

Risk Prevention Training of Diabetic Foot Ulcer (Buerger Allen Exercise) in Family and DM Patients

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Abstract

Diabetic foot ulcer increase year by year. therefore prevention is prioritized before complications such as diabetic foot ulcers occur. Many studies have been conducted related to the prevention of diabetic foot ulcers with Buerger Allen exercise which has a significant impact on improving peripheral circulation. The activity aimed to socialize the prevention of diabetic foot ulcers with the Buerger Allen exercise. This activity was carried out in March 2021 in collaboration with the Public Health Center of Sungai Raya District a health service that oversees the location of the activity. The target population in this activity are those who have a history of diabetes mellitus or diabetic foot ulcers or have a family with diabetic foot ulcers. The participants were given knowledge about preventing diabetic foot ulcers utilizing the Buerger Allen exercise

Keywords: Diabetic Foot Ulcer, Buerger Allen exercise, Ankle Brachial index

INTRODUCTION

Diabetic foot ulcers are complications that occur in DM patients, where the main cause is impaired peripheral perfusion in the legs caused by obstruction of blood flow in the veins which obstructs venous return. Prevention and management to improve peripheral circulation can be done by doing active exercises (Buerger Allen Exercise). Previous studies have shown results related to the effectiveness of Buerger Allen Exercise in improving peripheral circulation as evidenced by an increase in the ankle Brachial index (ABI) in patients with type 2 DM.

Buerger Allen Exercise is an active movement action in the plantar area by applying the force of gravity to help increase arterial and venous blood flow thereby increasing the vascularity of blood vessels in the tissue. Research related to the effectiveness of the Buerger Allen Exercise has been carried out, so this action is highly recommended to be carried out by DM patients to prevent and improve peripheral circulation (Bhuvaneshwari & Tamilselvi, 2018; Chain et al., 2019; Jannaim et al., 2018; Pebrianti, 2017; Salam & Laili, 2020; Syah et al., 2021).

METHOD

The Kubu Raya Regency area reported 2,249 cases of DM patients (Risksedas, 2018). One of the areas of Kubu Raya Regency, namely Sungai Ambangah Village, is one of the villages located in the Sungai Raya District, Kubu Raya Regency. This village is from the city of Pontianak is about 17.7 km. In this village, there are only health facilities in the form of one sub-health center and one polindes or poskesdes. In recent years it was reported by the local community that there were many cases of DM patients and 5 people had experienced complications of DM in the form of diabetic foot ulcers.

The implementation of this activity was held on March 10, 2021 at the Sungai Ambangah Village Head Office Hall, the activity could run smoothly even though it was carried out during the Covid 19 pandemic, of course, while maintaining the Health protocol, with all participants washing their hands before entering the Sungai Ambangah Village Office Hall, And everyone must wear a mask. The activity was opened by the Village Head of Sungai Ambangah and then continued by the service team providing training on preventing the risk of diabetic foot ulcers to all participants.

RESULTS

The activity lasted approximately 120 minutes, with high enthusiasm from the community. After the team explained the prevention of diabetic foot ulcers with the Buerger Allen Exercise. After that, a question and answer session was opened and closed with an assessment of the participants, where 90% of the participants were able to demonstrate the Buerger Allen Exercise correctly.

DISCUSSION

The activity went smoothly, participants were given material related to diabetes and its complications, then also presented several ways to prevent complications that would occur such as diabetic foot ulcers. After the participants understood the concept of diabetes and its complications, they were taught one way to prevent diabetic foot ulcers with the Buerger Allen exercise. The participants were enthusiastic and willing to try the movements that were taught. Participants are committed to being able to do Buerger Allen exercises to prevent complications of diabetic foot ulcers.

CONCLUSIONS AND RECOMMENDATIONS

Based on the presentation of all activities to the residents of Sungai Ambangah, it can be concluded that a number of the output targets that have been achieved include: (1) There was good cooperation from the organizers and partners, (2) Participants were able to actively participate (3) Participants 90% were able to understand and properly demonstrate the Buerger Allen Exercise.

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