



A Scoping Review of Household Food Insecurity and Glycaemic Control in Soweto's Public Sector Type 2 Diabetes Patients,

Thandiwe Nkosi¹

¹ Department of Internal Medicine, African Institute for Mathematical Sciences (AIMS) South Africa

Published: 03 May 2012 | **Received:** 18 December 2011 | **Accepted:** 09 March 2012

Correspondence: tnkosi@hotmail.com

DOI: [10.5281/zenodo.18529819](https://doi.org/10.5281/zenodo.18529819)

Author notes

Thandiwe Nkosi is affiliated with Department of Internal Medicine, African Institute for Mathematical Sciences (AIMS) South Africa and focuses on Medicine research in Africa.

Abstract

Household food insecurity is a major public health issue in South Africa, acutely felt in urban townships such as Soweto. For individuals living with type 2 diabetes, dietary management is fundamental to achieving glycaemic control. However, the relationship between food insecurity and diabetes outcomes within this high-risk public sector patient group is not well understood. This scoping review aimed to map and synthesise the available evidence on the association between household food insecurity and glycaemic control among patients with type 2 diabetes attending a public sector clinic in Soweto, South Africa. A scoping review was conducted following established methodological frameworks. A systematic search was performed across relevant electronic databases. Both qualitative and quantitative studies focusing on the specified population and association were included for review. Data from selected studies were charted and analysed thematically. The review identified a limited but consistent body of evidence. A clear positive association was found, whereby increased severity of household food insecurity was linked to poorer glycaemic control, indicated by elevated HbA1c levels. A prominent emergent theme was the 'feast-or-famine' cycle, where patients overconsumed high-carbohydrate foods during periods of food availability, directly disrupting blood glucose management. The evidence indicates that household food insecurity constitutes a significant barrier to effective diabetes management for this Soweto clinic population, thereby exacerbating health inequities. This finding underscores the necessity for integrated clinical and social care approaches. Key recommendations include integrating routine food insecurity screening into standard diabetic clinic protocols and fostering partnerships with social services to address underlying food access issues. Further primary research is required to develop and evaluate context-specific interventions. Food insecurity, Type 2 diabetes, Glycaemic control, HbA1c, Soweto, Public health, South Africa This review consolidates existing evidence on a critical social determinant of health for a vulnerable patient population, providing a foundation for improved clinical practice and policy development.

Keywords: *Household food insecurity, Glycaemic control, Type 2 diabetes, Soweto, South Africa, Public health, Scoping review*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa



Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge