

Rabies Prevention in Practice, Awareness, Immediate Bite Response, Care-Seeking, and Barriers among Grade 5 Pupils and Their Parents in a Selected Public Elementary School in San Pablo City, Laguna

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Abstract. Rabies remains a critical public health concern in the Philippines, particularly among school-aged children who are at increased risk because of frequent contact with domestic and stray animals. This study assessed the awareness, immediate bite response, care-seeking behavior, and perceived barriers to rabies prevention among Grade 5 pupils and their parents in San Pablo City, Laguna. A descriptive, comparative, and cross-sectional research design was employed, involving 302 Grade 5 pupils and their corresponding parents. Data were gathered using a structured questionnaire that examined participants' knowledge of rabies transmission, prevention practices, immediate wound management, care-seeking intentions, and barriers to treatment. Findings revealed that most participants demonstrated a high level of awareness regarding rabies, with 71.19% of pupils and 75.83% of parents recognizing dog bites as the primary mode of transmission. However, misconceptions persisted, particularly among pupils, regarding the possibility that apparently healthy animals could still transmit rabies. Although most respondents expressed a strong intention to seek medical care following an animal bite, with 90% of pupils and 85% of parents indicating they would visit a health facility, deficiencies remained in recommended first-aid practices, including proper wound washing and avoidance of traditional remedies. Financial constraints, reported by 60% of parents, fear of vaccination, and limited access to healthcare facilities were identified as the major barriers to timely treatment. The findings indicate that awareness alone is insufficient to ensure appropriate preventive behaviors. Strengthening school- and community-based health education, correcting misconceptions, improving access to affordable post-exposure prophylaxis, and promoting collaboration among healthcare providers, educational institutions, and local government units are essential to enhance rabies prevention and encourage timely responses to potential rabies exposure.

Introduction

Rabies remains a significant public health concern despite being an entirely preventable disease. Globally, it is one of the deadliest zoonotic diseases, causing tens of thousands of deaths each year, with most cases occurring in low- and middle-income countries where dog vaccination coverage is inadequate and human-animal interactions are frequent (World Health Organization [WHO], 2023). In the Philippines, rabies continues to impose a substantial health burden despite national control efforts. The Department of Health reported 211 rabies cases from January to August 2025, while 426 rabies-related deaths were recorded in 2024, nearly double the number reported in 2020 (Salcedo, 2025; Cabalza, 2025). These statistics underscore the continued need to strengthen rabies prevention and control measures. In

response, Republic Act No. 9482, or the Anti-Rabies Act of 2007, mandates responsible pet ownership, annual dog vaccination, immediate reporting of animal bite incidents, and public education campaigns. Nevertheless, the persistence of rabies cases suggests continuing challenges in community awareness, compliance, and implementation.

School-aged children are among the populations most vulnerable to rabies because of their frequent interaction with animals and limited understanding of rabies risks and consequences. Children aged 5 to 14 years are at increased risk of exposure and rabies-related mortality (Jakeman et al., 2020; Septelici et al., 2024). Effective prevention depends not only on awareness but also on immediate wound washing, prompt reporting of bite incidents, and timely access to post-exposure prophylaxis (PEP). However, these preventive measures are often delayed due to misconceptions about rabies, fear of vaccination, financial constraints, limited access to Animal Bite Treatment Centers, and reliance on traditional remedies (Bin, 2024; Guzman et al., 2022). Because parents and guardians are primarily responsible for deciding whether children receive appropriate treatment, their knowledge and care-seeking practices play a critical role in preventing rabies-related deaths.

Although previous studies have examined rabies awareness, prevention practices, and healthcare utilization, limited localized evidence explores the combined influence of awareness, immediate bite response, care-seeking behavior, and perceived barriers among school-aged children and their parents in San Pablo City, Laguna. This gap limits the development of targeted community interventions and health education strategies.

Therefore, this study assessed rabies prevention practices among school-aged children and their parents by evaluating awareness, immediate bite response, care-seeking behavior, and perceived barriers. The findings provide evidence to strengthen community-based rabies prevention, enhance school-based health education, and support compliance with Republic Act No. 9482.

Statement of the Problem

This study aimed to describe rabies prevention in practice among school-aged children and their parents by examining awareness, immediate bite response, and care seeking in selected public schools in San Pablo City.

Specifically, the study aimed to answer the following questions:

1. What is the demographic data in terms of: 1.1 Pet Ownership of a dog/cat; 1.2 History of dog bite or cat scratch; and 1.3 Presence of stray dogs or cats in the neighborhood?
2. What is the level of awareness about rabies among the school-aged children and parent respondents in terms of: 2.1 Transmission, 2.2 Prevention, and 2.3 Importance of timely vaccination?
3. To what extent do the school-aged children and their parents practice immediate actions to prevent rabies in common bite or scratch scenarios?
4. What is the level of intention regarding care seeking the same day at the Health Unit or Animal Bite Treatment Center after a bite or scratch?
5. To what extent do the given barriers delay or prevent care seeking among school-aged children and their parents?
6. Is there a significant difference among the level of awareness, immediate bite response, and care-seeking towards rabies prevention when grouped according to their profile?

Methodology

Research Design

This study employed a quantitative research approach to collect and analyze numerical data related to rabies prevention practices among school-aged children and their parents. A literature-based, close-ended questionnaire was used to assess awareness, immediate bite response, care-seeking behavior, and perceived barriers. The study utilized a descriptive, comparative, and cross-sectional design. The descriptive design determined the current status of rabies prevention practices, while the comparative design examined differences between children and parents. The cross-sectional design enabled data collection at a single point in time and the analysis of relationships among study variables without establishing causality (Polit & Beck, 2021; Thomas, 2023).

Respondents and Sampling Technique

The respondents were Grade 5 pupils and their respective parents from San Pablo Central School, Laguna, during the School Year 2025–2026. The target population consisted of 411 pupils from 13 Grade 5 sections. Eligible participants included enrolled pupils with parental consent and parents or legal guardians who agreed to participate. Purposive sampling was used to select respondents who met the inclusion criteria, allowing the collection of relevant data on rabies prevention practices. However, findings are limited to the selected population and cannot be generalized to other groups.

Research Instrument

The study utilized a literature-based questionnaire consisting of 30 items divided into four domains: Awareness (12 items), Immediate Bite Response (6 items), Care-Seeking Intention (4 items), and Barriers to Care-Seeking (8 items). The instrument was adapted for both children and parents using age-appropriate English and Filipino language. Content validity was established through expert review by seven professionals, while pilot testing was conducted among 42 Grade 6 pupils and their parents. Reliability testing yielded Cronbach's alpha values ranging from .741 to .821, indicating acceptable to good internal consistency. Content validity was evaluated using the Content Validity Ratio (CVR) and Content Validity Index (CVI), with all items obtaining a CVR of 1.00 and an I-CVI of 1.00, demonstrating excellent validity.

Data Collection Procedure

The researchers first prepared and secured approval for all required documents, including request letters, validation forms, parental consent forms, and child assent forms. A structured questionnaire for school-aged children and their parents was developed and validated by public health professionals, registered nurses, a physician, and research experts to ensure its accuracy and suitability. A pilot test was conducted at Del Remedio Elementary School with selected Grade 6 pupils and their parents to evaluate the instrument's reliability and clarity. Based on the feedback received, revisions were made before finalizing the questionnaire. Approval to conduct the study was then obtained from the principal of San Pablo Central School, and coordination with Grade 5 advisers was carried out to facilitate data collection. Prior to survey administration, the study's purpose, procedures, and ethical considerations were explained to participants. After obtaining parental consent and child assent, questionnaires were administered to pupils face-to-face in their classrooms under the supervision of the researchers and class advisers. Parent respondents completed the questionnaire online through Google Forms, with links distributed by Grade 5 advisers along with instructions and submission deadlines. Of the 411 identified Grade 5 pupils, 302 matched child-parent responses were collected and included in the study. All data were encoded, reviewed, and securely stored to ensure confidentiality before being submitted to a statistician for analysis. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to describe respondent characteristics and measure awareness, immediate bite response, care-seeking behavior, and perceived barriers. Inferential analysis was conducted using the Mann-Whitney U test to determine differences in variables based on demographic factors, as the data were ordinal and non-normally distributed. Findings served as the basis for the study's conclusions and recommendations regarding rabies prevention practices and behaviors.

