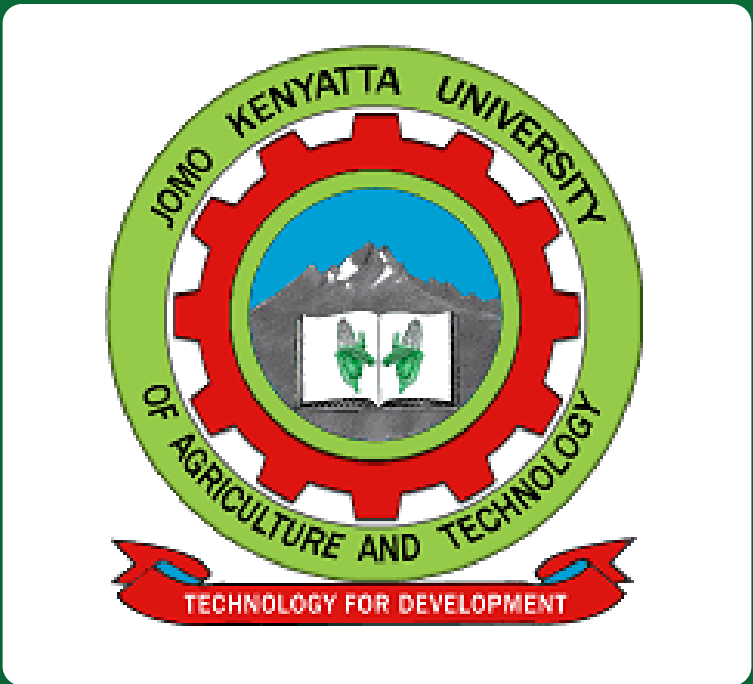
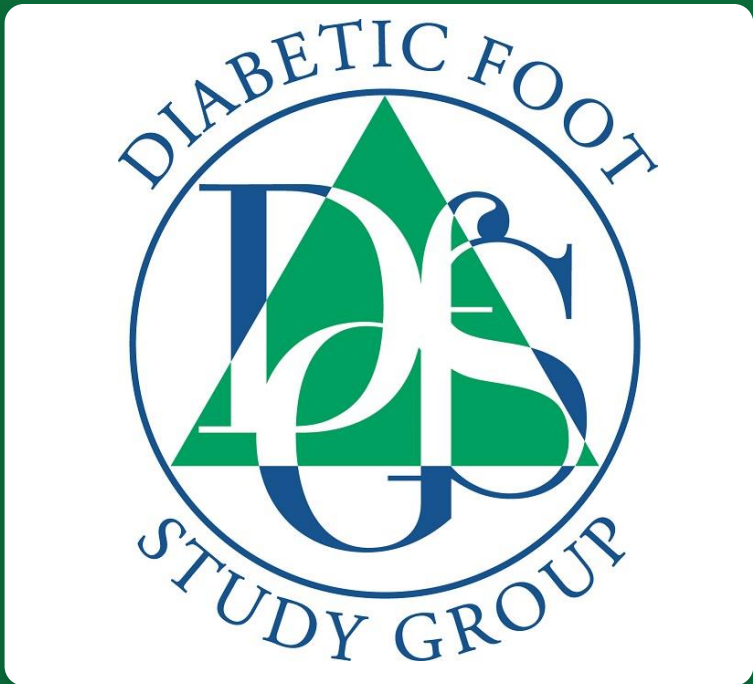




Prevalence and Risk Stratification of Diabetic Foot-Related Disease in Kenya



A Cross-Sectional Study of Two Level 5 Referral Hospitals

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363

Participants enrolled

67%

Female

58 yrs

Mean age (SD 13.1)

38%

≥1 IWGDF risk factor

27%

Loss of protective sensation

Introduction

- Diabetes foot complications carry major socio-economic, clinical, psychological and physical impacts for people living with diabetes, especially in low-resource settings such as Kenya.
- Nationally (IWGDF): 20% are at high risk of diabetic foot, 36% moderate, 37% low, and only 7% at no risk.
- Kenyan patients show high rates of undiagnosed diabetes and poor blood-glucose control.
- Even early presenters often lack comprehensive care — missing diagnostic kits (monofilaments, tuning forks), inappropriate footwear, and poor self-examination practice due to low screening awareness — raising injury and infection risk.

