
Dengue Preventive Practices of Different Barangays in Tuguegarao City

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Abstract— The widely known tropical disease in the Philippines, dengue, has been addressed through community awareness campaigns promoting dengue preventive practices like the 5S strategy of the Department of Health (DOH). However, a lack of cooperation and empowerment hinders success, necessitating increased awareness and stakeholder involvement. This study assessed the implementation of dengue preventive practices along the 5S strategy of the residents, barangay officials, and barangay health workers of different barangays of Tuguegarao City. The study helps Tuguegarao City's barangays enhance coordination by implementing programs or seminars to improve collaboration and dengue practices in the community. A descriptive-quantitative study was conducted using stratified random sampling involving 365 heads of households and 93 barangay officials and health workers (BHW) in three barangays with the highest dengue cases (San Gabriel, Ugac Sur, and Ugac Norte) and three barangays with the lowest dengue cases (Centro 6, Centro 7, and Centro 8). The research tool focused on the 5S components: search and destroy, seek early consultation, secure self-protection, sustain vector control measures, and sustain hydration that undergone a clarity and validity assessment that experts evaluated. Statistical treatments included frequency count, percentage, mean, t-test, and ANOVA. Results indicated good implementation of dengue preventive practices under the 5S Strategy among residents, with excellent levels observed among barangay officials and BHW. While the study yielded relatively positive results, the high number of dengue cases suggests additional contributing factors. Population growth leading to limited housing space and potential breeding sites in outdoor areas may compromise the effectiveness of preventive measures. The preventive practices were implemented to some extent, but the effectiveness can be compromised if it is not consistently followed or if there are gaps in implementation. Additionally, the study revealed that each barangay employs its strategy for dengue control.

Keywords— 5S Strategy of dengue prevention of the Department of Health (search and destroy, seek early consultation, self-

protection measures, support vector control measure, sustain hydration) implementation of dengue prevention practices, implementation of dengue preventive practices.

I. INTRODUCTION

Generally, over the years, dengue has been a threat to public health in the Philippines. Dengue is the fastest-spreading vector-borne disease and one of the top 10 worldwide health hazards (WHO, 2022). The virus that causes dengue infects humans when infected mosquitoes bite them. This disease is mostly found in tropical and sub-tropical climates, mostly in urban and semi-urban areas. *Aedes aegypti* is regarded as the main dengue vector due to its propensity to transport the dengue virus, preference for feeding on human blood, and propensity to thrive in regions where people congregate and engage in activities (Vitek et al., 2014).

Over the past few decades, the dengue virus has become widespread worldwide. In the Philippines, the most well-known and feared tropical disease is dengue. Since Manila saw the first dengue outbreak in Southeast Asia in 1954, the disease has continued to be endemic. The Philippines had the most dengue cases globally in 2019, with 437,563 cases reported (Ong et al., 2022). There have been 2 597 067 cases and 2 065 fatalities reported as of August 24, 2022. Most cases have been recorded from Brazil (1 910 657 cases and 774 deaths), followed by Vietnam (145 536 cases and 53 deaths), the Philippines (82 597 cases and 319 deaths), Indonesia (68 903 cases and 640 deaths), and Peru (57 469 cases and 72 deaths) (ECDC, 2022). The DOH's Dengue Prevention and Control Program reported 1,044 dengue cases in Isabela, 974 are from Cagayan, 344 are from Nueva Vizcaya, 70 are from Quirino, and five are from Batanes (PIA, 2022). In addition, the Provincial Epidemiology and Surveillance Unit (PESU) reported 2,477 dengue cases, with six deaths in the Cagayan Valley as of July 10, 2022, with Tuguegarao City having the highest number of cases.