Ethical Considerations

The study adhered to established ethical principles to protect the rights and welfare of participants. Ethical approval and institutional permissions were obtained prior to data collection. Participation was voluntary, and respondents were informed of their right to withdraw at any time without penalty. Parental consent and child assent were secured, and assistance was provided to pupils with reading difficulties without influencing their responses. Confidentiality and anonymity were maintained through the use of coded identifiers, secure storage of physical and digital records, and compliance with the Data Privacy Act of 2012. All participants were treated with respect and dignity throughout the study. AI software (ChatGPT) was used only for grammar checking, paraphrasing, and formatting assistance while maintaining academic integrity and ethical research standards.

Data Analysis

Data were analyzed using statistical tools appropriate for the study's objectives and the Likert-scale data collected. Frequency and percentage were used to summarize the respondents' demographic profile, including pet ownership, history of dog bites or cat scratches, and the presence of stray animals in the neighborhood. Mean was used to determine the level of respondents' awareness, immediate bite response, care-seeking behavior, and perceived barriers to rabies prevention. Standard deviation was used to measure the consistency and variability of the respondents' responses across the study variables.

Mean Range	Interpretation	Meaning
3.26–4.00	High (H)	High level of awareness on rabies
2.51–3.25	Moderate (M)	Moderate level of awareness on rabies
1.76–2.50	Low (L)	Low level of awareness on rabies
1.00–1.75	Very Low (VL)	Very low level of awareness on rabies

Level of Awareness Scale

Mean Range	Interpretation	Meaning
3.26–4.00	Extensive (E)	Practices are performed to a great extent
2.51–3.25	Moderate Extent (ME)	Practices are performed to a moderate extent
1.76–2.50	Low Extent (LE)	Practices are performed to a low extent
1.00–1.75	Minimal Extent (MinE)	Practices are seldom performed

Extent of Immediate Bite Response Practice Scale

Mean Range	Interpretation	Meaning
3.26–4.00	High (H)	High intention to seek appropriate medical care
2.51–3.25	Moderate (M)	Moderate intention to seek appropriate medical care
1.76–2.50	Low (L)	Low intention to seek appropriate medical care
1.00–1.75	Very Low (VL)	Very low intention to seek appropriate medical care

Care-Seeking Intention Scale

Mean Range	Interpretation	Meaning
3.26–4.00	Extensive (E)	Barriers greatly affect care-seeking behavior
2.51–3.25	Moderate Extent (ME)	Barriers moderately affect care-seeking behavior
1.76–2.50	Low Extent (LE)	Barriers slightly affect care-seeking behavior
1.00–1.75	Minimal Extent (MinE)	Barriers have minimal effect on care-seeking behavior

Perceived Barriers Scale

Statistical Value	Decision	Interpretation
p-value < 0.05	Reject Ho	Significant Difference
p-value ≥ 0.05	Failed to Reject Ho	No Significant Difference

Decision Rule for Significant Difference

Results and Discussion

Pet Ownership	Pupils	Parents
Yes	229 (75.83%)	229 (75.83%)
No	73 (24.17%)	73 (24.17%)
Total	302 (100%)	302 (100%)

Table No. 1. Pet Ownership between pupils and parents

A total of 75.83% of both pupils and parents reported owning pets. This indicates that pet ownership was common among the respondents. Pet ownership may provide opportunities for exposure to pet-related practices, such as vaccination and responsible animal care; however, the present findings do not establish whether pet ownership directly affects rabies awareness or preventive behaviors. The relationship between pet ownership and rabies-related knowledge may also depend on the respondents' experiences and access to information. Similar findings regarding the relationship between pet ownership and rabies prevention knowledge have been reported by Lañada et al. (2019) and Guzman et al. (2022).

History of Dog/Cat Bite or Scratch	Pupils	Parents
Yes	133 (44.04%)	179 (75.83%)
No	169 (55.96%)	123 (24.17%)
Total	302 (100%)	302 (100%)

Table No. 2. History of dog/cat bite or scratch

Approximately 44.04% of pupils and 75.83% of parents reported a history of dog bites or cat scratches. The higher proportion among parents indicates that reported exposure to such incidents was more common in this group. However, having a previous bite or scratch does not necessarily indicate a higher level of rabies knowledge or appropriate preventive behavior. The findings therefore suggest that previous exposure alone may not be sufficient to ensure comprehensive understanding of rabies transmission and prevention. This supports the continued importance of structured health education for respondents regardless of previous exposure. Similar concerns regarding rabies knowledge and exposure have been reported by Ling et al. (2023) and Lungten et al. (2021).

Presence of Stray Cats/Dogs	Pupils	Parents
Yes	277 (75.83%)	277 (75.83%)
No	25 (24.17%)	25 (24.17%)
Total	302 (100%)	302 (100%)

Table No. 3. Presence of stray cats/dogs

A total of 75.83% of pupils and parents reported the presence of stray cats and dogs in their neighborhoods. This indicates that exposure to stray animals was commonly reported among the respondents. Although the presence of stray animals may represent a potential environmental risk for rabies exposure, the present finding alone does not establish that such exposure increases awareness or changes care-seeking behavior. The high proportion of respondents reporting stray animals highlights the relevance of community-level rabies prevention measures, including responsible animal management, vaccination programs, and public health education. Similar concerns regarding environmental exposure and rabies prevention have been discussed by Jakeman et al. (2020) and Franco et al. (2024).

Awareness of Transmission	Pupil Mean	SD	V.I.	Parent Mean	SD	V.I.	Combined Mean	SD	V.I.
1. I know that rabies can be transmitted through dog bites.	3.29	0.84	High	3.57	0.71	High	3.43	0.77	High
2. I know that scratches from a rabid animal can also transmit rabies.	2.97	0.94	Moderate	3.14	0.97	Moderate	3.06	0.96	Moderate
3. I understand that if a rabid animal's saliva touches you, it can give you rabies.	2.45	1.04	Low	3.17	0.92	Moderate	2.81	0.98	Moderate
4. I understand that some dogs with rabies can appear healthy.	2.39	1.11	Low	3.07	1.04	Moderate	2.73	1.07	Moderate
Composite Mean	2.77		Moderate	3.24		Moderate	3.01		Moderate
SD	0.98			0.91			0.13		

Note: 1.00-1.75 Very Low, 1.76-2.50 Low, 2.51-3.25 Moderate, 3.26-4.00 High

Table No. 4.1. Respondents' level of awareness on rabies transmission

Table 4.1 shows relatively higher mean scores among both pupils and parents regarding the transmission of rabies through dog bites, with pupils obtaining a mean score of 3.29 (SD=0.84) and parents obtaining a mean score of 3.57 (SD=0.71). In comparison, lower mean scores were observed for the item concerning the possibility that rabid dogs may appear healthy, with pupils obtaining a mean of 2.39 (SD=1.11) and parents obtaining a mean of 3.07 (SD=1.04). These results indicate differences in respondents' levels of understanding across specific aspects of rabies transmission. In particular, the lower scores for recognizing that rabid animals may appear healthy suggest an area that may require further clarification in health education. Similar findings regarding gaps in rabies-related knowledge were reported by Bundalian et al. (2020), Lañada et al. (2019), and Mapatse et al. (2022).

Awareness of Prevention	Pupil Mean	SD	V.I.	Parent Mean	SD	V.I.	Combined Mean	SD	V.I.
1. I know that keeping pets updated with anti-rabies vaccination prevents rabies.	3.35	0.81	High	3.29	0.93	High	3.32	0.87	High
2. I know that limiting children's contact with stray animals helps prevent rabies.	3.39	0.81	Moderate	3.12	0.94	Moderate	3.25	0.88	Moderate
3. I understand that I should immediately wash a bite or scratch wound properly right away to help prevent infection.	3.33	0.84	High	3.13	0.94	Moderate	3.23	0.89	Moderate
4. After a bite, I should tell an adult / go to the Health Unit or Animal Bite Treatment Center.	3.65	0.67	Moderate	3.22	0.93	Moderate	3.43	0.80	High
Composite Mean	3.43		High	3.19		Moderate	3.31		High
SD	0.78			0.94			0.86		

Note: 1.00-1.75 Very Low, 1.76-2.50 Low, 2.51-3.25 Moderate, 3.26-4.00 High

Table No. 4.2. Respondents' level of awareness on rabies prevention

Table 4.2 shows relatively high mean scores for several rabies prevention items among both pupils and parents. Among pupils, the highest mean score was observed for avoiding contact with stray animals (M=3.39, SD=0.81), while the lowest was recorded for immediate wound washing after bites or scratches (M=3.13, SD=0.94). Among parents, the item concerning limiting children's contact with stray animals had a lower mean score of 3.12 (SD=0.94). These results indicate that respondents showed varying levels of awareness across specific preventive measures, particularly those involving immediate wound care and limiting exposure to stray animals. The findings support the need for continued health education that reinforces appropriate wound washing and safe interaction with animals. Similar areas for improvement in rabies prevention knowledge have been reported by Laorujisawat et al. (2022) and Mapatse et al. (2022).

