

Utilization of Herbs as Therapy in the Treatment of Diabetic Foot Ulcers

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ABSTRACT

The number of diabetic foot ulcer (DFU) sufferers increases from year to year. Many studies have been conducted to examine the appropriate therapy to overcome DFU. One type of therapy that has been widely studied is related to the use of herbal products in treating DFU. So that currently there are many scientific articles that inform about the efficacy of herbal products in accelerating wound healing both acute and chronic. The activity aimed to socialize the use of herbal products in the treatment of foot ulceration. This activity was carried out in February 2022 in collaboration with the Public Health Center of Sungai Raya District as 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. Participants who participated were given health education about the management of diabetic foot wounds and the use of herbal products in the treatment of diabetic foot wounds.

Keywords: Herbs therapy, Therapy Herbs for Diabetic Foot Ulcer, Herbs and foot ulceration

INTRODUCTION

Foot ulceration is common complications which decrease quality of life diabetes mellitus patients. (Pratama and Phutthikhamin, 2017). In Indonesia, the prevalence of foot ulceration is around 15% and the incidence in DM patients is 29 times (Tri Hastuti, 2008). Medical record data at the Provincial Hospital of West Borneo in 2019 showed that more than 200 DM patients having foot ulceration. DFU impact to the quality of life, and increases morbidity and mortality (Assaad-Khalil et al., 2015). Previous studies have shown a 15-46-fold higher risk of lower limb amputation (ALL) in DM patients than the general population (Nehring et al., 2014). In addition, amputation increases the risk of patient mortality, mortality in the first month after amputation is 8.5% of patients, and over a five-year period it reaches 39-68% (Pratama et al., 2021).

The nurse's role in diabetic foot care is very important (Seaman, 2005), advice on appropriate therapy is needed to improve of knowledge DFU patients. (Bielby, 2006). Significantly, one of appropriate therapy is utilization of herb products to improve wound healing process. Many proved that honey keeps moist of wound tissue, absorbs exudate and improves of cell epitelization.

There are several studies explained of beneficial herbs therapi on diabetic foot ulceration (Ahmadli, Farshadpour, Kaffash, & Mohammadbeigi, 2019), Date and Honey mixture compared with hiney alone for DFU healing (Ogai et al., 2021), Topical honey for the treatment of diabetic foot ulcer: A systematic review (Kateel, Adhikari, Augustine, & Ullal, 2016), etc. The activity aimed to socialize the use of herbal products in the treatment of foot ulceration.

METHOD

Sungai Ambangah is a small villages in West Borneo Province which needs attention to decrease developof DFU complication. It was reported that in 2016 there were two persons who died from sepsis from diabetic foot infections or ulcers and there were approximately 60 residents who had DM. This village far from health services and it is one of cause of delays in handling DFU treatment. Furthermore, the lack of knowledge related diabetic foot care also cause develop DFU to other complication. In this case, people need to be given health education to protect them or their family from severe of DFU complication. Education about herb

therapies for diabetic foot care is one appropriate intervention that people can apply at their home.

This activity was carried out in February 2022 in collaboration with the Public Health Center of Sungai Raya District as a health service that oversees the location of the activity. After obtaining a permit for the implementation of the activity, the team briefly contact the community which helped by village apparatus. Basically, not only those with DM who follow this program, but healthy people will also be included as secondary targets who can later be used as cadres in follow-up activities.

RESULTS

The program was attended by 30 participants. The Health Education about Herb therapies can be absorbed by the participants and has the potential to be applied directly to families. Demographic data of participants' can be seen in the following table.

Table 1. Demographic Data of Participants (n=30)

	n (30)	%
Male	10	33
Female	20	67
Junior High School	5	16.7
Senior High School	25	83.3

Table-1 showed that the participants is dominated by female with an average senior high school education level.

Table 2. Participants Experienced in apply Herb therapies

Experienced	Frequency	
	n	%
Ever	22	73.3
Never	8	26.7

Table 2 shows that majority of participants have had experience in applying herb therapies for wound care

Table 3. Various of Herbs and Traditional Therapy for Diabetic Wound care

No.	Kinds of Herbs Therapy	Function
1	Honey	Keeps tissue moisturizing, Absorbant, Antiseptic, Promote cell epitelization
2	Turmeric	Decrease bacterial colonization
3	Salt Water	Antiseptic, Decrease bacterial colonization
4	Gamat	Promote wound healing process

DISCUSSION

At the beginning of the activity, participants were educated about diabetes mellitus, diabetic wound care and herbs therapy for wound care. When the process of delivering the material, participants were very enthusiastic and cooperative, and they wanted the activity to be carried out as often as possible, because they thought that this activity was to increase their knowledge about diseases that they considered hereditary. The results of the program show that most of the participant really want to apply other kinds of herb therapy that they never did before. After participating of the program, the participants will commit to implement all of knowledge that they have obtained. Participants are provided with a flyer about diabetic wound care and herbs therapy.

CONCLUSIONS AND RECOMMENDATIONS

All participants have received a presentation about diabetic foot care, which can then be concluded that a number of output targets that have been achieved include: (1) active

participants during the implementation of activities, (2) Organizers and partners actively cooperate. (3) participants are able to understand and commitment to implement the herbs therapy properly. In addition, this activity continues to be carried out for all people in the stronghold, given the many cases of complications and amputations caused by the severity of the UKD.

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ATTACHMENT



Figure 1. Health Education