This global burden is being addressed by launching an extensive community awareness campaign and engaging local communities in implementing dengue preventive practices. In the Philippines, the Department of Health (DOH) embarked on an effort to prevent the continuous influx of dengue cases through a localized response of destroying mosquito breeding sites to eliminate dengue risk. In addition, leadership and planning for sustainable community participation, transfer of technical knowledge and skills in planning, and taking measures to ensure sustainability at each level are key in dengue prevention (Onuh, & Cabanacan-Salibay, 2021). Good practices for dengue control depend on awareness campaigns and information about dengue fever. Dengue fever can be controlled if there is mutual coordination between community members and local government units. Similarly, those respondents that followed appropriate practices for dengue control were those that were well-organized, had active leaders, participated with local government in awareness campaigns and practices for dengue eradication, shared information regarding dengue fever, and maintained mutual coordination with health departments and local government in dengue control. Effective coordination among local communities, government agencies/line departments, and local leadership is necessary to implement dengue prevention programs (Zahir et al., 2016). DILG urges LGUs and barangays to mobilize residents and create a campaign regarding dengue and the proper practices to eliminate breeding areas of dengue-carrying mosquitoes. The barangay council takes the lead in eradicating dengue-carrying mosquito breeding grounds in their communities by following the procedures in seek and destroy operations. They also look at enforcing and promoting barangay obedience in enacting dengue-prevention measures (UN-OCHA, 2019).

The key components of outbreak response are controlling outbreak through preventing exposure, stopping transmission, and preventing infection need to be addressed by a sustainable intervention. DOH arranged the 5S strategy as part of the Anti-dengue campaign. The 5S strategy advises people to seek early consultation at the cleanest medical facility, seek out and destroy mosquito breeding sites, maintain self-protection such as applying insect repellents, support fogging, spraying, and misting in hot spot locations, and maintain hydration (Onuh, & Cabanacan-Salibay, 2021). Moreover, the effectiveness of dengue preventive practices depends on vector control measures and sustained community involvement, which can improve vector control efforts substantially.

However, the initiative needed help to achieve its dengue prevention objectives. The main obstacles to its success include the lack of empowerment among the stakeholders in taking charge of dengue prevention, the awareness of the people, the difficulty of eliminating local breeding grounds, and ineffective waste collection services that could result in the spread of waste that can gather rainwater (Wilson & Chen, 2015). According to Provincial Epidemiology Surveillance Unit (PESU), Tuguegarao City has the highest number of reported dengue cases supported by the City Health Office. As of October 27, 2022, there are 830 dengue cases. Despite the different preventive measures and having a moderate knowledge of the transmission and occurrence of dengue, preventive practices

still need to be well executed (Carrington & Simmons, 2014). Therefore, further investigation is needed to find the real reason behind the increasing dengue cases in Tuguegarao City. This study assessed the implementation of dengue preventive practices along the 5S strategy of the residents, barangay officials, and barangay health workers of different barangays of Tuguegarao City.

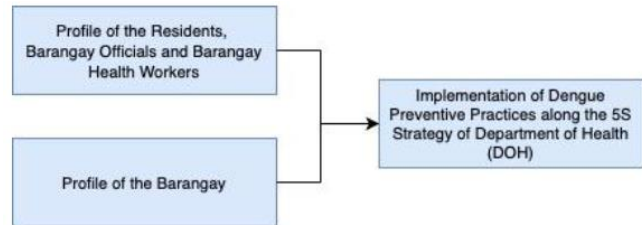


Fig. 1. Implementation of Dengue Preventive Practices along the 5S Strategy of the Residents, Barangay Officials, Barangay Health Workers, and Barangays of Tuguegarao City

The figure above depicts the study's main goal, which assessed the implementation of dengue preventive practices along the 5S Strategy of DOH of the residents, barangay officials and barangay health workers of different barangays of Tuguegarao City using independent variables such as the profile of the residents and barangay officials and barangay health workers (age, gender, occupation, and family income) and profile of barangays based on the classification of dengue cases. Respondents was given a questionnaire consisting of the preventive practices along the 5S Strategy of the DOH.

