied students for method 1 and 2. Pre test results of method 1 and 2 were statistically equivalent.

Statistical comparison of post test 1 results of method 1 and 2 with t-test did not result significant ($P > 0.05$). This means there is no statistical difference in the average knowledge level resulted from education using different media between method 1 (presentation) and method 2 (booklet). Direct comparison of score difference between pre test and post test results of all methods indicate that method 3 (8.52) is better compared to method 1 (5.42) and method 2 (5.48).

Rabies Education in Senior High School Students

The average knowledge level of senior high school students on rabies is shown in Table 8 below.

Table 8. Average Knowledge Level of Senior High School Students on Rabies with Standard Error

Intervention					
	Pre Test	Post Test 1	Post Test 2	Post Test 3	Post Test 3 Mo.
Method 1	34.82 \pm 1.2 ^a	43.60 \pm 1.36 ^b	-	-	43.72 \pm 1.46 ^b
Method 2	40.23 \pm .87 ^a	46.44 \pm 1.42 ^b	47.98 \pm .66 ^b	-	47.63 \pm .49 ^b
Method 3	36.16 \pm .91 ^a	42.23 \pm 1.95 ^b	41.67 \pm .99 ^b	46.54 \pm .67 ^c	45.71 \pm .91 ^c

Note: different superscripts in the same line indicates statistical difference

Results in Table 8 show an overall significant increase in the knowledge level of senior high school students until post test 3 months ($P < 0.05$). The maximum achievable test score for senior high school students is 60. In method 1 and 2 there is a significant difference between pre test and final post test results, even though in method 1 the results of post test 1 is statistically equivalent to the final post test as are the results of post test 2 and the final post test in method 2. In method 3 there is significant increase until post test 3, which was maintained until the final post test 3 months later. Comparison of post test 1 results and final method results are shown in Table 9.

Table 9. Comparison of Methods Using Average Knowledge Levels with Standard Error for Senior High School Level

Test	Average \pm SE		
	Method 1	Method 2	Method 3
Pre Test	32.82 \pm 1.2 ^a	40.23 \pm .87 ^b	36.16 \pm .91 ^a
Post Test 1	43.60 \pm 1.36	46.44 \pm 1.42	42.23 \pm 1.95
Post Test 2	-	47.98 \pm .66	41.67 \pm .99
Post Test 3	-	-	46.54 \pm .67
Post Test 3 Mo.	43.72 \pm 1.46	47.63 \pm .49	45.71 \pm .91
Score Difference	8.9	7.4	9.5

Note: different superscripts in the same line indicates statistical difference

Comparison of pre-test results shown in Table 9 above indicates heterogeneity between the baseline values of groups, where students in method 2 on average have better starting knowledge than students in method 1 and 3. This most likely occurred because students in method 2 are from the natural science class stream, which gives them better knowledge on biology-related issues compared to students in method 1 and 3 which are from the social science class stream.

Statistical comparison of post test 1 results of method 1 and 3 using t-test did not result significant ($P > 0.05$). This means there is no statistical difference in the average knowledge level resulted from education using different media between method 1 (presentation) and method 3 (rabies incident film). Direct comparison of score difference between pre test and post test results of all methods indicate that method 3 (9.5) is better compared to method 1 (8.9) and method 2 (7.4).

Rabies Education in the Hunting Community

Rabies education in the hunting community was given in two sessions. In the first session, introduction and general knowledge on rabies was given using a power point presentation and flipchart. In the second session, the rabies incident movie was shown and discussion was generated on the dangers of rabies so hunters would understand the importance of rabies vaccination.

A total of 17 hunters attended the sessions. They were quite enthusiastic and interactive in the discussion because they wanted to know more about rabies vaccination. They admitted that it was the first time they received such clear and detailed information on rabies with an attractive presentation. As a result, the community immediately requested rabies vaccination for their dogs.

In response, CIVAS in collaboration with the Livestock Service Office of Sukabumi District facilitated the vaccination of 30 hunting dogs owned by the community. Six other dogs were not vaccinated because they were too young. Vaccination was conducted Tuesdays so it did not interrupt their weekly hunting schedule on Sunday. This way, the dog's performance is not affected by post-vaccination stress and the belief that vaccination makes dogs weak could be eliminated.

DISCUSSION

At the beginning of the program, we found out that the baseline value of student knowledge on rabies in each school is not the same. In some schools, the collective knowledge of students on rabies is higher compared to others, as was shown in Table 3. Information from teachers and officers of the Livestock Service Office confirmed that no education on rabies has been specially given to the students because so far the program was focused on dog owners who are usually adults. Therefore, this difference in knowledge is most likely influenced by the different intelligence and study subject background of students, such as found in senior high school students where the natural science class stream had better average score than the social science class stream. But, regardless of their starting point, overall all groups experience a significant increase in knowledge level after the education program.

Information given to young and educated respondents is expected to be received and transferred more easily. School students as agents of change can then pass on that information to their neighborhood. There are several factors affecting the ability of students in receiving and retaining information, such as internal factors (health and intelligence), external factors (surrounding environment), and study approach factors. Different approaches could result in different results, and this is what this program is trying to explore.

The program found that the education media used to relay information to elementary, junior high and senior high students has no significant influence to the results of the education, but variation in the media is important to prevent boredom from receiving the same information repeatedly. A more influencing factor might be how the educator presents the information to the audience. More often a message is repeated, the higher the chances people will receive and retain the message (Longman & Atkinson 1999). In each session of the program, interactive discussion and question-answer sessions were commenced to maintain the attention and focus of the audience and provide opportunities to repeat key messages. Also the media used (power point presentation, comic book, flash movie) are technologically new and attractive for students, resulting in high interest and good transfer of information.

