



'Isi Piringku' Education as a Hypertension Prevention Strategy in Jilatang Village, South Aceh, Indonesia

Teungku Nih Farisni^{1,*}, Nurul Pahriza², Novi Firmadanti³

^{1,2,3} Department of Public Health, Faculty of Health Sciences, Teuku Umar University, West Aceh, Indonesia

✉ teungkunihfarisni@utu.ac.id

ARTICLE INFO

Article history

Received : 27-9-2026

Revised : 02-10-2026

Accepted : 03-10-2026

Keywords

Education, Hypertension, Isi Piringku, Prevention, Dietary Practices.

ABSTRACT

Hypertension is one of the health challenges associated with dietary patterns and high salt consumption. The residents of Jilatang Village still need to improve their understanding of balanced diets, portion control, healthy food choices, and limiting salt intake to prevent hypertension. This community engagement program aimed to improve community knowledge through "Isi Piringku" education. The activity was conducted through educational material delivered using posters, followed by discussions, question-and-answer sessions, and a quiz involving 25 participants. The results showed that participants demonstrated engagement and were able to respond to questions during the post-education quiz. This activity provided information on applying a balanced diet, managing food portions, choosing more nutritious foods, and limiting salt intake as an effort to prevent hypertension. Similar educational programs are expected to be conducted continuously through community health activities in Jilatang Village.

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



A. INTRODUCTION

Hypertension is one of the most common types of non-communicable diseases in the community and remains one of the public health challenges in Indonesia. This condition may occur without clear symptoms; however, if it is not properly addressed and managed, it can lead to various complications. Unhealthy lifestyles, such as excessive salt consumption, inadequate dietary patterns, and lack of physical activity, are among the factors that may increase the likelihood of developing hypertension (Sitorus, 2019). Therefore, improving community understanding of healthy dietary practices is one of the key steps in preventing and managing hypertension.

Nutritional intake plays a crucial role in maintaining health and preventing non-communicable diseases. A balanced diet is not only related to the types of food consumed but also to appropriate food variety and proportions. The "Isi Piringku" concept is a simple tool that can be used to help communities understand how to arrange balanced food compositions and portions (Kesehatan, 2024). For individuals who are at risk of or already have hypertension, dietary management, particularly by limiting salt consumption, is very



important. Rahmawati et al., (2024) showed that education and demonstrations regarding the “Isi Piringku” concept among pre-elderly and elderly individuals with hypertension could improve their knowledge and skills in preparing healthy, low-salt meals.

Previous activities have also shown that “Isi Piringku” education can serve as an approach to improving understanding of hypertension prevention. Ahmadi et al., (2025) implemented an “Isi Piringku” education program for a community with hypertension and found an increase in the participants’ average knowledge scores after the education was provided. The average knowledge score increased by 17.9 points, equivalent to 24.7%, following the intervention. The education was delivered using posters to explain appropriate food portions, nutritional content, and meal management.

A similar situation was identified in Jilatang Village, Samadua District, South Aceh Regency, where hypertension is one of the health problems faced by the community. Based on initial observations, unhealthy dietary practices, including the habit of consuming salted fish, were identified as one of the problems in the community. This situation indicates the need for preventive and promotive efforts that are easy to understand and can be applied in daily life. Therefore, education on balanced dietary practices through the “Isi Piringku” concept is considered appropriate to the needs of the people of Jilatang Village.

In response to these problems, a community engagement activity was conducted through “Isi Piringku” education as an effort to prevent hypertension. The education was delivered using a poster as a visual tool to explain food portions, the principles of balanced nutrition, and appropriate food choices to help prevent hypertension. This activity is expected to provide practical information so that community members can implement healthier dietary practices in their daily lives.

The objective of this community engagement activity was to improve community understanding of hypertension prevention through “Isi Piringku” education in Jilatang Village, Samadua District, South Aceh Regency. Through this activity, community members are expected to recognize the importance of a balanced diet and adopt healthier eating habits as one of the efforts to prevent hypertension.

B. METHODS

The community engagement activity was conducted on Thursday, July 23, 2026, in Jilatang Village, Samadua District, South Aceh Regency. The activity aimed to increase community awareness of healthy eating practices as one of the efforts to prevent hypertension. The target participants were mothers and older adults living in Jilatang Village. Participant selection was assisted by village health cadres, who disseminated information about the activity through the local community WhatsApp group.

