



People experiencing homelessness in Miami Florida endure a disproportionately high incidence rate of lower extremity ulcerations



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Introduction

- People experiencing homelessness are subject to increased morbidity and mortality due to many chronic illnesses when compared to housed populations.
- Our study sought to characterize the incidence of diabetic lower extremity ulcers (DLEUs) in a population of people experiencing homelessness (PEH) in Miami, Florida.
- This was a retrospective cohort study that investigated the incidence rate of diabetic lower extremity ulcerations among Miami Street Medicine patients experiencing homelessness over 28 months and compared these data with two existing United States-based data sets that reported incidence rates of diabetic lower extremity ulcerations.
- This is the first US study focused on examining the diabetic lower extremity ulceration incidence rate (DLEU-IR) in the PEUH population.

Methods

PEH patient data including diagnosis of diabetes, random blood glucose levels, and presence of lower extremity ulceration were documented in REDCap electronic medical record from May 1 2021-September 1 2023.

Literature Review: reported incidence of lower extremity ulceration among two available diabetic patients in the US: **US diabetes disease management cohort (1)** and **2006-2008 Medicare FFS Diabetic Population (2)**



Incidence was calculated as the number of diabetic lower extremity ulceration divided by the number of patients with (1) a diagnosis of diabetes or (2) random blood sugar > 200 per year. Sample populations were normalized to 100 person years.

Results

PEH in Miami FL with DLEU-IR (n=19)	0.18	PEH in Miami FL with DLEU-IR (n=19)	0.18
95% Confidence Interval	0.1067 to 0.2845	95% Confidence Interval	0.1067 to 0.2845
Diabetes disease management cohort DLEU-IR (n=1,666)	0.07	Medicare Beneficiaries DLEU-IR	0.06
95% Confidence Interval	0.02814 to 0.14423	95% Confidence Interval	0.02202 to 0.13059
Incidence rate difference	0.11	Incidence rate difference	0.12
95% Confidence Interval	0.012 to 0.208	95% Confidence Interval	0.024 to 0.216
P-value	P = 0.0278	P-value	P = 0.0143
Incidence rate ratio	2.5714	Incidence rate ratio	3.0000
95% Confidence Interval	1.048 to 7.2839	95% Confidence Interval	1.1408 to 9.2322
P-value	P = 0.0290	P-value	P = 0.0143

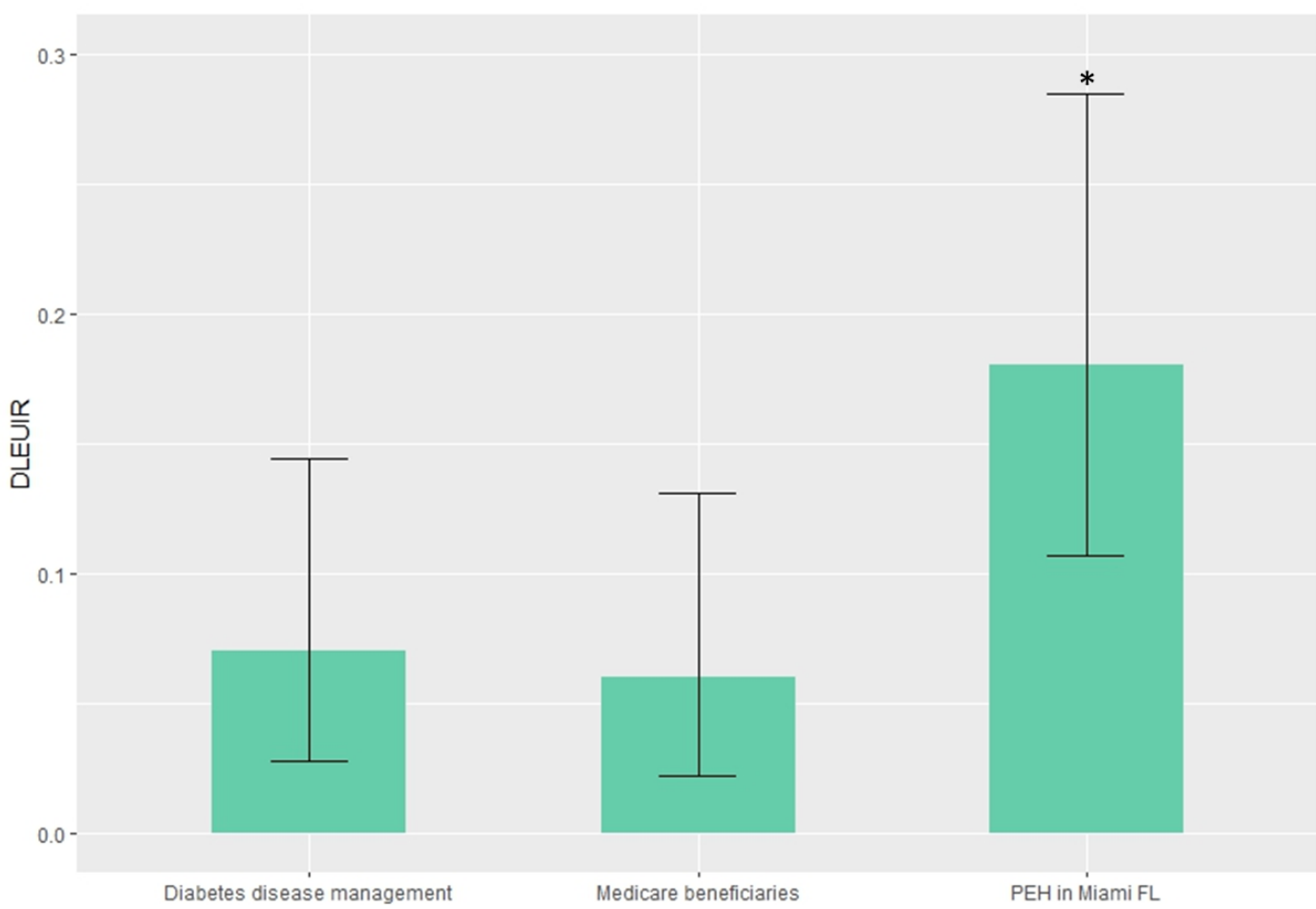


Table 1, Figure 1: incidence rates of diabetic lower extremity ulcerations in Miami PEUH compared with Diabetes management cohort (p<0.05) and Medicare beneficiaries (p<0.05)

Conclusions and future directions

- Diabetic lower extremity incidence was 18 per 100 patients per year for PEH, 6.84 per 100 per year for a United States diabetes disease management cohort, and 6 per 100 patients with diabetes per year for Among Medicare beneficiaries included in the 2006-2008 Medicare fee-for-service (FFS) Diabetic population.
- Our study suggests that PEH with diabetes experience DLEUs at an incidence rate three times that of diabetic Medicare Beneficiaries and 2.57 times that of a United States Diabetes disease management cohort.
- Social and biological consequences of homelessness likely contribute to this disproportionate incidence of DLEUs.
- It is essential for health care providers to take housing status into account when creating treatment plans for diabetic patients.

References

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