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Health Education for Elderly to Prevent Obesity at the Yayasan Pondok Lansia Bahagia Surabaya

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A B S T R A C T

Aging is a degenerative process that leads to a decline in physiological functions and increases the risk of noncommunicable diseases. Obesity is particularly prevalent among individuals aged 55 to 64 years, with contributing factors including diet, physical activity, and lifestyle. This article reports the results of a community service program aimed at educating the elderly on healthy living to prevent obesity at Yayasan Pondok Lansia Bahagia Surabaya. The program was conducted on Sunday, March 10, 2024, from 08:00 to 10:30 AM at the foundation's secretariat. Target participants included 25 elderly and pre-elderly women who regularly attend the foundation's Islamic study groups and exercise sessions. The activities utilized counseling and practical methods, including health education and group gymnastics. Participants engaged enthusiastically, noting the material was both interesting and beneficial for their health. Evaluation through pre-test and post-test assessments demonstrated a measurable increase in participants' knowledge after the program. This community service effectively enhanced awareness of healthy behaviors and obesity prevention among the elderly. The findings suggest that combining educational sessions with practical exercise can improve knowledge retention and encourage the application of healthy lifestyle practices. The program also highlights the importance of continuous community-based interventions in supporting elderly health and promoting sustainable habits to prevent obesity.

INTRODUCTION

Aging is a degenerative process that causes physiological processes to decline with age, and this can result in non-communicable diseases. Unhealthy eating habits from the past may also have an impact on the health of the elderly by increasing their susceptibility to various diseases today. According to Nugroho, the national prevalence of central obesity for the elderly is 18.8%, with the age groups 55-64 years (23.1%), 65-74 years (18.9%), and over 75 years (15.8%) having the highest rates. The age range of 55 to 64 years has the highest frequency of obesity. Obesity is caused by a number of factors, including nutrition, physical activity, and lifestyle. Their consumption patterns of eating more fast food, which is usually high in fat and sugar but low in fiber, are influenced by more modern lifestyle changes. Increased body fat increases the risk of degenerative diseases such as hypertension, coronary heart disease, and diabetes mellitus by causing respiratory problems and endocrine dysfunction. Heavy financial burdens and poor quality of life will be affected by this condition (Nugroho, 2019).

The disease known as obesity is characterized by the accumulation of extra fat in the body. One of the known risk factors for the development of several degenerative diseases, including heart disease and

stroke, is obesity. An alarming percentage of the elderly female population, including 16%, is obese, according to a health check report from the elderly health post in the Jagir Health Center working area in 2015 (Sofa, 2018). Body Mass Index (BMI) is body weight in kilograms divided by height in meters (kg/m^2) which is a basic index of weight to height used to categorize overweight and obesity (Herdiani, 2021). Due to the many dangers that can affect the older population, obesity in this age range is a serious health problem (Sari, 2024). Increased energy from the availability of more beneficial and energy-dense foods is a major factor contributing to obesity. A person's capacity to achieve nutritional balance is greatly influenced by diet and other food-related factors (Gufraan, 2023).

The purpose of this article is to convey the results of community service regarding education for healthy elderly to prevent from obesity at the Yayasan Pondok Lansia Bahagia Surabaya.

METHOD

This community service activity was carried out on Sunday, March 10, 2024, which was held at the Secretariat of the Yayasan Pondok Lansia Bahagia Surabaya. The event was held from 08.00 to 10.30. The target participants in this activity were mothers who were members of the routine Islamic study and exercise of the Yayasan Pondok Lansia Bahagia Surabaya, who were entering the elderly or pre-elderly age. The activities carried out used counseling and practice methods in the form of gymnastics. The procedure for this community service activity is divided into three stages, namely the pre-activity stage, the community service activity stage, and the post-activity stage. The pre-activity stage carried out preparations including partner surveys, location surveys, problem surveys, document preparation, material preparation, and facility preparation. At the community service activity stage, it was opened with an opening, reading of the holy verses of the Qur'an, remarks by the head of the foundation, distribution of pre-test question sheets, pre-test question work sessions, material presentations, healthy gymnastics for the elderly, question and answer sessions, distribution of post-test question sheets, post-test question work sessions, and ended with a closing by the committee. Meanwhile, the post-activity stage is to evaluate the event, increase participant knowledge, and compile a final report and document for community service. The community service partner in this case, Yayasan Pondok Lansia Bahagia Surabaya, was involved in helping the author to gather participants, provide input to the author regarding the materials needed by participants, and provide facilities in the form of facilities and infrastructure. To evaluate this community service activity, the author uses two indicators that are subjective and objective. Subjective assessment is carried out based on the enthusiasm of participants in participating in the activity, asking questions, and sharing their experiences. While objective assessment is carried out based on the results of the comparison of pre-test and post-test questions. The results of the pre-test and post-test are analyzed descriptively by calculating the average value of all participants between the pre-test and post-test values.

