

## RELATIONSHIP OF SOCIO-DEMOGRAPHIC PROFILES TO THE KNOWLEDGE ON RABIES AND PRACTICES ON RABIES CONTROL PROGRAM OF SELECTED ANIMAL BITE VICTIMS IN LAGUNA, PHILIPPINES

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**ABSTRACT** – Relationship of socio-demographic profiles to the knowledge on rabies and practices on rabies control Program of selected animal bite victims in Laguna, Philippines was explored in this study. It determined the socio-demographic profiles of the respondents, and the knowledge on rabies and practices on rabies control program of selected animal bite victims were assessed. Furthermore, the relationship and significant relationships of the socio-demographic profiles to the knowledge on rabies and practices on rabies control program were analyzed. This study utilized descriptive correlational study surveying 244 animal bite victims from January to December 2015 in a 2nd Class Municipality in Laguna. Descriptive Statistics, Correlational Analysis and Chi Square Test were used to present and analyze the collected data. Results revealed that the mean age range of the victims was 27 years old. The youngest bite victim was one-year-old and the oldest was 85 years old. Majority (52%) of the animal bite victims were female and most (36.08%). In terms of educational attainment, the majority (21.72%) of the animal bite victims were high school graduates. Majority (175) of the animal bite victims were bitten by dogs. Knowledge and practices of animal bite victims ranged very good to excellent with a mean range of 3.47-3.64, SD = 0.657-0.703. There was a very weak association of socio-demographic profile (age, sex, highest educational attainment) and type of animal who bit the victims to the knowledge of rabies, practices on the prevention and control of rabies. While there is an excellent knowledge and practices of animal bite victims on the control and prevention of rabies programs, there was generally a weak association on the socio-demographic profiles. In terms of relationship of the knowledge on rabies and practices on rabies control program, socio-demographic profiles, age, sex and highest educational attainment has significant relationship to the knowledge of animal bite victim on rabies while only the highest educational attainment has significant relationship to the practices on rabies control program.

**Keywords:** rabies, post exposure prophylaxis, health service satisfaction, animal bite

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## INTRODUCTION

Rabies may not be the disease with the highest mortality and morbidity rates in the Philippines, however, it must still be considered as a major public health concern since it is one of the most difficult diseases to be treated and can cause an annual count of 200-300 deaths. This neglected disease is 100% fatal, but it is also 100% preventable (Department of Health, 2008). In underdeveloped nations, canine rabies still claims the lives of 55,000 people annually despite being completely preventable. Knowledge gaps that might contribute to the prevention strategies and result in avoidable fatalities can be found using information on local beliefs and customs. Knowledge about rabies is a vital element to the prevention and control of rabies. A study done by Mapanga et al (2014) on the knowledge, attitude and practices revealed that of the 5, 141 households that have been surveyed in central, southern and northern Tanzania (both in urban and rural areas), majority (17%) of respondents were domestic dog owners (average of 2.3 dogs/household), majority of the respondents (>95%) had heard about rabies, and majority (>80%) knew that dog bites was the mode of transmission of rabies.

Furthermore, a study revealed that respondents who were likely to have greater knowledge about rabies were those who had greater education, originated from areas with history of rabies interventions and had experienced exposure by a suspect rabid animal, were male and owned dogs. Additionally, the majority (80%) of these respondents would typically go to the hospital for treatment following a suspected bite, but only 5% of them were aware of the importance of rapid wound cleansing following a bite. In addition, this study found that just 51% of respondents had vaccinated their dogs, even though more than 65% of respondents were aware of dog vaccination as a method of preventing rabies. The determining factors of this study were the following: being a male-heads household, presence of children, low economic status, residing in urban areas, owning livestock, originating from areas with rabies intervention and having purchased a dog. In terms of willingness to contribute to veterinary services, the majority (90%) of the respondents says they were willing, however they can only contribute no more than US \$0.31.

In addition, the study recommended that there should be a campaign to further increase the knowledge of people in Tanzania the importance of wound washing, seeking post-exposure prophylaxis and the need to vaccinate dogs. Additionally, it suggested that increased veterinary and medical sector involvement be made in order to guarantee the viability of preventive services.

