ASJo: Aceh Sanitation Journal **2962-567X= P-ISSN: 2963-895X**
Volume 2 Number 2, Month December
https://journal.poltekkesaceh.ac.id/index.php/dheja

The Influence Of Health Counseling On The Level Of Community Knowledge Regarding The Eradication Of Mosquito Nests (Psn) And Lents In Gampong Lam Teungoh, Peukan District, Banda Aceh

Rosalia Putri[1]
Public Health Study Program, Faculty of Health Sciences, Abulyatama University
Muhammad Firdaus[2]
Public Health Study Program, Faculty of Health Sciences, Abulyatama University
Firman Azhar[3]
Public Health Study Program, Faculty of Health Sciences, Abulyatama University
Mayasirul Mukminat[4]
Public Health Study Program, Faculty of Health Sciences, Abulyatama University
Nadia Sopia[5]
Public Health Study Program, Faculty of Health Sciences, Abulyatama University
Suriyatun[6]
Public Health Study Program, Faculty of Health Sciences, Abulyatama University

ABSTRACT

Community behavior regarding Dengue Hemorrhagic Fever (DHF) and behavior of eradicating mosquito nests (PSN) is one of the risk factors for the occurrence of DHF. Behavior is influenced by knowledge and exposure to information. The type of research is quantitative and the research method used is pre-experimental design using a one group pretest-posttest design. Of the 50 respondents, the level of public knowledge about eradicating mosquito nests and larvae before being given counseling was 11 respondents (22%) with poor knowledge. and as many as 39 people (78%) with good knowledge. Of the 50 respondents, the level of public knowledge regarding eradicating mosquito nests and larvae after being given counseling, all 50 respondents (100%) had good knowledge. There is an influence of health education on level of community knowledge regarding eradicating mosquito nests and larvae in Gampong Lam Teungoh, Peukan Bada District, Aceh Besar Regency. Counseling will have an impact on knowledge and good knowledge will providegood impact on behavior.

Keywords:Counseling, Knowledge, PSN, Flick

Introduction

Dengue fever remains a major public health problem throughout tropical and sub-tropical regions of the world. Various programs are implemented based on national policies. The dengue disease control program is about eradicating dengue hemorrhagic fever. This policy contains various main program activities including epidemiological surveillance, outbreak prevention, increasing community participation, and outreach (Giena et al., 2020). Dengue Hemorrhagic Fever (DHF) is a disease that is often found in most tropical and subtropical regions. The disease agent is the dengue virus and has 4 different serotypes, transmitted to humans through the bite of infected mosquitoes, especially *Aedes aegypti*and Aedes albopictus (1).

In 1970, only 9 countries experienced dengue fever outbreaks, but now dengue fever is an endemic disease in more than 100 countries, including Africa, Uncle Sam's country (America), the Eastern Mediterranean, Southeast Asia and the West Pacific. The number of cases in Southeast America and the West Pacific has exceeded 1.2 million cases in 2008 and more than 2.3 million cases in 2010. In 2013, 37,687 cases of severe dengue fever were reported out of a total of 2.35 million cases in America (2).

Indonesia is one of the countries with the highest cases in Southeast Asia. Reported dengue cases in 2018 were recorded at 65,602 cases, this number increased in 2019 to 138,127 cases. Deaths due to dengue fever in 2019 also increased compared to 2018, namely from 467 to 919 deaths. The dengue fever morbidity rate in 2019 was 51.53 per 100,000 population (RI Ministry of Health, 2019). Aceh, which is the westernmost province of Indonesia, is also not spared from dengue fever cases, where the high number of dengue fever cases in the last five years in Aceh places dengue fever as one of the disease outbreaks with a prominent incidence. Banda Aceh is also one of the citieshas the highest prevalence of dengue fever cases in Aceh as proven in 2019 there were 344 people infected with one death [(3)].