RESULT AND DISCUSSION

This activity was carried out according to the planned schedule, namely on Sunday, March 10, 2024, which was attended by 25 mothers who had entered old age, or who had not yet entered old age (pre-elderly). The participants who attended were members of the Koran reading and routine exercise managed by the Yayasan Pondok Lansia Bahagia Surabaya. Participants in this activity had various backgrounds, including retired employees to housewives. The activity took place solemnly from beginning to end, as in



Figure 1. Event's documentation

The material presented in this community service activity includes the definition of obesity, causes of obesity, risk factors for obesity, and how to prevent obesity. In the exercise session, the author also distributed resistance bands and provided tutorials so that participants could apply the exercises at home. The exercises in the exercises provided were light to moderate intensity exercises, and were adjusted to the physical abilities of each participant. Among the exercises practiced were upper limb, lower limb, and spine muscle strengthening exercises. Participants can practice these exercises at home 3 to 5 times a week. Participants can play the exercise videos presented by the author on the author's YouTube channel at <https://youtu.be/mX93udzTy8M?si=jZGnEtKi2RhJ15rf>. The purpose of this exercise is to improve fitness, increase muscle strength, and as an effort to prevent obesity.

The author evaluated this community service activity subjectively and objectively. The participants participated in this activity with high enthusiasm, because according to them the topic presented was very interesting and beneficial for health. Based on the evaluation results, participants experienced an increase in knowledge between before and after receiving counseling material on Healthy Elderly Education to Prevent from Obesity at the Yayasan Pondok Lansia Bahagia Surabaya, as in Table 1.

Table 1. Pre-test and post-test scores of participants

Participant's score	Pre-test	Post-test
Mean score	74	82
Lowest score	60	70
Higherscore	70	90

This results in line with the community service activities that have been published in the previous article. The Geriatric Community at the Pengayoman Nursing Home in Semarang City and the management of the Orphanage are the targets of this program. The teaching materials include nutritional issues, risks, prevention, and balanced nutrition. Sixteen elderly residents participated in this activity and completed the pre- and post-test. There was an increase in participant understanding of most of the questions, based on the study of participants before and after the test. The high interest of participants and the many questions asked by older participants indicate that this educational effort has gone well and been successful (Tursinawati, 2023). Another article regarding education in the woodball sports community, the elderly must receive health checks and balanced nutrition education. The elderly have a higher level of knowledge about balanced nutrition, as shown by the increase in the percentage of knowledge about the goals of 41.4% in this area (Yunieswati, 2023).

This result is also supported by another article regarding that community service has succeeded in increasing the understanding of the elderly about obesity and osteoarthritis based on changes in pre-test and post-test scores, with an increase in the number of correct answers of 47.6%, illustrating the effectiveness of community-based education. Education about Obesity and Osteoarthritis in the Geriatric Community at Panti Wreda Pengayoman Semarang concluded the high enthusiasm of the elderly during the counseling. In conclusion, the effectiveness of this community service is an indication of the theory of health behavior change in action—a theory that empowers older adults to embrace healthier lifestyle choices. By increasing the awareness and attitudes of the elderly population, this community program helps to highlight the importance of preventive nutrition among this age group (Tatius, 2024).

CONCLUSION

Community service activities have been carried out well. Participants' knowledge has increased after receiving educational materials based on the evaluation of the average pre-test and post-test scores. The author hopes that with this community service, participants can practice the knowledge and practice the exercises they have received in their daily lives. So that it can reduce the incidence of obesity in the elderly and prevent other metabolic diseases such as diabetes mellitus, hypertension, and knee osteoarthritis.

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