In another study on Knowledge, Attitude and Practices of Canine in Rabies Khyber Pakhtunkhwa and Punjab Province of Pakistan (Ameed, T. et.al., 2020) revealed that 75% of the respondents were not vaccinated against rabies, 60% did not seek medical attention after a possible animal bite, and 55% reported that the local hospital did not have suitable rabies patient care facilities. Furthermore, because they were unaware of pre-exposure prophylaxis for rabies (51%;  $p < 0.05$ ; odds ratio 1.25), respondents who had dogs at home were less likely to have vaccinated themselves against the disease (38%;  $p < 0.05$ ; odds ratio 1.58). They also have a propensity to delay seeking medical attention after a suspected bite (52%;  $p < 0.05$ ; odds ratio 1.97), which may have contributed to more rabies-related deaths (65%;  $p < 0.05$ ; odds ratio 1.73) in their immediate or extended families. The respondents' lack of knowledge about rabies is consistent with the findings of a study conducted in Bangladesh by Hossaine, M. et. al. (2017). They have very little understanding of the rabies virus's transmission, clinical characteristics, and other related issues, all of which are crucial for rabies prevention. These two studies opposed the findings from the study of Davlin, SL et, al (2013) on Knowledge, attitudes, and practices regarding rabies in Filipinos following implementation of the Bohol Rabies Prevention and Elimination Programme. The results showed that the people of Bohol were well-informed on several facets of rabies and the government's efforts to manage it.

Additionally, they indicated a desire to follow the majority of the responsible pet ownership rules, such as those requiring canine vaccinations and registration. More awareness of rabies and the importance of informing local authorities about potentially infected pets will aid in the elimination of any residual rabies reservoirs on the island.

The Department of Health aims to make 'the' Philippines a country free of rabies and rabies infection by year 2020. The department employed seven tactics to attain these: "1) Post Exposure Prophylaxis (PEP) provision to all Animal Bite Centers (ABTCs); 2) Pre-Exposure Prophylaxis (PrEP) provision to high-risk individuals and school children in high incidence zones; and 3) Health education by increasing public awareness through the Information, Education and Communication (IEC) campaign. The elementary school curriculum will incorporate a rabies prevention program, and responsible pet ownership (RPO) will be promoted. The DOH should intensify its promotion of dog vaccination, dog population control, and stray animal control in cooperation with the Department of Agriculture. RA 9482, often known as "The Rabies Act of 2007," requires that rabies control ordinances be strictly enforced. The public should also be educated on how to handle animal bites and/or rabies exposure properly. 4) A year-round campaign to raise awareness of rabies, including World Rabies Day on September 28 and Rabies Awareness Month in March, should be conducted. 5) Medical professionals should be trained on how to treat rabies victims. 6) The Interlocal Health Zone should establish ABTCs.

There have been no studies in Siniloan, Laguna about knowledge and practices on rabies and its control and prevention program. This study therefore is a pioneering study which is vital in addressing the gap why rabies is still present in the municipality despite of . This study will help determine the reasons behind the high prevalence of rabies cases in Siniloan, Laguna, and find ways to prevent as well as eliminate rabies in tropical countries, like 'the' Philippines.

Moreover, the study serves as evidence-based research to further intensify the rabies control program being implemented in Siniloan, Laguna.

### **General Objective of the Study**

This study explored the relationship of socio- demographic profiles to the knowledge on rabies and practices on rabies control program of selected animal bite victims in Laguna, Philippines.

#### **Specific Objectives:**

1. To determine the socio-demographic profiles of the respondents in terms of:
  - a. age
  - b. sex
  - c. occupation of animal bite victims
  - d. Highest educational attainment of animal bite victims
  - e. type of animal who bit the victim
2. To determine the knowledge of animal bite victims on rabies control and prevention program of the animal bite victim
3. To determine the practices of animal bite victims on rabies control and prevention program of animal bite victim
4. To determine the association of the knowledge of animal bite victims on rabies control and prevention program of animal bite victim to its:
  - a. age
  - b. sex
  - c. occupation of animal bite victims
  - d. highest educational attainment of animal bite victims

e. type of animal who bit the victim

5. To determine the association of practices of animal bite victims on rabies control and prevention program of animal bite victim to its:

- a. age
- b. sex
- c. occupation of animal bite victims
- d. highest educational attainment of animal bite victims
- e. type of animal who bit the victim

6. To determine the relationship of the knowledge of animal bite victims on rabies control and prevention program of animal bite victim to its:

