Original Article

Level of Awareness on the Community-Based Strategies for Rabies Prevention and Management in Barangay Tisa, Cebu City

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Abstract: The prevalent community belief that diseases can spread from dogs to humans through bites emphasizes the considerable public health importance of rabies prevention and management within the population. Rabies is a viral zoonotic disease-causing fatal brain and spinal cord inflammation. This study utilized a quantitative descriptive correlational research design to determine the level of awareness on the community-based strategies for rabies prevention and management. Based on the respondent's profile, most of the respondents are aged 18-28, wherein most of the respondents are single and at college level. The results revealed that the Barangay Tisa are highly aware of the prevention (weighted mean 4.54) and management (weighted mean of 4.63) of rabies in their community. The results correlate the respondents' profile and its significant importance in acquiring data of this study on level of awareness on the community-based strategies for rabies prevention and management. The findings showed that there is a significant difference between the respondents' level of awareness on the prevention of rabies and the respondents' level of awareness on the management of rabies. The study concluded that the residents of Barangay Tisa, Cebu City, exhibited a high level of awareness regarding community-based strategies for rabies management than in rabies prevention. Most respondents were young, single individuals with college-level education. Statistical analyses revealed significant relationships between demographic factors and awareness levels, highlighting the importance of education in fostering understanding of rabies management. Overall, the findings underscored the effectiveness of community initiatives in promoting awareness and suggested the need for targeted action plans to further enhance rabies prevention efforts in the area.

Keywords: level of awareness, community-based strategies, rabies prevention, management in barangay

1. INTRODUCTION

The prevalent community belief that diseases can spread from dogs to humans through bites emphasizes the considerable public health importance of rabies prevention and management within the population. Rabies is a viral zoonotic disease-causing fatal brain and spinal cord inflammation (World Health Organization [WHO], 2019). Wildlife, including bats, raccoons, skunks, and foxes, are recognized as common rabies reservoir species on a global scale [1]. However, domestic dogs (Canis familiar is) are by far the most critical rabies reservoirs and vectors for human rabies in the world, predominantly in African and Asian countries [2]. Even with preventative measures in place, rabies still kills tens of thousands of people each year, mostly from dog attacks. The key to ending canine-mediated human rabies is to treat the illness from its foundation. Increasing community knowledge and administering animal vaccinations on time are key to breaking the cycle of transmission [3]. According to the Centers for Disease Control and Prevention [CDCP] (2020), rabies causes approximately 59,000