In elementary school students, methods 2 and 3 resulted most effective, while in junior and senior high school students, method 3 resulted better compared to other methods. This is most likely because the information is repeated more often through more sessions (2 and 3 times) and the different media used are easily understood. From here, it is clear that the more often we give information, the higher the knowledge level will become. For elementary school students, after the last final post test, students are given specially designed rabies-snakes and ladders game which contains information on rabies identification, prevention, and management, so children can play and be reminded of information on rabies.

Basically, if we give information through new and different approaches (media) continuously, it will be easier for the audience to receive, understand, and retain the information. It is often said that information must be repeated at least 3 times to be retained by the receiver (Wood 2008). But, in designing a program, besides achievement, efficiency of the method used must also be considered. Information does not always have to be given continuously if the audience has reached a certain level of knowledge, such as was found in elementary school students in this program. Method 2 in elementary school students resulted in statistically equivalent results as method 3,

but was more efficient in application because the method only required 2 sessions. Unfortunately similar results could not be concluded for junior and high school students since certain methods in those levels could not be compared statistically. Therefore, further exploration is warranted to find the best education approach for students in these levels.

In the hunting community, the final goal of the program was to make them realize the importance of vaccination because it will reduce the risk of rabies infection in hunting dogs. Before, hunters have received incorrect information regarding rabies vaccination. They believed that it will make their dogs weak, prone to illness, and no longer be functional as hunting dogs. In truth, if vaccination was conducted appropriately, such as only vaccinating healthy dogs, not using recently vaccinated dogs for hunting for at least 3 days, and not bathing the dogs after vaccination, then post-vaccination stress will not affect the health and performance of the dogs. Vaccination of hunting dogs is possible with the right approach and education and the appropriate vaccination strategy, which is adjusted to the dog's activities.

The process desired in this program is to change people from not knowing to knowledgeable, then approving and willing to implement the necessary measures. Therefore, other people are expected to imitate what has been done and also people who have received the knowledge and implemented the measures will advocate it to others around them. Also, the government and other educators could learn from the findings and results of the program, and use it to design their own effective and successful education program.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on results achieved in the program, we can conclude that education with 2 sessions (method 2) is most effective and efficient for elementary school students, while education with 3 sessions (method 3) is indicated to be most effective for junior and senior high school students. Overall, all student groups experienced a significant increase in knowledge on rabies.

Hunters that received rabies education admit of benefiting from the program and developed initiative to routinely vaccinate their dogs, as proven by their enthusiasm to vaccinate their dogs immediately. Therefore we conclude that rabies vaccination of hunting dogs is possible with the right approach and follow up.

Recommendation

This program recommends that approaches used for rabies education should be adjusted to the local culture to be more effective in information transfer. Therefore, rabies related social-cultural assessments are necessary to identify issues that challenge rabies mitigation in different societies and future approaches and education media should be designed according to the result of such assessments. This measure is recommended for other regions in Indonesia, such as the islands of Nias, Mentawai, and Bali, which are all newly infected areas with on-going rabies outbreaks, and also the islands of Flores, Sumatra, and Sulawesi, which are endemic areas with also on-going rabies incidences.

Particularly for Sukabumi district, this program recommends to extend rabies education to other subdistricts with high rabies incidences with the recommended approaches and methods. Targeted audiences should be children, for long term future prevention, and high risk communities, such as hunters and dog owners, to prevent the disease at its source.

For junior and high school students, since statistically sound conclusions could not be derived from the results of this program, further research is warranted.

The success of the rabies vaccination in the hunting society in this program could be used as a success story to encourage other communities to conduct vaccination. Intensive education and persuasive approach to hunters with continuous exposure to information through available technologies could accelerate behavior change regarding rabies vaccination in dog.

REFERENCE

- [Anonim]. 2008a. Rabies. <http://wwwn.cdc.gov/travel/yellowBookCh4-Rabies.aspx>.
- [Anonim]. 2008b. Rabies. <http://www.cfainc.org/articles/rabies.html>.
- [Anonim]. 2008c. Rabies. <http://www.healthscout.com/ency/68/738/main.html>
- [CDC] Centers for Disease Control and Prevention. 2008. Rabies. <http://www.cdc.gov/rabies/about.html>
- [CDC] Centers for Disease Control and Prevention. 2008. The Rabies Virus. <http://www.cdc.gov/rabies/virus.html>.
- [Defra] Departement for enviroment Food and Rural Affairs. 2008. Diseases factsheet: Rabies. <http://www.defra.gov.uk/animalh/diseases/notifiable/rabies/index.htm>.
- [Depkes] Departemen Kesehatan. 2010. Hari Rabies Sedunia 2010. <http://www.depkes.go.id/index.php/berita/press-release/1221-hari-rabies-sedunia-2010.html>.
- [Disnak Jabar] Dinas Peternakan Provinsi Jawa Barat. 2008. Waspada Terhadap Penyakit Rabies. http://www.disnak.jabarprov.go.id./index.php?mod=penyakit_Hewan&idMenuKiri=551&idMenu=555.
- [Disnak. Kab. Sukabumi] Dinas Peternakan Kabupaten Sukabumi. 2008. Laporan Hasil Pelaksanaan Eliminasi Anjing Liar di Wilayah Kabupaten Sukabumi 2008.
- Homeier BP. 2005. Rabies. http://www.kidshealth.org/parent/infections/bacterial_viral/rabies.html.
- Longman DG. and RH Atkinson. 1999. College Learning and Study Skills. Wadsworth/Thomson Learning
- Middendorf JT. 2008. Rabies. <http://www.canismajor.com/dog/rabies/html>.
- Naipospos TSN. 2007. Kesehatan Hewan untuk Kesejahteraan Manusia. Bogor. CIVAS Pr.
- [OIE] Office International des Epizooties. 2005. Rabies. http://www.oie.int/eng/normes/mmanual/a_summary.htm.
- [PHAC] Public Health Agency of Canada. 2008. Rabies. <http://www.phac-aspc.gc.ca/tmp-pmv/info/rage-eng.php>.
- [WHO] World Health Organization. 2008. Rabies. <http://www.who.int/mediacentre/factsheets/fs099/en/>
- Wood JT. 2008. Communication in Our Lives. Cengage Learning

APPENDIX

Appendix 1. Education Media

1. Presentation for Elementary School Students

This presentation was designed for children between 10 to 11 years of age. The presentation contains information that could be easily understood by children using simple language. It consists of general knowledge on rabies, how rabies is transmitted, clinical symptoms of rabies in animals, how to avoid being bitten, and how to prevent and manage bite cases.



