
Overview Of Community Knowledge And Actions On The Dangers Of Rabies-Infected Dog Bites In Kineleosan Village, Kombi District

Jelita Mita Soputan^{1)*}, Lucyana Pongoh^{2)*}, Ilham Salam^{3)*}, Bertom Pajung^{4)*}, Vera Tombokan^{5)*}, Tony Pandaleke^{6)*}

^{1,2,3,4,5,6)} Public Health Program, Manado State University

*Corresponding Author

Email : ajelitasoputan08@gmail.com

Abstract

Rabies is a serious zoonotic disease caused by the Lyssavirus virus that attacks the central nervous system. The disease is still a threat, including in Kinaleosan Village where most of the community keeps dogs. The problems identified are the lack of public knowledge and preventive measures about rabies. There are still people who use traditional medicine such as lemon or chili pepper crushed after being bitten by a dog and do not immediately go to health facilities. The purpose is to find out an overview of the knowledge and actions of the people of Kinaleosan Village, Kombi District about the dangers of dog bites as rabies-transmitting animals. Using the methodology of quantitative descriptive research and the research population, all families who raise rabies-infected animals (dogs) in Kinaleosan Village as many as 235 families. Samples were taken from 148 families using the Slovin formula. Data were collected using questionnaires and analyzed using univariate analysis. The results showed that the characteristics of respondents' knowledge about the dangers of rabies-infected animal bites were mostly in the fairly good category, namely 75 respondents (50.7%). Meanwhile, the characteristics of public actions regarding the dangers of rabies-infected animal bites were mostly in the good category, namely 82 respondents (55.4%). The conclusion of this study is that the knowledge of the people of Kinaleosan Village about the dangers of rabies-infected animal bites is quite good (50.7%) and the community's actions are good (55.4%). It is recommended that the public continue to increase knowledge and increase actions regarding the dangers of rabies.

Keywords: Knowledge, Action, Rabies, Rabies Transmission Hwan.

INTRODUCTION

For health, infectious diseases are still a very serious threat, especially rabies. Rabies is a zoonotic disease that can affect humans and warm-blooded animals. Rabies is caused by the *Lyssavirus* virus belonging to the family *Rhabdoviridae*, which then attacks the central nervous system and is fatal. Rabies is a serious zoonotic disease that is very dangerous because it can cause death in animals and humans infected with the rabies virus in animal saliva. As a major spreading animal of rabies (HPR), dogs play a large role in the spread of the disease, especially in areas with high populations of wild dogs and intense human-animal interactions. This rabies virus spreads to animals and humans through saliva, usually through bites, scratches, or direct contact with mucous membranes such as mouth or open wounds (WHO, 2025). In the 1800s, rabies entered Indonesia and spread almost to the entire region. Rabies is one of the health problems in the community that can cause death after the patient experiences clinical symptoms (Permatananda et al, 2022) while according to (Fidela, 2024) rabies is one of the zoonotic diseases caused by viruses from the family *Rhabdoviridae* and the genus *Lyssavirus*. Rabies will attack the central nervous system after being transmitted through bites or scratches from rabies-infected animals (HPR) such as dogs, cats, monkeys and bats. Rabies disease is very fatal because it can cause physiological and psychological disorders.

The World Health Organization (WHO) states that rabies kills approximately 55,000 people every year worldwide. More than 99% of deaths are caused by the bite of a dog animal that has been infected with the rabies virus before. The spread of this virus is more common in rural communities with a low economic level due to the lack of awareness and knowledge and access to prophylaxis after exposure, which is the cause of death due to rabies in rural areas.

In general, rabies transmission can be through animals to animals or animals to humans through bites or scratches. In addition, rabies transmission can also occur through contamination of open wounds. It is recorded that about 95% of rabies cases that occur in humans are caused by dog bites. The clinical signs caused by animals that have been infected with cases of rabies vary from one species to another. In animals such as dogs and cats, about 4 days to 8 weeks (Fidela, 2024). According to the World Health Organization (WHO) in January-July 2024, public data shows that 71 people in Indonesia died from rabies. In Indonesia alone, there are 26 rabies-endemic provinces, of which East Nusa Tenggara (NTT) is the most affected province with case reports of 19,320 animal bites with the potential for rabies in humans during 2023 which caused 35 deaths due to rabies. In 2024, NTT province reported 16,180 cases of animal bites that can cause rabies and 27 deaths due to rabies (WHO, 2024).