deaths worldwide each year. Even though there is proof that eradicating stray dogs and implementing animal vaccination programs can lower the incidence of human rabies, dog rabies is still widespread in many countries; exposure to rabid dogs remains responsible for more than 90% of human rabies exposures, and 99% of human rabies deaths globally. Less than 0.05% of rabies deaths occur in the Americas, with Asia accounting for most cases (59.6%), followed by Africa (36.4%). Moreover, India is the nation that causes the most significant number of human rabies deaths worldwide, accounting for 35% of cases [4]. In Asia, rabies is a significant problem. Experts advised Asian nations to develop comprehensive national strategies encompassing improved availability of modern human vaccines and cost-effective treatments post-exposure, enhanced disease diagnosis and monitoring, and data management at national, regional, and global levels. They were also encouraged to collaborate across sectors to control rabies in dogs and to develop plans to increase public and healthcare worker awareness of rabies prevention and control [5]. In the Philippines, there is already an established program to control and prevent rabies, but such control only covers a few islands and provinces [6]. Though canine-mediated human rabies is now a notifiable disease, under the auspice of the national government's programs to halt its transmission, the disease remains a significant problem, causing 200-300 human deaths yearly [7]. Rabies-related deaths continue despite the escalation of rabies prevention and control efforts. This increasing demand for protective post-exposure prophylactic [PEP] vaccination also strains the local and national health budgets, as PEP is costly and often given unnecessarily. Consequently, frequent vaccine shortages divert resources from dog vaccination programs in rabies elimination campaigns. The very sporadic detection of canine rabies cases when diagnosing human cases indicates that surveillance is insensitive in some endemic areas—unless most cases are identified, there will be limited understanding of either human or animal cases and effective control efforts will be challenging. Less than 10% of cases, including dog rabies, are identified in samples from some areas with inadequate routine surveillance [8]. Current surveillance policies in the Philippines have it that investigations are only done when a human rabies case is detected, laying further emphasis on the role the government, industry, and private sector players must play collaboratively to ensure enough is done to eliminate rabies. Through proper usage of vaccine, this viral infection is preventable [9]. Animal bite cases have increased sharply at the Department of Health in Central Visayas [DOH-7] for the first half of 2023 relative to the same period last year. According to Dr. Ronald Jarvik Buscato, head of DOH-7's Communicable Diseases Section, they have monitored over 59,000 bites in the region between January and June. They are also investigating 19 suspected cases of rabies-related deaths in the same period—a stark increase from the seven cases last year [10]. There's also one news article from Cebu Daily News claiming eight out of Cebu City's 80 Barangays are now classified as high-risk for rabies among animals. According to a newspaper article from The Freeman in Cebu City News and Information, Dr. Jessica Maribojoc, the Chief of the Department of Veterinary Medicine and Fisheries [DVMF], highlighted that presently, there exists a recorded case of rabies in each of eight out of the city's 80 barangays. The eight high-risk areas for rabies are barangays Guadalupe, Inaya wan, Kina sang-an, Lahug, Pit-os, Punta Princesa, Tisa, and Tejero. For this matter, a recommended study aims to conduct research in one of eight Barangays of rabies "high-risk" Barangays in Cebu City, herein specifically Barangay Tisa. In Cebu City, there are two designated facilities for managing animal bites. The ABC Animal Bite Center sits in Barangay Carreta, approximately 3.5 kilometers away from Barangay Tisa. Concurrently, the Animal Bite Treatment Center occupies a position along Capitol Compound Road. This study is significantly relevant since one of the researchers was once a victim of an animal bite. Rabies is a serious public health concern but remains a neglected disease due to poor healthcare resources. Knowing what people in the community are aware of in terms of preventive measures and how to manage such cases can plan effective interventions to lessen the burden of rabies cases. The experiences of one of the researchers with the fear and uncertainty over a possible rabies scenario further incite the motivation for this study, in which each contribution to the

knowledge base builds public health outcomes. Several existing studies have highlighted the importance of community awareness and knowledge regarding rabies prevention and control in various regions. A study by [11] assessed people who live in slum communities have gaps in their knowledge and attitudes regarding rabies prevention and stray dog control. In relation to [12] even though public health workers are aware that vaccine is required, embedded local beliefs, practices, and culture persist, which contributes to wrong, unhygienic practices of wound management and delay in seeking medical attention. Other potential factors may be poor access to health services. Likewise, [13] assessed a country that lacks hard data on epidemiology, vaccines for dogs and PEP for humans, and that is tight by logistic and financial constraints to efficient medical rabies control, disease awareness takes an important place in disease prevention. Moreover, [14] conducted a study at community health center level with the following objectives to document the knowledge of victims of dog or animal bites about the first aid measures at home, full treatment course, utilization of nearest health facility and about the preventive measures in general in cases of dog or animal bite. Correspondingly, [15] collected socio-demographic data and experience with dog-incurred injury, to assess knowledge of dog behavior and rabies prevention and attitudes in risk identification and practice in risky behavior. Prior studies have also highlighted the need to create awareness, cultural beliefs, and community on how to prevent and control the disease. However, there is missing link regarding the level of awareness and practice of community-based strategies especially in Cebu City. Hence, this study will fill this gap by establishing the extent to which these strategies are understood and implemented by the targeted population. The purpose is to reveal threats that might hinder the practical application of these approaches in terms of misunderstandings, gaps, or cultural nuances. Thus, this study assessed this level of awareness to identify misconceptions, knowledge gaps, and cultural barriers that may hinder the effectiveness of these strategies, leading to a more tailored and impactful public health campaigns, ensuring that community members are not just passive recipients but active participants in rabies prevention and management efforts. The researchers are undergraduates taking a Bachelor of Science in Nursing who have studied medical-surgical nursing and community health nursing [CHN], both of which are relevant and have given them the competencies essential for conducting the study on "Level of Awareness on the Community-Based Strategies for Rabies Prevention and Management." Their experience in medical-surgical nursing has given them a deep knowledge of disease management, such as rabies, and their CHN education has taught them skills in engaging with communities and educating about health. This combination makes them highly suitable to deal with community-based strategies for preventing and managing rabies. Rabies remains a significant public health concern globally, leading to numerous fatalities each year, mainly due to dog bites. The persistence of rabies highlights the importance of understanding and implementing effective preventive measures at the community level. Despite the availability of preventive measures, rabies continues to pose a threat to public health. The lack of awareness and knowledge among community members regarding rabies prevention strategies can contribute to the persistence of the disease. In light of the recent data from across the globe which emphasizes the significant annual deaths caused by rabies, the researchers, through this study, aim to determine the level of awareness of the community-based strategies for rabies prevention and management among the residents of Barangay Tisa, Cebu City. Through this study, the researchers seek to gather valuable insights that can inform the development of an action plan tailored to the specific needs of the community. This study determined the level of awareness of community-based strategies for the prevention and management of rabies among the residents in Barangay Tisa, Cebu City.