CIRI hewan terkena RABIES

Air liur yang berlebihan



CIRI hewan terkena RABIES

Rahang selalu terbuka (sulit makan & minum)



CIRI hewan terkena RABIES

Peka cahaya dan suara



CIRI hewan terkena RABIES

Ekor di lengkungkan diantara kaki



Bagaimana Rabies membuat orang sakit

Rabies menyerang OTAK...



OTAK rusak → GILA → MATI

Jika MANUSIA terkena RABIES.....

Tanpa Penanganan yang tepat, maka 100% akan MENINGGAL

Bagaimana cara menghindari Rabies????

Menghindari di gigit atau dicakar hewan yang mengidap RABIES



Jangan mengganggu anjing yang sedang MAKAN, TIDUR, MENJAGA ANAKNYA



Kandangkan Anjing & Kucing



Vaksinasi semua Anjing & Kucing



Jika digigit atau dicakar binatang penular rabies

- Beritahu orang DEWASA
- Cuci luka dibawah air mengalir
SEGERA!!!!
- Bersihkan luka dengan sabun
- Beri Alkohol atau Obat Merah
- SEGERA ke PUSKESMAS /
DOKTER



Kenapa Vaksinasi itu PENTING

RABIES merupakan penyakit
BERBAHAYA yang belum ada
OBATnya....

Akan tetapi PENYAKIT ini BISA
DICEGAH



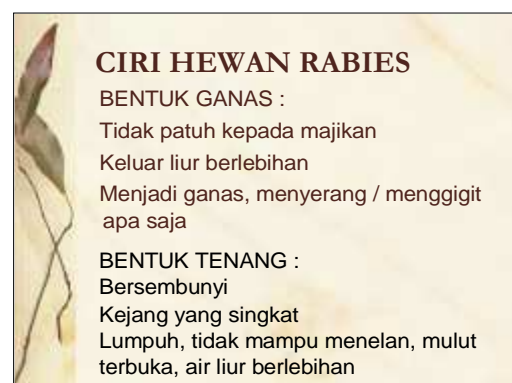
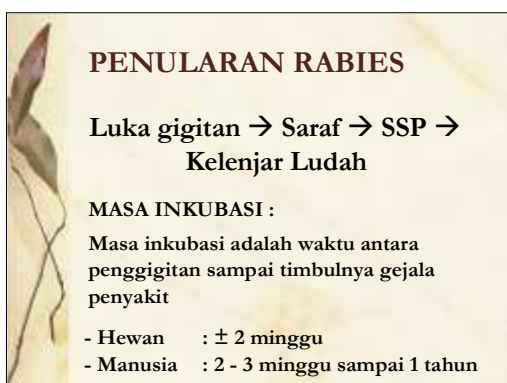
VAKSINASI

TERIMA KASIH



2. Presentation for Junior High School Students

This presentation was designed for students between 13 to 14 years of age. The presentation contains some scientific terms, but is still easy to understand. It consists of general knowledge on rabies, how rabies is transmitted, clinical symptoms of rabies in animals and human, and how to prevent and manage bite cases.





TANDA – TANDA pada MANUSIA

- Sakit KEPALA
- Pupil membesar, bicara tidak karuan, selalu ingin bergerak, nampak kesakitan dan menjadi gugup
- Rasa panas (nyeri) pada tempat gigitan
- Takut air, peka suara keras, cahaya dan angin/udara
- Air liur dan air mata keluar berlebihan
- Kejang-kejang disusul dengan kelumpuhan dan akhirnya meninggal dunia