The activity was divided into several stages, including preparation, delivery of educational materials, interactive discussion, and evaluation. During the preparation stage, the team identified the community’s needs and prepared relevant educational materials covering the “Isi Piringku” concept, balanced nutrition, appropriate food portions, healthy food choices, and hypertension prevention. A poster was used as the main medium for delivering the educational information. The main focus of the poster was to explain the “Isi Piringku” concept, particularly the recommended food composition and portions, as well as healthier food choices to help prevent hypertension.

During the implementation stage, participants were provided with information about the importance of a balanced diet as an effort to prevent hypertension. Participants were



introduced to the “Isi Piringku” concept and given explanations about the recommended food composition and portions. The material also emphasized the importance of reducing salt intake and choosing more nutritious foods. The educational session was delivered by Nurul Pahrissa and lasted approximately 1.5 hours. After the material was presented, participants were given the opportunity to ask questions and discuss their daily eating habits.

Evaluation was conducted at the end of the activity to assess the extent to which participants understood the material presented. The evaluation was conducted through a quiz consisting of 10 questions related to the educational materials, particularly the “Isi Piringku” concept and hypertension. Participants’ level of understanding was assessed based on their ability to answer the quiz questions correctly. In addition, the discussion and question-and-answer sessions were also used to further assess participants’ understanding of the material. Through this activity, participants were expected to improve their knowledge of healthy eating practices and apply the “Isi Piringku” concept in their daily lives as one of the efforts to prevent hypertension.

C. RESULT AND DISCUSSION

The community service activity, which involved “Isi Piringku” education as an effort to prevent hypertension, was conducted in Jilatang Village, Samadua District, South Aceh Regency, with a total of 25 participants. At the beginning of the activity, participants received information about hypertension and its relationship with healthy eating habits. The educational material covered food selection, appropriate portion sizes, and reducing salt intake as part of hypertension prevention. A poster illustrating food composition and portion distribution based on the “Isi Piringku” concept was used to support the presentation. This visual medium was considered appropriate because it presented nutritional information in a simple and accessible format. Through the illustrations, participants, particularly mothers and older adults, could more easily understand recommended food portions and relate them to their daily eating habits. The poster could also be reused as a reminder to encourage balanced eating practices at home.

The “Isi Piringku” concept has also been incorporated into community education programs for hypertension prevention. Medyna et al., (2022) conducted a community education program using several educational media, including a poster on the DASH Diet, an “Isi Piringku” calendar, and materials on Clean and Healthy Living Behavior (PHBS). Their findings showed an increase in the number of participants with good knowledge after the educational intervention. Statistical analysis also indicated a difference in knowledge before and after the activity. These findings support the use of visual educational media to communicate information about balanced nutrition and hypertension prevention. Similarly, the activity in Jilatang Village used a poster to explain food composition and portion sizes, with additional emphasis on reducing salt consumption. Although changes in participants’ knowledge were not statistically measured, their ability to answer the quiz questions provided an indication of their basic understanding of the information delivered during the session.

The educational material covered the principles of “Isi Piringku,” food portion distribution, the importance of consuming a variety of nutritious foods, and healthier food choices. Participants were also informed about the importance of limiting salt in their daily meals. Nutrition education related to hypertension was also reported by Pomalingo et al., (2023) who conducted an educational program for older adults in Tabumela Village. Their activities included health education, discussions, health examinations, and a demonstration



of “Isi Piringku” to introduce the principles of balanced nutrition. Both activities shared a similar approach by providing practical nutritional information to support healthier eating habits. However, the program in Jilatang Village specifically focused on hypertension prevention by addressing portion control, healthier food selection, and reduced salt consumption.

Following the presentation, the activity continued with a discussion and question-and-answer session. Participants were encouraged to ask questions, share their opinions, and describe their everyday eating habits. The discussion addressed the application of “Isi Piringku,” appropriate food portions, healthier food choices, and limiting foods with high salt content. This method was considered relevant because it encouraged two-way communication between participants and the activity facilitators. Through this interaction, participants could clarify information, relate the material to household eating habits, and obtain further explanations on how to apply healthy eating practices in daily life. A discussion-based approach was also used by Pomalingo et al., (2023) in their hypertension and balanced nutrition education program for older adults. During the activity in Jilatang Village, participants actively engaged in the discussion and question-and-answer session. Their involvement indicated that interactive education provided opportunities for participants to take an active role in understanding the material. This approach is consistent with community-based education methods that combine information delivery and discussion to communicate nutritional messages.