II. METHODS

A. Research Design

The researchers conducted a descriptive quantitative research design in the different barangays of Tuguegarao City to achieve the study's objective. This research design seeks information in which it collects quantifiable data that assess the implementation of dengue preventive practices along the 5S dengue prevention of the DOH.

B. Locale and Respondents

The research study was conducted within Tuguegarao City, Cagayan, specifically in the top three barangays with the highest dengue cases. The study's respondents were heads of the family, barangay officials, and barangay health workers. The researchers used probability sampling method, stratified random sampling with a 95% confidence level and a 5% margin of error. The researchers used stratified probability method in choosing the head of the family participants. The sample size of the study was composed of 458.

C. Instrument

The questionnaire was based on the DOH 5S strategy (search and destroy, seek early consultation, secure self-protection, sustain vector control measure, and sustain hydration). The questionnaire was consisting of 20 questions, specifically 7 questions regarding search and destroy, 2 questions regarding seek early consultation, 8 questions

regarding secure self-protection, 2 questions regarding sustain vector control, and 1 question regarding sustain hydration. The questionnaire contains two parts. The first part is about the socio-demographic profile of the respondents such as age, gender, occupation, and family income. The second part is the different implementation of dengue prevention practices along the 5S strategy. Part two utilized a five-point scale with always (5), often (4), sometimes (3), rarely (2), and never (1) responses to assess preventive practices along the 5S strategy of the DOH.

Experts assessed the questionnaire by rating every item in the questionnaire and the whole questionnaire itself. The validation result showed that all the questionnaire questions were appropriate for the data gathering. Some items were advised to be rephrased so that respondents would be easily understood. Thus, comments or suggestions were incorporated into the final tool before gathering research data.

D. Data Analysis

The data gathered by the researchers was analyzed and interpreted using Statistical Package for the Social Sciences (SPSS) based on the variables in the study. Frequency count and percentage were used in the profile variables of the respondents, barangay officials and barangay health workers (BHW), and barangays. Mean was used to know the level of implementation of dengue preventive practices along the 5S strategy of DOH of the residents, barangay officials, and barangay health workers, and barangays with highest and lowest dengue cases in which the following scores was utilized:

TABLE I. REFERENCE RANGE AND DESCRIPTION FOR THE LEVEL OF IMPLEMENTATION OF DENGUE PREVENTIVE PRACTICES ALONG THE 5S STRATEGY OF DOH OF THE RESPONDENTS

Range	Description
4.50 - 5.00	Excellent
3.50 - 4.49	Good
2.50 - 3.49	Average
1.50 - 2.49	Poor
1.00 - 1.49	Very Poor

Moreover, the tools that were used in the significant difference between the preventive practices along the 5S strategy of DOH of the top three barangays with the lowest dengue cases and the top three barangays with the highest dengue cases when grouped according to the profile variables are t-test and Analysis of Variance (ANOVA).

E. Ethical Considerations

Ethics review and clearance from the University of Saint Louis- Research Ethics Board was obtained prior to the implementation of the data collection procedure of this research to ensure that it is carried out in a responsible and ethically accountable manner.

III. RESULTS AND DISCUSSION

The tables presented below show the data which was retrieved from the questionnaires floated by the researchers with the assistance of the University Guidance. Moreover, it answered the following research questions of this study,

whereas the study aims to assess the coping mechanism in a more specific means in terms of problem- focused, emotion-focused, and avoidant coping of the college students with low scores on the Mental Health Index.

