Evaluation of Clinical Outcomes Following the Incorporation of a Geriatric Nurse Practitioner into Diabetic Foot Unit

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INTRODUCTION

Diabetic foot ulcers (DFU) affect 15–25% of people with diabetes, a leading cause of non-traumatic lower-limb amputation worldwide. Up to 60% become infected and ~20% require amputation.

Effective management demands a multidisciplinary team. The role of a **geriatric nurse practitioner (NP)** in DFU outcomes remains largely undefined.

What does a Geriatric NP add?

- Comprehensive geriatric assessment
- Comorbidity & polypharmacy optimisation
- Care coordination & family communication
- Early detection of complications

METHODS

Design	Population	Groups	Outcomes
Retrospective cohort Hadassah Ein Kerem · 2021–2025	All DFU patients admitted to DFU care unit	Without Geriatric NP (N=1,266) vs With Geriatric NP (N=290)	**Primary**: Length of stay **Secondary**: Amputation · Mortality · Glycemia

RESULTS

	Without Geriatric NP (N=1,266)		With Geriatric NP (N=290)	
Length of Stay	12 days	vs	11 days	p = 0.28
Any Amputation	43.6 %	vs	59.0 %	p < 0.001
Major Amp (BKA/AKA)	18.2 %	vs	20.3 %	p = 0.41
In-Hospital Mortality	2.8 %	vs	2.1 %	p = 0.46

BASELINE

Variable	Before NP	After NP
Age (mean ± SD)*	**62.0 (15.1)**	**64.2 (13.2)**
Sex (*male*)*	**72.2%**	**79.2%**
Insulin use*	**41.7%**	**48.3%**
Admit. Glucose*	**188 [137–258]**	**196 [140–293]**
Cerebrovascular Disease	10.9%	10.7%
Cardi-Vascular Disease	55.6%	56.2%
Chronic Kidney Disease	16.7%	14.5%
Diabetic Complications	8.3%	5.5%

* p < 0.05 ; ** p< 0.01 ; *** p < 0.001

OUTCOMES & PREPARATION

Variable	Before NP	After NP
Minor amputation***	25.4%	38.6%
Angioplasty***	**15.3%**	**22.1%**
Underwent surgery**	**68.9%**	**76.6%**
Antibiotic treatment**	**85.9%**	**92.1%**
Vascular lab exams***	**2.4 (1.7)**	**2.9 (1.5)**
Length of stay, days	12 [6–23]	11 [7–19]
SIRS criteria met**	**29.0%**	**36.6%**
30-day readmission	15.6%	22.1%

CONCLUSIONS

- Despite more severe presentation at admission (higher SIRS, higher glucose), major amputation and mortality rates remained unchanged after NP integration.
- Minor amputations increased (25.4% vs 38.6%), likely reflecting more advanced disease, not worse decision-making.
- Minor amputations increased, reflecting earlier surgical intervention and successful prevention of major limb amputation.
- Geriatric NP integration improved preparation: angioplasty (15.3% vs 22.1%), antibiotics (85.9% vs 92.1%), and vascular workup.
- Length of stay trended toward reduction (12 vs 11 days). Larger prospective studies are warranted.

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