- a. age
- b. sex
- c. occupation of animal bite victims
- d. highest educational attainment of animal bite victims
- e. type of animal who bit the victim

7. To determine the relationship of practices of animal bite victims rabies on control and prevention program of animal bite victim to its:

- a. age
- b. sex
- c. occupation of animal bite victims
- d. highest educational attainment of animal bite victims
- e. type of animal who bit the victim

## **METHODOLOGY**

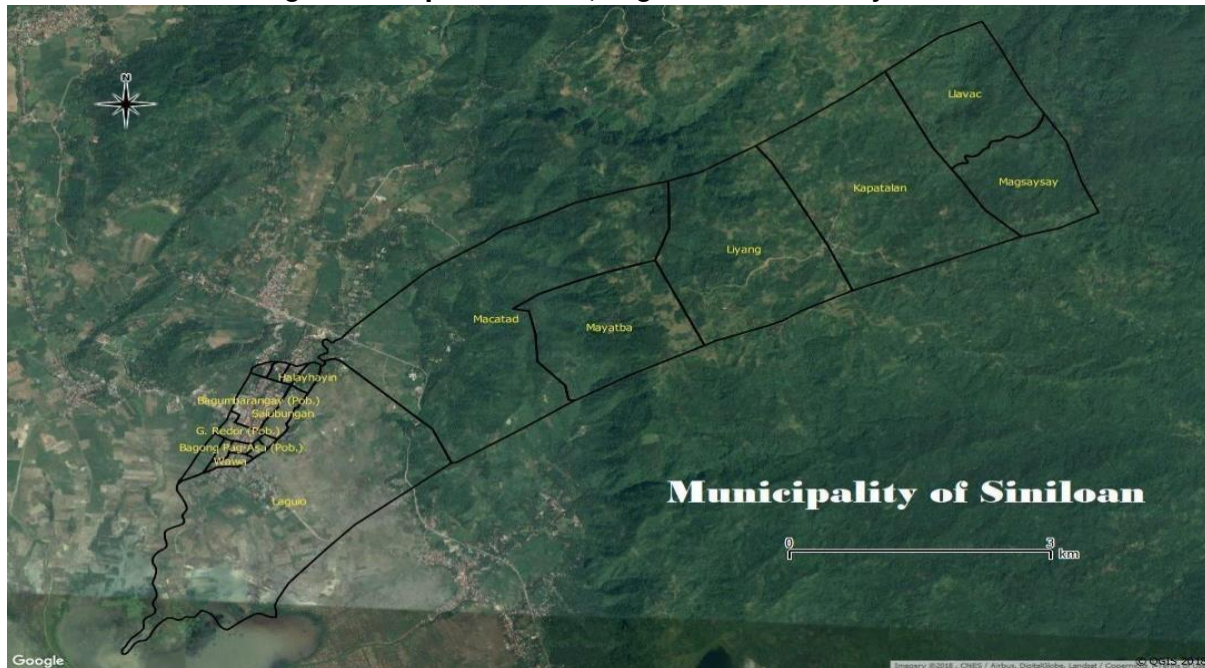
### **Research Design**

This study utilized a cross-sectional study design.

### **Setting**

The study was conducted in Siniloan- a rural, second-class municipality in Laguna, which lies in the plains between Sierra Madre and Laguna de Bay. Second-class municipalities are those that have attained an average yearly income of ten million pesos or more, but less than fifteen million pesos. It has a population of 37,860 individuals, with a recorded total number of 450 bite victims with a prevalence rate of 1.18% in 2015. The animal bite victims were from 20 barangays (see Figure1), namely: Acevida, Bagong Pag-Asa (Poblacion), Bagumbarangay (Poblacion), Buhay, Gen. Luna, Halayhayin, Mendiola, Kapatalan, Laguio, Liyang, Llavac, Pandeño, Magsaysay, Macatad, Mayatba, P. Burgos, G. Redor (Poblacion), Salubungan, Wawa and J. Rizal (Poblacion). Siniloan, Laguna recorded 5716 dogs and 1852 cats as of 2021. The highest number of dogs (775) was recorded in Barangay Kapatalan and the highest number of cats (236) was recorded in Barangay Macatad.

**Figure 1. Map of Siniloan, Laguna and the study sites**



*Source: PPDCO*

### **Sample Size Determination**

To determine the number of respondents for the survey, a table of appropriate sample size with 95% confidence level was used. For the Siniloan rural health unit with 450 total human bite victims, a sample size of 207 was determined (The Survey System, 2012).