TABLE II. LEVEL OF IMPLEMENTATION OF THE DIFFERENT 5S STRATEGIES

Categories	Residents		Barangay Officials	
	Mean	Qualitative Interpretation	Mean	Qualitative Interpretation
Search and Destroy	4.18	Good	4.68	Excellent
Seek Early Consultation	3.46	Good	4.56	Excellent
Self-Protection			4.39	Good
Measures Sustain Vector Control	3.80	Good	4.49	Excellent
Measures Sustain Hydration	3.39	Good	4.76	Excellent
Overall	4.56	Excellent	4.58	Excellent
	3.88	Good		

Table II shows the mean of residents' implementation of dengue preventive practices along the 5S Strategy of the DOH (DOH), which means that there is a good implementation of dengue control specifically in search and destroy, seek early consultation, self-protection measures, and support vector control measures. At the same time, there is an excellent implementation in sustaining hydration. Thus, it implies that most residents have a good implementation of dengue preventive practices within their community. The table also shows the mean of barangay officials and barangay health workers (BHW) regarding the implementation of dengue preventive practices along the 5S Strategy of the DOH (DOH), that there is an excellent encouragement of barangay leaders regarding the implementation of dengue preventive practices specifically in search and destroy, seek early consultation, support vector control measures, and sustain hydration. At the same time, there is a good implementation of dengue in self-protection measures. Thus, it implies that most barangay officials and barangay health workers (BHW) have an excellent implementation of dengue preventive practices within their community.

This study evaluated the dengue preventive practices of 365 residents (head of the family) and 93 barangay officials and barangay health workers (BHW) with the highest and lowest dengue cases. In the study, most residents belong to the barangay with the highest dengue cases, consisting of 346 and 19 respondents from barangays with the lowest dengue cases. Additionally, majority of barangay officials and barangay health workers belong to the barangay with the highest dengue cases, which consists of 57. It is because, according to Wong et al., 2022, high populations are dengue predominants wherein there are poor practices to combat dengue disease, and a large population is a perfect condition for the multiplication of mosquitos, especially *Aedes Aegypti*. Also, the high population favored the transmission of the dengue virus.

The data revealed that the average age of the residents, barangay officials, and barangay health workers (BHW) in the implementation of the dengue preventive practices along the 5S strategy belongs to 41-50 years old (middle adulthood) signifies that the age group wishes to broaden one's influence and devotion to family, society, and future generations. It is congruent with the study of Chandre et al., (2015) in which they have higher dengue prevention practices than other groups as they engage themselves to care for others and engage in meaningful and productive work and responsibilities that positively contribute to society.

Furthermore, the results show the level of implementation of dengue practices along the 5S strategy of the DOH among residents, showing a good implementation of dengue control within their homes and in their environment. It is supported by the study of Mubarak et al. 2018 that residents of barangays demonstrate a good implementation of various dengue control measures due to their close-knit community dynamics. A strong sense of belonging fosters collective responsibility, making search and destroy efforts more effective. With shared awareness and commitment, they actively inspect their surroundings, eliminating breeding sites and reducing mosquito populations. Naing et al. (2011) found that residents' understanding of the importance of self-protection measures contributes to effective dengue control in community cooperation. Residents actively use mosquito repellents, wear appropriate clothing, and install screens on windows and doors to minimize mosquito exposure. This proactive approach results from communal awareness campaigns and mutual support in adopting preventive practices. Also, the residents benefit from well-organized vector control measures supported by local authorities and community leaders. The collaborative effort ensures the effective deployment of insecticides, larvicides, and other mosquito control strategies, making the environment less conducive for mosquito breeding. Moreover, the sense of unity encourages open communication, enabling early consultation-seeking behavior among residents. Also, one of the key factors contributing to the excellent implementation and sustainability of hydration practices among barangay residents is the strong community support system. They regularly engage in health promotion activities, emphasizing the importance of staying hydrated. Through community-led initiatives, residents have access to clean water sources and education on proper hydration levels. The residents take pride in their collective efforts, fostering a culture of accountability and continuous improvement in dengue control measures (Ong et al., 2022). The barangay residents demonstrate a good and excellent implementation of various dengue control measures due to their community-driven approach.

