Hasan. AJPHN 2025; 2:2 - https://doi.org/10.62377/tber4w45 Queeva Publishing

Understanding Diabetes Care Barriers Through Community Voices: A Brief Qualitative Report from Jefferson County, Kentucky

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Submitted: 28.04.2025
Revised: 02.06.2025
Accepted: 03.06.2025
Published: 01.08.2025

Abstract

Background: Type 2 diabetes is a significant public health concern in Jefferson County, Kentucky, exacerbated by socioeconomic barriers influencing care access and disease management. This qualitative study explored community-perceived barriers impacting diabetes self-management among local adults. **Methods:** Guided by the Theory of Planned Behavior, this qualitative study involved thematic analysis (Braun and Clarke's method) of open-ended responses collected through an online questionnaire from six purposively selected adults (≥18 years) with physician-diagnosed type 2 diabetes in Jefferson County. **Results:** Participants described several structural barriers affecting their diabetes care, primarily highlighting medication affordability (83%), transportation difficulties (67%), and inadequate access to healthy food (67%). Additional qualitative themes revealed concerns related to insufficient flexibility of healthcare services and personal time constraints. Participants further suggested community-informed strategies, including subsidized medication programs, enhanced transportation services, increased availability of virtual healthcare, and improved local access to affordable fitness facilities and nutritious foods. **Conclusion:** Qualitative insights underscore a substantial gap between diabetes care intentions and achievable self-management practices due to persistent systemic barriers. Addressing these barriers through targeted, community-driven solutions could meaningfully improve diabetes outcomes in Jefferson County.

Keywords: Type 2 Diabetes, Community-Based Research, Healthcare Access, Health Inequities, Qualitative Report.

Introduction

Type 2 diabetes is a growing public health concern in the United States, disproportionately affecting low-income populations and communities of color. In Kentucky, and particularly in Jefferson County, type 2 diabetes is not only prevalent but deeply intertwined with structural inequalities that reflect broader issues of health justice. The combination of medical vulnerability and social disadvantage in these populations reinforces cycles of chronic illness, disability, and systemic neglect (Clark and Utz, 2014). Jefferson County, Kentucky, represents a dynamic and demographically complex metropolitan region that highlights these patterns. With approximately 772,000 residents as of the 2020 U.S. Census, the county is racially and socioeconomically diverse. It includes both affluent neighborhoods and historically marginalized areas, such as the West End, where health disparities are particularly acute. Following the 2003 merger of the Louisville city and county governments, the newly unified Louisville Metro Government was tasked with addressing countywide health needs (Rowley et al., 2017). The prevalence and burden of type 2 diabetes in Jefferson County underscore these racial and geographic divides. While the East End—predominantly White and economically advantaged—reports diabetes rates between 10% and 12%, the West End, which is predominantly African American, shows prevalence rates of approximately 20% (Golden et al., 2019). These disparities are consistent with broader national trends that highlight how race, income, and geography intersect to shape chronic disease risk. Substance use, particularly opioid dependence, has been shown to significantly hinder diabetes care access, with studies indicating that adults with co-occurring opioid use disorder are over 40% less likely to receive consistent primary care for chronic conditions like diabetes (Hasan, 2024). According to the Community Health Needs Assessment and other local sources, diabetes is a persistent driver

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of health decline in the region. Furthermore, populations at highest risk—such as African American, Hispanic/Latino, Asian American, Native American, and Pacific Islander communities—tend to face systemic obstacles in accessing preventive care, consistent follow-up, and diabetes education (Aguayo-Mazzucato et al., 2019).

Demographic patterns further contextualize the local burden of disease. Jefferson County's adult population is aging, with 62% between the ages of 18 and 64, and an additional 16% over the age of 65—both age groups at higher risk for diabetes (Meneilly et al., 2018). Obesity is a well-established risk factor for type 2 diabetes, as excess adiposity contributes to insulin resistance and impaired glucose metabolism (Hasan and Harrison, 2025). Gender differences are also relevant, as some studies suggest men tend to receive earlier diagnoses, while women—often more affected by obesity—face increased progression risks (Kautzky-Willer et al., 2016). Type 2 diabetes is associated with an increased risk of infections, including urinary tract infections, skin and soft tissue infections, and poor wound healing, due to chronic hyperglycemia impairing immune function (Hasan and Yusuf, 2023). In Louisville, approximately 48% of individuals diagnosed with diabetes are male, and 52% are female. Despite the depth of epidemiological and demographic data, little is known about how individuals within these communities perceive their illness and navigate barriers to treatment (Kautzky-Willer et al., 2016). This study was designed to help address that gap.