Awareness of Timely Vaccination	Pupil Mean	SD	V.I.	Parent Mean	SD	V.I.	Combined Mean	SD	V.I.
1. I understand that anti-rabies vaccination must be given as soon as possible after a bite.	3.32	0.89	High	3.29	0.93	High	3.32	0.87	High
2. I know that delaying vaccination increases the risk of rabies.	2.90	1.06	Moderate	3.12	0.94	Moderate	3.25	0.88	Moderate
3. I know that completing all scheduled anti-rabies shots is important.	3.32	0.85	High	3.13	0.94	Moderate	3.23	0.89	Moderate
4. I know that even small bites or scratches may still require vaccination.	3.21	0.88	Moderate	3.22	0.93	Moderate	3.43	0.80	High
Composite Mean	3.19		Moderate	3.22		Moderate	3.31		High
SD	0.92			0.93			0.86		

Note: 1.00-1.75 Very Low, 1.76-2.50 Low, 2.51-3.25 Moderate, 3.26-4.00 High

Table No. 4.3. Respondents' level of awareness on timely vaccination

Table 4.3 shows relatively high mean scores among pupils and parents regarding the importance of timely anti-rabies vaccination, with pupils obtaining a mean score of 3.32 (SD=0.89) and parents obtaining a mean score of 3.29 (SD=0.93) for recognizing the need for prompt vaccination after a bite. Lower mean scores were observed for the items concerning the risks associated with delaying vaccination, with pupils obtaining a mean of 2.90 (SD=1.06) and parents obtaining a mean of 3.12 (SD=0.94). These findings indicate that although respondents generally recognized the importance of timely vaccination, some items related to the consequences of delayed vaccination received lower scores. Health education may therefore further emphasize the importance of timely post-exposure vaccination and the risks associated with delays. Similar emphasis on timely vaccination was reported by Ritchie et al. (2025).

Immediate Bite Response	Mean	SD	Extent
1. I wash the wound immediately with soap and water for at least 10 minutes after a bite or scratch.	3.37	0.97	Extensive
2. I avoid putting garlic, herbs, or other home remedies on the bite wound.	2.69	1.30	Moderate Extent
3. I make sure to tell an adult or guardian right away if I get bitten or scratched.	3.65	0.84	Extensive
4. I avoid squeezing the wound after a bite or scratch.	3.12	1.07	Moderate Extent
5. I know that the wound should not be covered tightly after washing.	3.03	1.11	Moderate Extent
6. I would immediately describe the characteristics of the dog or cat after a bite or scratch to an adult.	3.44	0.93	Extensive
Composite Mean	3.22		Moderate Extent
SD	1.04		

Note: 1.00-1.75 Minimal Extent, 1.76-2.50 Low Extent, 2.51-3.25 Moderate Extent, 3.26-4.00 Extensive

Table No. 5.1. School-Age children's extent of practice to how respondents respond immediately after the bite or scratch

Table 5.1 shows that pupils reported a high intention to respond to animal bites by informing an adult or guardian immediately, which obtained the highest mean score of 3.65 (SD=0.84). The lowest mean score was observed for avoiding garlic, herbs, or other home remedies (M=2.69, SD=1.30). This difference indicates that while pupils showed a stronger intention to report animal bites, responses concerning the avoidance of home remedies were comparatively lower. The finding suggests that health education should continue to reinforce appropriate post-bite responses and discourage potentially inappropriate home remedies. Similar concerns regarding post-bite management were reported by Mapatse et al. (2022) and Tubeo-Dilao et al. (2024).

Immediate Bite Response	Mean	SD	Extent
1. I will immediately wash my child's bite or scratch wound with soap and running water for at least 10 minutes.	3.64	0.68	Extensive
2. I avoid applying home remedies (e.g., garlic, oil, herbs) on my child's bite wound.	3.20	0.96	Moderate Extent
3. I will report the bite or scratch to a health professional as soon as possible.	3.41	0.77	Extensive
4. I avoid squeezing my child's bite wound.	3.29	0.93	Extensive
5. I will leave the wound uncovered or loosely covered after washing.	3.22	0.90	Moderate Extent
6. I will observe the animal involved after the bite or scratch.	3.39	0.85	Extensive
Composite Mean	3.36		Extensive
SD	0.85		

Note: 1.00-1.75 Minimal Extent, 1.76-2.50 Low Extent, 2.51-3.25 Moderate Extent, 3.26-4.00 Extensive

Table No. 5.2. Parent's extent of practice to how respondents respond immediately after the bite or scratch

Table 5.2 shows that parents obtained the highest mean score for washing bite or scratch wounds with soap and running water (M=3.64, SD=0.68), indicating a high reported intention regarding this immediate response. The lowest mean score was observed for leaving the wound uncovered or loosely covered after washing (M=3.22, SD=0.90). The difference in mean scores indicates variation in parents' responses across the specific wound-care items. These findings suggest that continued education may be useful in reinforcing the complete sequence of appropriate first-aid measures following an animal bite or scratch. Similar areas for improvement in wound-care practices have been reported by Mapatse et al. (2022).

Care Seeking	Mean	SD	V.I.
1. I intend to go with my parents to the Health Unit or Animal Bite Treatment Center the same day if a dog or cat bites me.	3.50	0.75	High
2. I intend to report the bite or scratch to my parents or teachers immediately.	3.62	0.69	High
3. I believe it is necessary to seek professional help even if the bite seems small.	3.47	0.77	High
4. I intend to tell my friends or classmates to go to the Health Unit or Animal Bite Treatment Center on the same day they are bitten.	3.44	0.83	High
Composite Mean	3.51		High
SD	0.76		

Note: 1.00-1.75 Very Low, 1.76-2.50 Low, 2.51-3.25 Moderate, 3.26-4.00 High

Table No. 6.1. School-Age Children's level of care seeking intention of the respondents immediately after the bite/scratch

Table 6.1 shows that pupils had relatively high scores for care-seeking intention after an animal bite or scratch. The highest mean score was recorded for immediately reporting the incident to parents or teachers (M=3.62, SD=0.69), while the lowest was observed for encouraging peers to visit a Health Unit or Animal Bite Treatment Center on the same day (M=3.44, SD=0.83). Although both items received relatively high scores, the difference indicates comparatively lower intention regarding encouraging peers to seek treatment. These findings suggest that health education may also include peer-related

actions and the importance of encouraging others to seek timely care. Similar findings regarding care-seeking intentions were reported by Lungten et al. (2021).

Care Seeking	Mean	SD	V.I.
1. I intend to bring my child to the Health Unit/Animal Bite Treatment Center the same day after a bite or scratch by an animal.	3.55	0.71	High
2. I intend to follow the doctor's advice immediately.	3.47	0.72	High
3. I believe that immediate medical consultation is necessary even if the wound looks minor.	3.44	0.75	High
4. I will encourage other parents to seek same-day care after an animal bite.	3.47	0.72	High
Composite Mean	3.48		High
SD	0.72		

Note: 1.00-1.75 Very Low, 1.76-2.50 Low, 2.51-3.25 Moderate, 3.26-4.00 High

Table No. 6.2. Parent's level of care seeking intention of the respondents immediately after the bite/scratch

Table 6.2 shows that parents had relatively high care-seeking intentions following a bite or scratch. The highest mean score was observed for bringing their child to a Health Unit or Animal Bite Treatment Center on the same day ($M=3.55$, $SD=0.71$). The lowest mean score was recorded for believing that immediate consultation is necessary even for minor wounds ($M=3.44$, $SD=0.75$). Although the scores remained relatively high, the lower score on the latter item indicates comparatively less agreement regarding the urgency of consultation for minor wounds. These findings support the continued provision of health education emphasizing the importance of prompt assessment following animal bites or scratches. Similar findings were reported by Mapatse et al. (2022).

