


BMJ Open Applying the theoretical domains framework to identify determinants to mental healthcare use among older African Americans with type 2 diabetes: a qualitative study

Jaclynn Hawkins ¹, Srijani Sengupta,¹ Katherine A Kloss,¹ Claudia Schwenzer,¹ Fonda N Smith,¹ Lenette M Jones,² Jamie Mitchell,¹ Robin Nwankwo,³ Gretchen A Piatt^{3,4}

To cite: Hawkins J, Sengupta S, Kloss KA, *et al.* Applying the theoretical domains framework to identify determinants to mental healthcare use among older African Americans with type 2 diabetes: a qualitative study. *BMJ Open* 2024;**14**:e073689. doi:10.1136/bmjopen-2023-073689

► Prepublication history for this paper is available online. To view these files, please visit the journal online (<https://doi.org/10.1136/bmjopen-2023-073689>).

Received 23 March 2023
Accepted 26 July 2024



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¹University of Michigan School of Social Work, Ann Arbor, Michigan, USA

²School of Nursing, University of Michigan, Ann Arbor, Michigan, USA

³Department of Learning Health Sciences, University of Michigan Medical School, Ann Arbor, MI, USA

⁴University of Michigan School of Public Health, Ann Arbor, Michigan, USA

Correspondence to
Dr Jaclynn Hawkins;
jahawk@umich.edu

ABSTRACT

Objectives There is a paucity of research focused on enhancing access to mental healthcare for older African Americans with type 2 diabetes (T2D), who may be at risk for or living with comorbid depression. This study aims to identify barriers and facilitators to mental healthcare utilisation among this population, guided by the theoretical domains framework (TDF).

Design This qualitative study involved 30 interviews with older African American adults diagnosed with T2D. The interview questions were aligned with TDF domains to capture participant perspectives on barriers and facilitators to mental healthcare use.

Setting Interviews were conducted via telephone by a licensed clinician trained in social work. Each session lasted 60–90 min and was transcribed and analysed.

Participants The study included 30 African American adults (15 males and 15 females), aged 60 and above, living in an urban area in the Midwest.

Primary and secondary outcomes The primary outcome was the identification of themes from participant responses, analysed using thematic content techniques and categorised into TDF constructs. Demographic data served as the secondary outcome.

Results Nine key themes were identified, categorised under major TDF domains and constructs. Significant barriers included (1) systemic racism ('knowledge'), (2) normalisation of depressive symptoms ('beliefs about consequences'), (3) perceived stigma ('beliefs about consequences') and (4) costs of medications and healthcare ('environmental context and resources'). Facilitators to seeking mental healthcare included (1) empowerment ('beliefs about capabilities'), (2) perceived benefits of mental health exams ('beliefs about consequences'), (3) positive provider experiences ('reinforcement'), (4) recognition of depressive symptoms as a motivator ('goals') and (5) support networks ('social influences').

Conclusion and implications Key findings highlight that fostering positive patient–provider relationships and enhancing self-recognition of depressive symptoms can significantly encourage mental healthcare utilisation

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Small sample size of 15 male and 15 female participants may limit generalisability of findings.
- ⇒ Findings were limited to the constructs identified by the theoretical domains framework.
- ⇒ Findings highlight unique barriers and facilitators to seeking mental healthcare among African Americans with type 2 diabetes.
- ⇒ In-depth interviews provide deep insight into the unique experiences and perspectives of African American adults with type 2 diabetes, capturing rich, detailed data.

among older African Americans with T2D. These findings suggest that future interventions should focus on strengthening these relationships and improving self-awareness to better mental health outcomes.

INTRODUCTION

Depression is two times more likely in people with diabetes than the general population, and one in four people with diabetes will have elevated depressive symptoms in their lifetime.¹ Among patients with type 2 diabetes (T2D), depression can result in worsened glycaemic management,² greater severity of T2D complications,³ decreased adherence to T2D treatment regimens,^{4 5} increased functional disability⁶ and increased rates of premature all-cause mortality.^{7 8} There is also increasing evidence of significant financial and psychological costs associated with depression in patients with T2D.⁶ One study found that patients reporting comorbid T2D and major depression were seven times more likely to report functional disability, defined as difficulty performing activities of daily living or routine social activities, than



