



Assessment of Community Awareness and Responsiveness on the Health Hazard brought by Mosquito-borne Diseases

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Abstract

Quezon City is located in the Philippines and considered as the most populated city in the country, with nearly 2.9 million as indicated by the last national statistics. Numerous number of the dengue cases in Metro Manila for the year 2019 were recorded in Quezon City based on the recent report of Department of Health (DOH). The city had more than 3,000 instances of dengue. This study was descriptive in nature, determining the relevance of health and barangay officials' responsiveness to the awareness of the residents from a particular barangay area. This study focused on the aspects on the perception and views of the selected participants regarding the mosquito-borne disease cases. Campus principal of Batasan Hills National High School and Health Sanitation Officer in-charge from the twenty selected barangays were then asked for their permission to formally conduct the study. Twenty barangays in Quezon City including Barangay Payatas, Commonwealth, Batasan Hills, Holy Spirit, San Agustin, Capri, Bagbag, Nagkaisang Nayon, East Kamias, Sikatuna Village, Quirino 3A, Quirino 2A, San Bartolome, Krus na Ligas, Pinyahan, Quirino 2B, Bagong Silangan, Sauyo, Talipapa and Tandang Sora possess a significant health risk on mosquito-borne diseases as indicated positive on having such mosquito breeding sites. There are preventive strategies being performed in each barangay. Unfortunately, due to the rising population, there are times that the needs are not being satisfied but the good thing about it is the commitment of barangay to serve its fellows through providing alternatives and other solutions to be able to meet the public health demand. To sum it all up, there are still factors that needs to be addressed by the city Health Department, for the residents, allotting more self-discipline on their surroundings may reduce to reduce mosquito-borne diseases cases.

Research Question

1. What barangays in Quezon City possess a positive threat on mosquito-borne diseases?
2. What are the classifications of pupae/larvae found in breeding sites in terms of:
 - a. Density
 - b. Type
3. How does the barangay health officials respond to the needs of the residents when it comes to the following aspects:
 - a. Timely Manner
 - b. Facilities and Equipment
 - c. Communication
 - d. Medical Needs
4. What are the sources of information being utilized by the residents in each barangay enabling them to be aware of mosquito-borne diseases?
5. How aware are the residents in terms of:
 - a. Mosquito-borne Diseases
 - b. Disease Symptoms
 - c. Possible Breeding Sites
 - d. Prevention Mitigation and Adaptation Practices on Mosquito-borne Diseases
6. What are the suggestive coping mechanisms to be implemented by each barangays to improve and invent new possible preventive strategy to lessen diseases rates caused by mosquitoes?

Introduction

According to the World Population Review (2020), Quezon City is located in the Philippines and considered as the most populated city in the country, with nearly 2.9 million as indicated by the last national statistics. Quezon City was assigned as a city in 1939. After 40 years, it was assigned as a Highly Urbanized City. Quezon City has more than one million a bigger number of occupants than the national capital, Manila. Several programs were conducted to deal with the rising population of the City because this reality possesses a significant role to the well being of the community. Being populated city can cause many viral diseases and can grow many harmful organisms and mosquitoes. Recently, a thousand bull frogs were being released by Brgy. Old Balara, Quezon City in esteros in a bid to halt the widespread of lethal mosquitoes that has affected 188,562 people nationwide and killed 807 from January 1 to August 3. Local governments try to combat dengue through fumigation and by encouraging residents to clean their surroundings (CNN Philippines, 2019). Realizing the huge dilemma and impacts caused by mosquito-borne diseases, it is, therefore, very important to seek for information to be able to formulate solution to deal with the threat of these lethal mosquitoes. This research study can be a promising strategy for long-standing concerns of different areas not only in Quezon City, but in the whole wide world. The improvement of issues related to mosquitoes may lead future generation to have a better platforms in reducing the rates of diseases-causing mosquitoes as they go through the process of being professionals.