### **Sampling Technique**

This study utilized a non-probability sampling technique using total enumeration. Confirmation of the address and presence of the animal bite victims were done through the help of the Rural Health Unit (RHU) health worker following ethical standards protocol and Data Privacy Act.

### **Data Collection**

Data collection was carried out through the assistance of a Sicilian health nurse that has been trained by the researcher to carry out and administer the survey. The participants were identified using the Siniloan Rabies Registry 2015 records. A house to house survey was done with the assistance of the barangay health workers in order to locate the bite victims from 20 barangays.

### **Research instrument**

Research instrument used in this study was adopted from the National Rabies Prevention and Control Program Manual of Operations (2012). It was translated and back translated to the Filipino language. The extent of validity and reliability of the survey questionnaires were tested, reliability was computed to be 0.7.

### **Research Population**

Animal bite victims who visited the Siniloan RHU from January to December 2015 were included in the study. They were informed of the purpose of the research and participants

were also informed of their anonymity, voluntarism and confidentiality using the ethical principles that were strictly followed.

### **Data Collection**

The animal bite victims accomplished the translated survey questionnaires through the assistance of rabies coordinator nurse and the barangay health workers with the supervision of the researcher of the study. The questionnaires included specific questions about the level of knowledge of animal bite victims about rabies and their practices once they were bitten.

### **Other independent variables**

Several other independent variables – all of which were captured through items in the survey questionnaire - were included in the analysis of data. The data of all the animal bite victims (450) were included in the study and since a sample size of 207 was computed, we surveyed 244 bite victims. The variables used to identify various demographic details of the victims were:

#### Age

A blank space was provided in the survey questionnaire in order to determine the age of the respondents.

#### Sex

Sex was categorized in two: male and female.

#### Occupation of animal bite victims

A space was provided in the questionnaire so the respondents will be able to write their occupation freely.

#### Highest educational attainment of animal bite victims

To determine the highest educational attainment of the animal bite victims, the following response options were provided: elementary graduate, high school graduate, earned units in college, finished vocational course, college graduate, post graduate, and others.

#### Type of animal who bit the victim

In order to determine the type of animal who bit the victims, two response options were provided: Dog and Cat.

### **Data Analysis**

#### ***Socio-demographic profile of animal bite victims***

The socio-demographic profile of the respondents was determined in terms of their age, sex, socioeconomic status, occupation, and highest educational attainment using descriptive statistics of mean.

#### ***Level of knowledge and practices on rabies control and prevention program of animal bite victims***

The level of knowledge and practices on rabies control and prevention programs of animal bite victims was determined through a) extent of knowledge and b) practices on prevention

and control of rabies. In order to interpret the result, the legend is as follows: 4 is excellent, 3 is very good, 2 is good, and 1 is poor.

### ***Interpretation of results***

The following were used to interpret the results of the study: a) Descriptive statistics; b) Pearson's correlation coefficient; c) Point biserial; and d) Spearman's rank correlation coefficient.

### ***Ethical Considerations***

The ethical considerations were applied and approved by the University of the Philippines Open University Institutional Research Ethics Committee (UPOU-IREC). Ethical principles were strictly followed. The following provides the actions that were done to comply with each of the six principles and data archiving. For the recruitment of the participants, the 2015 Rabies legend was used to gather the respondent's identity.

### ***Compliance with protocol***

The compliance with protocol was established through the use of the research proposal submitted to the UPOU-IREC. Ethical protocols were strictly followed, giving the details of the procedure of the sampling, invitation of participants, gathering and managing data using the survey forms, and then data management and analysis.

### ***Informed consent***

The compliance with the informed consent was established using the information sheet provided to the respondents for them to decide whether to proceed or not with the survey. The consent statements contained an explanation of the research procedures, purposes, benefits, responsibilities and potential risks to a prospective participant, in the course of research.

### ***Openness and integrity***

The compliance to the principle of openness and integrity was done through community participatory works wherein the results of the study were relayed to the Siniloan Rural Health Unit. After the approval of the panel, a copy of the manuscript will be given to the Siniloan Rural Health Unit as their guide.

### ***Protection from harm***

The compliance to the protection from harm was done through the voluntary nature of the research in which the responses were collected during their free time and usually after work hours.