Based on data from the Ministry of Health (Kemenkes), there were 31,113 cases of rabies-infected animal bites from 2020 to April 2023. In addition, data shows that 23,211 cases of HPR bites have been given anti-rabies vaccines. It is also reported that there are 11 cases of death in Indonesia due to rabies (Ndoen et al, 2023). In North Sulawesi itself, rabies cases are quite high. There have been around 4,479 reported cases of rabies-infected animal bites, with 11 cases of human deaths. Then in June 2022, there were 2,089 cases of bites with 6 deaths (North Sulawesi Health Office, 2022). The Kombi Health Center confirmed that in November 2024 there were 4 cases of dog bites at the Kombi Health Center, then in February-March 2025 there were around 10 cases of dog bites, 2 of which had been vaccinated with the VAR (Anti-Rabies Vaccine) because the dog died, and the remaining 8 people were instructed to wash their wounds according to the SOP and were given education by health staff at the Kombi Health Center.

In Kinaleosan village, most of the people keep rabies-infected animals, namely dogs. Some people have experienced bites and even scratches but choose not to go to the health center because they do not have a vehicle and access to the health center which is a little far, but there are also some people who have private vehicles to go to the health center for treatment if they are bitten or scratched by a dog. However, there are also people of Kinaleosan Village who believe in the medicine that has been taught by their parents in the past that if they are hit by a scratch or even a dog bite, they use lemon that has been cut into two parts and then rubbed on the part bitten or clawed by the dog, there are also those who use mashed rica and knives that are brought closer to the wound or scratch from the dog to prevent the rabies virus from occurring. Some of these methods are still used by the people of Kinaleosan Village if they are bitten or scratched by a dog.

Community knowledge and actions on rabies prevention are needed to carry out rabies prevention efforts so that the implications of this research can be used as information, especially in providing health education to the public so that public knowledge about rabies prevention can increase so that prevention efforts can be carried out.

RESEARCH METHODS

This type of research uses quantitative descriptive research. Quantitative descriptive research is a type of research that is conducted with stages of a quantitative approach to find answers to a problem and obtain more information about a phenomenon (Paramita et al, 2021). This research was conducted to find out the overview of public knowledge and actions about the dangers of rabies-infected animal bites in Kinaleosan Village, Kombi District. The population in this study is all families who raise rabies-infected animals (dogs) in Kinaleosan Village as many as 235 families. The sample used in this study was a family that raised rabies-infected animals (dogs) in Kinaleosan Village, which amounted to 148 families.

In this study, the slovin formula was used as a method in sampling. This method is simple and effective for determining the right sample size for quantitative research with large and low populations in heterogeneity (Ernanda and Sugiyono 2017). In this study, the margin of error or the level of error tolerance used was 5% (0.05). Primary data is data collected or retrieved directly from the source and processed directly by the researcher from the subject and the object of the research, which is collected through questionnaires and interviews with the research subject. Secondary data is data that already exists or that has been collected by other parties and can be accessed. The data required for research is obtained from a variety of sources, including journals, books and the internet.

The analysis used is univariate analysis which aims to explain the characteristics of each research variable. It is used to summarize the data set of the measurement results in such a way that the data set is transformed into useful information and the data processing process is focused on a single variable, which is referred to as a univariate variable.

