



Edukasi Waspada Kolesterol Tinggi Di Desa Pasar X Dusun III Kecamatan Kutalimbaru

Indah Pratiwi Harahap¹, Shahrul Rahman²

¹ Mahasiswa Fakultas Kedokteran, Universitas Muhammadiyah Sumatera Utara

² Mahasiswa Departemen Penyakit Dalam, Universitas Muhammadiyah Sumatera Utara

Abstract

Received: 20 April 2025
Revised: 27 April 2025
Accepted: 01 Mei 2025

The problem of high cholesterol (hypercholesterolemia) is one of the groups of non-communicable diseases (NCDs) whose prevalence is currently increasing. The increase in NCDs can be triggered by several factors that are closely related to the food consumed in everyday life that triggers an increase in cholesterol. This community service counseling aims to provide education related to cholesterol problems and increase public knowledge related to matters relating to high cholesterol. This education program uses visual aids such as posters and involves participants through interactive discussions. Based on the counseling, the education program regarding the problem of being aware of high cholesterol has succeeded in increasing public knowledge of the risk of increasing cholesterol, symptoms, and prevention. Although there are challenges when delivering education to participants, using visual media that has an attractive appearance can help to attract the attention of participants, where participants initially had limited knowledge about cholesterol until they gained new knowledge about high cholesterol and the importance of preventing it. With this counseling, it can be emphasized regarding education on how to prevent increased cholesterol and recognize the risks and symptoms early in order to prevent complications.

Keywords: *High cholesterol, education*

(*) Corresponding Author: indahpratiwi.zhaa11@gmail.com¹, shahrulrahman@umsu.ac.id²

How to Cite: Harahap, I., & Rahman, S. (2025). Edukasi Waspada Kolesterol Tinggi Di Desa Pasar X Dusun III Kecamatan Kutalimbaru. *Jurnal Ilmiah Wahana Pendidikan*, 11(5.D), 187-193. Retrieved from <https://jurnal.peneliti.net/index.php/JIWP/article/view/10478>

INTRODUCTION

Non-communicable diseases (NCDs) are health problems that are currently often experienced by people around us and have become a global health problem, most of which often occur in developing countries, including in Indonesia. WHO reports that the prevalence of NCDs in the world is 40 million individuals suffering from NCDs. Based on data reported by the Global Status Report Non-Communicable Disease, NCD cases often occur due to unhealthy lifestyles and food so that there can be an increase in excess fat in the body, where if this condition is not prevented it can have a negative effect on health and can trigger complications of chronic diseases such as hypertension, diabetes mellitus, cholesterolemia, dyslipidemia, and obesity.

A report from the Health Research and Development Agency shows that the prevalence of hypercholesterolemia in Indonesia has reached 35%, with women at higher risk (39.6%). This shows how urgent it is to prevent and treat

hypercholesterolemia. High cholesterol, or hypercholesterolemia, is a major risk factor for cardiovascular disease, stroke, and coronary heart disease. Global data shows that the prevalence of hypercholesterolemia in the world has reached 45% (WHO, 2019). Therefore, health education steps about cholesterol and its prevention are very much needed to reduce the number of NCDs in the community. The urgency of this activity is based on the urgent need to increase public awareness of the risks of high cholesterol. Interactive and targeted education, such as health counseling using visual media and a two-way approach, is expected to encourage changes in community behavior in maintaining their health. This program is designed to increase public knowledge about high cholesterol, prevention methods, and the importance of a healthy lifestyle through education and health checks in Dusun III, Pasar X Village.

METHODS

This community service activity was carried out through a direct health education and medical examination approach to residents of Pasar X Village, Dusun III, Kutalimbaru District. The method used was participatory counseling that actively involved residents in the learning process and health examinations. This counseling was carried out in the form of two-way communication with easy-to-understand media, such as posters and leaflets, to attract attention and make it easier for residents to understand the material.

