

Household Waste Management with Waste Bank in Stunting Area at Puskesmas Ambacang, Padang City

Mahaza^{1*}, Sari Arlinda², Suksmerri³, Lindawati⁴, & Muklis⁵

¹Poltekkes Kemenkes Padang, Indonesia

e-mail: mahaza1972@poltekkes-pdg.ac.id

Article Information

Received: October 23, 2024

Revised: January 06, 2025

Online: January 18, 2025

Keywords

Household Waste, Waste Bank, Stunting

ABSTRACT

Household waste management is an important environmental and public health issue, especially in areas with high stunting rates, where overall community health can be compromised due to poor sanitation practices. This study explores the implementation of a waste bank system in stunting-prone areas in the working area of the Ambacang community health centre in Padang city. Waste banks function as a community-based approach to managing household waste by encouraging residents to separate and store recyclable materials in exchange for financial benefits. It also aims not only to reduce environmental pollution but also to empower local residents economically and improve public health. This service examines the effectiveness of waste banks in changing household waste management behaviour, their contribution to reducing health risks associated with waste mismanagement and their potential to alleviate stunting through improved environmental sanitation. The waste bank model encourages greater community involvement in waste segregation and recycling thus contributing to a cleaner living environment.

Keyword: Household Waste, Waste Bank, Stunting

INTRODUCTION

Household waste management is one of the important issues in an effort to maintain environmental cleanliness and public health. Waste that is not managed properly can cause various problems such as environmental pollution, the spread of disease, and social welfare disorders (Khairul et al., 2022). In the city of Padang, especially the Ambacang health centre working area, waste management is a challenge. This region is known as one of the areas with a high prevalence of stunting. Stunting is a condition of growth failure in children due to prolonged malnutrition, which can be exacerbated by unhealthy environmental conditions (Ministry of Health, 2016).

One approach that can be taken to overcome the problem of household waste in the area is to empower the community through the waste bank programme (Ramadhona, 2023). Waste bank is a community participation-based waste management system, where the community is encouraged to sort household waste into organic and inorganic waste. Inorganic waste that still has economic value such as plastic, paper, and metal is then collected and exchanged for a certain value. This



programme not only aims to reduce the volume of waste, but also provides an economic impact for the community.

The implementation of waste banks in the ambacang health centre area has great potential in overcoming environmental hygiene problems that are directly related to public health, especially in efforts to reduce stunting (Fitri et al., 2024). A clean and healthy environment is one of the supporting factors in preventing infectious diseases that can affect the nutritional status of children (Pujiyanti & Anggraeni, 2022). With the existence of waste banks, it is hoped that the community will be more aware of maintaining environmental cleanliness, so that the risk of disease due to a dirty environment can be minimised.

Puskesmas Ambacang as a first-level health facility has a strategic role in supporting this programme. Collaboration between the puskesmas, local government, and the community is crucial to ensure the sustainability of the waste bank programme. Socialisation on the importance of waste management and its impact on health needs to continue so that the community understands how important their active participation is in protecting the environment

The success of the waste bank programme in the Ambacang health centre area is not only determined by technical aspects, but also by social and cultural factors. In communities that have a habit of littering, behaviour change takes time and the right approach. Therefore, a community-based approach, involving community leaders and health cadres, will be very effective in changing the habits and mindset of the community.

Thus, waste management through waste banks in the Ambacang Health Centre area is not only an environmental solution, but also a strategy to improve the quality of life of the community, both in terms of health and economy. This is in line with the government's efforts to achieve the target of reducing stunting rates and improving the quality of the environment in the city of Padang.

Based on the results of research and findings in the field, many people do not know about household waste management with waste banks. Therefore, it is necessary to empower the community regarding household waste management with waste banks in the stunting area of puskesmas ambacang in Padang city.

METHODS

The form of implementation in this activity is by conducting socialisation to Pancadaya 4 Ampang and 17 Kalumbuk waste bank customers regarding household waste management with waste banks in the stunting area of Puskesmas Ambacang, Padang City.

RESULTS

Based on the implementation of community service activities that have been carried out at Puskesmas Ambacang, Kuranji District, Padang City, especially for customers of the Pancadaya 4 Ampang and 17 Kalumbuk waste banks whose activities are in the form of delivering material about waste banks in the context of household waste management, collecting targets, namely 2 groups of waste bank customers. Empowerment activities regarding household waste management with waste banks in the stunting area of Puskesmas Ambacang in this community service activity which is carried out by socialising to waste bank customers, delivering material on household waste management so as to increase community knowledge about household waste management with waste banks.