RESULTS AND DISCUSSION

Table 1. 1 Characteristics of Respondents by Age

Age	Frequency	Percentage (%)
17-25 Years	20	13,5 %
26-35 Years	28	18,9 %
36-45 Years	27	18,2 %
46-55 Years	36	24,3 %
56-65 Years	24	16,2 %
65 Years and Older	13	8,8 %
Total	148	100 %

The ages obtained from the results of the study are categorized as follows: Age 17-25 years amounting to 20 respondents (13.5%), 26-35 years amounting to 28 respondents (18.9%), 36-45 years amounting to 27 respondents (18.2%), 46-55 years with a total of 36 respondents (24.3%), and 56-65 years old as many as 24 respondents (16.2%), while those aged 65 years and above amounted to 13 respondents (8.8%).

Table 1. 2 Characteristics of Respondents Based on Education

Education	Frequency	Percentage (%)
S2	1	0,7 %
S1	18	12,2 %
D4	1	0,7%
SMA	68	45,9 %
SMP	30	20,3 %
SD	30	20,3 %
Total	148	100 %

The results of the research obtained were S2 education with 1 respondent (0.7%), S1 with 18 respondents (12.2%), D4 with 1 respondent (0.7), high school with 68 respondents (45.9%), junior high school with 30 respondents (20.3%), and elementary school with 30 respondents (20.3%).

Table 1. 3 Characteristics of respondents based on knowledge about rabies

Knowledge About Rabies	Frequency	Percentage (%)
Good	31	20,9 %
Pretty Good	75	50,7 %
Not Good	40	27,0 %
Not Good	2	1,4 %
Total	148	100 %

The characteristics of respondents who have knowledge about rabies are the good category of 31 respondents (20.9%), quite good with a total of 75 respondents (50.7%), poor with 40 respondents (27.0%) while the bad category is 2 respondents (1.4%).

Table 1. 4 Characteristics of Respondents Based on Community Actions Regarding Rabies

Knowledge About Rabies	Frequency	Percentage (%)
Good	82	55,4 %
Pretty Good	46	31,1 %
Not Good	15	10,1 %
Not Good	5	3,4%
Total	148	100 %

Characteristics based on Community Actions Regarding Rabies, respondents who had good actions amounted to 82 respondents (55.4%), respondents who had good actions amounted to 46 respondents (31.1%), respondents who had bad actions amounted to 15 respondents (10.1%) and respondents who had bad actions amounted to 5 respondents (3.4%).

Table 1. 5 Educational Crostabs With Knowledge About Rabies

AGE	KNOWLEDGE ABOUT RABIES								TOTAL	
	GOOD		ENOUGH GOOD		LESS GOOD		NOT GOOD			
	n	%	n	%	n	%	n	%		
17-25 Years	2	10.0	11	55.0	7	35.0	0	0.0	20	100.0%
26-35 Years	6	21.4	11	39.3	10	35.7	1	0.0	28	100.0%
36-45 Years	3	11.1	14	51.9	10	37.0	0	0.0	27	100.0%
46-55 Years	8	22.2	21	58.3	7	19.4	0	0.0	36	100.0%
56-65 Years	10	41.7	13	41.7	3	12.5	1	4.2	24	100.0%
65 Years And Older	2	15.4	8	61.5	3	23.1	0	0.0	13	100.0%
Total	31	20.9	75	50.7	40	27.0	2	1.4	148	100.0%

It can be seen that this is a cross table between age and knowledge about rabies, age 17-25 years with the category of knowledge about rabies as good as 2 people (10.0%), good enough as many as 11 people (55.0%) and poor 7 people (35.0%). Age 26-35 years with the category of knowledge about rabies as many as 6 people (21.4%), 11 people (39.3%) are good enough, 10 people (35.7%) are not good and 1 person (3.6%) is not good. Age 36-45 years years years with the category of knowledge about rabies as many as 3 people (11.1%), good enough 14 people (51.9%), bad 10 people (37.0%) and no good none. Age 46-55 years with the category of knowledge about rabies was good as many as 8 people (22.2%), good enough as many as 21 people (58.3%), bad as many as 7 people (19.4%) and bad no exists.

Aged 56-55 years with the category of knowledge about rabies as many as 10 people (41.1%), good enough as many as 10 people (41.1%), bad as many as 3 people (12.5%), and bad as many as 1 person (4.2%). Then those aged 65 years and above with the category of knowledge about rabies are good, namely 2 people (15.4%), good enough 8 people (61.5%), poor 3 people 23.1%.

