# USER PERCEPTIONS AND PERSPECTIVES ON THE QUALITY OF DIABETIC FOOT ULCERS MANAGEMENT: PRELIMINARY RESULTS OF A SEQUENTIAL MIXED METHODS



# GIRAS Groupe Interdisciplinaire de Recherche Appliquée en Santé

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## EXPLORATORY STUDY



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## Background

- Up to 34% of people with diabetes have a lifetime risk of developing a diabetic foot ulcer (DFU).1
- 40% of patients have a DFU recurrence within 1 year after healing;
  - 65% within 5 years;
  - 90% within 10 years.1
- The interdisciplinary team of the Complex wound clinic (CPC) of the Hôtel-Dieude-Lévis hospital (Québec, Canada):
  - Met quality of care indicators in terms of structure, processes and results for DFUs healing, but has a high burden of DFU recurrence.<sup>3</sup>
  - No data available regarding quality of care including the patients' perspective.<sup>4</sup>

### Aim

 Determine the perceptions and the perspectives of knowledge users i.e. patients and team providers, regarding the quality of care received at the CPC.

#### **OBJECTIVES**

- 1. Evaluate the quality of care that led to a healed DFU at the CPC
  - Preliminary result presented thereafter.
- 2. Compare perceptions and perspectives:
  - Patients with DFU remission and those with DFU recurrence
  - Patient with DFU recurrence and team providers
- 3. Explore hypotheses about factors related to DFU recurrence and quality of care from knowledge users' perspective.

### Methods

DESIGN: Exploratory sequential mixed methods study



QPP Questionnaire

Initial wound width (cm)

Initial wound depth (cm) Median (range)

\*†: Missing data for some patients

Step 1: T0

Plantar healed DFU

- DATA COLLECTION:
  Validated questionnaire
  available in French
- Short form of the Patient's Perspective (QPP)<sup>5,6</sup>
- Evaluate
- Responses on an agreement scale of 1 to 4 (totally disagree to totally agree)

#### **Step 2: T1**

#### 3 months later



- Physically assess DFU recurrence or remission by the team.
- Questionnaire related to the perceptionsof patients regarding their conditions.

**Analysis** 

- Compare perception of patients with DFU recurrence to those without
- Compare the care provider's perception to the patient's perception
- Generate hypotheses to explain the patient's recurrence or remission related to quality of care.

**POPULATION:** n = 20 consecutive patients recruited at the CPC **Inclusion criteria:** 

• Any patient, 18 years and older with diabetes who has been treated at the CPC for a DFU

\* statistically significant

Completely healed DFU

4 dimensions

- Having consent to participate in this research
- Being able to read, understand and write in French.

## DATA COLLECTION: Perceptions of the t

- Perceptions of the team providers on the quality of care received by the patient
- Qualitative questionnaire.

## Results

#### Characteristics (n=20) Mean (range) Age (years) 64 (42-81) Male 75 Sex (%) Female Single 45 Family status (%) With spouse 55 Smoking (%) Type 1: Diabetes (%) 90 Type 2: HbA1c (%)† 7,2 (5,6-9,7) Mean (range) Peripheral neutopathy (%) 80 Peripheral artery disease (%) History of osteitis in the last year (%) 45 Plantar to metatarsal heads 45 Location of the wound 35 Plantar to toe 20 Others Initial wound length (cm) Median (range) 0,6 (0,2-7,5)

Median (range)

Table 1: Clinical and Demographic

importance on the dimensions of care by patients Sociocultural Physical technical Identity oriented Medical technical 4 dimensions approach dimension atmosphere competence Perceived reality 3,94 3,91 3,85 Subjective importance 3,85 3,88 3,89

67% of patients were admitted to the clinic after 0-7 days and the other 33% after less than one month following doctor's referral.

**Short QPP responses** 

Figure 1: Quality of care perceive and the subjective

- 100% of patients were admitted on time at their appointment.
- Questions about how patients feel:
- 5% feel quite bad mentally;
- 10% feel quite bad physically.
- **85%** of patients mentioned that they will fully follow recommendations of care providers.
- 90% of patients found it easy to reach the CPC:
- 65% of patients didn't know if it is easy to reach the doctor by the phone.
- 95% of patients would consult at CPC again without hesitation.

#### **Discussion / Conclusion**

- Our sample is very similar to those of other studies about DFU in terms of characteristics,<sup>7,8</sup>
   But:
  - A higher proportion of patients had peripheral artery disease and history of osteitis in the last year before the DFU

0,4 (0,1-5,0)

0,2 (0-2,0)

- Previous studies have established that those characteristics are predictor of DFU recurrence.<sup>1,7</sup>
- Patient overall satisfaction of the quality of care received at the CPC was high.
- Results are consistent with our previous studies on the quality of care at the CPC. <sup>2,3</sup>
- To our knowledge, this project represents the first data regarding patients' perceptions and perspectives for DFU care in a interdisciplinary team in Québec.



### CONTINUATION OF THE STUDY

- Regarding T1, we have the results of 15/20 patients
  - 6 patients have DFU recurrence to date (40%)
  - The relation between knowledge users' perceived quality of care and DFU recurrences is a new area to explore for DFU management.

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