The level of implementation of dengue practices along the 5S strategy of the DOH (DOH) among barangay officials and barangay health workers (BHW) was excellent as they encouraged their residents always to perform the dengue practices in their community. It is supported by the study of Mashudi et al., 2022 that leaders at the community level have an excellent track record in implementing dengue prevention practices within their barangays due to their key roles and dedicated efforts. As local leaders, barangay officials are at the

forefront of community engagement and mobilization. They spearhead awareness campaigns and coordinate with relevant government agencies to secure resources and support for dengue prevention initiatives. Their strong leadership fosters a culture of accountability and responsibility among residents, encouraging active participation in search and destroy activities, early consultation seeking, and self-protection measures. It is also supported by the study of Ong et al. (2022) that barangay health workers play a critical role in the success of dengue prevention practices due to their frontline position in healthcare services. They are well-trained in dengue awareness, diagnosis, and treatment, allowing them to identify and respond to potential dengue cases swiftly. Through regular health visits and community outreach programs, they disseminate information on dengue prevention, engage with residents, and address any misconceptions or concerns. Their presence in the barangay fosters trust and confidence in healthcare services, encouraging residents to seek early consultation, leading to timely management and containment of dengue outbreaks. Overall, the collaborative efforts of barangay officials and health workers create a robust and comprehensive approach to dengue prevention, effectively safeguarding the health and well-being of their communities.

A good implementation of dengue preventive practices in the barangays with the highest dengue cases as a prevention to the increasing rate of cases in their barangays and barangay with low dengue cases have an average implementation of dengue practices. It is supported by the study of Mashudi et al., (2022) that if people had a high perceived susceptibility to acquiring dengue, they were more likely to have good preventive practices. Othman et al. (2019) study showed that places with increased dengue cases tend to have a good implementation of search and destroy and seek early consultation due to the urgent and pressing need to address the dengue outbreak. With more reported cases, these barangays experience firsthand the severe impact of dengue on their communities, leading to heightened awareness and vigilance. Also, it is revealed in the study of Petzold, M. (2012) that the increased incidence of dengue cases prompts residents to be more proactive in seeking early consultation at the first sign of symptoms, recognizing the importance of timely medical intervention to prevent complications. Consequently, the convergence of public awareness, local response, and community engagement in these high-risk barangays contributes to a good implementation of search and destroy and seek early consultation practices, which is crucial in mitigating the dengue burden. Also, it is supported in the study of Rajapaksha et al, (2023) that barangays with the highest and lowest dengue cases exhibit excellent implementation in sustaining hydration and good implementation in self-protection measures due to their varying experiences with the disease. The barangays with the highest dengue cases have learned from the severity of outbreaks and understand the importance of maintaining proper hydration to support the body's immune response and prevent complications. Their experience has led to the establishment of robust health promotion programs and access to clean water sources, fostering a culture of hydration awareness and practice. On the other hand, barangays with the lowest dengue cases remain

proactive in implementing self-protection measures, as they recognize the potential risk of the disease spreading to their communities. Both high and low-risk barangays' commitment to these preventive measures contributes to effective dengue prevention, highlighting the importance of local experiences in shaping successful strategies against the disease. It is also congruent to the study of Zellweger et al. (2017) that there is still an average implementation of sustaining vector control as while they may recognize the importance of vector control in dengue prevention, resource constraints, logistical challenges, or limited community participation could hinder their ability to sustain these measures effectively. Additionally, the continuous and consistent application of vector control strategies requires ongoing efforts, which might be challenging to maintain in high-risk barangays facing recurrent dengue outbreaks. Despite their awareness and initial efforts, sustaining vector control measures may require a collaborative approach involving local authorities, health workers, and community members, ensuring a more comprehensive and lasting impact on reducing mosquito populations and curbing dengue transmission.