2. MATERIALS & METHOD

This study utilized a quantitative descriptive correlational research design to determine the level of awareness on the community-based strategies for rabies prevention and management. The results of this study formed the basis of the proposed action plan for community empowerment to enhance the

knowledge and capability of people for the prevention and management of rabies for the residents of Barangay Tisa, Cebu City. The descriptive-correlational study approach prioritizes elucidating relationships between variables rather than inferring causation, and its association with experienced researchers and statisticians facilitates the production of valid research outcomes, fosters skills necessary for conducting high-quality studies, and can impact patient care [16]. This study was conducted at Barangay Tisa, Cebu City, demographic data from the 2020 Census indicates a total population of 47,364, constituting 4.91% of Cebu City's overall population. The 2015 Census reported a household population of 37,749 in Tisa, distributed across 7,735 households, averaging 4.88 members per household. These statistics provided a comprehensive overview of the population dynamics within the research area of Barangay Tisa, aiding in a more detailed understanding of its social and demographic characteristics. Within the barangay, there are ten (10) health centers near Barangay Tisa with qualified healthcare personnel providing essential medical services and raising health awareness. The participants in this study were the citizens living in Barangay Tisa, Cebu City. In a deliberated plan to guarantee a detailed and family-focused portrayal of the community, the researchers chose to determine the sample size based on the number of households instead of the entire population tally. The researchers utilized a method that centered on the household in order to gain a more in-depth understanding of community dynamics and preferences. The researchers used a Stratified Random Sampling Method to ensure full representation of the community. This technique included categorizing a population into different subgroups, known as strata, based on similar characteristics, and was a commonly used statistical approach. Identified were 7,735 households, resulting in a sample size of 153 individuals when calculated according to Slovin's formula. Researchers gathered approximately 153 samples from the population of Barangay Tisa, Cebu City, in order to obtain a margin of error of 8%. This sample size provided dependable data for the study. The participants in this study met the specified inclusion criteria. The respondent was required to be a minimum of 18 years old, irrespective of gender or level of education. Furthermore, the individual asked possessed a healthy mental state. Thirdly, the individual resided in Barangay Tisa in Cebu City. Finally, the participant was prepared to provide voluntary consent to take part in the research. Those who did not meet any of the inclusion criteria were not included in the study. This study used a survey questionnaire created by the researcher, which consisted of three sections. The initial section of the survey established the Respondents' Profile. It included four questions that individuals answered themselves, covering age, education level, marital status, family structure, and the accessibility of Health Centers in their area. The second portion of the survey aimed to assess the knowledge of rabies prevention measures. It consisted of ten (10) indicators rated on a scale of 1 to 5. A rating of five (5) indicated strong agreement with the statement, four (4) indicated almost agreement, three (3) indicated neutrality, two (2) indicated partial disagreement, and one (1) indicated strong disagreement from the respondent. The next section of the survey aimed to assess knowledge about managing rabies. Respondents rated ten (10) aspects on a scale from 1 to 5. A score of five (5) indicated strong agreement with the statement, four (4) indicated almost agreement, three (3) indicated neutrality, two (2) signified partial disagreement, and one (1) showed strong disagreement. Additionally, the questionnaire was translated into Visayan to address language barriers, ensuring that participants comprehended the questions well and could provide accurate responses. This dry run procedure commenced with a transmittal letter addressed to the Dean of the College of Nursing of the University of Cebu - Bani lad, specifically requesting permission to conduct a dry run procedure within the community of Barangay Caban Calan, Mandaue City. After the notice to conduct the procedure was granted by the committee, the researcher sent out transmittal letters to the Barangay Captain and Barangay Health Officials of Barangay Caban Calan to secure permission for the dry run procedure. Subsequently, the researchers conducted an orientation about the study with the barangay officials and barangay health workers, discussing the approach or method for distributing the questionnaires to the respondents. Once approval was obtained, the researchers scheduled a pilot test