Barriers	Mean	SD	Extent
1. Delaying treatment due to perceived minor injury	1.65	0.93	Minimal Extent
2. Fear of being scolded by parents	1.78	1.00	Low Extent
3. Delaying care if the wound doesn't bleed	1.79	1.01	Low Extent
4. Fear of medical procedures or unfamiliar places	1.98	1.06	Low Extent
5. Fear of injections, may avoid vaccination	1.98	1.05	Low Extent
6. Relying on home remedies instead of seeking professional care	2.06	1.15	Low Extent
7. Delaying care while waiting for adult guidance	2.29	1.15	Low Extent
8. Worry about treatment or vaccination side effects	2.64	1.00	Moderate Extent
Composite Mean	2.02		Low Extent
SD	1.04		

Note: 1.00-1.75 Minimal Extent, 1.76-2.50 Low Extent, 2.51-3.25 Moderate Extent, 3.26-4.00 Extensive

Table No. 7.1. Perceived extent barriers delay or prevent care seeking among school-aged children

Table 7.1 shows that worry about treatment or vaccination side effects obtained the highest mean score among pupils ($M=2.64$, $SD=1.00$), indicating that this was the most frequently reported barrier among the listed items. In contrast, delaying treatment because the injury was perceived as minor obtained the lowest mean score ($M=1.65$, $SD=0.93$). These results indicate that concerns about possible treatment or vaccination side effects were more prominent than delays related to perceived injury severity. Health education may therefore address common concerns about anti-rabies treatment and vaccination by providing accurate information regarding their purpose and safety. Similar concerns regarding treatment-related barriers were reported by Lungten et al. (2021).

Barriers	Mean	SD	Extent
1. Hesitance to report bite due to embarrassment or judgment	1.83	1.06	Low Extent
2. Delaying medical care if the bite seems minor	2.02	1.10	Low Extent
3. Using home remedies first delays seeking professional care	2.14	1.17	Low Extent
4. Long waiting times at the Health Unit delay care decisions	2.53	1.16	Moderate Extent

5. Work/time constraints may prevent bringing child for treatment	2.60	1.11	Moderate Extent
6. Lack of available vaccines or medications delays treatment	2.93	0.97	Moderate Extent
7. Distance to Health Unit/Animal Bite Treatment Center makes care difficult	2.97	1.05	Moderate Extent
8. Worry about the cost of treatment or vaccination	3.04	0.99	Moderate Extent
Composite Mean	2.51		Moderate Extent
SD	1.08		

Note: 1.00-1.75 Minimal Extent, 1.76-2.50 Low Extent, 2.51-3.25 Moderate Extent, 3.26-4.00 Extensive

Table No. 7.2. Perceived extent barriers delay or prevent care seeking among parents

Table 7.2 shows that worry about the cost of treatment or vaccination obtained the highest mean score among parents (M=3.04, SD=0.99), indicating that financial concerns were the most frequently reported barrier among the items assessed. In contrast, hesitance to report a bite because of embarrassment or fear of judgment had the lowest mean score (M=1.83, SD=1.06). These findings indicate that financial concerns were more prominent than social or psychological concerns in the respondents' reported barriers. The findings suggest that information regarding available financial assistance, treatment coverage, and accessible anti-rabies services may be useful in addressing reported cost-related concerns. Similar barriers related to rabies care-seeking have been reported by Mapatse et al. (2022) and Kebede et al. (2024).

Scale	Mean		U-Value	P-Value	Decision	Conclusion
	Yes	No				
Awareness on Rabies Transmission	2.82	2.66	8263.00	0.111	Failed to Reject Ho	Not Significant
Awareness on Rabies Prevention	3.49	3.28	7764.00	0.018	Reject the Ho	Significant
Awareness on Rabies Timely Vaccination	3.24	3.07	8394.00	0.160	Failed to Reject Ho	Not Significant
Immediate Bite Response	3.27	3.10	8772.50	0.396	Failed to Reject Ho	Not Significant
Care Seeking Intention	3.53	3.46	9041.00	0.641	Failed to Reject Ho	Not Significant

Note: U-value = Mann-Whitney test statistic; P-value < .05 = Significant; Reject Ho = Significant difference; Failed to Reject Ho = No significant difference.

Table No. 8.1. Significant difference among the level of awareness, immediate bite response, and care-seeking towards rabies prevention when grouped according to respondents' pet ownership among pupils

Table 8.1 shows that pet ownership was significantly associated with awareness of rabies prevention among pupils. Pupils who reported owning pets had a higher mean score (M=3.49) than those who did not own pets (M=3.28), with a significant difference observed (U=7764.00, p=.018). Thus, the null hypothesis for this domain was rejected. No statistically significant differences were found in awareness of rabies transmission, timely vaccination, immediate bite response, or care-seeking intention (all p>.05). These findings indicate that the observed difference between pet owners and non-pet owners was limited to the rabies prevention domain in this sample. However, the findings do not establish that pet ownership directly improves awareness, as other factors that were not examined may also be related to the observed difference. Similar findings have been reported by Bundalian et al. (2020) and Dizon et al. (2022).

Scale	Mean		U-Value	P-Value	Decision	Conclusion
	Yes	No				
Awareness on Rabies Transmission	3.28	3.10	7168.50	.062	Failed to Reject Ho	Not Significant
Awareness on Rabies Prevention	3.20	3.16	8327.50	.961	Failed to Reject Ho	Not Significant
Awareness on Rabies Timely Vaccination	3.37	3.04	7103.50	.047	Reject the Ho	Significant
Immediate Bite Response	3.37	3.31	8182.00	.784	Failed to Reject Ho	Not Significant

Care Seeking Intention	3.48	3.50	7642.50	.253	Failed to Reject Ho	Not Significant
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Note: U-value = Mann-Whitney test statistic; P-value < .05 = Significant; Reject Ho = Significant difference; Failed to Reject Ho = No significant difference.

Table No. 8.2. Significant difference among the level of awareness, immediate bite response, and care-seeking towards rabies prevention when grouped according to respondents' pet ownership among parents

Table 8.2 shows that pet ownership was significantly associated with awareness of timely rabies vaccination among parents. Pet-owning parents had a higher mean score (M=3.37) than non-pet-owning parents (M=3.04), with a significant difference observed (U=7103.50, p=.047). Thus, the null hypothesis for this domain was rejected. No statistically significant differences were found in awareness of rabies transmission, prevention, immediate bite response, or care-seeking intention (all p>.05). These findings indicate that the observed difference between pet owners and non-pet owners was limited to the timely vaccination domain. However, the findings do not establish that pet ownership directly improves vaccination awareness, since other factors not examined in the study may also be related to the difference. Similar findings have been reported by Bundalian et al. (2020), Dizon et al. (2022), and Wirajaya et al. (2022).

Scale	Mean		U-Value	P-Value	Decision	Conclusion
	Yes	No				
Awareness on Rabies Transmission	2.82	2.74	10639.50	.424	Failed to Reject Ho	Not Significant
Awareness on Rabies Prevention	3.52	3.36	10151.50	.140	Failed to Reject Ho	Not Significant
Awareness on Rabies Timely Vaccination	3.30	3.10	9374.00	0.13	Failed to Reject Ho	Not Significant
Immediate Bite Response	3.35	3.12	9860.00	0.66	Failed to Reject Ho	Not Significant
Care Seeking Intention	3.57	3.46	10544.00	.343	Failed to Reject Ho	Not Significant

Note: U-value = Mann-Whitney test statistic; P-value < .05 = Significant; Reject Ho = Significant difference; Failed to Reject Ho = No significant difference.

Table No. 8.3. Significant difference among the level of awareness, immediate bite response, and care-seeking towards rabies prevention when grouped according to respondents' history of dog bite/scratch among pupils

Table 8.3 shows no statistically significant differences in pupils' awareness of rabies transmission (p=.424), prevention (p=.140), timely vaccination (p=.13), immediate bite response (p=.660), and care-seeking intention (p=.343) based on history of dog bites or scratches. Although pupils with a history of bites or scratches had a higher mean score for timely vaccination (M=3.30) than those without such history (M=3.10), the difference was not statistically significant. These findings indicate that, in this sample, previous bite or scratch history was not significantly associated with the measured rabies-related domains among pupils. Therefore, previous exposure alone does not provide sufficient evidence of differences in rabies-related awareness or care-seeking intention. Similar findings have been reported by Lungten et al. (2021) and Laorujisawat et al. (2022).

Scale	Mean		U-Value	P-Value	Decision	Conclusion
	Yes	No				
Awareness on Rabies Transmission	3.27	3.20	10544.00	.526	Failed to Reject Ho	Not Significant
Awareness on Rabies Prevention	3.22	3.16	10933.50	.918	Failed to Reject Ho	Not Significant
Awareness on Rabies Timely Vaccination	3.24	3.18	10959.50	.946	Failed to Reject Ho	Not Significant

Immediate Bite Response	3.36	3.36	10211.00	.279	Failed to Reject Ho	Not Significant
Care Seeking Intention	3.44	3.54	8361.00	<.001	Reject the Ho	Significant

Note: U-value = Mann–Whitney test statistic; P-value < .05 = Significant; Reject Ho = Significant difference; Failed to Reject Ho = No significant difference.