The high incidence of dengue fever is due to several obstacles, namely environmental conditions, people's clean and healthy living behavior and the absence of a vaccine. DHF is an environmental-based disease, environmental factors that cause dengue include geographical conditions such as height above sea level, prolonged seasonal changes which make it easier for Aedes aegypti mosquito larvae to reproduce. Apart from that, seasonal conditions such as wind, air humidity levels, rainfall which cause puddles of water have the potential to become breeding grounds for mosquito larvae. Population density, population mobility and transportation also contribute to the development of mosquito larvae [(9)].

The vector that transmits dengue fever is the Aedes Aegypti mosquito which breeds in water reservoirs in the form of standing water collected in a place or vessel in or around the house or public places. The existence of Aedes Aegypti is influenced by human and environmental factors. Environmental factors related to the presence of Aedes Aegypti include the type of water reservoir (TPA), rainfall, air temperature, humidity, altitude, influence of wind, presence of plants, and seasonal variations. Meanwhile, human factors related to the presence of Aedes Aegypti are population density, population mobility, distance between houses, light intensity and dengue PSN behavior [(4).]

A method that has a high success rate if carried out simultaneously and continuously is control with PSN. However, the implementation of PSN is still experiencing obstacles because people's knowledge, attitudes and behavior in maintaining environmental cleanliness, especially the cleanliness of water reservoirs, are still lacking [(5).]

Community behavior regarding Dengue Hemorrhagic Fever (DHF) and behavior of eradicating mosquito nests (PSN) is one of the risk factors for the occurrence of DHF. Behavior is influenced by knowledge and exposure to information [(7)]. Counseling is also an activity that has been carried out to prevent dengue fever, which aims to change people's behavior, provide learning experiences or create conditions for individuals, groups and communities including increasing knowledge, attitudes and behavior. Counseling is basically a communication process and behavior change process through education [(8)].

Preventing dengue fever is a shared responsibility of all elements of society, with one of the smallest elements being the family. The most effective prevention of dengue fever is by involving community participation through behavioral changes related to the prevention of dengue fever [(6).]

The main problem that occurs among the community is the lack of knowledge on how to prevent dengue fever. Public knowledge regarding dengue fever, especially how to prevent and treat it, is not yet completely good, so community service is very necessary to assist the community in preventing and eradicating dengue fever cases by providing outreach and outreach. The outreach activities carried out are by providing health material in the form of prevention efforts, maintaining environmental cleanliness and eradicating mosquito nests(PSN) and flick.

Research Purposes

The purpose of this research is to find outThe Influence of Health Education on the Level of Community Knowledge Regarding the Eradication of Mosquito Nests (PSN) and Larvae in Gampong Lam Teungoh, Peukan District, Banda Aceh.

Research Methodology

This research was conducted in July 2023, Gampong Lam Teungoh, Peukan Bada District, Aceh Besar. The type of research is quantitative and the research method used is pre-experimental design using a one group pretest-posttest design. The population in this study was the entire community of Gampong Lam Teungoh. The sample in this study used an accidental sampling technique, which is a sampling technique that happened to be present or present at the time of the research, totaling 50 respondents. The data used is primary data which was carried out by giving a questionnaire containing questions about eradicating mosquito nests and larvae.

Results And Discussion

Table 1. Characteristics of Respondents Based on Gender

Gender	Frequency	Percentage
Man	13	26%
Woman	37	74%
Total	50	100%

Based on table 1, it can be seen that the respondents in this study were mostly women with a total of 37 respondents (74%), while the respondents who were male were 13 respondents (26%).

Table 2. Characteristics of Respondents Based on Age

Age	Frequency	Percentage
26-35 Years	15	30%
36-45 Years	20	40%
46-55 Years	15	30%
Total	50	100%

Based on table 2, it can be seen that the respondents in this study who were aged 26-35 years were 15 respondents (30%), who were aged 36-45 years were 20respondents (40%) and those aged 46-55 years amounted to 15 respondents (15%).