with 25 respondents from different households among the residents of Barangay Caban Calan, Mandaue City. The researchers conducted a face-to-face intercept in the community, orienting the respondents about the purpose of the study. The respondents were given the option to decide whether they would participate or decline the invitation to take part in the study. Furthermore, the respondents were informed of their freedom to voluntarily withdraw from the study at any point if they so decided. Upon the respondents' agreement to participate in the study, the researchers provided an Informed Consent Form and asked them to sign it. Finally, the researchers distributed the questionnaires to the respondents, who were given 30 minutes to answer them. After the completion of the two-part questionnaire, the researchers gathered, tabulated, and analyzed the data presented. Following the analysis, the reliability of the adapted questionnaire was assessed using the Cronbach's alpha value. This proposed study commenced with a transmittal letter to the Dean of the College of Nursing of the University of Cebu - Bani lad, specifically requesting permission to conduct a quantitative research study within the community of Barangay Tisa in Cebu City. Upon approval, the study was submitted to a panel of experts for design hearing and approval. After approval by the panel during the proposal hearing, the study was forwarded to the University of Cebu Academic and Research Ethics Committee (UCAREC) for protocol and ethics review. Upon receiving authorization from the committee to conduct the study, the researcher sent transmittal letters to the Cebu City Mayor, the Barangay Captain, and Barangay Health Officials of Barangay Tisa seeking permission to proceed with study. After obtaining permission, the researcher took three weeks to gather data. Face-to-face intercepts were conducted within the community, where respondents were oriented about the purpose of the study and given one day to decide on participation. The following day, the researcher returned to distribute informed consent forms. During data gathering, inclusion and exclusion criteria were reviewed to ensure that respondents who received the questionnaire were properly selected. Once respondents signed informed consent forms, they were given the questionnaire. Respondents were allotted 30 minutes to 1 hour to complete the questionnaire. After collecting the completed questionnaires, the responses were reviewed to ensure all questions were answered and no information was omitted.

3. RESULTS & DISCUSSION

The profile details the average scores of the socio-demographic respondents' data are grouped according to age, marital status, educational level, access to the barangay health center, and family structure, along with their respective frequencies and percentages. The results are used to pinpoint areas where awareness may be lacking and to create an action plan aimed at improving rabies prevention within the community.

Table 01: Respondents' Profile

Profile	Frequency	Percentage
Age		
18-28	55	35.95
29-40	49	32.03
41 and above Total	49 153	32.03 100
Marital status		
Single	77	50.33
Married	71	46.41
Widowed	5	3.27
Total Educational attainment	153	100
Elementary level	1	0.65
Elementary graduate	6	3.92

Highschool level	23	15.03
Highschool graduate	41	26.80
College level	60	39.22
College graduate	22	14.38
Total Easy access to barangay health center	153	100
Yes	152	99.35
No Total	1 153	0.65 100
Family structure		
Nuclear	73	47.71
Single parent	24	15.69
Extended Total	56 153	36.60 100

