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Edukasi Dan Pencegahan Dbd Di Desa Pasar X Dusun Iii Kecamatan Kutalimbaru

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Abstract

Dengue fever (DBD) is one of the main health problems in Indonesia, the morbidity and mortality rates continue to increase from year to year. This research focuses on education and prevention of DHF in Pasar X Village, Hamlet III, Kutalimbaru Sub-district, with the aim of increasing community awareness of the risks of DHF and effective ways to prevent transmission through the practice of 3M (Menguras, Menutup, Mengubur). The method used in this study was an educational presentation complemented by interactive discussions and question and answer sessions. Education was delivered through visual media in the form of informative and easy-to-understand posters. The participants of this study totaled 20 people. The results showed that there was success in increasing community awareness and understanding of the risks and prevention of DHF. The community gained better knowledge about the importance of the 3M practice (Menguras, Menutup, Mengubur) in preventing dengue transmission. Although the education program faced challenges, such as communication barriers and limited resources, the results showed an increase in community readiness to implement preventive measures in their neighborhoods. This education is an important first step in DHF control efforts, but program sustainability and adequate infrastructure support are needed to achieve more optimal and sustainable results

Keywords: DHF, Prevention, Health education.

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INTRODUCTION

Dengue fever (DHF) is a serious global health problem, with 500,000 cases and around 22,000 deaths each year. In Indonesia, DHF is still one of the diseases with high morbidity and mortality rates (Ciptono et al., 2021). Concurring to information from the Service of Wellbeing of the Republic of Indonesia in 2021, there were 73,518 cases of DHF, with 705 of them coming about in passing. The 5-14 age group is most affected, accounting for around 43.25% of the total cases (Sukardin et al., 2023). This illness is caused by the dengue infection and is transmitted through the chomp of the Aedes aegypti mosquito or Aedes aegypti. These mosquitoes breed in humid tropical areas, especially in stagnant water such as gutters, flower vases, and pet drinking places (Ramayanti et al., 2022). These environmental characteristics and mosquito behavior cause an increase in dengue cases during the rainy season, when many breeding sites appear. Therefore, controlling this disease through environmental interventions and behavioral changes, such as the 3M (Drain, Cover, and Recycle) and 3M Plus campaigns, is very important (Sukardin et al., 2023).

Health education such as direct education plays an important role in this effort by conveying messages, building trust, increasing knowledge, and increasing public awareness of health. Counseling can be carried out through various media and methods, such as lectures, video screenings, and the use of visual media such as posters, leaflets and booklets (Ranteallo et al., 2021).

Previous relevant research shows that education-based interventions and community involvement can significantly reduce the incidence of Dengue Hemorrhagic Fever (DHF). For example, research by Ranteallo et al. (2021) in Dusun Tengah Lembang Sa'dan Andulan, Sa'dan District, North Toraja Regency showed that health education can provide information and increase confidence to behave better in maintaining health. The attitude in question is to maintain the environment to prevent dengue fever. Meanwhile, the study by Trapsilowati et al. (2015) in Semarang City emphasized the importance of a participatory approach in the dengue fever prevention program, by actively involving the community in every stage of the intervention, from planning to evaluation.

The urgency to carry out education and prevention of dengue fever in Pasar X Village is very high, considering the serious impact caused by this disease, such as decreased productivity to the risk of death, especially in vulnerable groups such as children and the elderly. Therefore, effective and community-based preventive measures are needed to reduce the number of dengue fever transmissions in this area.

This activity aims to provide education to the community about dengue fever prevention. It is trusted that this movement can increment mindfulness and dynamic association of the community in endeavors to avoid dengue fever, so that a more beneficial environment is made that's free from the chance of this illness.

METHODS

The research in the community service program implemented in Pasar X Village, Dusun III, Kutalimbaru District, Deliserdang Regency, Medan, North Sumatra was conducted using the presentation and question and answer method. This consider points to supply instruction on the anticipation of Dengue Hemorrhagic Fever (DHF) and was held on Wednesday, August 28, 2024, at 09.00-12.00. The participants in this activity numbered 20 people, consisting of adults and the elderly.

The implementation process began with the preparation of educational materials on DHF which were delivered through the poster in Figure 1, containing information about the 3M actions (Draining, Covering, and Burying) as a preventive measure. This poster also includes information about the causes, symptoms, and risks of DHF complications. This poster is used as the main tool in conveying educational messages visually and attractively, which are designed to be easily understood by the local community.

After the education session, a health check was carried out which included blood pressure, uric acid, and cholesterol tests. This examination aims to detect early health risk factors that can affect susceptibility to DHF and other diseases. The results of this examination are then used to provide appropriate follow-up advice for each participant, with the aim of increasing awareness of the importance of maintaining health and preventing disease through healthy living behaviors.

Figure 1. Educational poster of DBD

RESULTS & DISCUSSION

Description of Participants

Participants in the study "Education and Prevention of Dengue Fever in Pasar X Village, Dusun III, Kutalimbaru District" numbered 20 people with diverse demographic characteristics. The majority of participants were adult and elderly women, with an age range of 40 to 80 years. They generally have a work background as housewives or workers in agriculture and animal husbandry. The educational backgrounds of the participants were diverse, with the majority having completed elementary to secondary education.

Before the education was carried out, participants' knowledge of Dengue Hemorrhagic Fever (DHF) was very limited. The information they had usually came from personal experience or other informal sources, without an in-depth understanding of this disease, both in terms of type, transmission method, and effective prevention measures. Therefore, the education provided in this study is very important to increase participants' awareness and knowledge of the risks and prevention of DHF, especially in their residential environment.