TABLE III. THE DIFFERENCE IN THE LEVEL OF IMPLEMENTATION OF DENGUE PREVENTIVE PRACTICES ALONG THE 5S STRATEGY BETWEEN BARANGAYS WITH HIGH AND LOW DENGUE CASES

Variable	t-value	p-value	Decision
Residents			
Search and Destroy	4.86	0.00	Reject Ho
Seek Early Consultation	3.77	0.00	Reject Ho
Self-Protection Measures	-1.76	0.08	Do not reject Ho
Sustain Vector Control Measures	5.88	0.00	Reject Ho
Sustain Hydration	-1.31	0.19	Do not reject Ho
Barangay officials and health workers			
Search and Destroy	0.97	0.34	Do not reject Ho
Seek Early Consultation	0.65	0.52	Do not reject Ho
Self-Protection Measure	2.53	0.01	reject Ho
Sustain Vector Control Measure	2.01	0.05	Do not reject Ho
Sustain Hydration	1.38	0.17	Do not reject Ho
Search and Destroy	0.97	0.34	Do not reject Ho

The result showed that residents in the barangays with the highest dengue cases have a better implementation of dengue practices in search and destroy, seeking early consultation, and sustaining vector control measures. The table also shows that of all the barangay officials and barangay health workers (BHW) level of implementation of dengue preventive practices along the 5S strategy only in self-protection measure that a significant difference exists, which means that the barangays with the highest dengue cases have a better implementation in the mentioned ways of dengue prevention practices.

The residents in the barangays with the highest dengue cases have better-implemented dengue practices in search and destroy, seeking early consultation, and sustaining vector

control measures. It is supported by the study of Azmawati et al. (2013) that with more dengue cases, residents witness the severe consequences of the disease, leading to heightened awareness and a sense of urgency in taking preventive actions. They actively participate in search and destroy efforts by inspecting their surroundings regularly, eliminating mosquito breeding sites, and encouraging their neighbors to do the same. This proactive approach is driven by the firsthand experience of the disease's devastating effects and to safeguard themselves and their loved ones. It was further supported in the study of Chandren et al. (2015), wherein the sustained implementation of vector control measures in the barangay stems from the community's shared commitment to curbing the disease's spread. Residents actively support local authorities and health workers in deploying vector control strategies. They recognize the importance of a collaborative approach and work together to ensure these measures' consistent application and effectiveness. Additionally, the barangay's response may benefit from increased government support and resources due to its high dengue burden, further enhancing the implementation of vector control measures. Also, according to Espino et al. (2022), the high prevalence of dengue cases in the barangay prompts residents to seek early consultation at the earliest sign of symptoms. They understand that timely medical intervention is crucial in managing the disease and preventing complications. This awareness fosters a culture of responsible health-seeking behavior, with residents promptly visiting healthcare facilities for diagnosis and treatment. As a result, the community experiences reduced delays in medical attention, leading to better outcomes for those affected by dengue (Roy et al., 2021).

Moreover, only in self-protection measure that a significant difference exists in the level of implementation of dengue preventive practices along the 5S strategy of DOH of the barangay officials and barangay health workers between high and low dengue cases, which means that the barangays with the highest dengue cases have a better implementation in the mentioned ways of dengue prevention practices due to their direct exposure to the challenges posed by the disease. It is supported by the study of Harapan et al. (2018), barangays that were mostly affected by dengue witnessed firsthand the impact in their community, motivating them to lead by example in adopting self-protection measures. Additionally, barangay officials and health workers are crucial in sustaining vector control measures in the high-risk barangay. They collaborate with relevant government agencies and organizations to secure necessary resources for ongoing vector control efforts. Their continuous monitoring and evaluation of vector control strategies help identify areas for improvement and adaptation, leading to more effective and sustained measures over time.