PENCEGAHAN

HEWAN

VAKSINASI secara RUTIN MERANTAI atau MENGANDANGKAN

MANUSIA

HINDARI GIGITAN atau CAKARAN

APABILA TERGIGIT

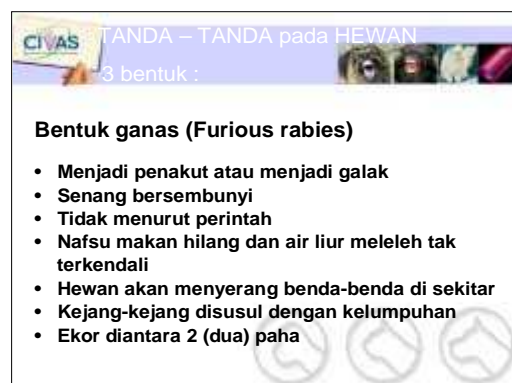
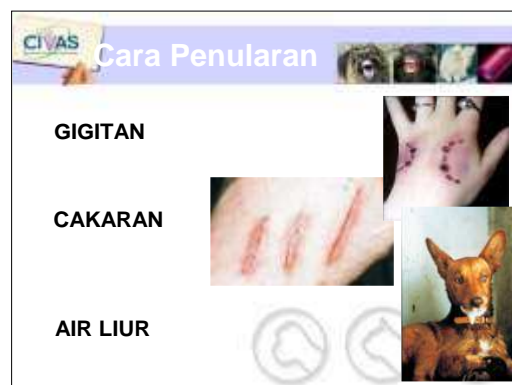
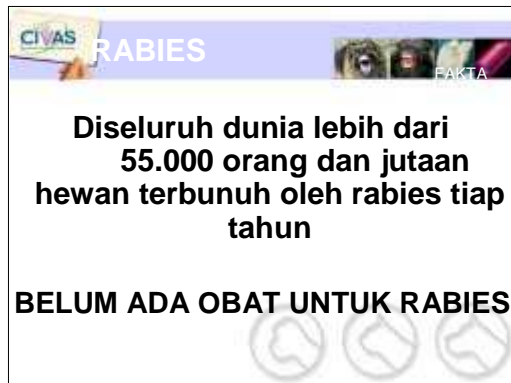
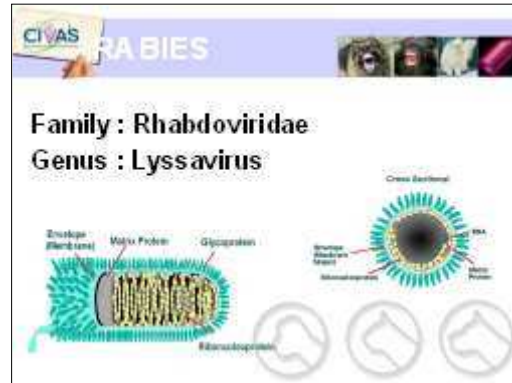
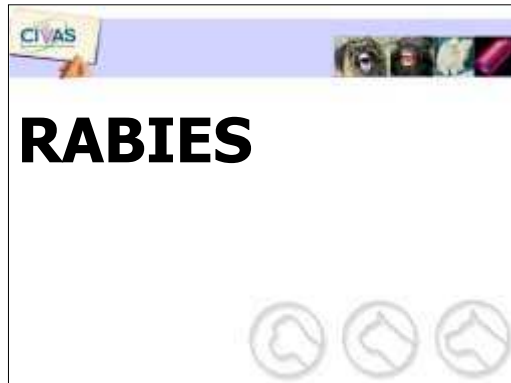
- Cuci luka dibawah air mengalir
SEGERA
- Bersihkan luka dengan sabun / detergen
- Beri Alkohol atau Obat Merah
- **SEGERA** ke PUSKESMAS / DOKTER

TERIMA KASIH



3. Presentation for Senior High School Students

This presentation was designed for teenage students between 16 to 17 years of age. The content is similar to the presentation for junior high school students but it is presented in a more scientific and detailed manner.



TANDA – TANDA pada HEWAN

3 bentuk :

Bentuk diam (Dumb Rabies)

- Bersembunyi di tempat yang gelap dan sejuk
- Kejang-kejang yang singkat, sering tidak terlihat
- Lumpuh, tidak dapat menelan, mulut terbuka
- Air liur keluar terus menerus (berlebihan)
- Mati

Bentuk Asymptomatis

-

TANDA – TANDA pada HEWAN

TANDA – TANDA pada HEWAN

TANDA – TANDA pada HEWAN

TANDA – TANDA pada HEWAN

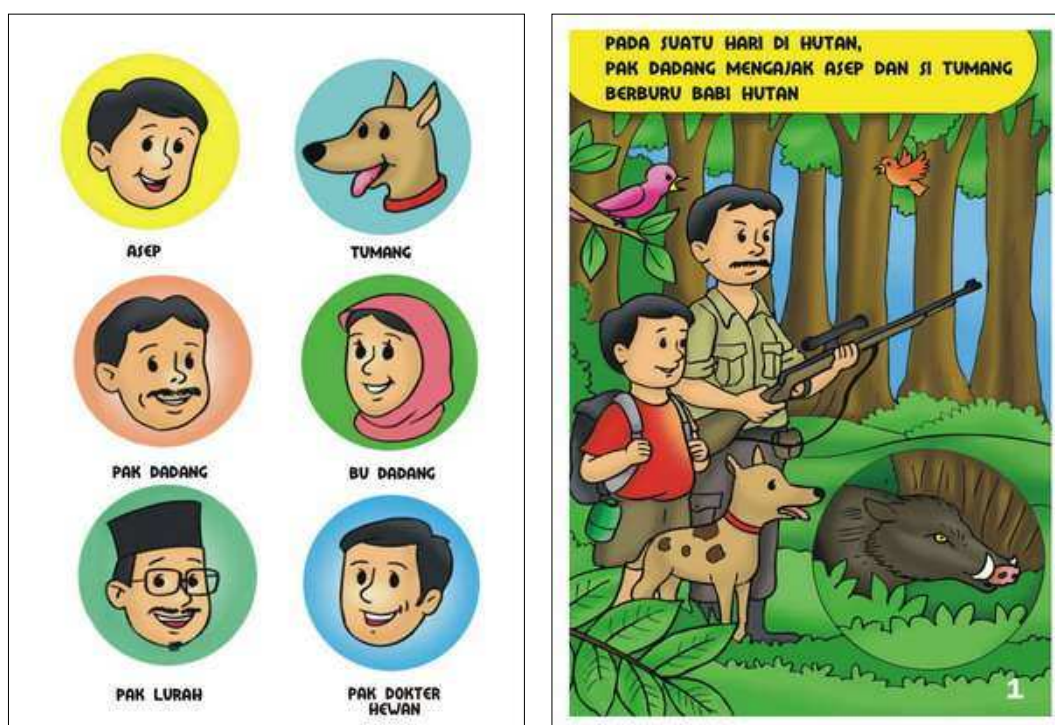
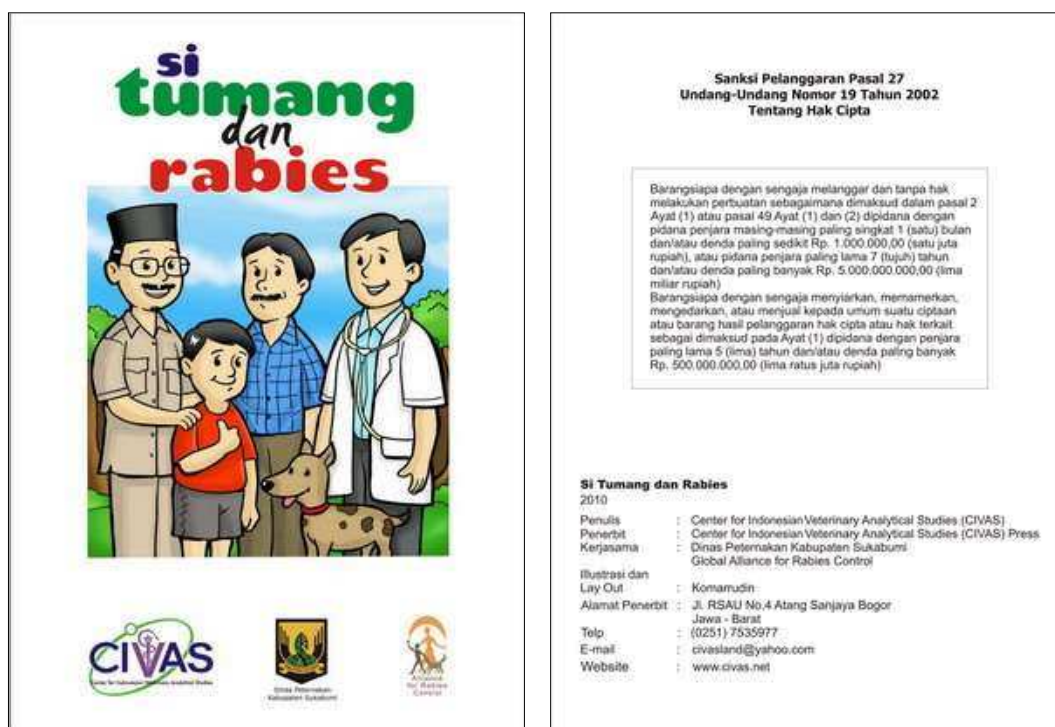
TANDA – TANDA pada HEWAN