While an extensive body of literature has established the biomedical and social risk factors associated with type 2 diabetes, relatively few studies have explored how individuals in mid-sized urban settings experience and interpret these risks in everyday life. Much of the existing research is framed around large-scale epidemiological analyses or clinical interventions, which often overlook the lived realities of those navigating complex structural barriers to care. In urban areas like Louisville, where demographic diversity and social inequity coexist, this lack of context-sensitive research leaves a critical gap in understanding how people with diabetes perceive their condition, manage their care, and respond to barriers that may not be immediately visible in quantitative datasets (Hill-Briggs et al., 2020). Specifically, few studies have examined how perceptions of control, attitudes toward treatment, and social pressures intersect with structural determinants to influence access to care (Zeidi et al., 2021). This study addresses those gaps by applying TPB to a community-centered needs assessment of adults living with type 2 diabetes in Jefferson County(Ajzen, 1991). This study aimed to examine how adults with type 2 diabetes in Jefferson County, Kentucky, experience and respond to barriers in accessing care.

Methods

This study employed a cross-sectional, mixed-methods design guided by the Theory of Planned Behavior (TPB), with the primary emphasis placed on qualitative inquiry. Conducted as a graduate-level academic assessment in Jefferson County, Kentucky, the study aimed to explore perceived barriers and facilitators to diabetes care among adults diagnosed with type 2 diabetes. While the study included both quantitative and qualitative components, the limited quantitative sample size (N = 6) restricts the generalizability of those data. As such, quantitative results are presented descriptively to provide context, while the qualitative component serves as the core of the analytical and interpretive focus. Participants were recruited through a convenience sampling approach, targeting adults (18 years and older) residing in Louisville, Kentucky, with a self-reported diagnosis of type 2 diabetes. Recruitment efforts were designed to accommodate time constraints and resource limitations associated with student-led, small-scale public health research. While the small sample size is a methodological limitation, the study was designed as an exploratory needs assessment rather than a generalizable population study. The intent was to gather rich, context-specific insights to inform future research, community programming, and policy development. Data were collected via paper-based surveys administered in person by trained research team members. The instrument included two primary components. The first section collected demographic and socioeconomic information such as age, gender, race, income, education level, and insurance status. The second section included both structured Likert-scale items informed by TPB constructs—attitudes, subjective norms, and perceived behavioral control—and open-ended questions designed to capture personal experiences with diabetes care access. Survey responses were anonymized and securely stored.

The qualitative component of the survey was analyzed using thematic analysis following Braun and Clarke's six-phase method (Braun and Clarke, 2012). Responses to open-ended questions were independently reviewed and coded by multiple team members to ensure interpretive rigor. A codebook was developed collaboratively, and recurring patterns and themes were identified. The themes were refined iteratively and are reported with illustrative quotations that reflect participants' lived experiences, with the goal of informing culturally and contextually relevant interventions. Quantitative data collected through TPB-informed Likert-scale items are

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presented solely in aggregate descriptive form. No inferential statistical tests were conducted due to the small sample size. The purpose of the quantitative component was not to derive generalizable conclusions, but rather to supplement qualitative findings by providing background context about participants' behavioral beliefs and perceived control related to diabetes care. This project was conducted under the School of Public Health and Information Sciences at the University of Louisville (Course Reference: PHPB-611-50-4252) as part of a student-led academic initiative. Given the minimal risk and use of anonymized data, the IRB waived formal ethical review. Participation was voluntary, and data were managed in accordance with institutional confidentiality and data protection protocols.

Results

This study explored barriers and facilitators to type 2 diabetes care in Jefferson County, Kentucky, using a mixed-methods approach grounded in the Theory of Planned Behavior. While the small sample (N=6) limited generalizability, qualitative responses provided meaningful insight into community-specific challenges and priorities.