IV. CONCLUSION

This study concludes that the residents have a good level of implementation of the preventive practices along the 5S Strategy of the DOH. It indicates that residents have a good implementation of dengue preventive practices in their communities and home. It further illustrates that they have good practice of the 5S strategy of the DOH. However, the community needs sufficient resources, knowledge, awareness,

and more developed practices to effectively supplement its needs to lessen dengue cases. Moreover, this study also revealed that barangay officials and health workers have an excellent level of implementation of preventive practices along the 5S Strategy of the DOH. They showed an excellent performance in encouraging the residents to perform these dengue control measures under the 5S Strategy of DOH. The local authorities and health workers in these barangays respond promptly by intensifying their efforts in conducting a thorough search and destroy activities to eliminate mosquito breeding sites and reduce disease transmission. The collaborative efforts of barangay officials and health workers further enhance the implementation of dengue prevention practices, with their leadership and expertise playing a pivotal role. However, the least performed among residents are practices under support vector control measures, and among barangay officials and barangay health workers are self-protection measures. The sociodemographic profile of the respondents, such as age, gender, occupation, and family income, were the factors correlated with the level of implementation of dengue preventive practices along the 5S strategy of the residents, barangay officials, and barangay health workers of different barangays of Tuguegarao City. Furthermore, the barangay residents with the highest dengue cases exhibit a better implementation of search and destroy, seek early consultation, and sustain vector control measures due to their direct exposure to the challenges posed by the disease. Additionally, residents' age, gender, occupation, and family income influence their adoption of preventive practices, indicating the importance of tailored approaches to dengue prevention initiatives. The strong leadership of barangay officials and health workers, along with their collaboration with relevant agencies, contributes significantly to the sustained success of dengue control efforts. This study showed a relatively positive result with the level of implementation. However, population growth might increase human density and infrastructures, resulting in limited space and the accumulation of potential breeding sites for mosquitoes in outdoor areas. Moreover, while preventive practices may be implemented to some extent, their effectiveness can be compromised if they are not consistently followed or if there are gaps in implementation. Thus, barangay health workers and officials should strategize and establish systematic schedules for inspecting potential dengue breeding sites, conducting assessments to assess the compliance among residents in performing preventive practices, and evaluating the community's needs regarding dengue prevention measures.

V. RECOMMENDATIONS

Because the findings of this study showed that the implementation of dengue preventive practices is relatively positive, there is still a need for continuous monitoring of how they implement dengue control even during the dry season as there is still an increase of dengue cases and strengthening their collaboration with the residents through conducting programs or seminars.

Since this study found out that practices under support vector control measures are the least practiced among residents, there is a need for barangay officials and barangay health

workers to develop further residents' practices regarding the implementation of dengue practices.

Practices under the self-protection measures are the least encouraged by the barangay officials and barangay health workers to the residents; thus, there is a need for further improvement to minimize the increase in dengue cases.

Barangays with high and low dengue cases need to improve and widen their practices regarding search and destroy, seek early consultation and self-protection measures, and sustain vector control measures to minimize the dengue rate.

Develop and improve male practices regarding the implementation of dengue preventive practices.

People who work away from their homes need to improve their practices as they have less time to practice dengue control directly in their homes.

Barangay health workers and officials should strategize and establish systematic schedules for inspecting potential dengue breeding sites, conducting assessments to assess the compliance among residents in performing preventive practices, and evaluating the community's needs regarding dengue prevention measures.

Furthermore, knowing the implementation of the barangay's dengue preventive practices provides nurses with valuable insights to guide their role in health education, community engagement, collaboration with stakeholders, surveillance, care provision, and quality improvement efforts.

For future researchers, the scope of this study should be expanded, as well as the target respondents, to assess the people's implementation better, especially in flooded areas since it is one factor in increasing dengue cases.

Future research can broaden the study by examining respondents' knowledge and perception gaps regarding dengue prevention, including healthcare providers, policymakers, and community members. Future researchers can explore the role of education and communication in bridging these gaps and enhancing preventive practices.

Lastly, future researchers may also incorporate an interview regarding how they implement their dengue control and not just solely base it on the self-reported answers to determine the factors that truly contribute to their dengue prevention practices.

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