TANDA – TANDA pada HEWAN

4. Comic

This comic tells the story about a boy named Asep with his father, a hunter. They went hunting in the forest with their hunting dog named Tumang. In the forest Tumang spots a wild boar and chases it. The boar gets away. In his search for the boar, Tumang is suddenly attacked by a wild dog from behind the bushes. Tumang is rescued by Asep and his father and is brought home.

Two weeks after being bitten, Tumang develops symptoms of a rabid dog and bites Asep. The village leader comes to handle the situation and calls the local government veterinarian. The veterinarian explains about rabies to every one and how it could be prevented by vaccination.













Vaksinasi Hewan Peliharaan Anda Secara Rutin untuk Mencegah Rabies

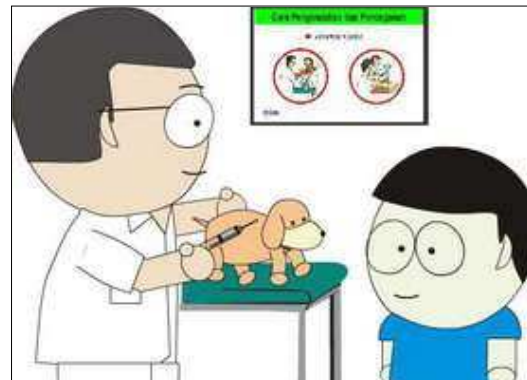
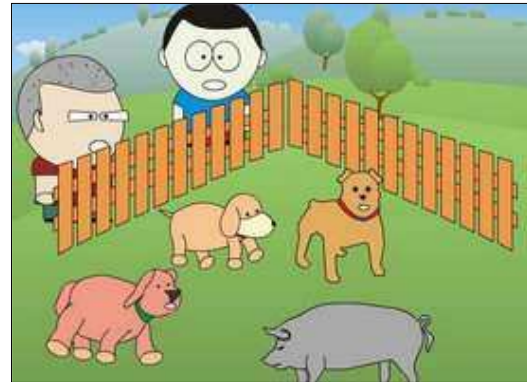
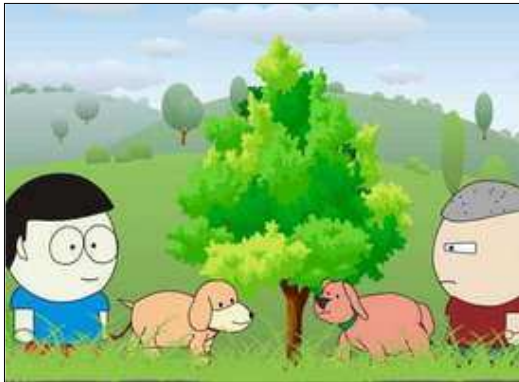


Diterbitkan atas kerja sama :



5. Flash Movie

This flash movie tells the story about 2 friends, Ujang and Deden, who both have dogs. One day Ujang is bringing his dog to the veterinarian for a rabies vaccination. In the way he met Deden who laughed at him saying that rabies vaccination is useless and unnecessary. A month later they participated in a wild boar training session in their village, where both Ujang and Deden's dog got attacked by a rabid looking dog during the event. Two weeks later Ujang finds Deden crying because his dog had died of rabies. They both went to the vet to seek advice and afterward always vaccinated their dogs against rabies.



6. Booklet

The title of the booklet is "Rabies, Did You Know?". It contains general information on Rabies for high school students, consisting of the meaning of rabies, its history, rabies development in Indonesia and the world, rabies transmitting animals, incubation time and symptom in both animal and human, and how to prevent and handle cases.