Participant Characteristics and Quantitative Perceptions

Participants ranged in age from 18 to over 65, with diverse educational backgrounds, employment statuses, and annual incomes (ranging from <$25,000 to >$200,000). Four identified as male and White; all had health insurance through Medicare or employer-based plans. Despite high agreement with statements such as "My doctor approves of me accessing treatment" (mean = 6.7) and "I know how to access diabetes treatment" (mean = 6.2), lower scores for "Accessing treatment would be easy for me" (mean = 4.8) and "I can overcome any barriers" (mean = 4.6) reflected limited perceived behavioral control—illustrating a critical disconnect between motivation and real-world feasibility.

Table-1: Themes and illustrative Quote

Theme	Description	Representative Quote
Healthcare System Engagement	Participants reported regular engagement with primary care providers and some specialty services (e.g., endocrinology, dietitians). No use of community-based services was reported.	N/A-all respondents reported seeing a PCP; some saw specialists.
Context-Specific Barriers	Challenges included lack of access to healthy food and diabetic-appropriate footwear. Quotes: *'I cannot find healthy food near where I live.'*	*'I cannot find healthy food near where I live.'*
Healthcare Barriers	Barriers included limited medication availability, cost of treatment, and gaps in insurance coverage.	*'It's hard to find shoes that fit well, and no one covers them.'*
General Barriers	General constraints such as limited time, which was noted without further explanation.	*'Time is a big problem for me.'*
Imagined Healthcare Facilitators	Suggestions to improve treatment access through free or subsidized medications, better insurance coverage, and reduced out-of-pocket costs.	*'If meds were free or cheaper, more people would stick to the plan.'*

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Imagined Community-Based Facilitators	Recommendations to improve transportation, access to fresh groceries, and availability of virtual care.	*'More buses or help getting to the doctor would help.'*
Enhanced Flexibility	Requests for more appointment scheduling options, including virtual visits, and walk-in hours.	*'Virtual appointments would make life easier.'*
Desired Community Resources	Calls for free medications, safe and affordable gym access, early screening programs, and more public health education around diabetes.	*'We need free meds and better gym access.'*

Thematic Insights from Qualitative Responses

Three overarching themes emerged from the qualitative analysis. First, structural and logistical barriers were commonly reported, including limited access to healthy foods, difficulty obtaining diabetic-appropriate footwear, and constraints related to time and scheduling. One participant noted the challenge of living in a food desert, stating they *"cannot find healthy food near where [they] live,"* while another emphasized that *"there's never enough time to get to appointments,"* highlighting competing demands. Second, participants proposed envisioned facilitators to improve care access, such as reducing medication costs—*"if meds were free or cheaper, more people would stick to the plan"*—expanding virtual care options, and improving transportation services. Third, under community resource priorities, participants emphasized the need for early screening programs, affordable fitness opportunities, and better public health education. For instance, one respondent stated, *"we need free meds and better gym access,"* reflecting a desire for integrated, accessible community supports. These themes collectively reinforce the importance of upstream, community-centered strategies tailored to the structural and behavioral realities faced by adults managing type 2 diabetes in Jefferson County.

Discussion

Therefore, policymakers and health authorities must recognize the critical importance of cadres Specifically, the Ministry of Health should institutionalize periodic cadre training, while local governments are advised to allocate dedicated resources for infrastructure and remuneration. and commit to strengthening the institutional frameworks that support them. By addressing these challenges, Indonesia can better leverage the Posbindu PTM program to combat the growing threat of NCDs and promote a healthier, more resilient population.

This qualitative study offers nuanced insights into the complex interplay between individual motivation, social support systems, and entrenched structural barriers shaping type 2 diabetes self-management among adults in Jefferson County, Kentucky. While participants expressed strong personal commitment and reported receiving support from healthcare providers and family, these internal and interpersonal assets were frequently undermined by persistent systemic barriers. In the United States, nearly 1 in 4 hospitalizations among adults with diabetes are due to infections—such as skin, urinary tract, or respiratory infections—which are more severe and recurrent in this population due to compromised immunity and delayed access to care (Muller et al., 2005). Specifically, participants cited medication affordability, transportation difficulties, food insecurity, and limited flexibility in healthcare delivery as key impediments. These findings are consistent with national data indicating that nearly 60% of low-income adults with diabetes in the U.S. experience at least one access-related barrier to care, such as cost or transportation (Cuddapah et al., 2022). Additionally, studies have shown that individuals with diabetes are up to three times more likely to be hospitalized for preventable complications when social determinants of health—such as housing, food, and mobility—are not adequately addressed. By situating these localized narratives within broader structural and epidemiological patterns, this study reinforces the need for upstream, equity-driven public health strategies that move beyond individual behavior to confront the systemic conditions shaping chronic disease outcomes (Woodward et al., 2024) (Zeidi et al., 2021). In the United States, individuals with diabetes are significantly more likely to develop infections that are resistant to commonly prescribed antibiotics, with studies indicating that over 50% of diabetic foot infections involve

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antimicrobial-resistant organisms—leading to longer hospital stays, higher healthcare costs, and increased risk of complications and amputations(Hasan et al., 2025).

Table-2: Mini Assessment Demographics

Demographics	**(N=6)**
Age (Years Old)	
18–33	1 (17%)
33–48	1 (17%)
48–63	2 (33%)
64+	2 (33%)
Gender Identity	
Male	4 (66%)
Female	2 (34%)
Race	
Caucasian/White	4 (66%)
African American/Black	1 (17%)
Other	1 (17%)
Educational Attainment	
High School	4 (66%)
Bachelors	1 (17%)
Masters	1 (17%)
Marital Status	
Single	2 (33%)
Married	3 (50%)
Divorced	1 (17%)
Annual Household Income	
Less Than $25,000	2 (33%)
$50,000 to $100,000	2 (33%)
$100,000 to $200,000	1 (17%)
$200,000+	1 (17%)
Employment Status	
Full Time Employment	3 (50%)
Part Time Employment	1 (17%)
Retired	2 (33%)
Health Insurance Status	
Covered Through Employer	4 (66%)
Other (Medicare)	2 (34%)
Zip Code	
40207	1 (17%)
40208	1 (17%)
40215	1 (17%)
40217	1 (17%)
40223	1 (17%)
40291	1 (17%)

Participants also proposed actionable, community-informed facilitators to mitigate these barriers, suggesting solutions such as subsidized medication programs, expanded access to virtual healthcare, improved public transportation, and increased availability of affordable fitness and nutritional resources. These recommendations align closely with national public health priorities emphasizing culturally sensitive and equity-oriented approaches to chronic disease management. Notably, a national survey found that nearly 70%

of adults with diabetes in low-income U.S. households reported delaying or forgoing care due to transportation or cost barriers, underscoring the urgent need for localized, structural interventions (Hill-Briggs et al., 2020)(Hood et al., 2023). However, due to the qualitative design and small purposive sample (N = 6), findings cannot be generalized broadly, and potential researcher bias inherent in survey design and thematic interpretation is acknowledged. Future research should employ larger, more diverse samples and integrate longitudinal, mixed methods approaches to comprehensively understand evolving community barriers and to rigorously evaluate the effectiveness of implemented healthcare policies and interventions over time.

Conclusion

Adults in Jefferson County continue to face significant structural barriers—such as medication costs, transportation challenges, and limited food access—that impede effective diabetes self-management, despite strong personal motivation. Grounded in the Theory of Planned Behavior, this qualitative report highlights the urgent need for locally tailored, community-informed interventions. We recommend implementing subsidized medication programs, expanding virtual care, and enhancing transportation access as immediate, actionable strategies to improve diabetes outcomes in this underserved population.

Informed Consent Statement

All participants provided digital informed consent via a Microsoft Forms survey, confirming voluntary participation, anonymity, and understanding of the study's purpose. No personal identifiers were collected, and ethical guidelines for minimal-risk research were followed.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflict of Interest Statement

The author declares that there are no conflicts of interest relevant to the content of this study.

Acknowledgment

The author sincerely thanks Dr. Nicolas Peiper for his valuable feedback and support during the study.

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