Most of the respondents' data fell within the age range of 18-28 years, with 39.22% having attended college. This suggests that younger individuals, particularly those with higher education levels, may have a greater representation in the study, potentially influencing the overall results and highlighting the importance of the level of awareness on the community-based strategies for rabies prevention and management of the residents from Barangay Tisa, Cebu City. According to [17], older individuals were less likely to show positive attitudes and proper practices, such as vaccinating their pets or community dogs against rabies, seeking medical care after being bitten by a potentially rabid animal, administering first aid, or cleaning bite wounds with soap and water. Conversely, elder participants expressed greater knowledge on government or non-governmental immunization initiatives and Animal Birth Control programs dealing with free roaming dogs. However, despite being aware, it is noted that older groups displayed overall worse rabies practices and attitudes than the young. These findings suggest that while younger individuals with higher education levels are more engaged in rabies prevention practices, older residents, despite their awareness of government and NGO-led initiatives, may require more targeted interventions to improve their attitudes and practices toward rabies control. This emphasizes the need to adapt community-based rabies prevention and management strategies in Barangay Tisa, Cebu City, to bridge the gaps in awareness and practices among various age groups. The marital status of the respondents reveals that most are single (77), followed by married individuals (71), and a smaller part are widowed (5). This distribution shows that single and married individuals make up most of the sample. This representation could affect the study's findings, as marital status may play a role in shaping the level of awareness of community-based strategies for rabies prevention and management among the residents of Barangay Tisa, Cebu City. According to [18], marital status has been found to be a significant factor in influencing rabies prevention practices. Logistic regression analyses have shown that variables like marital status, dog ownership, educational background, and sources of information can affect an individual's rabies prevention practices. While some studies noted no statistically significant difference between prevention practices and marital status, educational level, or occupation, other studies from locations like Bahir Dar, Ethiopia, and Sokoto, Nigeria, found these variables to be important. The differences in findings may be due to variations in study areas, sample sizes, or other socio-demographic factors. The family structure of the respondents shows that the majority come from nuclear families (73), followed by those living in extended families (56), and a smaller part are from single-parent households (24). This distribution shows that nuclear and extended family setups are the most common among the residents of Barangay Tisa, Cebu City. The role of family structure is crucial in rabies prevention and management, as families are foundational units of society that significantly influence health outcomes. Public health emphasizes collaborative efforts to create conditions that promote health, and families are central to these efforts. By integrating families into

public health programming and strategic partnerships, we can enhance community engagement and empower individuals to take an active role in rabies prevention. Although family considerations are not always prioritized within public health initiatives, families are vital in shaping health behaviors and outcomes. Engaging them in rabies prevention strategies aligns with principles that emphasize family stability, diversity, and responsibility, fostering a more resilient community capable of effectively managing rabies and protecting public health [19]. In terms of accessibility to health centers, a striking 99.35% of respondents report easy access to a barangay health center, highlighting widespread physical access to healthcare facilities within the community. Individuals living in areas with well-distributed and easily accessible healthcare facilities were more likely to seek preventive and curative care. A study by [20] noted that having health centers within a short distance reduced travel costs and time, encouraging more frequent visits. Moreover, the predominant family structure among respondents is nuclear, with 47.71% of individuals living in such households. A significant portion, 36.60%, live in extended families, while a smaller group, 15.69%, belong to single-parent households. According to [21], individuals in nuclear families were more likely to prioritize preventive care due to shared decision-making dynamics, while those in extended families often relied on collective input for health choices. This collective approach sometimes led to more comprehensive healthcare discussions, highlighting how family structures can shape health-related behaviors and priorities. This section provided the respondents' level of awareness on the community-based strategies of rabies in terms of prevention. The table shows that respondents strongly agree on the importance of community-based strategies for rabies prevention, with the highest support for annual pet vaccinations (4.70) and immediate reporting of rabies outbreaks (4.65).