Tanda pada manusia & Pencegahan

Tanda-tanda penyakit rabies pada manusia :

- Sakit kepala, tidak bisa tidur, demam tinggi, mual/muntah, tidak nafsu makan
- Merasa panas (nyeri) atau gatal pada tempat gigitan
- Sangat takut pada air dan paku terhadap cahaya, suara serta hembusan udara
- Air mata dan air liur keluar berlebihan
- Pupil mata membesar
- Bicara tidak keruan, gelisah, selalu ingin bergerak dan tampak kesakitan
- Kejang-kejang, lumpuh, dan akhirnya meninggal dunia

Rabies dapat dicegah dan diberantas dengan:

- Memberikan vaksin rabies pada anjing, kucing, dan kerah/monyet peliharaan secara teratur
- Menghindari terjadinya penggigitan dengan:
 - a) Tidak mengganggu anjing yang sedang makan, tidur, atau mengasuh anak
 - b) Menggunakan rantai (± 2 meter) pada hewan peliharaan saat mengapakinya keluar rumah
 - c) Memasang barangus pada mulut anjing terutama jika dibawa keluar

Penanganan Gigitan

- Mengurangi jumlah anjing, kucing dan monyet liar atau peliharaan yang berkeluaran dengan:
 - a) Rerantai (± 2 meter) atau menggendong hewan peliharaan
 - b) Tidak membuang hewan peliharaan ke tempat umum sehingga menjadi liar
 - c) Tidak membuang sisa makanan yang dapat mengundang berkumpulnya hewan liar
- Pertolongan pertama terhadap korban gigitan :
 - a) Cuci luka gigitan dengan air mengalir dan sabun selama 5-10 menit, keringkan, dan beri povidone iodine atau alkohol 70%
 - b) Bawa korban ke Puskesmas atau Rumah Sakit terdekat untuk penanganan lebih lanjut
- Laporkan kejadian penggigitan ke petugas Dinas Peternakan
- Tanggap hewan yang menggigit dan serahkan kepada Dinas Peternakan untuk diteliti selama 14 hari
 - a) Jika hewan menunjukkan gejala rabies dan mati dalam masa pengamatan maka kepala hewan tersebut akan dikirim oleh Dinas Peternakan ke laboratorium untuk kepastian diagnosis penyebab kematian
 - b) Apabila setelah masa pengamatan hewan tetap hidup maka :
 - Hewan berjenis akan diberi vaksin anti rabies dan dilepaskan atau
 - Hewan akan dibunuh bila tidak ada pemiliknya



7. Flipchart

The flipchart was designed for wild boar hunters. It contains general information on Rabies with emphasize on the importance of vaccination. Visualization through figures and pictures are more emphasized.

PENANGANAN DAN PENCEGAHAN RABIES




RABIES / ANJING GILA

Penyakit berbahaya yang menular dari hewan ke manusia




Semua mamalia dapat terkena RABIES





Binatang yang tidak akan menyebabkan RABIES

- Burung hantu
- Ular
- Elang
- Kodok




Tanda- tanda RABIES pada Anjing




RABIES Ganas

- Tidak menurut perintah pemilik
- Air liur keluar berlebihan
- Ganas, menggigit, ekor dilengkungkan ke bawah perut di antara dua paha
- Kejang-kejang kemudian lumpuh



Bagaimana RABIES dapat membuat Anda sakit?



Otak
Susunan Syaraf Tulang Belakang



Tanda-tanda RABIES tenang




Tanda- tanda RABIES pada Manusia




Jika hewan terkena RABIES,
mereka semua akan
mengalami kematian



Cara Pencegahan untuk Hewan

• Vaksinasi RABIES



Tindakan yang Dilakukan jika Terjadi Kasus Gigitan

Hewan Peliharaan

- Jangan dibunuh
- Ditangkap dan diserahkan ke Dinas Peternakan untuk diamati selama 14 hari
- Jika masih hidup tanpa menunjukkan gejala RABIES diserahkan kembali kepada pemilik



Tindakan...

Hewan Liar



- Jangan dibunuh, diusahakan ditangkap dan diserahkan ke Dinas Peternakan untuk diamati selama 14 hari



Tindakan...

Manusia



- Segera cuci luka gigitan dengan air bersih dan sabun/ detergen selama 5-10 menit kemudian bilas dengan air mengalir lalu keringkan



- Korban segera dibawa ke PUSKESMAS



Hal yang dapat Dilakukan untuk Mencegah RABIES



- Vaksinasi RABIES rutin



- Anjing tidak dibiarkan berkeliaran



- Anjing dirantai (panjang max 2 meter) moncong diberangus



8. Rabies Movie

This movie is a public awareness movie for rabies in Africa. It was produced by the Animal Health Directorate of South Africa and is dubbed into Indonesia language. Permission for using the movie is still in progress as it is difficult to contact the South African government.

9. Snake and Ladder Game

This is a common game played by children. There are 100 boxes in the game and each box is filled with simple information on rabies for children to read and remember.



Appendix 2. Pre and Post Test

1. ELEMENTARY SCHOOL

SCHOOL	
CLASS	
NAME	

1. Rabies is commonly known as..... disease
 - a. Mad dog
 - b. Fever dog
 - c. I don't know
 - d. Vicious dog
 - e. Dizzy dog
2. Is Rabies a dangerous disease?
 - a. Yes
 - b. No
 - c. I don't know
3. Rabies attacks the.....
 - a. Hand
 - b. Mouth
 - c. Brain
 - d. Head
 - e. I don't know
4. Can humans get Rabies?
 - a. Yes
 - b. All answers are wrong
 - c. No
 - d. I don't know
5. Animals that could give you Rabies are.....
 - a. Dog and snake
 - b. Cat and fish
 - c. Dog, cat, and monkey
 - d. Chicken and frog
 - e. I don't know
6. Rabies enters the body through.....
 - a. Food
 - b. Bites
 - c. Eye contact
 - d. Fur
 - e. I don't know
7. What are the signs of a rabid dog?
 - a. Vicious, a lot of drooling
 - b. Wags its tail
 - c. Likes to sleep
 - d. Likes to drink
 - e. I don't know
8. What will happen to people who are bitten by rabid animals but do not receive proper treatment?
 - a. They will get stronger
 - b. Nothing
 - c. They will die
 - d. They will get tetanus
 - e. I don't know
9. What is the first thing we should do if we are bitten by a dog or any other animal suspected to have Rabies?
 - a. Wash our wound with running water and soap/detergent
 - b. Throw the animal with a rock
 - c. Just let the wound heal on its own
 - d. Clean the wound using leaves
 - e. I don't know

