

# Patient Education for the Prevention of Diabetic Foot Wounds



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## Mini Review

Diabetes Mellitus is a metabolic disease with systemic and chronic complications, the incidence of which is growing. Among the complications commonly seen in diabetics are diabetic neuropathy and ischemia, the latter being the result of a peripheral artery disease. These complications, in combination with excessive pressure and infection, cause what is referred to as diabetic foot, which can lead to foot loss, with its accompanying psychological, physical, social and economic impacts [1,2] of our organs feet are the most vulnerable to injury, trauma and infection both in diabetics and in non-diabetics. However the foot is more easily injured in diabetics. In the presence of peripheral artery disease and visual impairment the loss of protective sensation in the feet and toes the reduction of blood flow to the feet and the appearance of cracking and drying due to moisture excessive sweating pose a risk to the feet [3].

The realization of the importance of foot care education for the prevention of foot problems in diabetics was long in coming [4]. By the 1970s, the role of education in treating diabetes had become commonly acknowledged [5]. Despite the inclusion of foot care education in general diabetes education many diabetics still failed to look after their feet so foot problems were a common occurrence [6]. The most important aim of diabetic foot care education is the prevention of potential injuries due to foot trauma [7]. There are many reasons for non traumatic amputations in diabetics but chief among them are the minor traumas that result in ulcerations and poor wound healing. Soft tissue injuries can be caused, for example, by the use of hot water bottles, walking barefoot, excessively short nails, foreign objects shoes, tight shoes or socks, and corns and bunions [8].

Because the hospital stay of individuals newly diagnosed with diabetes these days is brief, there is little time available for them to get needed diabetes education. Nurses have to squeeze foot care education into a program that covers the patient

monitoring his own blood glucose levels and other topics such as diet and exercise. In addition, they have to conduct this education while trying to get patients to understand how to deal with acute complications such as hyperglycemia, ketoacidosis and hypoglycemia [9]. Therefore, given all that must be addressed in the education provided, it is really quite difficult to stress self-care behavior revolving around foot care. All the different types of self-care required in diabetes must be practiced daily [10].

Pointed out that these kinds of practices, which require self-management skills, must be performed meticulously and rigorously suggested that, given the limited amount of time available to instructors providing diabetes education, foot care manuals are used in general diabetes education [11]. A multidisciplinary team approach is needed to solve diabetic foot problems. 50% of diabetes-related amputations could be prevented through patient education and early diagnosis-treatment. Treatment makes up a fundamental component of the education of the diabetic patient and is crucial to improving his or her quality of life [12]. It is extremely important for diabetics to receive education on foot care and diabetes in order to prevent the formation of foot wounds or to detect them early. The nurse who is a member of the diabetes team is the best person to plan protective care and to make sure that it is carried out.

The diabetes nurse should be able to recognize the complications that may occur in the feet of diabetic patients as well as whether self-care is being practiced sufficiently. He or she should be able to teach foot care behavior and monitor the individual's compliance at intervals that correspond to the level of risk he has of developing diabetic foot [13]. Foot care education should be provided individually and or with the family. If possible, the knowledge the patient has of foot care and how well he is able to take care of his feet should be checked at each visit. It is essential that the diabetic have learned sound foot care habits at the end of regularly provided education [14].

Structured and well organized education plays a vital role in protecting the feet. The goal is increasing motivation and skill. The patient is taught to recognize potential foot problems and what he must do about them. The education should be provided in multiple sessions over a period of time and a number of different methods should be used. It is critical to make sure that the patient understands what he is told that he is motivated and that he is sufficiently capable of taking care of himself [15].

### Conclusion

In conclusion, diabetic foot problems are preventable complications. Preventive behaviors much be instilled in the diabetic from the time he is diagnosed through regular monitoring and training. Patient education and getting the patient to learn how to take care of himself is extremely important in order to have him play an active role in the successful treatment and monitoring of the disease. Problem free foot care is cheaper than the treatment of diabetic foot problems.

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