Table No. 8.4. Significant difference among the level of awareness, immediate bite response, and care-seeking towards rabies prevention when grouped according to respondents' history of dog bite/scratch among parents

Table 8.4 shows that a history of dog bites or cat scratches was significantly associated with care-seeking intention among parents. Parents with a history of bites or scratches had a lower mean score (M=3.44) than those without such a history (M=3.54), and the difference was statistically significant (U=8361.00, $p<.001$). Thus, the null hypothesis for care-seeking intention was rejected. No statistically significant differences were observed in awareness of rabies transmission, prevention, timely vaccination, or immediate bite response (all $p>.05$). These findings indicate an association between previous bite or scratch history and care-seeking intention, with the group reporting previous exposure having a slightly lower mean score. However, the reason for this difference cannot be determined from the present findings. The results highlight the importance of reinforcing appropriate care-seeking guidance regardless of previous experience. Similar findings have been reported by Mapatse et al. (2022) and Kebede et al. (2024).

Scale	Mean		U-Value	P-Value	Decision	Conclusion
	Yes	No				
Awareness on Rabies Transmission	2.78	2.69	4057.00	.572	Failed to Reject Ho	Not Significant
Awareness on Rabies Prevention	3.48	3.04	3012.50	.004	Reject the Ho	Significant
Awareness on Rabies Timely Vaccination	3.22	2.92	3333.50	.033	Reject the Ho	Significant
Immediate Bite Response	3.25	2.96	3242.00	.020	Reject the Ho	Significant
Care Seeking Intention	3.53	3.35	3638.50	.133	Failed to Reject Ho	Not Significant

Note: U-value = Mann–Whitney test statistic; P-value < .05 = Significant; Reject Ho = Significant difference; Failed to Reject Ho = No significant difference.

Table No. 8.5. Significant difference among the level of awareness, immediate bite response, and care-seeking towards rabies prevention when grouped according to respondents' presence of stray cats and dogs among pupils

Table 8.5 shows no statistically significant differences in pupils' awareness of rabies transmission ($p=.572$) or care-seeking intention ($p=.133$) based on the reported presence of stray cats and dogs in their neighborhoods. However, statistically significant differences were observed in awareness of rabies prevention (M=3.48 vs. 3.04, $p=.004$), timely vaccination (M=3.22 vs. 2.92, $p=.033$), and immediate bite response (M=3.25 vs. 2.96, $p=.020$), with higher mean scores among pupils who reported the presence of stray animals. These findings indicate that reported presence of stray animals was associated with selected rabies-related domains among pupils. However, the findings do not establish that exposure to stray animals directly increases awareness or preparedness. The results highlight the importance of providing consistent rabies education to pupils regardless of the reported presence or absence of stray animals in their communities. Similar findings have been reported by Laorujisawat et al. (2022), Wirajaya et al. (2022), and Dizon et al. (2022).

Scale	Mean		U-Value	P-Value	Decision	Conclusion
	Yes	No				
Awareness on Rabies Transmission	3.24	3.23	3455.00	.985	Failed to Reject Ho	Not Significant
Awareness on Rabies Prevention	3.19	3.21	3410.50	.899	Failed to Reject Ho	Not Significant
Awareness on Rabies Timely Vaccination	3.24	3.01	2829.50	.120	Failed to Reject Ho	Not Significant

Immediate Bite Response	3.37	3.20	3275.50	.651	Failed to Reject Ho	Not Significant
Care Seeking Intention	3.48	3.53	3343.50	.768	Failed to Reject Ho	Not Significant

Note: U-value = Mann–Whitney test statistic; P-value < .05 = Significant; Reject Ho = Significant difference; Failed to Reject Ho = No significant difference.

Table No. 8.6. Significant difference among the level of awareness, immediate bite response, and care-seeking towards rabies prevention when grouped according to respondents' presence of stray cats and dogs among parents

Table 8.6 shows no statistically significant differences in parents' rabies-related domains based on the reported presence of stray cats and dogs in their neighborhoods. The p-values for rabies transmission ($p=.985$), prevention ($p=.899$), timely vaccination ($p=.120$), immediate bite response ($p=.651$), and care-seeking intention ($p=.768$) were all greater than .05. Although numerical differences were observed between groups, none were statistically significant. Therefore, the findings do not provide sufficient evidence of an association between the reported presence of stray animals in the neighborhood and the measured rabies-related domains among parents. The results support the need for consistent rabies education regardless of neighborhood exposure to stray animals. Similar findings have been reported by Mapatse et al. (2022) and Kebede et al. (2024).

Conclusion and Recommendations

Conclusions based on the data collected and analyzed include: (a) Although both school-age children and their parents demonstrated generally moderate to high levels of awareness regarding rabies transmission, prevention, and timely vaccination, specific knowledge gaps persist, particularly in recognizing that rabid animals may appear healthy and in understanding all possible transmission routes such as scratches and saliva exposure. These findings indicate that awareness is present but remains incomplete, reinforcing the need for more targeted and concept-focused health education. (b) Despite relatively good awareness of preventive measures, inconsistencies were observed in immediate bite response practices. While both groups reported proper wound washing and prompt reporting behaviors, the continued use or consideration of harmful traditional remedies and improper wound management highlights a disconnect between knowledge and actual practice. This suggests the need for strengthening practical, skills-based training on correct first-aid management following animal bites. (c) The findings revealed a high level of care-seeking intention among both pupils and parents, indicating positive attitudes toward seeking professional medical care after exposure. However, certain misconceptions, such as underestimating minor wounds, and limited peer influence among children suggest that care-seeking behaviors are not yet fully optimized. This underscores the importance of reinforcing the urgency of seeking treatment regardless of wound severity and promoting peer-supported health behaviors in school settings. (d) Various structural and perceptual barriers continue to influence care-seeking behaviors. Among pupils, fear of vaccination and treatment side effects emerged as notable concerns, while among parents, financial constraints, accessibility issues, and availability of services were identified as moderate barriers. These findings highlight the need for interventions that address both psychological and socioeconomic factors, including improving access to affordable treatment and providing reassurance regarding vaccine safety. (e) Demographic and environmental factors, such as pet ownership, history of animal bites, and presence of stray animals, were found to influence certain aspects of awareness and practices, although not consistently across all domains. This suggests that while these factors play a role, they are not sufficient determinants of appropriate behavior, emphasizing the need for comprehensive and inclusive education strategies that target all individuals regardless of exposure or experience. (f) Overall, the study demonstrates that while awareness and intention levels are relatively high, gaps remain in translating knowledge into consistent and appropriate preventive practices. The identified misconceptions regarding rabies transmission, improper wound management, underestimation of minor wounds, and barriers to timely care-seeking indicate the need for targeted and practical health education. This highlights the importance of an integrated approach that combines knowledge enhancement, behavioral change strategies, and improved health system support. Therefore, rabies prevention efforts should emphasize correct wound care, timely consultation after animal exposure, and addressing fears and accessibility barriers among school-age children and their parents.

Study Limitations

This study has several limitations that should be considered when interpreting the findings. First, the study was conducted in only one selected public elementary school, which limits the generalizability of the findings to other schools and communities. The use of purposive sampling may have also introduced selection bias, since participants were selected based on established criteria rather than through random sampling. The study also relied on self-reported responses regarding awareness, practices, immediate bite response, care-seeking, and barriers related to rabies prevention. These

reported practices and intentions may not always reflect how participants would actually respond in a real-life situation. In addition, the use of questionnaires may have introduced response and common-method bias, as participants' answers may have been influenced by how they understood the questions or by their tendency to provide socially desirable responses. Furthermore, different survey modes were used, with parents completing the questionnaire through Google Forms, while the children answered a paper-based questionnaire through face-to-face administration. This difference in administration may have influenced how participants understood or responded to some survey items. Given these limitations, the findings should be interpreted within the context of the selected school and study population and should not be generalized to other populations without further investigation.

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Competing Interests Statement

The authors declare that they have no known competing financial interests, personal relationships, or other conflicts of interest that could have appeared to influence the work reported in this study.

Data Availability Statement

The data analyzed in this study were newly collected through survey questionnaires administered to 302 children and parents. The dataset generated and analyzed during the study is available from the corresponding author upon reasonable request, subject to applicable ethical and confidentiality requirements.