Table 02: Respondent's' Level of Awareness on the Community-Based Strategies of Rabies in Terms Prevention

Indicators (Prevention)	Weighted Mean	Interpretation
1. Pets should be vaccinated against rabies once every year.	4.70	Strongly Agree
2. Stray dogs manifesting signs of rabies infection such as excessive drooling, staggering, and seizures should be reported and killed.	4.28	Strongly Agree
3. A suspected rabies outbreak in the community should be reported immediately to the authorities.	4.65	Strongly Agree
4. It is important to control the dog population in the community.	4.60	Strongly Agree
5. Dog handlers at high risk should take pre-exposure prophylaxis.	4.56	Strongly Agree
6. Pet dogs should be caged or sheltered.	4.36	Strongly Agree
7. One should be able to identify the signs of rabies in animals and know what actions to take if they encounter a potentially rabid animal.	4.56	Strongly Agree
8. One should be aware of the potential risks associated with interacting with animals in the community.	4.55	Strongly Agree
9. Actively participating in community initiatives aimed at enhancing rabies prevention helps in fostering awareness	4.63	Strongly Agree

and ultimately reducing the incidence of rabies.		
10. Proper waste management, including the disposal of food scraps, helps prevent the spread of rabies.	4.53	Strongly Agree
Aggregated Weighted Mean	4.54	Strongly Agree

Legend: 4.21-5.0 = Strongly Agree; 3.41- 4.20 = Almost Agree; 2.61-3.40= Neutral; 1.81-2.60=2 Almost Disagree; 1.00-1.80= Strongly Disagree There is also strong agreement on controlling the dog population (4.60) and showing rabies symptoms (4.56). The elevated level of awareness, reflected in the overall weighted mean of 4.54, suggests that respondents recognize the seriousness of rabies and are likely to support preventive actions, contributing to the positive result. Their consistent answers indicate a well-informed community, which could lead to better implementation of rabies control measures. The strong agreement among respondents on rabies prevention measures, particularly pet vaccination, and dog population control, aligns with the idea that increased community engagement and responsible dog ownership can enhance vaccination coverage and reduce rabies transmission. This high level of awareness and support for these strategies, as reflected in the overall positive results, implies that healthier, well-managed dog populations in the community may foster more proactive attitudes toward rabies prevention efforts, further reinforcing public health initiatives [22]. The slightly lower score (4.28) on reporting stray dogs with rabies symptoms may reflect a gap in public initiative or awareness when it comes to managing free-roaming dog populations. This aligns with [23], who discuss the challenges faced by different groups in implementing dog population management programs. Public education and responsible ownership are essential, yet the lower awareness of reporting rabid dogs suggests that community members might not fully engage with these efforts, particularly in regions where traditional methods like elimination of stray dogs remain prominent. This gap in proactive reporting could hinder more humane, education-driven approaches to rabies control, such as vaccination and sterilization, which require active community participation.

Table 03: Respondents' Level of Awareness on the Community-Based Strategies of Rabies in Terms Management

Indicators (Management)	Weighted Mean	Interpretation
1. Wounds from an animal bite should be immediately washed with soap and running water.	4.78	Strongly Agree
2. A bite from a potentially rabid animal should not be treated with traditional methods or faith healers like: "tutho" or "tandok".	4.39	Strongly Agree
3. Seeking immediate medical attention is a must if bitten by an animal of unknown vaccination status.	4.67	Strongly Agree
4. The biting animal should be quarantined if unable to confirm the vaccination status.	4.63	Strongly Agree
5. Wound bites from rabid animals should be washed with antiseptic.	4.64	Strongly Agree
6. Wound bite should be covered with sterile dressing to protect it from dirt and bacteria.	4.69	Strongly Agree
7. Accessibility of veterinary services should be ensured for timely treatment of animals.	4.67	Strongly Agree

8. It is essential to participate in community-led initiatives to improve rabies management.	4.63	Strongly Agree
9. Post-exposure prophylaxis is essential even if the biting animal appears healthy.	4.55	Strongly Agree
10. Post-exposure treatment should not be delayed in order to avoid complications such as neurological damage and even death.	4.67	Strongly Agree
Aggregated Weighted Mean	4.63	Strongly Agree

Legend: 4.21-5.0 = Strongly Agree; 3.41- 4.20 = Almost Agree; 2.61-3.40= Neutral; 1.81-2.60=2 Almost Disagree; 1.00-1.80= Strongly Disagree

