

Bridging Gaps: Exploring the Impact of Pharmacist Diabetes Interventions on A1C in Racially Diverse Populations - A Systematic Review

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Background/ Purpose

Type 2 Diabetes Mellitus is a chronic disease that results in high blood glucose due to insulin resistance. Its prevalence is steadily increasing across diverse populations, and if poorly managed, may cause serious health conditions over time. However, diabetes management is not a one-size-fits-all approach; it requires patient-centered interventions that address the unique needs and challenges faced by various racial and ethnic groups. Pharmacists are the most well-positioned to bridge healthcare disparities and optimize outcomes for individuals with diabetes.

Methods

Search terms utilized included pharmacist intervention, A1C, and diabetes across 2 major databases, Pubmed and Web of Science, focusing on primary literature. Duplicate results studies were screened out according to the PMID and title using Excel. Articles were screened out using exclusion criteria, such as A1C not being reported by ethnicity. Relevancy of articles were initially screened based on the title and abstract.

Results

Data analysis across a multitude of primary care clinics in the United States where pharmacists intervened on diabetes management revealed a A1C reduction in patients of various ethnicities. There was an average A1C reduction of 1.45% in Caucasian patients, 1.57% in African American patients, and 0.73% in Hispanic patients. Pharmacist-led patient medication and behavioral assessments, identification of patient-specific barriers to care, and consistent follow-up medication therapy sessions were the interventions that led to the highest amount of A1C reduction.

Conclusion

This systematic review shows how pharmacist-led interventions affect certain populations differently. The studies with a majority African American population showed that patients benefited from collaborative practice, frequent meetings, cost assistance with regular pharmacist consultations, and access to mental health resources. In addition, studies with a majority white population also revealed a correlation between depression and diabetes control. Hispanic dominant studies demonstrated the significance of the pharmacist and the patient population to speak the same language and directly communicate to one another regardless of the language spoken. These conditions yielded to the greatest reduction in A1C.