10. After the bite wound is properly handled, we should immediately go to the.....
- a. Livestock Service Office
 - b. Education Office
 - c. Citizenship Office
 - d. Community Health Center or Hospital
 - e. I don't know
11. To avoid being bitten by dogs, we should.....
- a. Cover ourselves with long sleeves and long pants
 - b. Only play during the day
 - c. Always play by carrying a stone
 - d. Not disturb dogs, especially if they are sleeping, eating, or caring for their pups, also do not look at them directly in the eye
 - e. I don't know
12. What should we do to prevent animals from getting Rabies?
- a. Give them good food
 - b. Don't keep animals
 - c. Give them regular vaccination
 - d. Just let them be
 - e. I don't know
13. To whom should we go if we want to give Rabies vaccination to our pet dogs or cats?
- a. The doctor
 - b. The police
 - c. The village officer
 - d. The vet or Livestock Service officer
 - e. I don't know
14. Have you ever heard about Rabies before?
- a. Yes, from my teachers at school
 - b. Yes, from government officers
 - c. Yes, from the newspaper
 - d. Yes, from watching television or listening to the radio
 - e. Never

2. JUNIOR HIGH SCHOOL

1. Rabies is commonly known as disease
 - a. Mad dog
 - b. Fever dog
 - c. I don't know
 - d. Vicious dog
 - e. Dizzy dog
2. Rabies is caused by:
 - a. Bacteria
 - b. Fungi
 - c. Virus
 - d. Toxins
 - e. I don't know
3. In the body, Rabies attacks the:
 - a. Muscle
 - b. Digestive system
 - c. Respiratory system
 - d. Brain and nerves
 - e. I don't know
4. Main Rabies transmitting animals in Indonesia are:
 - a. Dog, cat, monkey
 - b. Cat, dog, frog
 - c. Monkey, cattle, beetle
 - d. Flies, lice, other biting insects
 - e. I don't know
5. Rabies is passed on through:
 - a. Biting insects
 - b. Infected food
 - c. Bites and infected saliva
 - d. Infected soil, water, and air
 - e. I don't know
6. The incubation period of Rabies in humans is:
 - a. 1-2 days
 - b. 1-2 week
 - c. 2-3 weeks until a year
 - d. 5 months to 5 years
 - e. I don't know
7. The Rabies infection pathway:
 - a. Enter the body → Central nervous system → nerves → saliva gland
 - b. Enter the body → nerves → Central nervous system → saliva gland
 - c. Enter the body → nerves → saliva gland → Central nervous system
 - d. Enter the body → saliva gland → nerves → Central nervous system
 - e. I don't know
8. The symptoms of an animal with Furious Rabies are:
 - a. Aggressive/vicious, excessive drooling
 - b. Hiding, fear of bright light
 - c. There are no symptoms
 - d. Excessive drinking and eating
 - e. I don't know
9. The symptoms of an animal with Dumb Rabies are:
 - a. Aggressive/vicious, excessive drooling
 - b. Hiding, fear of bright light
 - c. There are no symptoms
 - d. Excessive drinking and eating
 - e. I don't know
10. One symptom of a person infected by Rabies is:
 - a. Talkative and engaging
 - b. Always smiling
 - c. Laughing and talking by his/her self
 - d. Excessive drooling and tear production
 - e. I don't know

11. What is the first thing you should do if you are bitten by a dog or any other animal suspected with Rabies?
 - a. Wash the bite wound with running water and soap/detergent then report the incident
 - b. Give antiseptics to the wound
 - c. Dress the wound with leaves
 - d. Wash the wound with ash
 - e. I don't know
12. What should be done to prevent a person bitten by a rabid animal from developing Rabies?
 - a. Suck the bite wound to draw out the poison
 - b. Immediately go to the community health center / hospital to get Anti Rabies vaccine
 - c. Dress the bite wound with medicinal leaves
 - d. Dress the wound with snail mucous
 - e. I don't know
13. What should be done to animals suspected with Rabies?
 - a. Restrain it and hand it over to the Livestock Service Office
 - b. Kill it to prevent it from biting other animals or humans
 - c. Catch it and collect its blood for medicine
 - d. Kill it, then burn it to destroy the Rabies virus
 - e. I don't know
14. What should we do to prevent Rabies?
 - a. Do not leave your home
 - b. Do not have pet animals
 - c. Regularly vaccinate pet dogs and cats
 - d. Just let it be
 - e. I don't know
15. Why is Rabies vaccination in dogs and cats important?
 - a. Because there is no cure for Rabies
 - b. Dogs and cats are susceptible to Rabies
 - c. Vaccination makes the animals immune to Rabies
 - d. Because it is free
 - e. I don't know
16. What is the proper way of giving Rabies vaccination to your animals?
 - a. Once for a lifetime
 - b. Not necessary if the animal looks healthy
 - c. If the animal is sick
 - d. Routinely for as long as the animal lives
 - e. I don't know

17. Rabies is a dangerous disease because:
- a. The government said it is and as good citizens we should agree
 - b. The cause is still unknown
 - c. It is zoonoses, could be infect both humans and animals
 - d. There is no cure, if Rabies symptoms occur it could no longer be treated
 - e. I don't know
18. Have you ever received information of rabies before?
- a. From school
 - b. From printed and electronic media
 - c. From the Livestock Service Office
 - d. I have never received information on Rabies before
 - e. I don't care