The highest score of 4.78 on wounds from an animal bite should be immediately washed with soap and running water demonstrates a high level of awareness among participants regarding the importance of wound care in management. Washing wounds with soap and water right away is one of the most effective first steps in reducing the risk of rabies transmission after an animal bite (World Health Organization, 2018). This high level of awareness can be due to community education initiatives that emphasize adequate wound treatment and rabies prevention techniques. The broad consensus on this goal suggests that community-based educational programs can significantly increase understanding of important procedures in rabies management, in accordance with the World Health Organization's recommendations for preventing repeat exposure. The lowest score of (4.39) on potentially rabid animal should not be treated with traditional methods may still be a sign of a lack of community effort or knowledge concerning wound management and proper treatment. Similar dilemma as stated by [24], India is having the highest burden of animal bite and rabies cases in the world. This imposes a substantial burden on the healthcare delivery services of the country. Rabies can be prevented by appropriate and timely PEP after an animal bite, but the attitude and treatment practices followed by cases of animal bite are important to ensure proper PEP. The overall mean of 4.59 in Table 2.3 shows that the respondents strongly agree on their awareness of community-based strategies for rabies prevention and management. The prevention indicator received a weighted mean of 4.54, while management scored slightly higher at 4.63, both falling under the "Strongly Agree" category. This suggests that the residents of Barangay Tisa have a solid understanding of both how to prevent rabies and manage rabies cases effectively. These results highlight the success of current efforts in educating the community on rabies prevention and management strategies.

Table 04: Summary on the Respondents' Level of Awareness on the Community Based Strategies of Rabies

Indicator	Weighted Mean	Interpretation
Prevention	4.54	Strongly Agree
Management	4.63	Strongly Agree
Overall Mean	4.59	Strongly Agree

The research findings from Barangay Tisa show significant progress in overcoming a critical barrier to fighting rabies: the lack of awareness about the disease. Respondents demonstrated strong agreement regarding their understanding of community-based strategies for rabies prevention and management, with an overall mean score of 4.59. The specific scores for prevention (4.54) and management (4.63) reveal a solid understanding of crucial practices, including the application of immediate wound care and the need to consult rabies prevention centers promptly. These results indicate that educational efforts have successfully informed at-risk populations about these vital steps, enabling them to take

proactive actions in case of rabies exposure and strengthening the community's ability to manage and prevent rabies effectively [25].

Table 05: Significant Relationship between the Profile and Level of Awareness on the Prevention of Rabies

Variables Prevention	Computed Value of X^2	D f	P-Value	Cramer's V	Decision	Interpretation
Age	2.954	4	0.566	0.098	Do Not Reject Ho	Not Significant
Educational Attainment	10.281	10	0.416	0.183	Do Not Reject Ho	Not Significant
Marital Status	9.131	4	0.058	0.173	Do Not Reject Ho	Not Significant
Family Structure	13.212	6	0.040	0.208	Reject Ho	Significant
Easy Access to Health Center	0.368	2	0.832	0.049	Do Not Reject Ho	Not Significant

Table 03 explored the relationship between various demographic factors and the level of awareness on rabies prevention through Chi-square tests, providing insight into the influence of these variables on decision-making regarding public health. Age, with a computed value of 2.954 and a p-value of 0.566, indicates no significant relationship with rabies awareness, suggesting that awareness does not vary significantly across different age groups. Similarly, educational attainment (computed value of 10.281, p = 0.416) and marital status (computed value of 9.131, p = 0.058) do not appear to influence awareness levels. Easy access to health centers, a potentially critical factor, also showed no significant impact (computed value of 0.368, p = 0.832). These results suggest that individual factors such as age, education, marital status, and access to healthcare are not primary drivers in determining rabies prevention awareness in the population studied. The Cramer's V values for these variables, ranging from 0.049 to 0.183, further indicate that the strength of the association between these factors and rabies awareness is weak.