Table 3. Frequency of Pre-Test Knowledge

Knowledge	Frequency	Percentage
Good	39	78%
Not good	11	22%
Total	50	100%

Based on table 3, it can be seen from the results of calculating respondents' knowledge before conducting counseling or pre-test, that 39 respondents (78%) had good knowledge and 11 respondents (22%) obtained poor results.from a total of 50 respondents (100%).

Table 4. Frequency of Post-Test knowledge

Knowledge	Frequency	Percentage
Good	50	100%
Not good	0	0%

Total	50	100%

Based on the results of Table 4, it shows that respondents with good knowledge after conducting counseling or post-test amounted to 50 respondents (100%).

The Influence of Health Education on the Level of Community Knowledge Regarding the Eradication of Mosquito Nests (PSN) and Larvae in Gampong Lam Teungoh, Peukan District, Banda Aceh.

Before carrying out the counseling, all respondents were given a pre-test questionnaire containing 15 questions as a tool to measure public knowledge about eradicating mosquito nests and larvae. The results obtained from each respondent based on the correct number of questionnaires submitted showed that respondents with less knowledge were 11. (22%) while respondents with good knowledge amounted to 39 (78%) respondents. This shows that some respondents still do not understand about eradicating mosquito nestsand flick.

The post-test was carried out by distributing the same questionnaire as the questionnaire used during the initial evaluation (pre-test) before counseling was carried out and also distributing leaflets about eradicating mosquito nests and larvae. Respondents' knowledge increased from 39 (78%) respondents with good knowledge to 50 (100%) respondents with good knowledge out of a total of 50 (100%) respondents.

The results of this research are in line with the research results of Giena et al (2020). Regarding the influence of health education on the level of public knowledge about dengue feverdengue inworking area of the Basuki Rahmad Community Health Center, Bengkulu City. Of the 48 respondents, the level of public knowledge about dengue fever before being given treatment was 17 people (35.4%) with insufficient knowledge, 25 people (52.1%) with sufficient knowledge, and 6 people (12.5%) with good knowledge. Of the 48 respondents, the level of public knowledge about dengue fever after being given treatment was 14 people (29.2%) with sufficient knowledge, and 34 people (70.8%) with good knowledge. There is an influence of health education on the level of public knowledge about dengue hemorrhagic fever in the working area of the Basuki Rahmad Community Health Center, Bengkulu City.

Similar research results were also carried outby Bestari & Ramanda (2020), regarding health education regarding eradicating mosquito nests (PSN) for dengue hemorrhagic fever (DBD) which affects the level of knowledge and attitudes of elementary school (SD) students. The results of the study showed that there was an influence of health education on the level of knowledge before and after health education about PSN DHF. The results of the Wilcoxon statistical test show that there is a significant influence between the results. The results are study findings based on methods that have been carried out, reporting health education on the level of knowledge before and after health education about PSN DHF with a significance result of 0.000 or $\rho < 0.05$.

From research by Khynn et al. (2004), we can see that people who are exposed to various health media such as pamphlets/posters, television, newspapers and journals in Myanmar have a better level of knowledge about dengue fever.thanpeople who are not deeply exposed [(10)].

Based on the data that has been analyzed, it shows that PSN and larval education activities as an effort to prevent dengue fever that have been carried out have had a big influence in changing respondents' understanding of the appropriate way to eradicate mosquito nests. The success of this educational activity was due to the methods used, namely lecture, discussion and question and answer methods as well as distributing leaflets according to the problems faced by the studentspublic.

The difference in knowledge scores after the counseling intervention was carried out using the lecture method shows that the lecture method is effective in increasing respondents' knowledge about dental and oral health, which in this case is about cariogenic foods and the relationship between cariogenic foods and dental caries. The lecture method is an extension method by conveying information and knowledge orally. Information

obtained from both formal and non-formal education can have a short-term influence resulting in changes or increased knowledge (11).Counseling will have an impact on knowledge and good knowledge will have a good impact on behavior.