Table 1. 6 Age and Community Action Regarding Rabies

AGE	PUBLIC ACTION ON RABIES								TOTAL	
	GOOD		ENOUGH GOOD		LESS GOOD		NOT GOOD			
	n	%	n	%	n	%	n	%		
17-25 Years	12	60.0	4	20.0	3	15.0	1	5.0	20	100.0%
26-35 Years	16	57.1	10	35.7	2	7.1	0	0.0	28	100.0%
36-45 Years	14	51.9	10	37.0	1	3.7	2	7.4	27	100.0%
46-55 Years	21	58.3	11	30.6	4	11.1	0	0.0	36	100.0%
56-65 Years	15	62.5	5	20.8	2	8.3	2	8.3	24	100.0%
65 Years And Older	4	30.8	6	46.2	3	23.1	0	0.0	13	100.0%
Total	82	55.4	46	31.1	15	10.1	5	3.4	148	100.0%

Based on the table, it can be seen that this is a cross table between age and community action regarding rabies, age 17-25 years with the category of community action regarding rabies as many as 12 people (60.0%), good enough as many as 4 people (20.0%) and poor 3 people (5.0%). Age 26-35 years with the category of community action regarding rabies as many as 16 people (57.1%), 10 people (35.7%) are good enough, 2 people (7.1%) are not good and there are no good ones.

Age 36-45 years years Year with the category of community action regarding rabies was good as many as 14 people (51.9%), 10 people (37.0%) were not good, 1 person (3.7%) was not good, and 2 people (7.4%) were not good. Aged 46-55 years with the category of community action regarding rabies as many as 21 people (58.3%), good enough as many as 11 people (30.6%), poor as many as 4 people (11.1%) and no good at all.

Aged 56-55 years with the category of community action regarding rabies as many as 15 people (62.5%), good enough as many as 5 people (20.8%), bad as many as 2 people (8.3%), and bad as many as 2 people (8.3%). Then those aged 65 years and above with the category of community actions regarding rabies are good, namely 4 people (8.3%), 8 people (61.5%), poor 3 people (23.1%) and those who are not good.

Table 1. 7 Education with knowledge about rabies

EDUCATION	KNOWLEDGE ABOUT RABIES								TOTAL	
	GOOD		ENOUGH GOOD		LESS GOOD		NOT GOOD			
	n	%	n	%	n	%	n	%		
S2	0	0.0	1	100.0	0	0.0	0	0.0	1	100.0%
S1	6	33.3	6	33.3	6	33.3	0	0.0	18	100.0%
SM	8	14.8	33	61.1	13	24.1	0	0.0	54	100.0%
SMP	9	24.3	13	35.1	14	37.8	1	2.7	37	100.0%
SD	8	21.1	22	57.9	7	18.4	1	2.6	38	100.0%
Total	31	20.9	75	50.9	40	27.0	2	1.4	148	100.0%

Based on the table, it can be seen that this is a cross table between education and knowledge about rabies, S2 education with the category of knowledge about rabies either non-existent, good enough as 1 person (100.0%) and not good and not good non-existent. S1 education with the category of knowledge about rabies was good 6 people (33.3%), good 6 people (33.3%), poor 6 people (33.3%) and not good none.

High school education with the category of knowledge about rabies was good as many as 8 people (14.8%), good 33 people (61.1%), poor 13 people (24.1%) and not good none. Junior high school education with the category of knowledge about rabies was good as many as 9 people (24.3%), good enough as many as 13 people (35.1%), bad as many as 14 people (73.8%) and bad as 1 person (2.7%). Elementary education with the category of knowledge about rabies was good as many as 8 people (21.1%), good enough as many as 22 people (57.9%), poor as many as 7 people (18.4%) and not good as 1 person (2.7%).