### ***Confidentiality***

The principle of confidentiality was achieved through anonymizing the survey respondents. Since we used codes instead of names, confidentiality was protected. Only the rabies coordinator, the barangay health workers and the study proponents had access to the data that were generated from the survey forms. Responses were anonymized so that participants could openly answer the survey as honestly as they could without fear of using such information against them.

### ***Professional codes of practice and ethics***

The research was done in cooperation with the Siniloan Rural Health Unit and Municipality of Siniloan, Laguna. It was stated that no monetary rewards were given to the respondents but their responses would be appreciated since it will be a baseline data to the health service satisfaction of animal bite victims, and it can be used to develop steps towards the improvement of the health service delivery. The respondents were instead given a small token



of appreciation after completing the survey to recognize their effort and time allotted during the completion of the survey.

### **Storage and disposal of data**

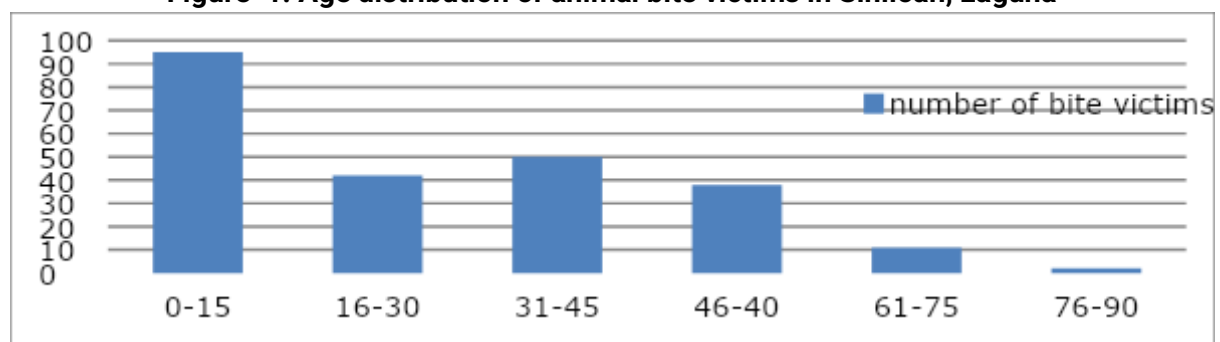
All the data gathered would be endorsed to the UPOU-IREC. It would be stored for a period of 5 years, and all the raw data and other information generated from the health service satisfaction survey will be kept under the steward of the rabies coordinator of the Siniloan Rural Health Unit. After 5 years, all the data will be shredded, and only electronic data will be kept for archiving.

## **RESULTS AND DISCUSSIONS**

This descriptive research discussed the socio-demographic profile of animal bite victims who received post exposure prophylaxis in the Siniloan Rural Health Unit in 2015. From the 450 animal bite victims, 244 respondents were surveyed and the results were as follows:

Figure 1 shows the age distribution of 244 animal bite victims who received post exposure prophylaxis recorded in the Siniloan Rural Health Unit from January to December 2015. The mean age among the 244 respondents was 27 years old. The data show that the youngest bite victim was one year old and the oldest was 85 years old, with the most number of victims found in the age group 0-15 years old. Similar to this, the age of the cases in the study by Kularatne et al. (2016) in Teaching Hospital Peradeniya Sri Lanka ranged from three months to 96 years, with a mean age of 29 years, and involved 19,661 cases of animal exposure during the five-year course of the study'. The resulting mean was close to the mean age of the victims in this study. The study of Ren et al. (2015), on the other hand, had a contrasting result. They found that in Zhejiang Province, China, the distribution of human rabies was highly stated in individuals between the age of 40 and 65 years, and the percentage of cases under 15 years of age was only 7%. In another study, a community survey done in India produced results that found that adult (>15 years old) males (around 78%) constituted 55 percent of the rabies cases (Sudarshan et al., 2005).

**Figure 1. Age distribution of animal bite victims in Siniloan, Laguna**

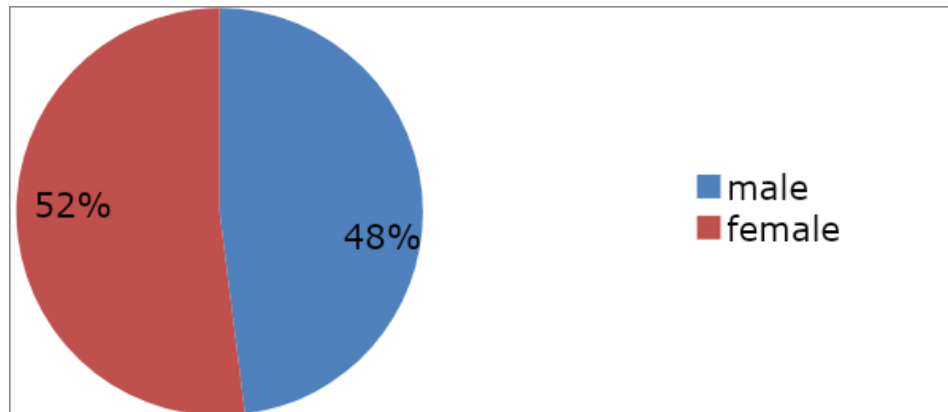


In Siniloan, 126 female (52%) and 116 male (48%) animal bite victims were recorded (see Figure 2). The most susceptible gender among all age groups in Siniloan was found to be females, compared to the findings done in Sri Lanka wherein males are more susceptible (Kularatne et al., 2016), as well as in Zhejiang province, China where there were more male victims than females. Since males engage in more outdoor activities and subsequently have more exposure opportunities than females, males become more susceptible (Ren et al., 2015). This finding is same with a study on Chalderan City, where results showed that most of the bites were witnessed in age group of 10-19 years old, men at rural areas attributed to their



higher presence outside for occupational and non-occupational activities, or due to audacity and more contacts (Babazadeh et al., 2016). Dimaano et al. (2011) also reported that males outstripped female cases likely because of views (belief to “tandoks”) associated with exposures.

**Figure 2. Gender of animal bite victims**



The different occupations of animal bite victims in Siniloan, Laguna (Table 1) were classified into 4 major groups as classified by International Standard Classification of Occupations (ISCO). The first group is the Professionals which include the pharmacist and the teacher. The second group is the Service and sales workers which includes the basket weaver, the clothes vendor, the laborer, dressmaker, janitor, dealer, ecoboys, business man, baker, tricycle driver, delivery boy, trimmer, barber, fish vendor, Pigrolac employee, security guard and the all-around maid. The farmer and the fisherfolk fall into the skilled agricultural,

forestry and fishery workers. The last group (Others) includes the housewife, barangay worker, students, barangay secretary, barangay captain and the *tambay*. Majority of the bite victims in Siniloan were students, followed by housewives. It had been noted that one of the reasons why most of the bite victims were students is because most children domesticate dogs and cats as pets and therefore the chance to get bit became higher as well. Most of the other occupations only have one victim. However, in Zhejiang province, China, it was the farmers and laborers who were found to be of high-risk, while students were at lower risk (only 5%) (Ren et al., 2015). Babazadeh et al. (2016) also reported that most bite victims in Chalderan City were occupational farmers.

**Table 1. Occupation of animal bite victims in Siniloan, Laguna**

Occupation	No. of victims	Percentage(%)
Professionals	4	1.64 %
Service and sales workers	33	13.52 %
Skilled agricultural, forestry and fishery workers	4	1.64 %
Others	88	36.06 %

Table 2 showed educational attainment of animal bite victims in Siniloan, Laguna. The bite victims were mostly high school graduates, followed by elementary graduates. Knowing the highest educational attainment is important to know the in-depth knowledge of the bite victims about rabies and its effect on them.

**Table 2. Educational attainment of animal bite victims in Siniloan, Laguna**

Highest educational attainment	No. of victims	Percentage(%)
Elementary graduate	51	20.90
Highschool graduate	53	21.72
Earned units in college	22	9.02
Finished vocational course	3	1.23
College graduate	25	10.25
Post graduate	5	2.05
Others	20	8.20

Most victims (175 respondents) were bitten by dogs, and only 69 respondents were bitten by cats (see Graph 3) coinciding with the results from Zhejiang province, China, which reported that higher than 70% of animal vectors were household dogs (Ren et al.,2015). Most studies from inside and outside of the country reported that the majority of animal bite cases were related to dogs, but it seems that it is because cat bite cases are under-reported since people may not think that cat bites can be dangerous (Babazadeh et al., 2016). Dog bite is the main cause of human rabies infection in the Philippines (Tohma et al.,2014). However, in Ilam, west of Iran, most cases were observed in cattle (33.3%) according to Bamonar et al., same as in the northern region of Iran as reported by Esfandiari. The rabies center of the Pasteur Institute of Iran reported that cows constitute 56.3% and 52.4% of all rabies cases in the country in 2002 and 2003, respectively, while the number of rabies in dogs, wolves, foxes and jackals in 2003 was 32.4% (Babazadeh et al., 2016).

