

COMMUNITY SERVICE DATA

PkM Title	: Elderly Exercise Activities to Improve Quality of Life Healthy
Chairman of PkM	: Nelly Br Barus, S.Kep., Ners., M.Kep
E-mail	: nellybrbarus2012@gmail.com
PkM member	: 1. Jismer Panjaitan, S.Kep., Ners., M.Kep 2. Natalina Lasma Beria Rumapea, S.Kep., Ners., M.Kep
Organizer	: STIKes Mitra Husada Medan
Activity Categories	: Community service
PkM Proposed Year	: 2024
Year of Activity	: 2024
Activity Location	: Kabanjahe Community Health Center
Source of PkM Funds	: STIKes Arta Kabanjahe

SUMMARY

This service report describes the implementation of elderly exercise activities which aim to improve the quality of healthy life for the elderly. The background to this activity is based on the increasing number of elderly people in Indonesia who are vulnerable to various health problems. Elderly exercise was chosen as an intervention because of its significant benefits in maintaining the physical and mental health of the elderly. This exercise activity is carried out regularly with the guidance of an experienced instructor. Each exercise session includes a warm-up, core movements and cool-down, accompanied by health education for participants. The results of the activities showed significant improvements in the physical and mental health of the participants, including reduced blood pressure and blood sugar levels, as well as increased social well-being through interactions between participants. The facilities and infrastructure used include a large gymnasium, assistive equipment such as mats and dumbbells, as well as adequate sanitation facilities. The conclusion of this report is that elderly exercise activities have succeeded in improving the overall quality of life of the participants. Recommendations are made that this activity can be made a routine program in elderly communities, with support from the local government and community health centers, to ensure sustainability and long-term benefits.

Key Words: Elderly Exercise, Health

JOURNAL OF COMMUNITY SERVICE
JCoS

I. Introduction

1. Background

Indonesia is currently facing the phenomenon of an increasing number of elderly people. Based on data from the Central Statistics Agency (BPS), the number of elderly people continues to increase every year. In 2020, the proportion of elderly people in Indonesia will reach 10% of the total population, and this figure is expected to continue to increase as life expectancy increases. As age increases, elderly people are vulnerable to various health problems, both physical and mental. Decreased physical activity, coupled with the natural aging process, often causes various degenerative diseases such as hypertension, diabetes and osteoporosis. Elderly exercise is an effective form of intervention in maintaining the physical and mental health of the elderly. This exercise is specially designed with movements adapted to the physical condition of the elderly, so it is safe and can be done regularly. Apart from providing physical benefits, elderly exercise also plays an important role in improving mental and social well-being, because it is carried out in groups, which allows social interaction and reduces the feeling of loneliness that is often experienced by the elderly.

2. Formulation of the problem

- What is the influence of elderly exercise activities on improving the quality of healthy life?
- What benefits do seniors feel after participating in regular exercise activities?
- How to increase elderly participation in gymnastics activities?

3. Activity Objectives

- Improving the quality of healthy life in the elderly through regular exercise activities.

- Increasing the elderly's understanding of the importance of physical activity in maintaining health.
- Creating an active elderly community that supports each other in maintaining health.

II. Theoretical basis

1. Elderly Health Theory

The elderly are an age group that experiences a natural decline in physiological function. According to the theory of biological aging, the aging process is characterized by a decrease in the function of the body's organs and an increased risk of disease. Physical activity is one effective way to slow down the aging process. Research shows that physically active seniors tend to have a better quality of life compared to those who are inactive.

2. Benefits of Gymnastics for the Elderly

- **Physical Health:** Elderly exercise can increase muscle strength, flexibility and body balance. This is very important to prevent falls, which is one of the main causes of injury in the elderly.
- **Mental Health:** Exercise can also help reduce symptoms of depression and anxiety that are often experienced by the elderly. Physical activity stimulates the release of endorphins, which can improve mood and provide feelings of happiness.
- **Social Health:** Exercise activities carried out in groups provide an opportunity for seniors to socialize, which is important for maintaining mental well-being and preventing social isolation.

3. Physical Activity Theory and Quality of Life

Physical activity has an important role in improving the quality of life of the elderly. According to physical activity theory, individuals who regularly engage in physical activity have a lower risk of chronic disease and have better levels of mental health. Physical activity is also closely related to increasing the body's functional capacity, which allows elderly people to remain independent in carrying out daily activities.

III. Implementation Method

1. Activity Preparation

- **Needs Survey:** An initial survey was conducted to identify the number of elderly people who have the potential to participate in exercise activities and their special needs.
- **Coordination with Related Parties:** Involve related parties such as community health centers, village/sub-district governments, and elderly communities in planning activities.
- **Schedule Preparation:** Gymnastics activities are scheduled regularly, for example three times a week, with a duration of around 30-45 minutes per session.
- **Instructor Recruitment:** Exercise instructors who have experience and knowledge of the needs of seniors are selected to lead activities.

2. Implementation of Activities

Gymnastics activities are carried out in a fairly large hall or field, taking into account the comfort and safety of the participants. Each session starts with a warm-up, continues with core movements, and ends with a cool-down. During the activity, the instructor provides clear guidance and ensures that each participant can follow the movements correctly.

3. Monitoring and Evaluation

To ensure the success of the program, regular monitoring and evaluation is carried out. Participants were asked to complete a questionnaire evaluating the impact of the activity on their physical and mental health. In addition, blood pressure, blood sugar levels and body weight are measured periodically to see the physical changes that occur.