The dedication of the community in mosquito-control researches is one of the strategy to effectively disseminate information on different localities. Residents from different barangays should put more effort in commitment and should be more involved to strengthen community awareness and briefing the barangay and health center responsiveness to meet the needs of the community to fight against mosquito-related diseases.



Research Methods

1. The survey questionnaires were distributed among the selected participants

2. The researchers gathered larvae sample in each of barangay.

3. The larvae sample in each barangay was examined by researcher by determining the larvae density and type using MHM App and macro lens.

4. The larvae sample in each barangay was examined by researcher by determining the larvae density and type.

5. The data gathered from the procedures were carefully analyzed by the researchers.



GLOBE Badges

Be a Data Scientist

The researchers analyze and evaluate the data they've gathered. Therefore, by that data, researchers will help community and health officials regarding this mosquito-borne diseases.

Make an Impact

This study will be a huge impact into the community for the reason that people will be aware and be alert in mosquito-borne diseases that is relevant into our country.

Be a STEM Professional

The researchers interpreted the figures and table in order to understand well. Moreover, the researcher has also a research method that they've followed during conducting this study.

Results

Barangay	Sample	Density	Total	Type
B(1)	1	15	48	Aedes
	2	14		Aedes
	3	19		Aedes
B(2)	1	13	31	Aedes
	2	8		Aedes
	3	10		Aedes
B(3)	1	5	18	Aedes
	2	7		Aedes
	3	6		Aedes
B(4)	1	4	20	Aedes
	2	7		Aedes
	3	9		Aedes
B(5)	1	0	4	None
	2	3		Aedes
	3	1		Aedes
B(6)	1	7	20	Aedes
	2	5		Aedes
	3	8		Aedes
B(7)	1	5	14	Aedes
	2	3		Aedes
	3	6		Aedes
B(8)	1	10	27	Aedes
	2	6		Aedes
	3	11		Aedes
B(9)	1	11	43	Aedes
	2	12		Aedes
	3	20		Aedes
B(10)	1	4	17	Aedes
	2	6		Aedes
	3	7		Aedes
B(11)	1	6	14	Aedes
	2	3		Aedes
	3	5		Aedes
B(12)	1	6	17	Aedes
	2	5		Aedes
	3	6		Aedes
B(13)	1	7	15	Aedes
	2	5		Aedes
	3	3		Aedes
B(14)	1	12	23	Aedes
	2	7		Aedes
	3	4		Aedes
B(15)	1	11	25	Aedes
	2	9		Aedes
	3	5		Aedes
B(16)	1	2	6	Aedes
	2	0		None
	3	4		Aedes
B(17)	1	5	15	Aedes
	2	7		Aedes
	3	3		Aedes
B(18)	1	6	18	Aedes
	2	4		Aedes
	3	8		Aedes
B(19)	1	6	23	Aedes
	2	9		Aedes
	3	8		Aedes
B(20)	1	8	18	Aedes
	2	6		Aedes
	3	4		Aedes

Discussion

Gather data and information from the selected participants showed the level of the community's knowledge on mosquito borne diseases. It showed that there are circumstances where the health officials and residents' knowledge do not meet the needs to be correlated to one another. In addition, it reflects that some residents did not know about mosquito breeding sites.

Conclusions

The researchers therefore concluded that the perception of the community about mosquito-borne diseases is somehow lacking due to matters being prioritized. There are different specific type and density level of larvae and pupae that is found in the breeding sites of the community and it depends upon the location of the site. There are vital factors in the community that affects their well-being such as the communication between the officials and the residents and the range of its responsiveness towards these issues. There are preventive strategies being performed in each barangay, it is commanded by the City Health Department. Unfortunately, due to the rising population, there are times that the needs are not being satisfied but the good thing about it is the commitment of barangay to serve its fellows through providing alternatives and other solutions to be able to meet the public health demand.

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