

# **Assessing knowledge and self-management practices of rural-based insulin-treated diabetic patients in Lilongwe, Malawi: A pilot study**

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## **Background**

This pilot study is a follow-up to a qualitative study that explored the experiences of insulin-treated diabetic patients in rural, Lilongwe. The study revealed compromised self-management and persistent ill-health.

## **Aim of the study**

To assess diabetes knowledge and self-management practices among rural-based insulin-treated diabetic patients.

## **Methods**

Ten participants were recruited for the study from a Diabetes Clinic at one of the tertiary hospitals in Lilongwe, Malawi. The study was conducted in three phases namely: pre-intervention, intervention, and post-intervention phases, and this abstract reports activities during phase one, the pre-intervention phase. Data were collected using a pre-intervention survey questionnaire, which included demographic and clinical characteristics and also assessed the participants' knowledge and compliance with the recommended self-management practices. Data were also collected from the participant's health records and this included information on clinic attendance, blood sugar, and insulin dosages, and admissions.

## **Results**

Results obtained revealed that participants more commonly experienced episodes of hyperglycemia (80%) and hypoglycemia (20%). Some reported being hospitalized due to diabetic ketoacidosis (90%), which was mainly caused due to missing insulin doses.

Additionally, 80% of the study participants had a number of diabetic-related complications, such as diabetic foot (20%), diabetic retinopathy (10%), poor vision (20%), and sexual dysfunction (30%) for male participants. The study results revealed that participants had inadequate knowledge about diabetes; perceived the diabetes illness experience as very burdensome (90%) and did not adhere to all self-management practices. Blood glucose monitoring was not done and drug and dietary compliance were compromised due to a lack of resources.

### **Conclusions and implications**

These results guided the evidence-based interventions, which were implemented under phase two of the study.