

Implementation of an Integrated Intervention Addressing Social Determinants of Health in an Underserved Community: Identifying Barriers and Facilitators of Care Provision for Persons with Type 2 Diabetes Mellitus

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BACKGROUND

- Persons in underserved communities, disproportionately represented by racial and ethnic minority groups, with diabetes and metabolic syndrome are at increased risk for poor outcomes including adverse events and death compared to other populations.^{1,2}
- Factors such as racism, structural inequalities, and contextual/environmental barriers influenced these disparate outcomes.³
- Understanding patient’s perspective is central to improving engagement in care and developing patient-centered programs and initiatives that can improve well-being.^{6,7}
- Few diabetes intervention investigations have sought to understand the perspective of the participant, particularly among minoritized groups.
- The perspectives of patients need to be understood to elucidate how integrated care interventions addressing social determinants can improve care for persons with Type 2 Diabetes.

Study Purpose

The purpose of this study was to explore barriers and facilitators to implementing an integrated intervention addressing social determinants of health among persons with diabetes.

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RESULTS

Table 1. Socio-demographic Characteristics (n=38)		
Age, mean (SD)		61.8 (8.1)
Ethnicity/race		
African-American, n (%)		17 (44.7%)
White, n (%)		15 (39.5%)
Hispanic, n (%)		3 (7.9%)
Other, n (%)		3 (7.9%)
Sex		
Female, n (%)		26 (68.4%)
Male, n (%)		12 (31.6%)
Note: SD, standard deviation		

Table 2. Theme Descriptions and Example Quotes		
Theme Name	Description	Example Quote
Facilitators		
Integrated Care Management	Management of Type 2 DM and depression involving collaborating with physicians and education on guidelines.	“...Information and referrals were given in one centralized place. The key player is the primary care physician’s office coordinating this (Male, White, 72).”
Community Linkages	Patient prioritized planning to identify needs and priorities. Interventionists provided information about available community resources.	“The intervention is the best thing- it shows you a variety of places you can choose to go to, close to your home. A lot of people don't know about these (Female, Black, 65).”
Individualization	Regular contact, feedback and discussions of challenges and barriers and development of strategies/plans specific to their own needs.	“You got to help them monitor what they’re taking, keeping it on the system for them, they will see a difference in numbers [clinical indicators] (Female, Black, 57).”
Engaging Social Support Networks	Combination of interventionist and social support networks (e.g., family, friends, church members, healthcare providers) to provide support for self-management activities and behavior.	“There is a lot involved. Your work [interventionist], nurses at diabetes management program, having group therapy. You gotta meet others with diabetes and that helps a lot (Female, Black, 66).”
Knowledge Attainment	Education about prescribed medical regimens, self-management behaviors and medical conditions.	“People need to understand and be educated on the importance/benefits of being on the medicine for diabetes (Female, Black, 57).”
Barriers		
Systemic Constraints	Systemic components such as limited appointment availability, physician shortages, lack of transportation and poor accessibility hindered care.	“Transportation is needed for those who have lost a foot or who live in an isolated area. I couldn’t drive for a month, and it was very limiting to get care (Female, Black, 47).”
Competing Demands for Resources	Competing demands for resources, particularly money and time, made self-management behaviors and care difficult.	“I was given information on a program for my health. The issue is cost. My insurance doesn’t cover it and there is too much to pay for (Male, White, 72).”

METHODS

- Participants were recruited from 3 primary care practices in West Philadelphia, Pennsylvania between 2013 and 2015 and were 30 years and older with a diagnosis of Type 2DM with a range of depressive symptoms.
- This study consisted of four in-person meetings with research team members (enrollment, baseline, 6 and 12 weeks) that were approximately 30 minutes each.
- Participants were randomized at the 2 week visit to:
 - Basic Intervention: Integrated management of Type 2 Diabetes Mellitus and Depression through collaboration with physicians, education and guideline-based treatment recommendations
 - Enhanced Intervention: Everything in the basic intervention plus, patient-prioritized planning to address social determinants of health (SDOH).
- At the final study visit participants were invited to participate in individual open-ended interviews to discuss facilitators of and barriers to intervention effectiveness.
- Qualitative analysis used a grounded theory approach to examine themes that emerged.

CONCLUSIONS

- Findings suggest that the integrated intervention strategy, addressing SDOH with an individualized and knowledge-based approach, was a facilitator of improved outcomes.
- Some systemic and resource constraints remained as barriers to achieving optimal outcomes. Findings underscore the importance of initiatives that aim to foster innovative, collaborative and multi-level strategies to address SODH among persons with diabetes in underserved communities.

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