# Whatsapp Messanger as A Communication, Coordination and Evaluation Media in Rabies Control Program in Bengkalis District

Dewi Anggreini<sup>1\*</sup>, Hani M. Mardani<sup>2</sup>, Abdul Muthalib<sup>3</sup>, Rini Deswita<sup>4</sup>

<sup>1</sup>Departement of Animal Husbandry and Animal Health of Riau Province <sup>2</sup>Departement of Agriculture of Bengkalis District <sup>3</sup>Departement of Health of Bengkalis District <sup>4</sup>Departement of Conservation and Natural Resources of Riau \*Corresponding author's email: dwee\_ai@yahoo.com

Keywords: Bengkalis District, One Health, rabies, whatsapp messanger.

# INTRODUCTION

Zoonotic control program can not only be done by one sector only, but must involve related sectors so that *handling* can be done comprehensively. Since 2016 Bengkalis Disctrict has been chosen as one of project area of One Health on prevention and control of targeted emerging infectious diseases and targeted zoonotic, especially rabies. 3 steps of training have been conducted for public health officers, animal health officer and wildlife health officer who served in Bengkalis District.

The absence of an information system on rabies-transmitted animal bites cases that can be accesed by officers from these three sectors has hampered the communication process which is the first step in implementing rabies prevention and control activities. Therefore we need a media that can bridge officers from the animal health, public health and wildlife health sector in communicating related cases of rabiestransmitted animal bites. As one of the output of One Health project, a whatsapp messanger grup, named "One Health Riau" have been created for all the field officers from the three sector to help them to communicate.

This study aims to provide an overview of the use of whatsapp messenger to communicate, coordinate and also to evaluate field officers in the handling of rabies-transmitted animal bite cases in Bengkalis District during March to May 2018.

# **MATERIALS AND METHODS**

The data used in this study was obtained from information on rabies-transmitted animal bites case and responses that were sent to "One Health Riau" whatsapp group by public health, animal health and wildlife health officers serving in Bengkalis District during March to May 2018. The data that were sent is recapitulated and processed using a simple descriptive analysis method

## **RESULT AND DISCUSSION**

The cases of rabies-transmitted animal bites informed to "One Health Riau" whatsapp group from March to May 2018 were 73 cases. The control of rabies disease is strongly influenced by the speed of response done by field officers, both from the public health sector to handle the bite victim or from animal health to observe the condition of the biting rabiestransmitted animal. Therefore information on the occurrence of bite case should be shared immediately so that other sectors know and then perform appropriate procedures to handling the case.

Table 1. Source of rabies-transmitted animal bite case information

	Informatio Informatio					Information		
	n			n				
	Numbe	from		from		from wildlife		
	r	public		animal				
		health		health		health		
Month	of case	officers		officers				
						officers		
	report		Numb		Numb		Numbe	
		er	er			r		
		of						
		case	%	of case	%	of case	%	
		report	0.4	report		report		
M l.	22	20	91	2	00/	0	00/	
магсп	22	20	% 02	Z	9%	0	0%	
Anril	26	24	92	r	00/	0	004	
Артп	20	24	70 QQ	2	090	0	0%0	
May	25	22	00	3	12%	0	0%	
<sup>1</sup> · i · a y	25	<i>LL</i>	90	5	10	U	070	
TOTAL	73	66	%	7	%	0	0%	

90% case informations (66/73) were sent by public health officers, 10% (7/73) by animal health officers, and no information sent by wildlife health officers. Most of rabies-transmitted animal bite cases information were sent by public health officers because the bite victims will seek treatment at the health center. Therefore the role of public health officers as the source of information is very important.

Another factor contributing to the success of rabies control is the handling of bite cases comprehensively that may reduce the risk of further bites by the same rabies-transmitted animal. Therefore, it is expected that public health officer and animal health officers and also wildlife health officer can respond each bite case together cross-sectorally.

Table 2. Types of response of rabies-transmitted
animal bite case information

		Response						
		cross-		Response		No		
	Number					respo	nse	
		sectorally Numbe		sector	ally			
Month	of case			Numbe				
		r		r		Number		
		of	%		%		%	
		case		of case		of case		
							50	
Maret	22	2	9%	9	41%	11	%	
A	26	r	100/	10	(20)	-	19	
Аргіі	26	5	19%	10	62%	5	%	
Mai	25	Q	270%	12	520%	1.	10	
Mei	23	0	5270	15	JZ 70	т	<sup>70</sup> 27	
TOTAL	73	15	21%	38	52%	20	%	

15 of 73 case responses (21%) were done cross-sectorally, 38 of 73 case responses (52%) were sectoral and 20 of 73 cases (27%) were not responded. Most of the cases were responded sectorally, it's is due to at the occurrence of cases, field officers do not have the same spare time to respond together because of many other tasks that must be done.

However, from March to May 2018, response activities that were carried out cross-sectorally increased 75% (2 to 8), and there was a decrease in the number of unresponsive cases as much as 175% (11 to 4).



**Fig. 1.**Types of response during March to May 2018

The increase of join response crosssectorally activities and the decrease of number of unresponsive case indicates that there is an increase in awareness of field officers about the importance of cross-sectoral joint response in controlling rabies as well as the importance of the response to each case of rabies-transmitted animal bites.

## CONCLUSION

By using the WA messanger, during March to May 2018, 73 rabies-transmitted animal bite cases have been reported, 90% by public health officer. 21% (15/73) cases have been responded cross-sectorally, 52% of cases (38/73) have been responded sectorally, and 27% cases (20/73) were not responded.

This study illustrates that whatsapp messengers could be used and effective as a media to bridge field officers from the public health, animal health and wildlife health sectors in handling rabies-transmitted animal bite cases. It also could be used to evaluate performance of rabies control program done by public health, animal health and wildlife health officers in Bengkalis District.

## ACKNOWLEDGMENTS

The authors would like to thank Ministry of Agriculture, Ministry of Health, Ministry of Environment and Forestry of Indonesia Republic, who have decided Bengkalis District as one of pilot area for One Health project. We also would like to thank all the field officers of Bengkalis District for the fast and kind respons during this study. Finally we would like to thank FAO ECTAD Indonesia, WHO, and USAID for the project funding.

### REFERENCES

- [1] Shakespeare M. 2009. *Zoonoses*. Second edition. Pharmaceutical Press. Page 14.
- [2] Direktorat Kesehatan Hewan. 2014. Manual Penyakit Hewan Mamalia. Ed ke-2. Subdit Pengamatan Penyakit Hewan Direktorat Kesehatan Hewan Direktorat Jendral Peternakan Kementerian Pertanian RI. Hlm 81-93
- [3] Setijanto H, Nisa' C, Novelina S. 2016. Anatomi Veteriner. Ed ke-2. IPB Press. Bogor. Hlm 58-60.