This activity lasted for 10 days, with a series of activities as follows:

- 1 Initial Coordination
Before the activity was carried out, the community service team coordinated with the Village Head and local village officials to obtain permission and support in implementing the activity.
- 2 Material Preparation
The team prepared educational materials in the form of posters containing information about the dangers of high cholesterol, how to prevent it, and the importance of maintaining a healthy lifestyle. This poster was then displayed at the activity location as an educational medium.
- 3 Implementation of Counseling
The counseling was carried out directly in the village meeting hall, where residents were given an explanation about high cholesterol and its impact on health. Education was carried out using an interactive communication method, where participants were encouraged to ask questions and discuss the material presented.
- 4 Health Check-up
After the counseling, a health check-up was conducted which included checking blood pressure, cholesterol levels, and uric acid.
- 5 Evaluation and Closing
At the end of the activity, an evaluation was conducted on the residents' understanding through a question and answer session. The results of the health check-up were distributed to the residents, along with recommendations for a healthy lifestyle that they could implement.

Tools and Materials

- 1 Posters and Leaflets

Used as a medium for counseling to provide information related to cholesterol and its prevention.

2 Digital Tensimeter

A tool to measure residents' blood pressure.

3 Cholesterol Check Tool

Used to quickly check residents' cholesterol levels.

The community service method for high cholesterol awareness and prevention education activities in Pasar X Village, Dusun III, Kutalimbaru District was carried out using a participatory approach that directly involved the community. This activity was carried out on August 28, 2024 at the local village hall with 20 participants.

Education was delivered using poster media which can be seen in Figure 1 as a teaching aid, which was designed to facilitate public understanding of cholesterol, risk factors, and how to prevent it. The activity started at 10.00-13.00 WIB with the presentation of material by the speaker, followed by a question and answer session that gave the public the opportunity to ask questions and discuss the topics discussed.

As a closing series of activities, a health check was also carried out including blood pressure checks and cholesterol level checks. This step aims to provide additional benefits for participants, as well as strengthen awareness of the importance of maintaining health in preventing high cholesterol. The entire series of activities is closely monitored to ensure active participation and public understanding of the material provided.



Figure 1. Educational poster on cholesterol

RESULTS & DISCUSSION

Description of Participants

In the study entitled “High Cholesterol Alert Education in Pasar X Village, Dusun III, Kutalimbaru District,” the participant profile consisted of 20 people, most of whom were adult and elderly women, aged between 30 and 80 years. Most of them work as housewives and informal workers in the agricultural or livestock sector, with education levels ranging from elementary to junior high school. Before participating in the education, their knowledge of cholesterol-related diseases was very limited, with understanding generally based on personal experience or informal information, without a deep understanding of the type of disease, how it is transmitted, and how to prevent it. This education is important to increase their awareness and understanding of the risks of high cholesterol.

Implementation of Education

Health checks were conducted on 20 residents of Pasar X Village, Dusun III, with the results that several residents had signs and symptoms of increased Cholesterol, the most common symptoms complained of were stiff neck, chest pain, shortness of breath and pain in the legs. After conducting counseling and examinations, the following results were obtained:

Table 1. Results of cholesterol checks on residents of Pasar X Village, Dusun III

Nama	Umur	Tekanan Darah (mmHg)	Kolesterol (mg/dL)
Ibu WA	41	142/100	176
Ibu SB	40	120/80	151
Bapak MS	44	150/120	201
Ibu SS	69	140/70	-
Ibu LBS	45	100/60	220
Ibu S	42	120/90	189
Ibu SBG	57	130/90	159
Ibu MS	37	120/70	134
Ibu VS	23	130/80	160
Ibu I	40	120/80	164
Ibu JT	81	130/90	-
Ibu NS	80	140/100	192
Ibu SBS	69	130/80	204
Ibu P	69	120/100	217
Ibu T	54	135/120	199
Ibu BS	30	110/70	178
Ibu FD	29	120/80	188
Ibu LS	45	135/110	215
Ibu TS	61	145/120	200
Ibu IB	47	120/70	211

The examination results found that 7 residents of Pasar X village had high cholesterol levels due to poor dietary habits that can trigger increased cholesterol, for example, foods containing coconut milk, fast food, and seafood. However, in most residents, the cholesterol test results were normal, amounting to 11 people, which indicates that the health condition of some residents of Pasar X Village is quite well maintained. However, in the cholesterol examination, there were 2 residents who were not willing to be examined. The interaction between the extension team and residents during the examination was natural, where residents who had questions immediately received an explanation. This method is effective in increasing residents' understanding of the importance of a healthy lifestyle and disease prevention. The importance of maintaining health preventively through a healthy diet and routine check-ups is still emphasized to residents. Activities like this need to be continued and developed so that the community continues to get the latest information on how to prevent non-communicable diseases, especially high cholesterol.

