Comparison of removable off-loading device and routine care to heal plantar ulcers due to leprosy and diabetes in the community – July 2024



# Facts:

- Each year, around 26 million people worldwide develop diabetic foot ulcers, and another 130 million are at risk of diabetic neuropathy. It is estimated that over 3 million people live with disabilities from leprosy. Among these 20-50% of patients with peripheral neuropathy from leprosy will develop ulcers.
- Approximately one-third of people with diabetes will develop foot ulcers during their lifetime.
  Among leprosy patients, about 30% experience numbness in their feet and are prone to developing ulcers on their soles.
- The prevalence of diabetes is 8.4% in India and 8.5% in Nepal higher than the global prevalence of 6.3%.

# **Project Cycle:**

2023 - 2024

## **Partners:**

The George Institute for Global Health, India University of Birmingham

The Leprosy Mission Trust India The Leprosy Mission Nepal

### **Supporters:**

UK National Institute for Health Research (NIHR) and Innovation for Global Health Transformation (RIGHT) Programme

### **Principal Investigator:**

Dr Joydeepa Darlong

Dr Indra Bahadur Napit

#### **Contact:**

To find out more about this project and its principal investigators or The George Institute please contact Tina Wall +61 410 411 983 or twall@georgeinstitute.org.au

# **Background:**

- Plantar ulcers are a serious complication in leprosy and diabetes globally, resulting in hospitalisation, disability and amputation.
  Continued pressure over the vulnerable site leads to ulcers and then impedes ulcer healing.
- Foot ulcers reduce patient mobility, social interaction and healthrelated quality of life. The treatment of foot ulcers places a substantial burden on healthcare systems.

## Aims:

 To compare a removable pressure-relieving off-loading device with standard routine care for healing plantar ulcers due to leprosy and diabetes in the community.

## Methods:

- This is a feasibility study to assess the practicality of using a removable offloading device in community settings among 150 individuals with ulcers due to leprosy and/or diabetes.
- Participants in the intervention group will receive a removable walker boot with a custom insole designed to relive pressure on the ulcer area(s). The control group will receive standard micro-cellular rubber footwear as part of their care.

# **Impact:**

- The offloading device can be easily applied with limited training and may allow patients to continue their essential daily routine activities.
- This study will provide initial data to assess how well a removable device that reduces pressure affects patient compliance and the healing of ulcers.

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