

Health-deviation self-care for the prevention of diabetic foot ulcers: a cross-sectional study.

Schmidt S.^{1,2}, Mayer H.¹ Panfil E.-M.^{1,2}

¹Institute for Nursing Science, University Witten/Herdecke, Germany ²Hessian Institute for Nursing Research, Frankfurt/Main, Germany

Problem background: The life time risk for diabetics to develop a diabetic foot ulcer (DFU) is around 15%. Besides an early foot diagnostic and risk classification it is necessary to involve the affected people in the prevention themselves. Therefore people with diabetes have to learn and carry out adequate foot self-care. Currently, there is insufficient knowledge as to which self-care the patients carry out.

Objectives: The object of the study was the description of the foot related health-deviation self-care carried out by the patients and the analysis of illness related differences.

Method: Using a convenience sample, 269 people with type1 and type 2 diabetes were included in a cross-sectional study. Basis of participation was the informed consent. The data were collected with the new developed "Frankfurter Catalogue of Foot Self-Care - Prevention of the Diabetic Foot Syndrome" (FCFSP). The new instrument contains 19 self-care activities for the prevention of DFU in three dimension (test-retest-coefficient 0,63; Cronbach's alpha 0,84). Patients were separated into four risk groups based on self reported presence of risk factors according to the consensus of the International Working Group on the Diabetic Foot.

Results: The majority of patients were male (58,8%). On average the persons were 62 years of age (23-86 years) and had suffered from diabetes for 20 years (1-60 years). The ratio between diabetes type 2 to diabetes type 1 subjects in the study was 2:1. Patients with a history of foot ulceration participated in more education programs and perform the most adequate self-care in the domain „Professional assistance in foot care“ ($p > 0,001$). Between the risk groups exist no significant differences in the domains „Self-control of the feet“ and “Self-control of shoes and stockings”. Patients with more than three completed education programs practice more adequate self-care regarding "Self-control of the feet".

Conclusion: Findings of the study point to specific problem areas and problem groups in the performance of adequate self-care. Patients at risk for the development of a diabetic foot ulcer do not perform an adequate self-care. There are self-care deficits regarding self-control of feet, shoes and stockings. Based on the data it seems to be that more than two educational programs are needed to perform an adequate self-care.