those without T2D or major depression.⁶ Another study found that patients with both conditions were less likely to follow their medication schedules, with greater depressive symptom severity correlating with not taking medication as prescribed.⁵ Estimates of the healthcare costs associated with comorbid T2D and depression are equally compelling. Medical costs associated with moderate to severe levels of depressive symptoms were 51%–86% higher than for patients reporting low levels of depressive symptoms,⁵ and patients with both T2D and depression had 4.5 times higher medical expenditures than patients with T2D alone.⁹ Furthermore, patients with comorbid depression had higher ambulatory care use and filled more prescriptions.¹⁰ Despite this, only 25%–50% of those with comorbid T2D and depressive symptoms actually receive a depression diagnosis and proper treatment.¹¹

Research has shown comparable rates of depression across racial and ethnic groups with T2D, but due to higher prevalence rates of T2D in African Americans, this group faces a greater burden of comorbid disease, particularly as they age.¹² Further, African Americans in the USA face a myriad of healthcare concerns, but mental health challenges may be among the most stigmatised.^{13–15} Research also suggests that African American men and women have more adverse life experiences than individuals of other racial and ethnic groups.¹⁶ In the USA, African Americans experience high rates of poverty, unemployment and underemployment and are incarcerated at much higher rates than individuals of other racial and ethnic groups.¹⁶ They are also one of the most common subpopulations in the USA to experience violence in the community—either directly or indirectly.¹⁶ These events can act as both a source of mental health challenges and a barrier to treatment.^{17 18} While empirical research has highlighted the distinctive mental health needs of African Americans,^{17 18} few have described practical solutions for how to address these needs among those living with a chronic illness.¹⁹ Furthermore, most of the diabetes management interventions that have been developed to meet the needs of African Americans have not been tailored to also meet the needs of those living with comorbid depression.²⁰ As such, current interventions and best practices may not address the unique challenges African Americans with T2D and comorbid depression face, particularly those related to utilisation of mental health services.

Facilitators of, and barriers to, mental healthcare use can be identified systematically using the theoretical domains framework (TDF). The TDF is a determinants framework identifying 14 domains related to behaviour change. It provides a lens for identifying cognitive, affective, social and environmental influences on behaviours, which in turn inform behaviour change strategies for intervention implementation. The use of the TDF allows for theory-driven refinements to optimise intervention content and processes (ie, domain-specific beliefs informed changes and improvements to intervention components) that are congruent with intervention components.

To address this significant gap in the literature, the aim of this study was to explore beliefs about depression among African American individuals with T2D in order to identify barriers and facilitators to mental healthcare to inform future work.

METHODS

Study design

Procedure

A convenience sample of 15 men and 15 women was recruited from the Michigan Center for Urban African American Aging Research Participant Resource Pool (MCUAAR PRP). The MCUAAR PRP (funded by the National Institute on Aging) is a registry accessible to researchers who are seeking African American participants over the age of 55 residing in Detroit, Michigan. Participants in the registry consent to be contacted by researchers when joining. Eligibility criteria for focus group participation included age 55 or older, identification as African American, and self-reported diagnosis of T2D from a physician. Depression diagnosis was not an inclusion criterion in our study because we sought to capture responses from a broad range of individuals with and without depression and mental healthcare use. Given that African Americans are less likely to receive proper diagnosis and treatment of depression,²¹ we aimed to better understand barriers and facilitators to mental healthcare use to (1) capture a broad range of experiences (2) increase the applicability of our findings.

The research team was sent a password-protected file with a list of participants who met our study inclusion criteria. Participants received one phone call which involved (1) reconfirmation of study eligibility using a telephone screening (administered by a research assistant or project coordinator); (2) a description of the study and (3) agreement to participate in the interview. Of the 116 participants eligible for the study, a total of 58 men and 58 women were contacted. 15 male and 15 female participants verbally consented to be interviewed. The participants were interviewed over the phone from November 2020 to January 2021. The interviews were semistructured and conducted by an experienced female interviewer with training in clinical social work (FS) and lasted 60–90 min (see [table 1](#)). Prior to beginning, the interviewer briefly introduced themselves, discussed the goals of the study and collected demographic data to describe the participants (described in [table 2](#)). All interviews were recorded, professionally transcribed and deidentified.