IV. Results and Discussion

1. Activity Results

From the results of the exercise activities that have been carried out, there has been a significant improvement in the physical and mental health of the participants. Most participants reported that they felt fitter and had more energy after taking part in regular exercise. In addition, the results of health measurements showed a decrease in blood pressure and blood sugar levels in several participants.

2. Discussion

This elderly exercise activity succeeded in improving the overall quality of life of the participants. Apart from the physical benefits, this activity also has a positive impact on the mental health and social well-being of the elderly. However, the challenge faced is how to maintain consistent participation of the elderly in this activity, considering that some of them have physical limitations or face problems in transportation.

V. Facilities and Infrastructure

1. Means

- A room or hall that is large enough and safe to use as a gym.
- Assistive equipment such as mats, light dumbbells and chairs.
- Sound system to play accompanying music for exercise.

2. Infrastructure

- Adequate sanitation facilities, such as toilets that are easily accessible to the elderly.
- Good ventilation in the gym to ensure smooth air circulation.
- Seating for resting before and after exercise.

VI. Budget

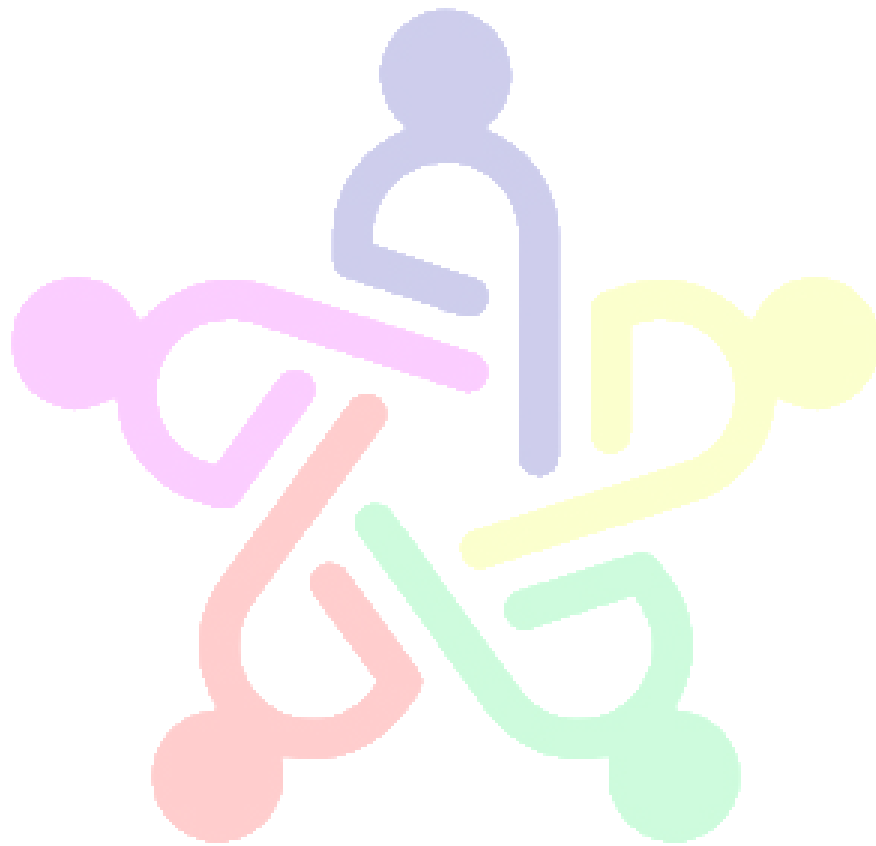
1. **Gymnastics Instructor:**IDR 500,000.
2. **Gymnastics Equipment (Mat, Dumbbells, etc.):**IDR 1,000,000 (Rent).
3. **Participant Consumption:**IDR 500,000 (Mineral water, healthy snacks).
4. **Documentation:**IDR 200,000.

Total cost:IDR 2,200,000

VII. Conclusions and Recommendations

This elderly exercise activity has shown positive results in improving the quality of life of the elderly. Regular exercise has been proven to improve the physical, mental and social health of the elderly. To maintain the sustainability of this program, it is recommended that this exercise activity be made a routine program in elderly communities, with support from the local government and community health centers.

In addition, efforts need to be made to involve more elderly people, especially those who are not yet active in physical activities, by providing education about the benefits of exercise and overcoming the obstacles they may face. With continued support, it is hoped that this activity can become part of a healthy lifestyle for seniors in the community.



JOURNAL OF COMMUNITY SERVICE
JCoS

Bibliography

1. World Health Organization (WHO). (2020). Physical Activity and Older Adults. Retrieved from <https://www.who.int/>
2. American Heart Association. (2019). Exercise and Physical Activity in Older Adults. Retrieved from <https://www.heart.org/>
3. Biddle, S. J. H., & Mutrie, N. (2008). Psychology of Physical Activity: Determinants, Well-being, and Interventions. Routledge.
4. Murrock, C. J., & Gary, F. A. (2010). Cultural Influences on Physical Activity in Older Adults: A Review of the Literature. *Journal of Gerontological Nursing*, 36(2), 14-23.
5. United Nations Department of Economic and Social Affairs. (2019). World Population Aging 2019. Retrieved from <https://www.un.org/>

JOURNAL OF COMMUNITY SERVICE
JCoS