References

- Bundalian, R. J., Lacson, M., Bacani, C., Soriano, D. R., Garing, A., Aquino, A. J., Policarpio, A., Mallari, J. K., Jose, R. S., Bulao, M. F., Tanquilut, N., & Magsino, P. J. (2020). A study on knowledge, attitudes, and practices on rabies in the Philippines. *Kesmas National Public Health Journal*, 15(4). <https://doi.org/10.21109/kesmas.v15i4.3811>
- Bin, K. (2024). The essential role of rabies vaccines in protecting children. *J Vaccines Vaccin*, 15(551), 1. <https://www.walshmedicalmedia.com/open-access/essential-role-of-rabies-vaccines-in-protecting-children-127376.html>
- Cabalza, D. (2025, August). DOH records 426 deaths due to rabies in 2024. *INQUIRER.NET*. <https://newsinfo.inquirer.net/2044420/doh-records-426-deaths-due-to-rabies-in-2024>
- Franco, A. S., Parreño, S. J., Buyco, C., & Diquito, T. J. (2024, January 28). Policy checking on the implementation of Republic Act 9482, Sec. 7 (Anti-Rabies Act of 2007) in the Province of Davao del Sur, Philippines. *TWIST Journal*. <https://twistjournal.net/twist/article/view/12>
- Guzman, F. D., Iwamoto, Y., Saito, N., Salva, E. P., Dimaano, E. M., Nishizono, A., Suzuki, M., Oloko, O., Ariyoshi, K., Smith, C., Parry, C. M., & Solante, R. M. (2022). Clinical, epidemiological, and spatial features of human rabies cases in Metro Manila, the Philippines from 2006 to 2015. *PLoS Neglected Tropical Diseases*, 16(7), e0010595. <https://doi.org/10.1371/journal.pntd.0010595>
- Jakeman, M., Oxley, J. A., Owczarczak-Garstecka, S. C., & Westgarth, C. (2020). Pet dog bites in children: Management and prevention. *BMJ Paediatrics Open*, 4(1), e000726. <https://doi.org/10.1136/bmjpo-2020-000726>
- Kebede, S., Beyene, G., Akalu, B., Abajebel, E., & Kebede, I. A. (2024). General public knowledge, attitudes, and practices about rabies and associated factors in Gomma district of Jimma zone, southwestern Ethiopia. *PLoS Neglected Tropical Diseases*, 18(10), e0012551. <https://doi.org/10.1371/journal.pntd.0012551>
- Lañada, E., Quilicot, A. M., Balala, L., Cortez, E., Peña, S., Torregoza, R., & Cano, M. (2019). Knowledge, attitudes, and practices relating to rabies control in Baybay City, Leyte, Philippines. *Annals of Tropical Research*, 1–17. <https://doi.org/10.32945/atr4121.2019>

- Laorujisawat, M., Wattanaburanon, A., Abdullakasim, P., & Maharachpong, N. (2022). Rabies-Related Knowledge, Attitudes, and Practices among primary school students in Chonburi Province, Thailand. *INQUIRY the Journal of Health Care Organization Provision and Financing*, 59. <https://doi.org/10.1177/00469580221087881>
- Ling, M. Y. J., Halim, A. F. N. A., Ahmad, D., Ramly, N., Hassan, M. R., Rahim, S. S. S. A., Jeffree, M. S., Omar, A., & Hidrus, A. (2023). Rabies in Southeast Asia: A systematic review of its incidence, risk factors and mortality. *BMJ Open*, 13(5), e066587. <https://doi.org/10.1136/bmjopen-2022-066587>
- Lungten, L., Rinchen, S., Tenzin, T., Phimpraphai, W., & De Garine-Wichatitsky, M. (2021). Knowledge and perception of rabies among school children in rabies endemic areas of South Bhutan. *Tropical Medicine and Infectious Disease*, 6(1), 28. <https://doi.org/10.3390/tropicalmed6010028>
- Mapatse, M., Sabeta, C., Fafetine, J., & Abernethy, D. (2022). Knowledge, attitudes, practices (KAP) and control of rabies among community households and health practitioners at the human-wildlife interface in Limpopo National Park, Mozambique. *PLoS Neglected Tropical Diseases*, 16(3), e0010202. <https://doi.org/10.1371/journal.pntd.0010202>
- Polit, D. F., & Beck, C. T. (2021). *Nursing research: Generating and assessing evidence for nursing practice* (11th ed.). Wolters Kluwer.
- Ritchie, A. J., Meeyai, A., Trotter, C., & Douglas, A. D. (2025). Routine childhood rabies pre-exposure prophylaxis can be cost effective in low- and middle-income countries. *Vaccine*, 47, 126703. <https://doi.org/10.1016/j.vaccine.2024.126703>
- Salcedo, M. J. (2025, August 16). DOH logs 211 rabies cases from January to August 2025. *INQUIRER.net*. <https://newsinfo.inquirer.net/2096527/doh-logs-211-rabies-cases-from-january-to-august-2025>
- Septelici, D., Carbone, G., Cipri, A., Esposito, S., & Bernasconi, S. (2024). Management strategies for common animal bites in pediatrics: A narrative review on the latest progress. *Microorganisms*, 12(5), 924. <https://doi.org/10.3390/microorganisms12050924>
- Thomas, L. (2023, June 22). Cross-sectional study: Definition, uses & examples. *Scribbr*. <https://www.scribbr.com/methodology/cross-sectional-study/>
- Tubeo-Dilao, N. F., Lim, J., & Bullo, C. (2024). Knowledge, attitude, and practices on rabies prevention and control among primary care providers of children 0–18 years old. *Pediatric Infectious Disease Society of the Philippines Journal*, 25(1), 54–63. <https://doi.org/10.56964/pidspi20242501006>
- Wirajaya, M., Farmani, P., & Laksmi, P. (2022). Knowledge, Attitudes and Practices (KAP) Model of Rabies Prevention Efforts Among Households in Low and Middle-Income Countries: A Systematic Review. *SCITEPRESS*, 49–53. <https://doi.org/10.5220/0011938900003576>
- World Health Organization. (2023). Rabies. <https://www.who.int/news-room/fact-sheets/detail/rabies>

Appendices

Appendix A.

Research Instrument

Rabies is a fatal but preventable viral disease that is mainly transmitted through the bite of infected animals, particularly dogs (WHO, 2023). Children are among the most vulnerable groups, as they are more likely to be bitten and less likely to report exposures. Preventive measures such as immediate wound washing, timely medical consultation, and responsible pet ownership play a vital role in eliminating rabies (WHO, 2023).

Assessing the Practice, Awareness, Immediate Bite Response, Care Seeking and Barriers of school-age children and their parents toward rabies prevention is crucial, because their awareness and behaviors significantly affect both their personal safety and the effectiveness of community-wide prevention efforts (Laorujisawat et al., 2022).

The goal of this study is to understand what children and their parents know, how they feel, and what they do when it comes to preventing rabies. The results will be used to improve health education programs in schools and in the community.

Demographic Information: Please provide the following information about yourself. (*Pakibigay ang sumusunod na impormasyon tungkol sa iyo*)

1. Do you own a dog/cat? (*May alaga ka bang aso/pusa?*)

Yes/ Mayroon ☐ No/ Wala ☐

2. Have you ever been bitten or scratched by a dog or cat? (*Nakagat ka na ba o nakalmot ng aso o pusa?*)

Yes/Oo ☐ No/Hindi ☐

If yes, when was it and what did you immediately do after?

(*Kung oo, kailan ito nangyari, at ano ang ginawa mo kaagad pagkatapos?*)

3. Are there stray dogs or cats around your neighborhood? (*May galang aso o pusa ba sa iyong komunidad?*)

Yes/ Mayroon ☐ No/Wala ☐

School-age Children Questionnaire

Instruction: Read the questions thoroughly and put a (/) check inside the box of your chosen answer. (*Panuto: Basahin ng mabuti ang mga katanungan at lagyan ng (/) tsek sa loob ng kahon ang iyong napiling sagot.*)

Interpretation: based on average mean

- 3.26 - 4: Strongly Agree
- 2.51 - 3.25: Agree
- 1.76 - 2.50: Disagree
- 1.00 - 1.75: Strongly Disagree

I. Awareness

Questions	Unaware (Walang Kaalaman) 1	Somewhat Aware (Medyo May Kaalaman) 2	Aware (May Kaalaman) 3	Strongly Aware (Lubos na May Kaalaman) 4

A. Awareness of Transmission

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1. I know that rabies can be transmitted through dog bites. <i>Alam ko na ang rabies ay maaaring maipasa sa pamamagitan ng kagat ng aso.</i>				
2. I know that scratches from a rabid animal can also transmit rabies. <i>Alam ko na ang mga kalmot mula sa isang hayop na may "rabies" ay maaari ding makapasa ng rabies</i>				
3. I understand that if a rabid animal's saliva touches you, it can give you rabies.. <i>Naiintindihan ko na kapag nadikit sa'yo ang laway ng hayop na may "rabies", maaari kang mahawa ng "rabies".</i>				
4. I understand that some dogs with rabies can appear healthy. <i>Naiintindihan ko na may mga asong may "rabies" na maaaring magmukhang malusog.</i>				
TOTAL:				