Conclusion

Of the 50 respondents, the level of public knowledge about eradicating mosquito nests and larvae before being given counseling was 11 respondents (22%) with poor knowledge and 39 people (78%) with good knowledge. Of the 50 respondents, the level of public knowledge regarding eradicating mosquito nests and larvae after being given counseling, all 50 respondents (100%) had good knowledge. Can be concluded thatThere isThe influence of health education on the level of community knowledge about eradicating mosquito nests and larvae in Gampong Lam Teungoh, Peukan Bada District, Aceh Besar Regency

Suggestions

Based on the results of this research, there are several suggestions that can be given as follows:

1. For researchers: the results of this research are expected to increase knowledge, especially regarding the relationship between knowledge and community behavior in eradicating mosquito nests.
2. To respondents: it is hoped that people will care more about and understand the cleanliness of the environment and the nesting places for dengue fever mosquitoes to breed in order to prevent the spread of the disease within their own families.
3. To future researchers: it is hoped that further in-depth and comprehensive research can be carried out involving other variables related to the eradication of dengue fever mosquito nests in the community.

References

1. Bestari, RS, & Ramanda, FF (2020). Health Education regarding the Eradication of Dengue Hemorrhagic Fever (DHF) Mosquito Nests (PSN) Influences the Level of Knowledge and Attitudes of Elementary School (SD) Students.
2. Dhefiana, T., & Daramusseng, A. (2023). Education on Mosquito Nest Eradication (PSN) as an Effort to Prevent DHF. Kaibon Abhinaya: Journal of Community Service, 5(1), 34–39.
3. Banda Aceh Health Office. (2019). Banda Aceh City Health Profile 2019.
4. Giena, VP, Riyani, O., & Effendi, E. (2020). The Influence of Health Education on the Level of Community Knowledge About Dengue Hemorrhagic Fever in the Basuki Rahmad Community Health Center Working Area, Bengkulu City. *Al-Asalmiya Nursing: Journal Knowledge Nursing (Journal of Nursing Sciences)*, 9(1), 69–79.
5. Karuniawati, H., Maryati, M., Setiyadi, G., Suprapto, S., Permana, A., Fatmawati, S., Aji, AWB, Kumalasari, HM, Pratiwi, YI, & Hayati, S. (2020) . The Influence of Counseling on Dengue Fever Knowledge of Residents of Potronayan Village, Nogosari, Boyolali. Geomedicine Services, 27–32.
6. Indonesian Ministry of Health. (2019). Indonesian Health Profile 2019, Ministry of Health of the Republic of Indonesia.
7. Young, AS, & Haqi, DN (2019). Determinants related to the presence of larvae in Rangkah Bun sub-district, Surabaya. PROMKES Journal, 7(1), 22.
8. Mulyanti, S., Insanuddin, I., & Supriyanto, I. (2021). Effectiveness of Extension AboutDental and Oral Health Using Lecture and Group Discussion Methods on Respondents' Knowledge (Literature Study). Journal of Dental and Oral Therapy, 1(1), 9–15. Ramdhani, AN, Ernawati,

9. K., Jannah, F., Rizon, JME, Abdusyakur, AF, Batubara, L., & Tunru, ISA (2022). The Influence of DHF Counseling Using Video Media on Community Knowledge in Desa Penyepatan, Cilincing, North Jakarta. Sciencetekes Magazine, 9(1), 23–31.
10. Saleh, M., Aeni, S., Gafur, A., & Basri, S. (2018). Relationship between Mosquito Nest Eradication (PSN) and the Presence of Aedes aegypti Mosquito Larvae in the Working Area of the Pancana District Health Center. Barru. HYGIENE: Journal of Environmental Health, 4(2), 93–98.
11. Zulaikhah, ST, & Yusuf, I. (2018). Effect of Education on Aedes aegypti Density in Preventing Dengue Fever. Journal of Public Health, 12(1), 1–7