Table 1. 8 Education With Community Action Regarding Rabies

EDUCATION	PUBLIC ACTION ON RABIES								TOTAL	
	GOOD		ENOUGH GOOD		LESS GOOD		NOT GOOD			
	n	%	n	%	n	%	n	%		
S2	1	100	0	0.0	0	0.0	0	0.0	1	100.0%
S1	11	61.1	6	33.3	1	5.6	0	0.0	18	100.0%
SM	36	66.7	13	24.1	4	7.4	1	1.9	54	100.0%
SMP	20	54.1	11	29.7	5	13.5	1	2.7	37	100.0%
SD	14	36.8	1	42.1	5	13.2	3	7.9	38	100.0%
Total	82	55.4	48	31.1	15	10.1	5	3.4	148	100.0%

Based on the table, it can be seen that this is a cross table between education and community action about rabies, S2 education with the category of knowledge about rabies is good for 1 person (100.0%) and not good, good enough and not good. S1 education with the category of community action about rabies was good for 11 people (61.1%), 6 people (33.3%) were good, 5 people (5.6%) were not good, and there were no good ones.

High school education with the category of community action about rabies was good as many as 36 people (66.7%), good 13 people (24.1%), poor 4 people (7.4%) and not good 1 person (2.7%). Junior high school education with the category of community action on rabies was good as many as 20 people (54.1%), good enough for 11 people (29.7%), poor for 5 people (13.5%) and not good for 1 person (2.7%). Elementary education with the category of community action on rabies was good as

many as 14 people (36.8%), good as many as 16 people (42.1%), poor as many as 5 people (13.2%) and bad as many as 5 people (3.4%).

The results of the study obtained that people who have good knowledge about the dangers of rabies-infected animal bites amounted to 31 people with a percentage of 20.9%, quite good amounting to 75 people with a percentage of 50.7%, not good amounting to 40 people with a percentage of 27.0% and not good amounting to 2 people with a percentage of 1.4%. This research is in line with the research of Kadek Ayu (2018) knowledge greatly affects the prevention, treatment and vigilance of rabies cases, this study also states that knowledge and actions have an important relationship in the prevention of rabies cases. This study also proves that if a person has a good understanding of rabies, for example, knowing that rabies is transmitted through dog bites, knowing how to wash bite wounds correctly with soap and water, and knowing that they have to go to the health center immediately, then that person will be more vigilant and definitely do much better prevention. Good knowledge can make people several times more likely to protect themselves from rabies so education is key so we can stop the spread of rabies cases.

Based on the results of research conducted in Kinaleosan Village, it shows that the people in Kinaleosan Village have quite good knowledge about the dangers of rabies-infected animal bites judging from the results obtained through this study. Why it is said to be quite good, this is inseparable from the fact that from ancient times until now, the majority of residents in Kinaleosan Village have indeed kept more dogs than other animals. The high population of these pet dogs naturally makes the interaction between humans and dogs very intense, so the chances of being bitten or even just scratched by the animal are also much greater. The higher a person's level of education, the better his knowledge of health, including rabies. However, in Kinaleosan Village, the relationship with the level of knowledge is slightly different because of the knowledge that is inherited from generation to generation. People with high levels of education may be quicker to understand modern methods of handling (such as washing with soap and vaccines to health centers) because they can easily access and seek new information. Meanwhile, people with low levels of education also have a fairly good basic knowledge of the dangers of dog bites. This knowledge was obtained through the teachings of parents and the experience of living in the village for a long time. So, the people in Kinaleosan Village already have awareness about the dangers of rabies that are evenly distributed at all levels of education because it has become mandatory knowledge to survive in a community that keeps many pet dogs.