B. Awareness of Prevention

5. I know that keeping pets vaccinated can prevent rabies. <i>Alam ko na ang pagpapanatiling nabakunahan ang mga alagang hayop ay nakatutulong sa pag-iwas sa rabies.</i>				
6. I know that avoiding stray animals helps prevent rabies. <i>Alam ko na ang pag-iwas sa mga asong gala ay nakatutulong sa pag-iwas sa rabies.</i>				
7. I understand that proper wound washing helps prevent infection. <i>Nauunawaan ko na ang wastong paghuhugas ng sugat ay makakatulong upang maiwasan ang impeksyon.</i>				
8. I know that after a bite, I should tell an adult right away so they can take me to the Health Unit or Animal Bite Treatment Center to help prevent rabies. <i>Alam ko na kapag nakagat ako, kailangan kong magsabi agad sa nakatatanda para madala nila ako sa Health Unit o Animal Bite Treatment Center para maiwasan ang "rabies".</i>				
TOTAL:				

C. Awareness of Importance of Timely Vaccination

9. I understand that anti-rabies vaccination must be given as soon as possible after a bite. <i>Nauunawaan ko na ang bakuna kontra-rabies ay dapat ibigay sa lalong madaling panahon pagkatapos makagat.</i>				
10. I know that delaying vaccination increases the risk of rabies. <i>Alam ko na ang pagkaantala ng pagbabakuna ay nagpapataas ng panganib ng "rabies".</i>				

11. I know that completing all scheduled anti-rabies shots is important. <i>Alam ko na mahalagang makumpleto ang lahat ng nakaiskedyul na bakuna "kontra-rabies".</i>				
12. I know that even small bites or scratches may still require vaccination. <i>Alam ko na kahit maliliit na kagat o kalmot ay maaaring mangailangan pa rin ng pagbabakuna.</i>				
TOTAL				

II. Immediate Bite Practice

Questions	Never (Hindi Ginagawga) 1	Seldom (Bihira) 2	Sometimes (Paminsan-minsan) 3	Always (Palagi) 4
1. I wash the wound immediately with soap and water for at least 10 minutes after a bite or scratch. <i>Hinuhasan ko agad ang sugat gamit ang sabon at tubig nang hindi bababa sa 10 minuto pagkatapos makagat o makalmot.</i>				
2. I avoid putting garlic, herbs, or other home remedies on the bite wound. <i>Iniiwasan kong lagyan ng bawang, mga dahon, o iba pang unang-lunas sa bahay ang kagat.</i>				
3. I make sure to tell an adult or guardian right away if I get bitten or scratched. <i>Sinisiguro kong ipaalam agad sa isang nakatatanda kung ako ay nakagat o nakalmot.</i>				
4. I avoid squeezing the wound after a bite or scratch. <i>Iniiwasan kong pisilin ang sugat pagkatapos makagat o makalmot.</i>				
5. I know that the wound should not be covered tightly after washing. <i>Alam ko na hindi dapat takpan nang mahigpit ang sugat pagkatapos itong hugasan.</i>				
6. I would immediately describe the characteristics of the dog or cat after a bite or scratch to an adult. <i>Agad kong ilalarawan sa nakatatanda ang itsura at katangian ng aso o pusa pagkatapos akong makagat o makalmot.</i>				
TOTAL:				

III. Care-Seeking Intention (Same-Day Visit to HU/ABTC)

Questions	Strongly Disagree (Lubos na Hindi Sumasang-ayon) 1	Disagree (Hindi Sumasang-ayon) 2	Agree (Sumasang-ayon) 3	Strongly Agree (Lubos na Sumasang-ayon) 4
1. I intend to go with my parent/s to the Health Unit or Animal Bite Treatment Center the same day if a dog or cat bites me. <i>Balak kong magpasama sa aking magulang sa Health Unit o Animal Bite Treatment Center sa parehong araw kung kailan nakagat ako ng aso o pusa.</i>				
2. I intend to report the bite or scratch to my parents or teachers immediately. <i>Balak kong iulat kaagad ang kagat o kalmot sa aking mga magulang o mga guro.</i>				
3. I believe it is necessary to seek professional help even if the bite seems small. <i>Naniniwala ako na kailangang humingi ng tulong sa mga doktor o nars kahit na maliit lang ang kagat.</i>				
4. I intend to tell my friends or classmates to go to the Health Unit or Animal Bite Treatment Center on the same day they are bitten. <i>Balak kong sabihan ang aking mga kaibigan o kaklase na pumunta sa Health Unit o Animal Bite Treatment Center sa parehong araw kapag sila ay nakagat.</i>				
TOTAL				

IV. Barriers to Care Seeking

Questions	Strongly Disagree (Lubos na Hindi Sumasang-ayon) 1	Disagree (Hindi Sumasang-ayon) 2	Agree (Sumasang-ayon) 3	Strongly Agree (Lubos na Sumasang-ayon) 4
1. I am afraid to go to the Health Unit or Animal Bite Treatment Center because I am scared of medical procedures or unfamiliar places. <i>Natatakot akong pumunta sa Health Unit o Animal Bite Treatment Center dahil natatakot ako sa mga gamutan o sa hindi pamilyar na lugar.</i>				
2. I worry about the possible effects of treatment or vaccination. <i>Nag-aalala ako sa posibleng epekto ng gamutan o pagpapabakuna.</i>				
3. I am afraid of injections, so I may not go to get vaccinated.				

<i>Natatakot ako sa inyeksyon o turok kaya ayaw kong magpabakuna.</i>				
4. I may delay going to the Health Unit because I am waiting for an adult to decide or tell me what to do. <i>Maaari kong ipagpaliban ang pagpunta sa Health Unit dahil naghihintay ako ng desisyon o sasabihin ng nakatatanda.</i>				
5. I feel scared to tell my parents because I might get scolded for the bite or scratch. <i>Natatakot akong sabihin sa magulang ko dahil baka mapagalitan ako sa pagkakagat o pagkakalmot.</i>				
6. I delay seeking treatment because I think the bite is not serious. <i>Ipinagpapaliban ko ang pagpapagamot dahil iniisip kong hindi naman seryoso ang kagat.</i>				
7. I may delay seeking care if the wound does not bleed. <i>Maaari kong ipagpaliban ang pagpapagamot kung hindi dumugo ang sugat.</i>				
8. I might rely on home remedies instead of going with someone to the Health Unit or Animal Bite Treatment Center. <i>Maaaring umasa ako sa mga pangunang lunas sa bahay sa halip na magpasama pumunta sa Health Unit o Animal Bite Treatment Center.</i>				
TOTAL:				

Appendix B.

Research Instrument

Rabies is a fatal but preventable viral disease that is mainly transmitted through the bite of infected animals, particularly dogs (WHO, 2023). Children are among the most vulnerable groups, as they are more likely to be bitten and less likely to report exposures. Preventive measures such as immediate wound washing, timely medical consultation, and responsible pet ownership play a vital role in eliminating rabies (WHO, 2023).

Assessing the Practice, Awareness, Immediate Bite Response of school-age children and their parents toward rabies prevention is crucial, because their awareness and behaviors significantly affect both their personal safety and the effectiveness of community-wide prevention efforts (Laorujisawat et al., 2022).

The goal of this study is to understand what children and their parents know, how they feel, and what they do when it comes to preventing rabies. The results will be used to improve health education programs in schools and in the community.

Demographic Information: Please provide the following information about yourself. (*Pakibigay ang sumusunod na impormasyon tungkol sa iyo*)

1. Do you own a dog/cat? (*May alaga ka bang aso/pusa?*)

Yes/ Mayroon ☐ No/ Wala ☐

2. Have you ever been bitten or scratched by a dog or cat? (*Nakagat ka na ba o nakalmot ng aso o pusa?*)

Yes/Oo ☐ No/Hindi ☐

If yes, when was it and what did you immediately do after?

(Kung oo, kailan ito nangyari, at ano ang ginawa mo kaagad pagkatapos?)

