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# Creating a model for leadership in the multidisciplinary prevention and management of diabetic foot complications in Uganda

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Service users





# Who we are and what did we do?



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- Recognised that a lack of services and research informed initiatives to reduce the significant diabetes health related complications are impacting Ugandan healthcare resources, patients and communities.
- Wanted to do something about it.
- Created a research team made up of two nurse researchers, a social scientist, and a biomechanic scientist.
- Applied for funding to the Burdett Trust for Nursing.
- Wanted to address this issue by introducing 'frugal innovations' to demonstrably improve morbidity, reduce mortality, in-patient stays and associated health systems costs.





# What did we do?



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Our aim was to evaluate the development, delivery and impact of a frugal diabetes self-management educational programme and multidisciplinary diabetic foot clinic on patients and health care staff in Uganda.

A multi-method approach combined analysis of:

- 1). Facility-based data to characterise patient populations,
- 2). A scoping review of the literature (Sajiith et al., 2024),
- 3). A 'kick off event' with stakeholders from the Ministry of Health, service users, clinicians and healthcare managers.





# What did we do?



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Coproduce a nurse led, culturally congruent, frugal, and sustainable education intervention and diabetic foot screening service.

- Used a complex interventions approach (MRC, 2021).
- Task shifting of roles (Tweheyo, 2018).
- Ethical approval was sought from the University of Salford
- and Mbarara University of Science and Technology.
- NEEDS was coproduced.
- 3 cycles period of reflexivity (Driscoll, 2007).
- Changes to delivery of the programme
  - ❖ Local language (Roturo)
  - ❖ Interactive sessions (Fitness Instructor, Pharmacist, Nutritionist).
  - ❖ Posters and leaflets







# What did we do?



## Methods:

- A mixed method evaluation ran alongside the DSME programme.
- Patient data included pre and post HbA1c, foot screening, physical activity, medications, weight, BMI, waist circumference, BP, and knowledge, skills and attitudes to diabetes self-management.
- Focus groups were conducted to examine patients and staff experiences of involvement in the new service model.
- Quantitative data was analysed using SPSS and qualitative data analysed using thematic analysis (Braun and Clarke, 2022).





# The impact and outcomes



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- A DSME programme was coproduced by 12 staff and 5 service users.
- Delivered over 3 cohorts between January and June 2024.
- 34 adults completed the DSME and attended the DFU prevention clinic.





# The impact and outcomes



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The findings:



- Statistically and clinically significant improvements in HbA1c.
- A reduction for 72% of participants (Mean  $-1.04 \pm 2.05$ ,  $t(32)=2.901$ ,  $p=0.003$ ).
- 48% of participants HbA1c was reduced to below 7% representing change equivalent to efficacy seen in drug trials.
- Participants showed an increase in self-management activities, became advocates and champions of a healthy lifestyle to family, friends and work colleagues.
- Previously held view of diabetes being a death sentence lifted.





# The impact and outcomes



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- Two publications (a scoping review and chapter on the impact of long-term conditions on amputation in a monograph on Rehabilitation Services in Uganda).
- A Palgrave Pivot monograph proposal dedicated to the diabetes work.
- A Burdett Trust Scholarship to a Ugandan Nurse who led the project locally to a UK conference. Finalist in these prestigious Diabetes Nursing awards.
- Working with GM Public Health Team in regards to Reverse Innovation.
- Rincy's PhD by Published work





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