

## Diabetes Gymnastics Training For The Elderly

Trisna Vitaliati<sup>1,\*</sup>, Ahmad Ali Basri<sup>1</sup>, Irwina Angelia Silvanasari<sup>1</sup>, Nurul Maurida<sup>1</sup>

<sup>1</sup>Community Nursing Departement, Universitas dr Soebandi, Jember, Indonesia

\*Corresponding Author; E-mail: [trisna@uds.ac.id](mailto:trisna@uds.ac.id)

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### Abstract

Diabetes gymnastics training for the elderly is a form of exercise specifically designed for the elderly with diabetes mellitus. This type of exercise aims to improve physical fitness, balance, and overall health while regulating blood glucose levels. This community service activity in the form of diabetes gymnastics training aims to increase the knowledge and skills of the elderly about diabetes gymnastics. The implementation method begins by providing education about diabetic gymnastics, followed by gymnastics together. The time for the implementation of the activity in June 2023 is located at the Jenggawah Village Office. The participants who attended this activity were 30 elderly people with diabetes mellitus. In this activity, participants followed closely how the instructor provided diabetes gymnastics movements. The results obtained during the implementation of this diabetes exercise are that the elderly who suffer from diabetes mellitus are able to carry out gymnastics actions according to the training so that the elderly look fit, more excited, and blood glucose levels become more controlled.

**Keywords:** Diabetes Mellitus, Elderly, Exercise

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### Introduction

In recent years, the number of elderly people suffering from diabetes mellitus in Indonesia and East Java has increased significantly (Milita et al., 2021). Often as we get older, a person will be more susceptible to a disease, one of which is diabetes mellitus. In addition to aging factors, there are also other factors such as the consumption of fatty foods, nutritional status based on BMI, and the lack of blood sugar level checks contribute to the increase in prevalence. This shows that diabetes mellitus in the elderly is a problem that requires serious attention and treatment (Hasina et al., 2022).

Interventions carried out by health workers, such as the use of Posbindu and health education and promotion, are very important in the prevention and control of diabetes mellitus in the elderly. One of the effective interventions in managing diabetes mellitus is to do diabetic gymnastics. In some studies, diabetic gymnastics has shown significant results in lowering blood sugar levels and can help control the disease effectively (Risnasari et al., 2022).

Diabetes mellitus exercises for the elderly have several significant benefits in reducing blood glucose levels and improving physical health (Rahayuningrum & Yenni, 2018). Diabetes exercises are designed according to age and physical status and are part of the treatment of

diabetes mellitus. The benefits of diabetic gymnastics are very important, and at least 2 times a week do this gymnastics exercise so that the body always feels fresh and can also restore blood sugar levels within normal limits (Anam et al., 2020). Diabetic gymnastics can be done effectively and efficiently, at no cost, and can be done at home. This makes diabetes gymnastics one of the non-pharmacological techniques that is very easy to do and very efficient in controlling diabetes mellitus.

This community service activity aims to achieve independence in the care of the elderly with diabetes mellitus so as to reduce the rate of illness in the elderly. Diabetic gymnastics for the elderly is considered effective in smoothing blood circulation in patients so as to reduce complications that arise. This service is carried out by providing counseling and assistance in diabetic gymnastics.

### **Identification of Problems**

The problem of diabetes mellitus in the elderly is one of the significant health challenges. Elderly people with diabetes mellitus need treatment for the rest of their lives. So in this case, it is necessary to improve the behavior of the elderly in their ability to manage their disease and prevent complications, namely by regulating blood glucose levels in the normal range. One of the self-care methods that can be done is to regularly do diabetic exercises. Diabetic gymnastics in the elderly has several significant benefits in reducing blood glucose levels and improving quality of life.

### **Implementation Methodology**

This community service activity was carried out in June 2023 at the Jenggawah Village Office, which is one of the villages located in the Jenggawah Health Center Work Area. The elderly with diabetes mellitus who attended this event amounted to 30 people. The implementation of this diabetes gymnastics training began by providing education related to diabetic gymnastics, followed by demonstrations and simulations inviting the elderly to practice gymnastics together.

## Results and Discussion

The results of the activity were shared by all elderly people with diabetes mellitus to participate in the training in an orderly and active manner. Health education and training about diabetes mellitus gymnastics are carried out so that the elderly know and are able to do diabetes gymnastics. In this training, they are also taught and practiced directly how to do diabetic gymnastics correctly using diabetic gymnastics steps consisting of warming, core and cooling. According to the participants, the implementation of diabetes gymnastics is very beneficial because it can help the process of changing blood glucose levels for people with Diabetes Mellitus in controlling or lowering blood glucose levels. This can be one of the alternative interventions that can be carried out by the elderly independently as part of the management of their diseases.

Diabetic gymnastics does not only function to burn excessive calories in the body, because diabetic gymnastics can also control blood sugar levels because when we do diabetic gymnastics, the cells in the muscles will work harder so of course they will need more sugar and oxygen levels to be burned into energy (Ginanjar et al., 2022). So diabetes gymnastics is useful in helping insulin work because later blood sugar will be channeled through muscle cells which are then converted into energy for our body so that this causes sugar levels in the body to decrease. Overall, diabetes gymnastics has many benefits, including: controlling blood sugar, inhibiting cardiovascular disease, helping weight loss, can provide psychological benefits, reduce drug use, prevent complications (Aryani & Kusumawati, 2018).



Figure 1. Image display of activities

## Conclusion

Diabetic gymnastics training for the elderly is a valuable tool for maintaining physical fitness, managing diabetes, and improving overall health. It is important to tailor the exercise to the individual's age and physical fitness level to ensure safety and effectiveness.

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