Feelings of powerlessness in individuals with either venous or diabetic foot ulcers

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Abstract  Aim: To assess feelings of powerlessness in patients with either venous or diabetic foot ulcers.

Methods: This was an exploratory, descriptive, cross-sectional study conducted from May 2010 to August 2012. Two hundred adult patients with either venous leg ulcers (N = 100) or diabetic foot ulcers (N = 100) were consecutively recruited from an outpatient wound care clinic of a university hospital in the city of São Paulo (Brazil). Eligibility criteria included patients with type 1 and 2 diabetes and foot ulcers, and those with venous leg ulcers and ankle-arm index between 0.8 and 1.0. Patients unable to respond to a questionnaire due to physical or cognitive deficit were excluded. Two instruments were used for data collection: a questionnaire assessing sociodemographic and clinical characteristics, and the Powerlessness Assessment Tool (PAT) for adult patients.

Results: Most patients were women, aged 60–70 years, and smokers. Fifty-seven patients (57%) with diabetes had had foot ulcers for 3–6 years and 55 (55%) patients had had venous ulcers for 7–10 years. Wound odor and exudate were present in most ulcers. The total PAT score was significantly higher (P = 0.002) for patients with foot ulcers (mean, 57.10) than for patients with venous ulcers (mean, 55.12). The highest mean scores for patients with venous and diabetic foot ulcers were 58.09 and 58.10, respectively, on the "self-perception of decision-making capacity" domain.

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Introduction

Problems in the lower limbs represent one of the most important chronic complications in individuals with vascular disease and diabetes mellitus. In industrialized countries, ulceration is the most common cause of non-traumatic lower-limb amputations, and has been shown to be a great public health problem worldwide. Therefore, due to the high incidence, prevalence and complications, the socioeconomic impact on the quality of life of these individuals is considered important. It is known that the majority of leg ulcers (60–70%) result from vascular causes [1,2]. The prevalence of venous ulcers is from 0.6 to 3.6% in the general population [1–3].

Foot ulcers and amputations are the main consequences associated with morbidity among persons with diabetes mellitus [4], and it is estimated that 15% of diabetic patients are at risk for foot ulceration [2]. Studies have shown that the annual population-based incidence may range between 1% and 4.1% and prevalence from 4% to 10% [5].

Ulcers cause pain, alteration in sleep patterns and loss of functional mobility, affecting the individuals' capacity to work and compromising their daily life and leisure activities. Associated with these factors, expenditure on treatment has a negative impact on the quality of life of persons and their family members [6,7]. All of these aspects make patients feel frustrated, dissatisfied, insecure, fearful, powerless and out of control. Individuals with wounds feel incapable of performing daily activities, and frequently consider themselves incapable of and impotent to play their role in society [8–10].

The feeling of powerlessness may be seen as a loss; the loss of control of running one’s own life [11]. NANDA-I defined the feeling of powerlessness as "the perception that one’s own action would not significantly affect a result; a lack of control perceived about a current situation or an immediate happening" [12].

Professionals in the field of health have technical and human skills to provide care for people with lower-limb ulcers and must be able to identify feelings of powerlessness and the basic care needs of this population. The assessment of feelings of powerlessness may contribute to the planning of interventions aimed at creating positive feelings and minimize the impact of lower-limb ulcers on the daily life of these patients.

The aim of this study was to assess feelings of powerlessness in patients with venous leg ulcers and compare with that of patients with diabetic foot ulcers to provide supportive evidence for improving quality of care for this population, directing interventions more satisfactorily toward the individual needs of the patient with a wound.

Methods

This is an exploratory, descriptive, cross-sectional study. The sample comprised 100 patients with diabetes mellitus and foot ulceration, and 100 individuals with venous leg ulcers. All received care at the Wound Unit in the Plastic Surgery Outpatient Clinic of the Federal University of São Paulo and in an outpatient wound care clinic of a hospital complex in interior São Paulo.

Two groups of patients were included: with Type 1 or Type 2 diabetes and foot ulcer and with venous ulcer, persons over the age of 18 years. Patients without physical and mental conditions to answer the questions in the questionnaire were excluded from the study.

Data were collected in the period comprising May 2010 to August 2012, after approval from the Research Ethics Committee of the Federal University of São Paulo (Protocol No.0383/10). Written informed consent was obtained from all patients prior to their inclusion in the study.

Two instruments were used for data collection: a questionnaire assessing sociodemographic and clinical characteristics, and the Powerlessness Assessment Tool (PAT) for adult patients. Because most participants had a low education level, the questionnaires were administered as a structured interview by the researchers.

The PAT was developed in Brazil and tested in a population sample of 210 adult patients from medical-surgical wards for item selection, reliability and validity [11,13]. It shows good internal consistency (Cronbach's alpha coefficient of 0.80) and test-retest reliability ($P > 0.05$) [11,13].