1. Rabies is caused by:
a. Bacteria b. Protozoa c. Virus d. Fungie. I don't know
2. In the body, Rabies attacks the:
a. Muscle b. Digestive system c. Brain and nerves
d. Respiratory system e. I don't know
3. Who could be infected by Rabies?
a. All mammals and human b. Flies, lice, and other biting insects
d. All mammals and fish e. I don't know
c. All mammals and amphibians
4. In the Rabies status map of Indonesia, Sukabumi is classified as:
a. Infected b. Free c. Historically free
d. Outbreak area e. I don't know
5. Main Rabies transmitting animals are:
a. Mammals and reptiles b. Flies, lice, and other biting insects
c . Dog, cat, monkey d. Dog, cat, snake, mice, bat
e . I don't know
6. Rabies is passed on through:
a. Carnivores b. Rodents
c. Bites and infected saliva d. Infected soil, water, and air
e. I don't know
7. The Rabies infection pathway:
a. Enter the body → Central nervous system → nerves → saliva gland
b. Enter the body → nerves → Central nervous system → saliva gland
c. Enter the body → nerves → saliva gland → Central nervous system
d. Enter the body → saliva gland → nerves → Central nervous system
e. I don't know
8. The incubation period of Rabies in humans is:
a. 1-2 days b. 1-2 weeks c. 2-3 weeks until a year
d. 2-3 months until 5 years e. I don't know
9. The symptoms of an animal with Furious Rabies are:
a. Aggressive/vicious, excessive drooling b. Hiding, fear of bright light
c. Excessive drinking and eating d. Tail wagging, active
e. I don't know
10. The symptoms of an animal with Dumb Rabies are:
a. Aggressive/vicious, excessive drooling b. Hiding, fear of bright light
c. Excessive drinking and eating d. Tail wagging, active
e. I don't know

11. One symptom of rabies in human is:
- a. Coldness on the bite wound
 - b. Searching for light and sound
 - c. Headache, incoherent speech
 - d. Sleep more than usual
 - e. I don't know
12. How to cure a person that has developed Rabies symptoms?
- a. Give fever medicine
 - b. Give painkiller
 - c. Go to the medicine man
 - d. Read the person verses from the holy book
 - e. There is no cure
 - f. I don't know
13. What is the first thing you should do if you are bitten by a dog or any other animal suspected with Rabies?
- a. Wash the bite wound with running water and soap/detergent
 - b. Give antiseptics to the wound
 - c. Cover the wound with sterile dressing
 - d. Wash the wound with ash so it would not be *najis*
 - e. I don't know
14. What should be done to prevent a person bitten by a rabid animal from developing Rabies?
- a. Suck the bite wound to draw out the poison
 - b. Give Anti Rabies vaccine
 - c. Dress the bite wound with medicinal leaves
 - d. Dress the wound with snail mucous
 - e. I don't know
15. Where should we go to find help for a person bitten by a rabid animal?
- a. Livestock Service Office
 - b. Education Office
 - c. Citizenship Office
 - d. Community Health Center or Hospital
 - e. I don't know
16. What should be done to animals suspected with Rabies?
- a. Restrain it and hand it over to the Livestock Service Office
 - b. Kill it to prevent it from biting other animals or humans
 - c. Catch it and collect its blood for medicine
 - d. Kill it, then burn it to destroy the Rabies virus
 - e. I don't know
17. What should we do to prevent Rabies?
- a. Eat healthy food
 - b. Don't have pet animals
 - c. Do not leave home at night
 - d. Regularly vaccinate pet dogs and cats
 - e. I don't know

18. Why is Rabies vaccination in dogs and cats important?
- a. Because it is obligated by the government
 - b. Vaccination makes the animals immune to Rabies
 - c. Not necessary if the animals are healthy
 - d. So our dogs and cats could freely bite people
 - e. I don't know
19. How many times should Rabies vaccination be given?
- a. Once for a lifetime
 - b. Not necessary if the animal looks healthy
 - c. Only if the animal is sick
 - d. Routinely for as long as the animal lives
 - e. I don't know
20. Rabies is a dangerous disease because:
- a. The government said it is and as good citizens we should agree
 - b. The cause is still unknown
 - c. There is no free area in Indonesia
 - d. There is no cure, if Rabies symptoms occur it could no longer be treated
 - e. I don't know
21. Have you ever received information of rabies before?
- a. From school
 - b. From printed and electronic media
 - c. From the Livestock Service Office
 - d. I have never received information on Rabies before
 - e. I don't care

Annex 3. Documentation

1. Elementary School



2. Junior High School



3. Senior High School



4. Hunting Society





Appendix 4. Certificate



Appendix 5. Participant Biography

1. Name : Eman
2. Age : 84 years old
3. Occupation : Farmer, Leader of hunting community in Jampang Tengah
4. Hunting experience : 72 years
5. Number of dogs owned?
Currently 5 dogs, but have had 12 dogs in the past
6. How many times do you hunt in a week?
1 – 2 times
7. What encouraged you to participate in this program?
I want to know more about rabies and how to prevent it
8. Will this program affect your life and family?
Yes
9. Will this program affect what you do in the future?
Yes, I will be more cautious about rabies
10. Will your involvement in this program affect your role in your community? How?
Yes, they will ask more about rabies and deeper
11. Have you ever met a dog with rabies symptoms? What did you do at that time?
Yes, I have. The dog was very aggressive. I had it killed.
12. Photo of respondent.



PARTICIPANT BIOGRAPHY

1. Name : Ajuk
2. Age : 40 years old
3. Occupation : Farmer
4. Hunting experience : 8 years
5. Number of dogs owned?
2 dogs
6. How many times do you hunt in a week?
Once a week
7. What encouraged you to participate in this program?
I want to know more about rabies
8. Will this program affect your life and family?
Yes
9. Will this program affect what you do in the future?
Yes, I want my dogs vaccinated
10. Will your involvement in this program affect your role in your community? How?
Yes
11. Have you ever met a dog with rabies symptoms? What did you do at that time?
Yes, I have. The dog was drooling a lot and very aggressive. It was killed.
12. Photo of respondent.



Alliance for Rabies Control
Dinas Peternakan Kabupaten Sukabumi
Center for Indonesian Veterinary Analytical Studies