**Figure 3. Number of animal bite victims bitten by dogs and cats**

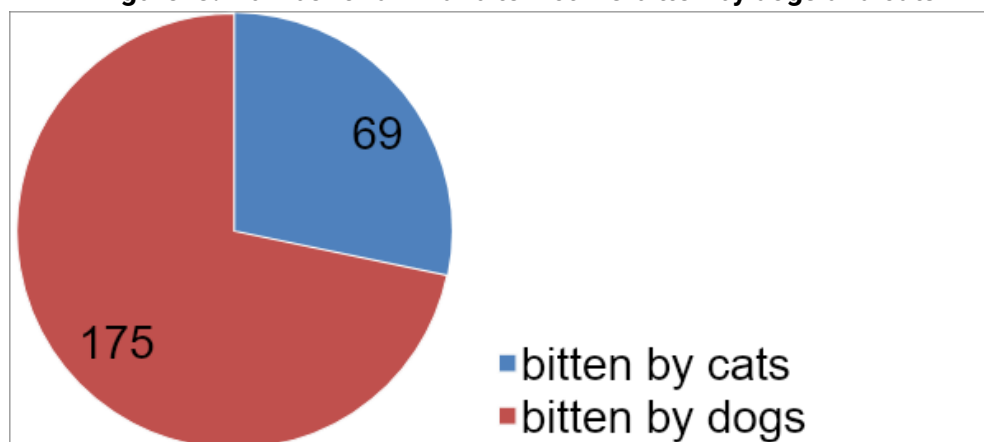


Table 3 show the knowledge and practices of animal bite victims in terms of the prevention and control of rabies. Based on the results, the extent of knowledge of animal bite victims who knew that rabies can kill a bitten person is *excellent* (mean= 3.64) while those who are aware of the rabies prevention and control program administered by the municipality's health unit is *very good* (mean= 3.47). In terms of extent of knowledge on the practices on prevention and control of rabies, animal bite victims who knew that rabies can be prevented through vaccination of companion animal like dogs and cats is *excellent* (mean= 3.61). Animal bite victims who knew that washing the affected area with soap and water is important whenever a person gets bitten by a dog or a cat is *very good* (mean= 3.49) and those who knew that receiving post exposure prophylaxis is important to prevent rabies is *very good* (mean= 3.52).

Among our study population, rabies awareness was considerably high, similar to reports from surveys conducted in Asia and Africa. The majority of the respondents knew that rabies can kill a bitten person and 92.21% were aware of rabies prevention and control programs administered by the municipal rural health unit. Sambo et al. (2014) also noted high rabies awareness in Tanzania, with 95% of the study participants being aware of rabies; an even higher percentage (98%) of study participants in Ethiopia was aware of it according to Jemberu et al. (2013). High awareness rates were also observed in Asian countries, i.e., Thailand with 93% (Kongkaew et al., 2004), Cambodia with 93% (Lunney et al., 2012), and Philippines (Davlin et al., 2014; Mbilo et al., 2017).

When it comes to preventive measures, 94.26% of the respondents knew that rabies can be prevented through vaccination of companion animal like dogs and cats, 92.26% knew that washing the affected area with soap and water is important whenever a person gets bitten by a dog or a cat, and 94.67% knew that receiving post exposure prophylaxis is important to prevent rabies. However, according to Mbilo et al study's from 2017, just 34% of respondents recognized that dogs needed to be vaccinated, and only 57% (almost 2/3) were aware that humans needed to be vaccinated as well.