Table 06: Significant Relationship Between the Profile and Level of Awareness on the Management of Rabies

Variables Management	Computed Value of X^2	D f	P-Value	Cramer's V	Decision	Interpretation
Age	5.931	4	0.204	0.139	Do Not Reject Ho	Not Significant
Educational Attainment	12.179	10	0.273	0.200	Do Not Reject Ho	Not Significant
Marital Status	1.656	4	0.799	0.074	Do Not Reject Ho	Not Significant
Family Structure	15.985	6	0.014	0.229	Reject Ho	Significant
Easy Access to Health Center	0.246	2	0.884	0.040	Do Not Reject Ho	Not Significant

The analysis shows that only family structure has a major connection with rabies management awareness, as evidenced by a p-value of 0.014. Other variables, such as age, educational attainment, marital status, and access to health centers, do not indicate significant associations, since their p-values surpass the 0.05 level. This implies that, while individual profiles can influence awareness, family structure is more important in understanding and efficiently controlling rabies awareness. According to [27], a community-based approach aims to strengthen families and systems to support disease programs and outbreak responses, reducing rabies risk and addressing community vulnerabilities. It focuses on supporting families and all sectors to take necessary actions to reduce dog bites and rabies transmission risks. Resilience starts at household levels, with family members understanding risks and mitigating spread. Fostering private sector commitment to empower communities is also crucial for effective community efforts. The results of the t-test indicate a statistically significant difference in respondents' awareness of rabies prevention and management. The mean awareness score for rabies prevention was 4.5418, while the mean for rabies management was slightly higher at 4.6333. A t-value of -3.522, with 152 degrees of freedom, produced a p-value of 0.001, which is below the significance level of 0.05. This leads to the rejection of the null hypothesis, confirming a significant difference between the two awareness levels. Respondents demonstrated slightly greater awareness of rabies management compared to its prevention.

Table 07: Significant Difference Between Respondents' Level of Awareness on Prevention and the Management of Rabies

Variables	Mean	T	D f	P-Value	Decision	Interpretation
Awareness on the Prevention of Rabies	4.5418	-3.522	152	0.001	Reject Ho	Significant
Awareness on the Management of Rabies	4.6333					

According to [28] there is a significant difference in the level of awareness regarding rabies prevention and rabies management. Awareness was identified as a critical factor in effective rabies control. Notably, the analysis shows a statistically significant distinction between knowledge of rabies prevention and management, with respondents demonstrating a slightly higher level of awareness about management. This result, supported by a p-value of 0.001, suggests a stronger focus or understanding of rabies management over prevention measures. These findings underscore the importance of strengthening educational initiatives that not only address management but also enhance preventive awareness, crucial for combating rabies effectively, particularly in high-risk areas.

4. CONCLUSIONS

The study employed a quantitative descriptive correlational research design with a researcher-made questionnaire to determine the demographic profile and level of awareness on the community-based strategies for rabies prevention and management in Barangay Tisa, Cebu City. Barangay Tisa is in Cebu City, Philippines, specifically in the southern part of the city. It is bordered by Barangay Laban Gon to the north, Barangay Basak Pardo to the south, Barangay Pahina Central to the west, and the Cebu Strait to the east. Ethical guidelines were strictly adhered to throughout the research to ensure the protection of human rights. Data analysis utilized Chi Square and Pearson R formulas to assess the respondents' profiles and weighted means to assess the level of awareness on the community-based strategies for rabies prevention and management in Barangay Tisa, Cebu City. Based on the respondent's profile, most of the respondents are aged 18-28, wherein most of the respondents are single and at college level. The results revealed that the Barangay Tisa are highly aware of the prevention (weighted mean

4.54) and management (weighted mean of 4.63) of rabies in their community. The results correlate the respondents' profile and its significant importance in acquiring data of this study on level of awareness on the community-based strategies for rabies prevention and management. The findings showed that there is a significant difference between the respondents' level of awareness on the prevention of rabies and the respondents' level of awareness on the management of rabies. The study concluded that the residents of Barangay Tisa, Cebu City, exhibited a high level of awareness regarding community-based strategies for rabies management than in rabies prevention. Most respondents were young, single individuals with college-level education. Statistical analyses revealed significant relationships between demographic factors and awareness levels, highlighting the importance of education in fostering understanding of rabies management. Overall, the findings underscored the effectiveness of community initiatives in promoting awareness and suggested the need for targeted action plans to further enhance rabies prevention efforts in the area.

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