The results of the research obtained were that public action on the dangers of rabies-infected animal bites was good amounting to 82 people with a percentage of 55.4%, quite good amounting to 46 people with a percentage of 31.1%, not good amounting to 40 people with a percentage of 10.1%, and not good amounting to 5 people with a percentage of 3.4%. An action is an act, behavior, or action that is done by a human being throughout his life to achieve a goal. Action is a mechanism of an observation that arises from perception so that there is a response to perform an action

Based on the results of Mamonto's research (2023), it shows that this level of good action indicates that most of the people in the Dumuhung area have implemented correct and effective practices. These well-classified actions generally include primary precautions such as controlling pets so that they do not roam freely and secondary precautions that are quick responses to the dangers of rabies bites, including doing the right first aid (washing the bite wound with soap and running water) and immediately seeking medical help at the health center to get the Anti-Rabies Vaccine (VAR). This is in line with the theory that strong knowledge and attitudes will trigger effective action

Actions also have levels, namely perception, guided response, mechanism, and adoption, and can be measured directly by observation or indirectly through surveys (Kinseng, 2017). The perception of the community in Kinaleosan Village is that the act of handling rabies-infected animal bites (HPR) is a danger that must be responded to immediately, where bites or scratches from dog pets are not just ordinary wounds. This strong view has been embedded in their heads for a long time, for

generations. Because they felt that the threat was real, the community acted quickly. In the past, the quick action taken was to use traditional methods to treat wounds. This is a habit that is still practiced by the community.

The people in Kinaleosan Village are aware of the dangers of rabies-infected animal bites, therefore they are easy to change or adopt ways of being able to use traditional methods with the habit of washing wounds with soap in running water or to the health center directly every time an incident occurs and make it part of their daily lives. Based on the results of research conducted in Kinaleosan Village, it shows that the people in Kinaleosan Village have actions about the dangers of rabies-infected animal bites that are good seen from the results obtained through this study.

CONCLUSION

Based on the results and existing discussions, it can be concluded that;

1. The majority of the people of Kinaleosan Village have a fairly good level of knowledge with a total of 75 respondents with a percentage value (50.7%) and actions in the good category as many as 82 respondents with a percentage value (55.4%) in dealing with the threat of rabies.
2. Age and education factors also affect people's understanding and behavior.
3. Although the knowledge and actions of the community are quite good, efforts such as re-socialization are still needed to encourage the community to remain consistent in implementing appropriate medical treatment procedures to prevent the danger of rabies.

REFERENCES

- Albunsiyary, A., Muninghar, & Riswati, F. (2020). Pengaruh Pengetahuan, Pengalaman Kerja, Kompetensi SDM dan Pengembangan Karier Terhadap Prestasi Kerja Personel Polsek Pamekasan. *MAP (Jurnal Manajemen Dan Administrasi Publik)*, 3(01), 19–37.
- Clarissa, A. G. N., & Gunawan, S. (2023). Gambaran Tingkat Pengetahuan Masyarakat Denpasar Bali Mengenai Pencegahan dan Tatalaksana Rabies. *Jurnal Ilmiah Indonesia*, 8(5), 3625-3631.
- Dewi, I. A. K. T. (2024). Hubungan Tingkat Pengetahuan Terhadap Sikap Masyarakat Mengenai Pencegahan Kasus Rabies di Banjar Sanggulan Desa Banjar Anyar Tahun 2024. *JURNAL NAWACITA USADA*, 1(01), 55-64.
- Dinas Kesehatan Sulut. (2022). Kunjungan Dinas Kesehatan Daerah Provinsi Sulawesi Utara ke Dinas Kesehatan Kabupaten Minahasa Tenggara Terkait Penanganan Rabies. <https://dinkes.sulutprov.go.id/detailpost/kunjungan-kepala-dinas-kesehatan-daerah-provinsi-sulawesi-utara-terkait-penanganan-rabies-di-kabupaten-minahasa-tenggara>
- Ernanda, D., & Sugiyono, S. (2017). Pengaruh Store Atmosphere, Hedonic Motive Dan Service Quality Terhadap Keputusan Pembelian. *Jurnal Ilmu Dan Riset Manajemen (JIRM)*, 6(10).
- Fidela, P. (2024). Tingkat Pengetahuan Masyarakat Terhadap Bahaya Rabies dan Pencegahannya di Kampung Rama Kota Makassar. Skripsi, Universitas Hasanuddin, Makassar.
- Hamid, A. (2024). Hubungan Tingkat Pengetahuan Dan Sikap Dengan Tindakan Pencegahan Penyakit Rabies Di Kelurahan Bugis. Prepotif: *Jurnal Kesehatan Masyarakat*, 8(2), 4491-4499.
- Kementerian Kesehatan Republik Indonesia. (2025). Surat Edaran Nomor: HK.02.02/C/508/2025 tentang Kewaspadaan Terhadap Kasus Rabies. Direktorat Jenderal Pengendalian Penyakit.
- Kementerian Kesehatan RI. (2023). Pedoman Penatalaksanaan Kasus Gigitan Hewan Penular Rabies di Indonesia. Jakarta: Direktorat Jenderal Pencegahan dan Pengendalian Penyakit (P2P).