As part of the activity evaluation, participants completed a quiz consisting of 10 questions about “Isi Piringku,” balanced nutrition, healthier food choices, and hypertension prevention. The quiz results showed that participants were able to respond to the questions and remained actively involved throughout the activity. Their responses provided an indication that they had understood the basic information presented during the educational session. This finding is consistent with the general objective of previous educational programs, including the study by (Medyna et al., 2022), which aimed to improve community knowledge of hypertension prevention through nutrition education. However, the evaluation method used in Jilatang Village differed from that of (Medyna et al., 2022), as no pre-test or post-test was conducted. Therefore, the increase in participants’ knowledge could not be calculated as a percentage or determined through a comparison of measurements taken before and after the intervention. Nevertheless, the quiz provided an opportunity to assess participants’ understanding of the main educational topics at the end of the session.

Education based on the “Isi Piringku” concept has also been conducted through community service activities in South Aceh. (Rahmi et al., 2024) provided nutrition education using an “Isi Piringku” leaflet to students of the Nursing Study Program in South Aceh. The material explained food composition on a plate and the importance of limiting sugar, salt, and fat intake. The activity aimed to improve knowledge and encourage the adoption of balanced eating practices. Similarly, the program in Jilatang Village discussed food composition, appropriate portions, and healthier food choices. The difference concerned the target population and educational emphasis: the Jilatang Village activity targeted community members, particularly mothers and older adults, with a specific focus on hypertension prevention. Accordingly, reducing salt consumption and selecting foods that support healthy eating were emphasized throughout the educational session.

Overall, the “Isi Piringku” education activity in Jilatang Village shared several similarities with previous community service programs, particularly in providing information about food composition, portion control, and healthier food choices. (Medyna et

al., 2022), (Pomalingo et al., 2023), and (Rahmi et al., 2024) demonstrated that nutrition education can be delivered through various media and methods according to the target population and program objectives. In Jilatang Village, the poster served as a visual learning aid, while discussions and the quiz enabled participants to interact with the facilitators and demonstrate their understanding of the material. Participants' active involvement and ability to answer the quiz questions suggested that this approach could be used to communicate basic information about balanced nutrition and hypertension prevention. However, these findings should be interpreted in consideration of the activity's evaluation limitations, particularly the absence of pre-test and post-test measurements and follow-up assessments of changes in participants' eating behaviors.

The activity also highlights opportunities to further develop health promotion programs in Jilatang Village. The poster may be reused in community health activities, including Posyandu sessions and health education programs supported by village health cadres. Information about balanced nutrition, food portion control, healthier food choices, and limiting salt intake can be reinforced through subsequent educational activities. The involvement of village health cadres in disseminating health information may also help sustain community participation and extend health messages to households. Future activities could include pre-test and post-test assessments as well as follow-up evaluations. These measures would help assess changes in participants' knowledge and provide insight into the extent to which healthy eating recommendations are applied in daily life.

In conclusion, the "Isi Piringku" education activity in Jilatang Village involved 25 participants and consisted of educational presentations, poster-based learning, discussions, question-and-answer sessions, and a 10-question quiz. Participants actively engaged in the activity and were able to answer questions following the presentation. The program provided practical information about balanced nutrition, appropriate food portions, healthier food choices, and limiting salt consumption as part of hypertension prevention. The poster helped illustrate food composition, while the discussion encouraged participants to connect the educational material with their daily eating habits. In line with previous community service findings, the combination of visual educational media and interactive discussion may serve as a practical approach to supporting health promotion and disease prevention at the village level. Continued implementation through community health activities and collaboration with health cadres is expected to support public understanding of balanced nutrition and hypertension prevention.