**Table 3. Knowledge and practices of animal bite victims on rabies control and prevention program in Siniloan, Laguna**

Criteria	Mean	SD	Verbal Interpretation
<u><i>knowledge on rabies</i></u>			
Rabies can kill a bitten person	3.64	0.657	Excellent
I am aware of rabies prevention and control programs administered by the municipality's health unit (Animal Bite Center in Siniloan rural health unit)	3.47	0.703	Very good
<u><i>Practices on prevention and control of rabies</i></u>			
Rabies can be prevented through vaccination of companion animal like dogs and cats	3.61	0.669	Excellent
Washing the affected area with soap and water is important whenever a person gets bitten by a dog or cat.	3.49	0.676	Very good
Receiving post exposure prophylaxis is important to prevent rabies.	3.52	0.659	Very good

*Legend: 4 is excellent, 3 is very good, 2 is good and 1 is poor*

Association of socio-demographic profiles to the knowledge, practices on prevention and control of rabies was shown in Table 4. In terms of knowledge about rabies, all of the socio-demographic profiles show positive very weak to weak association, while in terms of practices only the type of animal who bit the victims have positive weak association while age, sex, and highest educational attainment have negative very weak association.

**Table 4. Association of socio-demographic profiles to the knowledge and practices of animal bite victims on rabies control and prevention program**

Socio-demographic Profiles	Knowledge about Rabies	Practices on prevention and control of rabies
Age <sup>1</sup>	0.0343	-0.0619
Sex <sup>2</sup>	0.0860	-0.0490
Highest educational attainment <sup>3</sup>	0.2065	-0.0236
Type of animal who bit the bite victims <sup>2</sup>	0.1492	0.0850

Statistical analysis used: 1 – Pearson's Correlation Coefficient

2 – Point Biserial

3 - Spearman's Rho Correlation

Legend: <0.2 Very weak

0.2 – 0.4 Weak

0.4 – 0.6 Moderate

0.6 – 0.8 Strong

0.8 – 1.0 Very strong

1. No association

1 Perfect association

Table 5 shows the significant relationship of the socio-demographic profiles to knowledge and practices of animal bite victims to the prevention and control of rabies program. In terms of knowledge of rabies the age (p value=,0.00345), sex (p value=,0.00451) and highest educational attainment (p value= 0.00367) has significant relationship. This result was comparable to the study done by Mapanga et., al (2014) and Ahmeed et.al., ( 2017). In terms of practices on prevention and control of rabies, only highest educational attainment has a significant relationship (p value =0.00367).

**Table 5. Significant relationship of the socio-demographic profiles to knowledge and practices of animal bite victims to the prevention and control of rabies program**

Socio Demographic Profiles	Knowledge about rabies	Practices on prevention and control of rabies
Age	0.00345*	0.71870
Sex	0.00451*	0.67540

Socio Demographic Profiles	Knowledge about rabies	Practices on prevention and control of rabies
Highest Educational Attainment	0.03567*	0.00367*
Type of Animal who bit the bite Victims	0.7896	0.87654

## CONCLUSION

The results of the study revealed that the age of most bite victims were from age 0-15 years old and most of them were females. Majority of the bite victims were high school graduates. Majority of the bite victims belong to various occupations and the majority of them were bitten by dogs.

Generally, respondents' knowledge on rabies control and prevention program ranges from very good to excellent, similar to the practices on the prevention and control of rabies program.

In terms of association of knowledge about rabies control and prevention program to the socio-demographic profiles, all of the socio-demographic profiles show positive very weak to weak association, while in terms of practices only type of animal who bit the victims have positive weak association while age, sex, and highest educational attainment have negative very weak association;

The age (p value=,0.00345), sex (p value=,0.00451) and highest educational attainment (p value= 0.00367) have significant relationship to the knowledge on rabies; while among the sociodemographic profiles, only highest educational attainment has significant relationship (p value =0.00367) on the practices on prevention and control of rabies.

## RECOMMENDATIONS

Stakeholders should be empowered to achieve successful rabies elimination which starts from barangay residents, then local government units up to the national level. Although monitoring and evaluation should be put in place by policy makers to sustain the rabies elimination program. In addition, the use of higher statistical analysis is recommended for future studies in order to predict the relationship of socio-demographics into level of knowledge and practice of animal bite victims as well as level of satisfaction of animal bite victims in terms of client satisfaction, information dissemination about rabies elimination program and extent of impact of human rabies elimination program.

### Statement of Authorship

The first author initiated the concept, conducted the literature search, prepared the conceptual framework, identified thematic points, formulated recommendations, and undertook the writing up. The second author identified some issues, formulated recommendations, and reviewed the paper.

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