Challenges and Obstacles

During the implementation of the high cholesterol awareness education program in Pasar X Village, Dusun III, Kutalimbaru District, many challenges and obstacles emerged. Communication problems were one of the biggest challenges, especially because some participants did not understand the medical terms used and needed further explanation. Limited resources and facilities were also obstacles for residents in implementing the information received, especially in terms of behavioral changes such as maintaining environmental cleanliness and maintaining a diet according to recommendations. Although awareness of this education has increased, the implementation of preventive measures in the field still faces several obstacles.

CONCLUSION

The educational activities and health checks carried out have had a positive impact in increasing public awareness of the risks of high cholesterol. High community participation shows good enthusiasm, and counseling has proven effective in increasing knowledge. However, a sustainable program is needed to encourage healthier lifestyle changes so that the prevalence of non-communicable diseases in this village can be suppressed. Community development efforts like this need to be encouraged with significant support from various parties, including local leaders and government. This support is important to ensure that the community remains motivated and does not feel bored in maintaining their health, especially being aware of high cholesterol.

CONFLICT OF INTEREST

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

ACKNOWLEDGEMENT

We would like to thank the supervisors for their guidance, advice, and support during this research. I express my deepest gratitude and thanks to Allah SWT, as well as to the field supervisors, the Head of Pasar X Village, the Head of

RT, and the entire community. They have all shown extraordinary enthusiasm and joy in supporting this community service activity. Without their contributions and support, this activity would not have been successful.

REFERENCES

- Hamna Vonny Lasanuddin, Rosmin Ilham, Rianti P. Umani. Hubungan Pola Makan Dengan Peningkatan Kadar Kolesterol Lansia Di Desa Tenggara Kecamatan Tilango. *J Ilmu Kedokt dan Kesehat Indones*. 2022;2(1):22–34.
- Solikin S, Muradi M. Hubungan Kadar Kolesterol Dengan Derajat Hipertensi Pada Pasien Hipertensi Di Puskesmas Sungai Jingah. *J Keperawatan Suaka Insa*. 2020;5(1):143–52.
- Permatasari R, Suriani E, Kurniawan. Hubungan Kadar Kolesterol Total Dengan Tekanan Darah Pada Pasien Hipertensi pada Usia ≥ 40 Tahun. *J Labora Med*. 2022;6(2022):16–21.
- Irfan Rosyadi M, Rahmat Nazri Q, Hendry R, Studi Pendidikan Profesi Apoteker P, Lambung Mangkurat U, Martapura P, et al. Promosi Kesehatan “Waspada Kolesterol” Di Puskesmas Martapura 1. *J BUDIMAS*. 2022;04(02):1–5. Pengabdian J, Kasih M, Dirgahayu S. 1, 2 1,2. 2024;5(2):6–11.
- Setiawan F, Prambudi H, Alam M, Agustina E, Kaliwadas A, Java W. Sosialisasi Pemanfaatan Jahe Merah Untuk Menurunkan Kadar Kolesterol Di Kelurahan Kaliwadas Kabupaten Cirebon Socialization Of The Use Of Red Ginger To Lower Cholesterol Levels In Kaliwadas Village , Cirebon Regency. 2023;3(1).
- Prehanawan RP, Rayidah T, Mulyani AS, Ariyanti R, Safitri AN, Maharani S, et al. Waspada Kolesterol Tinggi: Sebuah Artikel Pengabdian Kepada Masyarakat. *J Pengabdian Masy Med*. 2022;12–7.