Figure 1: Nurul Pahrissa is presenting the materials



Figure 2: Question and answer session



Figure 3: Group photo with participants



Figure 4: Give prizes to participants who can answer the quiz

D. CONCLUSION

The “Isi Piringku” education program aimed at preventing hypertension in Jilatang Village, Samadua District, South Aceh Regency, was successfully conducted and involved 25 participants. The program explained the importance of maintaining a balanced diet, managing appropriate food portions, choosing more nutritious foods, and reducing salt intake as an effort to prevent hypertension. The participants were actively involved in the information delivery, discussions, question-and-answer sessions, and quizzes, and were able to answer the questions provided after the educational session.

The program was beneficial in strengthening the participants’ understanding of applying the “Isi Piringku” concept and healthy eating practices in their daily lives to prevent hypertension. As a follow-up, education on balanced dietary practices is expected to be continued through community health activities in Jilatang Village. One limitation of this activity was the absence of pre-test and post-test measurements, so the improvement in participants’ knowledge could not be measured quantitatively.

E. ACKNOWLEDGEMENTS

The authors would like to express their gratitude to Teuku Umar University, Faculty of Health Sciences, Department of Public Health, and the academic supervisor, who provided guidance, direction, and support throughout the implementation of this community engagement activity. The authors would also like to thank the Government of Jilatang Village, Samadua District, South Aceh Regency, the health cadres, and all community members who contributed to and supported the implementation of the “Isi Piringku” education program as an effort to prevent hypertension. The authors also extend their gratitude to all parties who provided assistance and support, enabling this activity to be successfully implemented.

F. AUTHOR CONTRIBUTIONS

Teungku Nih Farisni (TNF) contributed to providing guidance, direction, and supervision throughout the implementation of the activity, as well as providing feedback during the preparation and revision of the article. Nurul Pahrissa (NP) contributed to the implementation of the activity, delivery of educational materials, poster preparation, article writing, analysis of the activity results, and article revision. Novi Firmadanti (NF) contributed to the implementation of the activity, activity documentation, poster preparation, and



provision of documentation as supporting material for the article. Each author contributed according to their respective roles in supporting the implementation of the community engagement activity and the completion of the article.

G. REFERENCES

- Ahmadi, A., Anwar, A., Al-Daisi, A. N. U. U., S.Rauf, S. A., Zaid, F., Ayu, D. P., Mutmainnah, A. B., & La'lang, D. A. (2025). *Efektivitas Pemberian Edukasi Isi Piringku dan Gambaran Intervensi Senam Hioertensi sebagai Upaya Pencegahan dan Pengendalian Hipertesni di Kelurahan Balleangin*. 3(1), 38–44.
- Kesehatan, K. (2024). *Isi Piringku, Panduan Kebutuhan Gizi Seimbang Harian*. Kemenkes. <https://ayosehat.kemkes.go.id/isi-piringku-kebutuhan-gizi-harian-seimbang?>
- Medyna, I., Rizqi, M., Rahmawati, D., Prillia, D. V., & Noor, I. H. (2022). *PENYULUHAN PENCEGAHAN HIPERTENSI DENGAN DENGAN DISIPLIN (DIET DASH , ISI PIRINGKU , PHBS UNTUK LINDUNGI KELUARGA DARI HIPERTENSI)*. 6, 842–847.
- Pomalingo, A. Y., Talibo, S. D., & Hadi, N. S. (2023). *PENINGKATAN PENGETAHUAN TERKAIT HIPERTESNI DAN DIABETES MELITUS SERTA DEMONSTRASI GIDI SEIMBANG PADA LANSIA DI DESA TABUMELA*. *Junral Pengabdian Kesehatan Masyarakat*, 4. <https://ejurnal.ung.ac.id/index.php/jpkm/article/view/18506?utm>
- Rahmawati, I., Jayanti, R., Astuti, U. W., Nisa, Y. S., & Septi, T. (2024). *Kenali Isi Piringku Bagi Penderita Hipertensi*. 1(1), 11–14.
- Rahmi, C., Rasima, R., Yasni, H., & Asmanidar, A. (2024). *Edukasi Gizi Melalui Leaflet “ Isi Piringku ” dalam Upaya Pencegahan Obesitas pada Mahasiswa di Poltekkes Kemenkes Aceh Prodi Keperawatan Aceh selatan*. 4(Riskesda 2018), 1–6.
- Sitorus, J. (2019). *Pengaruh pola makan dan aktivitas fisik terhadap kejadian hipertensi pada pasien rawat jalan di rsu hkbp balige*. 5(1), 34–43.