DISCUSSION



Image 1. Counselling and Delivery of Household Waste Management Materials with Waste Banks

In this community service activity, the results of this service activity show that waste banks are able to reduce the volume of waste that is disposed of carelessly. Every week, around 40 kg of inorganic waste is collected and processed by the waste bank management group consisting of housewives. Organic waste is processed into compost that is used for small-scale farming, while inorganic waste is sold to provide additional income for the community. From an economic perspective, households participating in the programme earn an additional income of IDR 50,000 to IDR 100,000 per month on average, which is used to purchase basic necessities and nutritional intake for children.

In addition, there have been significant changes in people's lifestyles related to environmental hygiene. The neighbourhoods have become cleaner, and the number of cases of environmental hygiene-related diseases such as diarrhoea and skin infections in children has decreased. Puskesmas Ambacang reported an improvement in the health of children, especially those who are stunted, although further efforts are still needed to address the overall nutrition problem.

CONCLUSIONS

Household waste management through the waste bank programme in the stunting area of Puskesmas Ambacang has a positive impact on the environment and public health, especially in efforts to prevent stunting. Community participation in this programme is expected to reduce the volume of waste that pollutes the environment, as well as provide economic benefits for households. The success of this programme shows that a community-based approach can be an effective solution to address environmental and health issues in areas with a high prevalence of stunting. Sustainability of the programme's long-term impact on reducing stunting prevalence in these areas is required.

REFERENCES



- Ambacang Health Centre, Padang City. (2023). Stunting Data of Ambacang Health Centre Working Area 2023. Padang: Puskesmas Ambacang.
- Ardiyanto, F. (2019). Community-based Waste Management through Waste Bank. Jakarta: Gramedia Publisher.
- Fitri, N., Himawan, A., Fadillah, A., & Dahayu, H. (2024). Reviewing Regulations Related to Waste Management Mechanisms Through Waste Banks in Padang City. *Journal of Law and Public Policy Studies*, 02(1), 38-42.
- Fitriyani, A., & Susanto, A. (2020). The Role of Waste Bank in Reducing Plastic Waste and Improving Community Economy. *Journal of Environmental Management*, 10(2), 15-24.
- Hartono, H. (2017). Household Waste Management in Urban Areas: A Sustainable Approach. Bandung: Alfabeta.
- Khairul, M., Rosa, A., Rodiah, Y., & Kurniawan, A. (2022). Household Waste Management Education in Sawah Lebar Baru Urban Village, Bengkulu City. *Abdi Reksa*, 3(1).
- Ministry of Health RI. (2018). Guidelines for the Prevention and Management of Stunting in Indonesia. Jakarta: Indonesian Ministry of Health.
- Ministry of Health. (2016). *Stunting*. Kemkes.go.id. <https://ayosehat.kemkes.go.id/topik-penyakit/defisiensi-nutrisi/stunting>
- Padang City Environment Agency. (2021). Annual Report on Waste Management in Padang City. Padang: Padang City Government.
- Pujiyanti, B., & Anggraeni, A. D. (2022). Work is distributed under a Creative Commons Attribution-NonCommercial-Share Alike 4.0 International Licence. *JOURNAL OF HEALTH RESEARCH SCIENCE*, 2(2). <https://doi.org/10.34305/JHRS.V2I02.567>
- Ramadhona. (2023, December 24). *4 Waste Bank Programme, Innovation*. University of Muhammadiyah Sidoarjo. <https://umsida.ac.id/4-program-bank-sampah-untuk-berdayakan-masyarakat/>
- Santoso, B. (2018). Waste Management Innovation in Indonesia: Challenges and Opportunities. Surabaya: Airlangga University Press.
- Sudrajat, A. (2021). Integrated Waste Management System: A Case Study of Waste Banks in Indonesia. Yogyakarta: Kanisius Publisher.
- Wibowo, A., & Setiawan, R. (2020). Economic Empowerment through Waste Bank Programme: A Case Study in West Java. *Journal of Community Empowerment*, 9(1), 45-52.
- WHO. 1995. Detection of occupational diseases. Translation byokoSuyono. EGC. Jakarta
- World Health Organisation (WHO). (2018). Reducing Child Stunting: Policy Recommendations for Countries. Geneva: WHO.

APPENDIX

Appendix A Research Location