- Losoh, D. S., Sembiring, E. E., & Nurmansyah, M. (2024). Hubungan Pengetahuan dan Sikap Masyarakat dengan Tindakan Pencegahan Rabies di Wilayah Kerja Puskesmas Melonguane. *Mapalus Nursing Science Journal*, 2(2), 38-47.
- Maharani, S. A., Hilmi, I. L., & Salman, S. (2023). Efektivitas Vaksin Antirabies pada Manusia dan Cara Pemberantasan Kasus Rabies yang ada di Indonesia. *Jurnal Ilmiah Wahana Pendidikan*, 9(4), 473-479.
- Mamonto, F. H. (2023). Gambaran Pengetahuan, Sikap, dan Tindakan Masyarakat tentang Pencegahan Rabies di Wilayah Kerja Puskesmas Tahuna Timur Kabupaten Kepulauan Sangihe. Skripsi. Fakultas Kesehatan Masyarakat Universitas Sam Ratulangi Manado.
- Ndoen, H., Ole, A., Gale, A., Ndjurumbah, E., Mongko, F., Nesimnasi, J., ... & Wula, T. (2024). Edukasi Pencegahan Rabies Bagi Siswa Sekolah Dasar. *GOTAVA Jurnal Pengabdian Kepada Masyarakat*, 2(2), 93- 98.
- Notoatmodjo, S. (2020). *Metodologi Penelitian Kesehatan*. Jakarta: PT Rineka Cipta.
- Notoatmodjo, S. (2020). *Promosi Kesehatan dan Perilaku Kesehatan* (Ed. rev.). Rineka Cipta.
- Pancar, F. M. M., Libriani, R., Yaddi, Y., Prasanjaya, P. N., Dhian, P., Qurniawati, Q., ... & Aprilia, T. (2023). Upaya Peningkatan Kesadaran Masyarakat Terhadap Vaksinasi Rabies Hewan Kesayangan pada Hari Rabies Sedunia di Kota Kendari Menuju Indonesia Bebas Penyakit Rabies 2030. *Jurnal Abdi Masyarakat Indonesia*, 3(3), 845-850.
- Paramita, R. W. D., Rizal, N., & Sulistyan, R. B. (2021). *Metode penelitian kuantitatif*. Lumajang: Widya Gama Press (APPTI), Edisi, 3.
- Permatananda, P. A. N. K., Cahyawati, P. N., Aryastuti, A. A. S. A., & Lestarini, A. (2022). Upaya Pencegahan Rabies di Desa Taman, Bali. *ABDISOSHUM: Jurnal Pengabdian Masyarakat Bidang Sosial dan Humaniora*, 1(3), 357-363.
- Pote, P. F., Telew, A. A., & Butarbutar, A. R. (2024). Hubungan Pengetahuan dan Sikap Masyarakat dengan Tindakan Pencegahan Rabies di Wilayah Kerja Puskesmas Molompar. *VitaMedica: Jurnal Rumpun Kesehatan Umum*, 2(2), 52-60.
- Rahmawati, F. & Sari, M. D. (2022). Dampak psikologis pada korban gigitan anjing rabies di daerah endemis. *Jurnal Kesehatan Masyarakat Indonesia*, 17(3), 221–229.
- Ridwan, M. (2021). Studi Analisis Tentang Makna Pengetahuan dan Ilmu Pengetahuan Serta Jenis dan Sumbernya. *Jurnal Penelitian Multidisiplin*, 4(1).
- Rofflin, E., & Liberty, I. A. (2021). *Populasi, Sampel, Variabel dalam penelitian kedokteran*. Penerbit Nem.
- Rustam, H. K. (2022). Peninjauan Hubungan Pengetahuan, Sikap, dan Tindakan Pencegahan Terhadap Penyakit Rabies di Soppeng. *Infokes: Jurnal Ilmiah Rekam Medis Dan Informatika Kesehatan*, 12(2), 52-60.
- Saputro, D. N. H., Pujiastuti, D., & Astuti, W. T. (2025). Pemberdayaan Masyarakat Dalam Kewaspadaan Terhadap Gejala Neurologis dan Hematologis Akibat Gigitan Binatang di Sleman Yogyakarta. *Arreta: Community Health Service Journal*, 1(1), 37-45.
- Safaldy, A., Hermawan, A. D., Trisnawati, E., & Arfan, I. (2025). Hubungan pemeliharaan anjing dengan risiko gigitan hewan penular rabies di Sajingan dan Entikong (Wilayah perbatasan Indonesia-Malaysia). *Jurnal Kesehatan Komunitas (Journal of Community Health)*, 3(11), 475-485.
- Simatupang, H. S., et al. (2023). Efektivitas penanganan awal luka gigitan anjing terhadap risiko infeksi rabies. *Media Penelitian dan Pengembangan Kesehatan*, 33(2), 133–140.
- Sudewi, A. A. R., et al. (2020). Rabies in Bali: Epidemiological review and challenges toward elimination. *Jurnal Veteriner*, 21(1), 112–118.
- Syahfitri, R. I. (2023). Pengaruh Tingkat Pengetahuan Terhadap Pencegahan Penyakit Rabies. *PubHealth Jurnal Kesehatan Masyarakat*, 2(1), 48-53.

