

## EDUCATION AND OBESITY PREVENTION THROUGH HEALTHY LIFESTYLES

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### Article Info:

Submitted:

ABSTRACT

Accepted:

Published:

Handling Editor:

Keywords:

Obesity;

Education;

Dietary Habits;

Healthy Leaving

**Background:** Obesity is a major public health issue in Indonesia, with a rising prevalence. Obesity increases the risk of degenerative diseases like diabetes mellitus, hypertension, and cardiovascular disease. As a preventive measure, health education was held with the theme "Education and Prevention of Obesity Through Healthy Diet and Healthy Lifestyle" aimed at female participants. **Method:** The activity began with a pre-test to measure initial knowledge, then the delivery of materials and the last post-test was carried out in Pucangan Village, Montong District with 25 participants. **Result:** There was an increase in knowledge from the results of providing education related to obesity. The results of the BMI calculation showed 11 people with obesity. **Conclusion:** Increasing knowledge about obesity prevention can be done by providing education. Continuous efforts are needed to prevent obesity.

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### 1. INTRODUCTION

Obesity is a global health problem that continues to increase from year to year. Based on data from Riskesdas 2018, the prevalence of obesity in Indonesia reached 21.8% among adults, an increase compared to previous years. This problem not only affects physical health, but also increases the risk of various chronic diseases, such as type 2 diabetes mellitus, hypertension and cardiovascular disease (Karen E, et al., 2022).

The prevalence of obesity in Indonesia continues to increase significantly. Based on Riskesdas 2018 data, the prevalence of obesity in adults aged 18 years and over reached 21.8%, increasing from 14.8% in 2013. In

addition, the prevalence of overweight in the same age group reached 13.6%. In East Java Province, the prevalence of central obesity was at 23.5%, showing an increasing trend compared to the previous year. Meanwhile, in Tuban Regency, the prevalence of central obesity in adults was recorded at 17.2%, lower than the provincial average, but still requires serious attention <sup>1</sup>.

Obesity is one of the non-communicable diseases (NCDs) that is a public health challenge in Indonesia. This disease is caused by excessive accumulation of body fat due to energy consumption that exceeds needs, unhealthy eating patterns, and low physical activity <sup>2</sup>. In addition, obesity in women has complex health impacts,

including hormonal disorders, insulin resistance, polycystic ovary syndrome (PCOS), and decreased fertility <sup>3,4</sup>. This disorder not only affects reproductive health, but also increases the risk of cardiovascular disease, diabetes, and cancer <sup>5</sup>.

Lifestyle factors, such as consumption of fast food high in calories, fat, sugar and salt, as well as increasingly passive living habits due to urbanization, contribute to worsening this situation <sup>6</sup>. Obesity management strategies often involve lifestyle changes, pharmacotherapy, and metabolic surgical interventions. However, public awareness of the risks of obesity and the importance of health management is still low <sup>5</sup>.

Community service activities aim to provide education, prevention, and support in overcoming obesity in local communities. This approach includes promoting a healthy lifestyle through a balanced diet and increasing physical activity. This activity aims to increase awareness and knowledge about the importance of a healthy diet and a healthy lifestyle.

## 2. METHOD

This community service activity is an educational activity in the form of counseling on obesity prevention by implementing a healthy diet and healthy lifestyle. The purpose of this activity is so that the community can understand how to combat and prevent obesity, as well as know healthy eating patterns and do physical activities such as regular exercise. The implementation of this community service was carried out on Monday, December 9, 2024, which was attended by 25 participants in Pucangan Village, Montong District.

The counseling was conducted interactively, involving a Q&A session between participants and speakers. The material presented is related to healthy lifestyles, especially the handling and prevention of obesity in women of childbearing age. Data collection is carried out by means of a health examination, namely measuring body weight, height and calculating BMI. Pre-test and post-test are also carried out to determine the need for this activity.

## 3. RESULTS AND DISCUSSION

Before conducting counseling, participants were asked to undergo a health check that included checking their weight and height. The results of the health check showed that the body mass index (BMI) of participants with overweight was 11 people, participants with normal BMI results were 10 people, and 4 people showed thin results (underweight). Unhealthy eating patterns, such as high calorie, fat, and sugar consumption, contribute to an increased risk of obesity in women, especially in reproductive age <sup>7,8,9</sup>. The results of the questionnaire showed that 16 people did not do physical activity for 30 minutes every day. This is supported by research that says that exercise plays an important role in preventing and managing obesity, because physical activity increases energy expenditure, improves metabolism, and helps reduce body fat, including visceral fat. In addition, regular exercise can also reduce the risk of obesity-related diseases such as type 2 diabetes and hypertension <sup>5,7</sup>.

The head of Pucangan village, Montong sub-district, provides a jogging trip area for villagers. The area is used to prevent obesity in Pucangan village. This is supported by research by Ijsbrandy et

al, that providing education to the community about the benefits of exercise and providing ongoing support, such as training and monitoring, can increase the success of the program <sup>10, 11</sup>.

The results of the questionnaire showed that 18 respondents preferred fried food to boiled food. Fried food contributes significantly to the increased risk of obesity compared to boiled food because fried food has higher calories, more attractive texture and taste, so it encourages more consumption, and has an unhealthy diet <sup>12,13,14</sup>. There were 14 respondents who did not pay attention to the portion of food they would consume. Obese women tend to consume high-calorie foods, including oily and fried foods, without considering portion control. This can increase the risk of excessive calorie intake, one of the factors that causes obesity <sup>14,15,16</sup>.

After the health check-up, the participants gathered to fill out a questionnaire before the counseling material was given. The purpose of filling out the questionnaire was to measure the extent of their understanding of obesity and the healthy lifestyle that has been implemented. After filling out the questionnaire, it was continued with the provision of counseling materials explaining obesity, causes, impacts, prevention, healthy lifestyles, and safe foods for obesity. The next event was filling out the questionnaire after the counseling was given, to find out the understanding of the material that had been presented by the speaker.



Figure 3.1 Registration and checking of Body Mass Index (BMI).



Figure 3.2 Brief evaluation process (pre-test)





Figure 3.3 Group photo of the community and village officials.

## 4. CONCLUSION

Initial health checks showed that overweight, high-calorie diet, and lack of physical activity were the main challenges in preventing obesity in Pucangan. The jogging area provided by the village and education about healthy lifestyle through counseling are strategic steps to increase community awareness and behavior in preventing obesity. Education about healthy diet, exercise, and portion control are very important to reduce the risk of obesity and related diseases.

## 5. ACKNOWLEDGMENTS

Thank you to the participants, village heads, and village officials who took the time to attend this activity.

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