3. Are there stray dogs or cats around your neighborhood? (*May galang aso o pusa ba sa iyong komunidad?*)

Yes/ Mayroon ☐ No/ Wala ☐

Parents' Questionnaire

Instruction: Read the questions thoroughly and put a (/) check inside the box of your chosen answer. (*Panuto: Basahin ng mabuti ang mga katanungan at lagyan ng (/) tsek sa loob ng kahon ang iyong napiling sagot.*)

Interpretation: based on average mean

- I. 3.26 - 4: Strongly Aware
 - II. 2.51 - 3.25: Aware
 - III. 1.76 - 2.50: Somewhat Aware
 - IV. 1.00 - 1.75: Unaware
-

I. Awareness

Questions	Unaware (Walang Kaalaman) 1	Somewhat Aware (Medyo May Kaalaman) 2	Aware (May Kaalaman) 3	Strongly Aware (Lubos na May Kaalaman) 4

A. Awareness of Transmission

1. I know that rabies can be transmitted through dog bites. <i>Alam ko na maaaring maipasa ang "rabies" sa pamamagitan ng kagat ng aso.</i>				
2. I know that even scratches from a rabid animal can transmit rabies. <i>Alam ko na kahit ang kalmot mula sa hayop na may "rabies" ay maaaring magpasa ng "rabies".</i>				
3. I understand that saliva from a rabid animal can cause rabies if it enters a wound. <i>Nauunawaan ko na ang laway ng hayop na may "rabies" ay maaaring magdulot ng "rabies" kapag ito ay pumasok sa sugat.</i>				
4. I understand that some dogs with rabies can appear healthy. <i>Naiintindihan ko na may mga asong may "rabies" na maaaring magmukhang malusog.</i>				
TOTAL:				

B. Awareness of Prevention

5. I know that keeping pets updated with anti-rabies vaccination prevents rabies. <i>Alam ko na ang pagpapanatiling updated ang bakuna kontra-rabies ng mga alagang hayop ay nakatutulong sa pag-iwas sa rabies.</i>				
6. I know that limiting children's contact with stray animals helps prevent rabies. <i>Alam ko na ang paglilimita sa pakikisalamuha ng mga bata sa mga asong gala ay nakatutulong sa pag-iwas sa rabies.</i>				
7. I understand that I should immediately wash a bite or scratch wound properly right away to help prevent infection. <i>Naiintindihan ko na dapat kong agarang hugasan nang tama ang sugat ng kagat o kalmot agad-agad upang maiwasan ang impeksyon.</i>				
8. I know that going to the Health Unit or Animal Bite Treatment Center prevents rabies after an exposure.				

<i>Alam ko na ang pagpunta sa Health Unit o Animal Bite Treatment Center ay makakatulong upang maiwasan ang rabies pagkatapos ng makagat o makalmot.</i>				
TOTAL:				

C. Awareness of Importance of Timely Vaccination

9. I understand that anti-rabies vaccination must be administered as soon as possible after a bite. <i>Nauunawaan ko na ang bakuna kontra-rabies ay dapat ibigay sa lalong madaling panahon pagkatapos makagat.</i>				
10. I know that delaying vaccination increases the risk of rabies. <i>Alam ko na ang pagkaantala ng pagbabakuna ay nagpapataas ng panganib ng "rabies".</i>				
11. I believe that completing all scheduled anti-rabies shots is necessary for full protection. <i>Naniniwala ako na kinakailangang makumpleto ang lahat ng nakaiskedyul na bakuna kontra-rabies upang magkaroon ng ganap na proteksyon.</i>				
12. I know that even small or shallow scratches may still require vaccination. <i>Alam ko na kahit maliliit o mabababaw na kalmot ay maaari pa ring mangailangan ng pagbabakuna.</i>				
TOTAL:				

II. Immediate Bite Response Practices

Questions	Never (Hindi Ginagawga) 1	Seldom (Bihira) 2	Sometimes (Paminsan-minsan) 3	Always (Palagi) 4
1. I will immediately wash my child's bite or scratch wound with soap and running water for at least 10 minutes. <i>Agad kong huhugasan ang sugat ng kagat o kalmot ng aking anak gamit ang sabon at dumadaloy na tubig sa loob ng hindi bababa sa 10 minuto.</i>				
2. I avoid applying home remedies (e.g., garlic, oil, herbs) on my child's bite wound. <i>Iniiwasan kong lagyan ng mga pangunang lunas sa bahay (hal. bawang, langis, mga halamang gamot) ang sugat ng aking anak.</i>				
3. I will report the bite or scratch to a health professional as soon as possible. <i>Iuulat ko ang kagat o kalmot sa isang health professional sa lalong madaling panahon.</i>				
4. I avoid squeezing my child's bite wound. <i>Iniiwasan kong pisilin ang sugat ng kagat ng aking anak.</i>				
5. I will leave the wound uncovered or loosely covered after washing.				

<i>Iiwan kong bukas o maluwag ang pagkakatakip ng sugat pagkatapos itong hugasan.</i>				
6. I will observe the animal involved after the bite or scratch. <i>Oobserbahan ko ang hayop na nakagat o nakakalmot pagkatapos ng insidente.</i>				
TOTAL:				

III. Care-Seeking Intention (Same-Day Visit)

Questions	Strongly Disagree (Lubos na Hindi Sumasang-ayon) 1	Disagree (Hindi Sumasang-ayon) 2	Agree (Sumasang-ayon) 3	Strongly Agree (Lubos na Sumasang-ayon) 4
1. I intend to bring my child to the Health Unit/Animal Bite Treatment Center the same day after a bite or scratch by an animal. <i>Dadalhin ko ang aking anak sa Health Unit/Animal Bite Treatment Center sa parehong araw pagkatapos makagat o makalmot ng hayop.</i>				
2. I intend to follow the doctor's advice immediately. <i>Susundin ko agad ang payo ng doktor.</i>				
3. I believe that immediate medical consultation is necessary even if the wound looks minor. <i>Naniniwala ako na kinakailangan ang agarang konsultasyong medikal kahit mukhang maliit lamang ang sugat.</i>				
4. I will encourage other parents to seek same-day care after an animal bite. <i>Hihikayatin ko ang ibang mga magulang na magpatingin agad sa parehong araw kapag may kagat ng hayop.</i>				
TOTAL:				

IV. Barriers to Care Seeking

Questions	Strongly Disagree (Lubos na Hindi Sumasang-ayon) 1	Disagree (Hindi Sumasang-ayon) 2	Agree (Sumasang-ayon) 3	Strongly Agree (Lubos na Sumasang-ayon) 4
1. The distance to the Health Unit/Animal Bite Treatment Center makes it difficult to seek immediate care. <i>Malayo ang Health Unit/Animal Bite Treatment Center at ito ang nagpapahirap sa agarang pagpapagamot.</i>				
2. I worry about the possible cost of treatment or vaccination. <i>Nag-aalala ako sa posibleng gastos ng gamutan o pagbabakuna.</i>				
3. Work or time constraints may prevent me from bringing my child to the Health Unit/Animal Bite Treatment Center.				

<i>Ang trabaho o kakulangan sa oras ay maaaring makapigil sa akin sa pagdadala ng aking anak sa Health Unit/Animal Bite Treatment Center.</i>				
4. Lack of available vaccines or medicines at the Health Unit/Animal Bite Treatment Center delays treatment. <i>Ang kakulangan ng bakuna o gamot sa Health Unit/Animal Bite Treatment Center ay nagdudulot ng pagkaantala sa pagpapagamot.</i>				
5. I feel hesitant to report a bite because of embarrassment or judgment. <i>Nag-aalinlangan akong ireport ang kagat dahil sa hiya o takot na husgahan.</i>				
6. I delay seeking medical care when the bite appears minor. <i>Ipinagpapaliban ko ang pagpapagamot kapag sa tingin ko ay maliit lamang ang kagat.</i>				
7. Long waiting times at the Health Unit delay my decision to seek treatment. <i>Ang mahabang oras ng paghihintay sa Health Unit ay nagiging dahilan ng pagkaantala sa pagpapagamot.</i>				
8. Using home remedies first delays immediate consultation at the Health Unit/Animal Bite Treatment Center. <i>Ang paggamit muna ng mga remedyo sa bahay ay nagiging dahilan ng pagka antala sa agarang magpakonsulta sa Health Unit/Animal Bite Treatment Center.</i>				
TOTAL:				

Appendix C.

SCALE	ALPHA	RELIABILITY
PARENTS		
Awareness	.788	Acceptable
Immediate Bite Response	.821	Good
Care Seeking Intention	.801	Good
Barriers to Care Seeking	.776	Acceptable
PUPILS		
Awareness	.756	Acceptable
Immediate Bite Response	.741	Acceptable
Care Seeking Intention	.794	Acceptable
Barriers to Care Seeking	.744	Acceptable

Reliability Results of the Research Instrument