- Wawan Kurniawan, S. K. M., & Aat Agustini, S. K. M. (2021). Metodologi Penelitian Kesehatan dan Keperawatan; Buku Lovrinz Publishing. LovRinz Publishing.
- Wicaksana, R. D. (2023). Gambaran tingkat pengetahuan dan sikap pasien tergigit hewan Rabies di Kota Palangka Raya tahun 2023 (Doctoral dissertation, Rinaldy Dwi Wicaksana).
- Wicaksana, R. D. (2024, August). Gambaran Tingkat Pengetahuan Dan Sikap Pasien Tergigit Hewan Rabies di Kota Palangka Raya Tahun 2023: Description of the Level of Knowledge and Attitudes of Patients Bitten by Rabid Animals in Palangka Raya City in 2023. In *Jurnal Forum Kesehatan: Media Publikasi Kesehatan Ilmiah* (Vol. 14, No. 1, pp. 15-19).
- Widada, I. N., et al. (2021). Analisis epidemiologi rabies pada manusia akibat gigitan anjing di Indonesia. *Jurnal Kedokteran Hewan*, 15(2), 84– 90.
- Wijaya, R., Kurniawan, R. N., & Wijaya, I. (2022). Faktor Predisposisi Pencegahan Penyakit Rabies di Wilayah Kerja Puskesmas Donggo Kabupaten Bima. *Jurnal Promotif Preventif*, 5(1), 32-37.
- World Health Organization. (2024). Cegah Setiap Kematian Akibat Rabies: Pada Hari Rabies Sedunia 2024. WHO dan FAO Menyoroti Perlunya Tindakan Cepat serta Menyeluruh. <https://www.who.int/indonesia/id/news/detail/28-09-2024-prevent-every-rabies-death--who-and-fao-highlight-need-for-urgent-comprehensive-action-on-world-rabies-day-2024>.
- World Health Organization. (2025, July 24). Rabies – Timor-Leste. <https://www.who.int/emergencies/disease-outbreak-news/item/2025DON576>