Objectives

- To determine the prevalence and risk stratification of diabetic foot-related disease among people living with type II diabetes in two Level 5 referral hospitals in Kenya.

Methods

Study sites: Diabetes clinics in Kiambu and Nairobi counties, Kenya

Design: Descriptive cross-sectional

Sampling: Systematic random sampling

Population: T2DM patients attending the above clinics

Inclusion: Confirmed T2DM, willing to participate

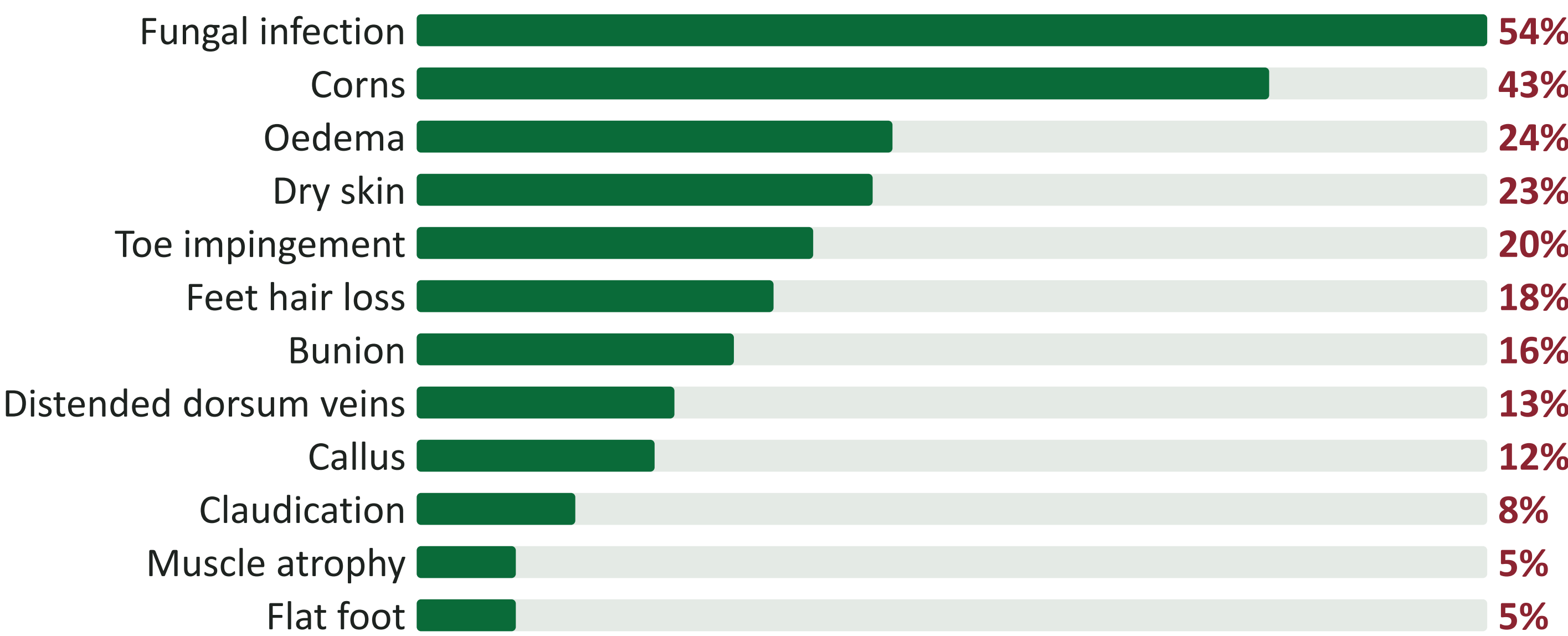
Exclusion: Severely ill (e.g., bedridden), gestational diabetes, or no consent/assent

Results

Cohort

- 363 participants enrolled; 244 (67%) female; mean age 58 yrs (SD 13.1).
- 154 (42.4%) rural residents; 91 (25.1%) with good glycaemic control.