Figure 2. Portrait after completing the education regarding

Implementation of Education

A organized approach was taken to actualize instruction in Pasar X Town, Dusun III, Kutalimbaru Locale, with a center on coordinate interaction with the community to avoid Dengue Hemorrhagic Fever (DHF). The most objective of this instruction is to extend open mindfulness and understanding of the dangers of DHF, how it is transmitted, and preventive measures that can be taken to diminish the transmission of this malady.

The education process begins with the distribution of materials through educational posters that are visually appealing and easy to understand by everyone. This poster (Figure 1) contains important information about preventing DHF through the 3M method (Draining, Covering, Burying). This information is made easier to understand and remember by using concise and effective explanations and visually appealing images to explain each step. This poster also includes additional information about the symptoms of DHF, how it is transmitted

through the Aedes aegypti mosquito, and the potential consequences that may occur if DHF is not treated immediately.

The activity was continued with an interactive discussion and question and answer session after the presentation of the material through the poster. The community was given the opportunity to ask questions and share their experiences about DHF in this session. The enthusiasm of the community can be seen from the many questions asked, especially regarding the early symptoms of DHF and preventive measures that can be taken at home. The answers given were adjusted to the local context that suits the residents of Pasar X Village, Dusun III, and the author provided a comprehensive and easy-to-understand explanation.

This educational activity received a very good response from the community, especially in terms of practical application of the knowledge gained. The community expressed their readiness to apply the 3M method in their daily routines in order to mitigate the transmission of DHF in their environment. In addition to increasing public awareness of DHF, this educational initiative also motivated them to take real action to prevent DHF.

Based on the results obtained, this educational program succeeded in increasing public awareness and understanding of DHF and its prevention. Ultimately, this education was able to contribute to efforts to prevent DHF in Pasar X Village, Dusun III, Kutalimbaru District, by conveying important information in a way that was easy for the community to accept and apply through the use of props such as posters and interactive approaches.

Challenges and Obstacles

The implementation of socialization activities for the prevention of dengue fever (DBD) in Dusun III Pasar X Village, Kutalimbaru District, faced various challenges and obstacles that were quite heavy. One of the main obstacles was the difficulty of communication. There were several medical terms and health concepts that were unfamiliar to most participants, requiring more concise and repeated explanations. In addition, the implementation of predetermined preventive measures, such as the 3M practice (Draining, Covering, Burying), was also hampered by limited resources and facilities in rural areas. A number of residents were unable to consistently implement DHF prevention measures due to lack of access to facilities needed for waste management and maintaining environmental cleanliness. This was exacerbated by the lack of infrastructure support, such as an adequate sanitation system, which is essential for reducing mosquito breeding grounds.

Although there has been an increase in awareness of this education, the implementation of preventive measures in the field still faces many obstacles. Therefore, a more comprehensive and sustainable approach that includes direct practice and the provision of facilities that facilitate preventive measures is needed to ensure that the information provided can be implemented properly.

CONCLUSION

The implementation of education on prevention of Dengue Hemorrhagic Fever (DHF) in Pasar X Village, Dusun III, Kutalimbaru District has succeeded in increasing public awareness and understanding of the risks and methods of preventing DHF. Through a structured approach, including the use of educational

posters and interactive Q&A sessions, the community gained better knowledge about the importance of the 3M practice (Draining, Covering, Burying) in preventing DHF transmission. Although this education program faced challenges, such as communication constraints and limited resources, the results showed an increase in community readiness to implement preventive measures in their environment. This education is an important initial step in efforts to control DHF, but the sustainability of the program and adequate infrastructure support are needed to achieve more optimal and sustainable results.

CONFLICT OF INTEREST

Concerning the research, authorship, and publication of this paper, the author(s) reported no potential conflicts of interest.

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REFERENCES

Ciptono, F. A., Martini, M., Yuliawati, S., & Saraswati, L. D. (2021). Gambaran Demam Berdarah Dengue Kota Semarang Tahun 2014-2019. *Jurnal IlmiahMahasiswa*, *11*(1), 1–5.

Ramayanti, I., Erlyn, P., Silvana, R., & Frayogi, F. D. (2022). Peningkatan Pengetahuan Masyarakat dalamPencegahan Penyakit DB D di Desa Beti IndralayaSelatan Ogan Ilir. *J. Community Angagement*.

Ranteallo, R. R., Handayani, Y., Almar, J., Wilayah, B., & Tenggara, A. (2021). Pengaruh Penyuluhan Kesehatan Terhadap Upaya Pencegahan Dema m BerdarahDengue (DBD) Di Dusun Tengah Lembang Sa'danAndulan Kecamatan Sa'dan Kabupaten Toraja Utara Tahun 2019. *Jurnal Ilmiah Kesehatan Promotif*, *6*(1), 25–36.

Sukardin, S., Sumartyawati, N. M., & Nurhidayah, N. (2023). Edukasi tentang Pencegahan PenularanDemam Berdarah Dengue (DBD) pada Siswa di SDN 1 Kekeri Lombok Barat. *Jurnal Abdimas Kesehatan (JAK)*, *5*(1), 139–144.

Trapsilowati, W., Mardihusodo, S. J., Prabandari, Y. S., & Mardikanto, T. (2015). Partisipasi masyarakat dalampengendalian vektor demam berdarah de ngue di Kota Semarang Provinsi Jawa Tengah. . *ektora: JurnalVektor Dan Reservoir Penyakit*, *7*(1), 15–22.