Foot conditions observed (% of participants)

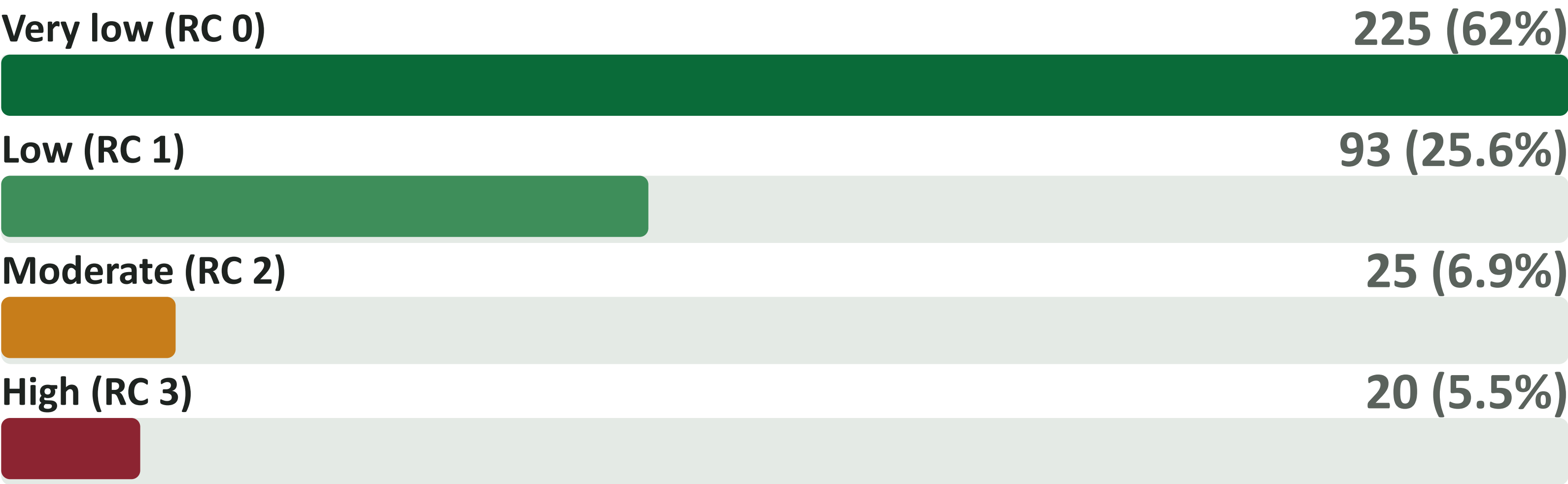


Clinical findings

- Loss of protective sensation (LOPS): 97 (27%).
- Peripheral arterial disease (PAD): 48 (13%).
- Structural foot deformities 10 (3%); previous/current foot ulcers 10 (3%); end-stage renal / dialysis 6 (2%).

38% of T2DM outpatients across both facilities had at least one risk factor (IWGDF risk category 1–3) for developing a diabetic foot complication.

Risk Stratification — IWGDF 2023



Discussion & Conclusion

- Consistent with global and regional evidence: a recent systematic review & meta-analysis of 36 studies across 23 countries found 53.2% (95% CI 45.1–61.3) of diabetes patients at risk of foot ulceration, IWGDF ≥1 (Maldonado-Valer et al., 2023).
- Comparable to an earlier single-centre Kenyan study — 56.5% categorized as moderate-to-high risk (Nduati et al., 2022).

Recommendations

- The 62% at very low risk retain a **window of opportunity** — glycaemic optimization, annual foot screening, footwear education and self-care counselling can substantially reduce progression to neuropathy and complications.
- Structured foot examination** using the IWGDF 2023 protocol should be mandated at every diabetes clinic visit, replacing the current opportunistic approach.

Acknowledgement

- Study participants

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