Interview guide development

The interview guide was informed by the TDF. As previously noted, the TDF is a determinants framework identifying 14 domains related to behaviour change.²² Developed by a multidisciplinary team, the TDF synthesises more than 30 theories of behaviour change and identifies 14 critical domains.²² The research team identified 11 domains most relevant to our study. Domains

Table 1 Interview questions

Domain	Questions
Knowledge	<i>What words do you or your family members use to describe depression?</i>
	<i>What makes men/women, particularly African American men/women, at risk for depression?</i>
	<i>Do you know of anything that a person can do to reduce their risk of getting depression?</i>
	<i>What makes men/women, particularly African American men/women, at risk for stress?</i>
	<i>What types of stressors do African American men/women experience?</i>
	<i>In your opinion, what can African American men/women do to reduce their stress? How do African American men/women cope with stress?</i>
Skills	<i>Can you please describe how you or someone you know would go about getting care if they felt stressed or depressed?</i>
Social identity/role	<i>What does having a mental health visit mean to you?</i>
	<i>In your opinion would men/women, particularly African American men/women, be open to talking to a professional, such as a counselor, to help you deal with stress and/or depression?</i>
Beliefs about capabilities	<i>On a scale from 0 to 10, where 0 is 'not confident at all' and 10 is 'very confident', how confident are you that you can talk to our doctor or counselor about mental health concerns?</i>
	<i>What makes it easy/hard?</i>
	<i>What do you think would help you overcome these problems?</i>
	<i>On a scale of 0–10, where 0 is 'not confident at all' and 10 is 'very confident', how confident are you that you can talk to a professional such as a therapist or counselor about stress concerns?</i>
	<i>In your opinion, what issues are men/women, particularly African American men/women, likely to experience due to stress?</i>
Optimism	<i>Do you think that you are likely to experience problems due to depression?</i>
Beliefs about Consequences	<i>What are the positive benefits to having a mental health exam? Are there any negatives or "down sides" to having mental health exams?</i>
	<i>What do you expect will happen if you or someone you know was depressed but did not have regular mental health examinations?</i>
Reinforcement	<i>(If the participant had a previous health appointment) Did the experience of talking with a mental health care provider make it more or less likely that you would have another one in the future?</i>
Goals	<i>Considering your other priorities, if you or someone you knew was feeling depressed or stressed, how important would it be to seek help? What are higher priorities and why?</i>
Environmental context and resources	<i>Sometimes our plans are hindered by things outside of our control. What things, outside of your control, could make it harder for you to have regular PCP exams for your diabetes and mental health treatment? What things could make it easier?</i>
	<i>What resources would be helpful to you if you were feeling stressed or depressed?</i>
Social Influences	<i>Have you ever been prompted by someone to have mental health treatment? If yes, by whom?</i>
	<i>Has anyone you know visited a mental health care provider for depression?</i>
	<i>What do you think prevents men/women, particularly African American men/women, from seeking depression treatment?</i>
Emotion	<i>Can you please imagine/think back when you were having a mental health appointment, what thoughts or feelings would you/did you have?</i>

were identified based on guidelines established for investigators using the TDF to identify factors that influence health behaviours in various contexts. Specifically, TDF domains for our study were based on a thorough assessment of a range of sources of information about mental healthcare use in African Americans via a careful examination of evidence-based recommendations and empirical research. We identified mental healthcare use as our primary health behaviour because a wealth of research shows that various forms of mental health interventions (ie, individualised and group

therapy) effectively treat depression and are typically the most widely used treatment option after a depression diagnosis.

Guided by the TDF, interview guide questions (30 items, see [table 1](#)) were developed to identify facilitators and barriers to mental healthcare use. Some of the questions participants were asked were related to their gender. For instance, men were asked, 'what makes men, particularly African American men, at risk for depression,' while women were asked, 'what makes women, particularly African American women, at risk for depression.'



Table 2 Sociodemographic characteristics of African American men and women with type 2 diabetes (n=30)

	African American men (n=15)	African American women (n=15)
Age range (n)		
54–65	4	3
66–75	5	6
76–85	5	6
>85	1	0
Average age, n (SD)	72 (4)	73 (4)
Average age at T2DM diagnosis, n (SD)	53 (6)	58 (6)
The average age for interviewees was 72 for men and 73 for women while the average age at diagnosis was 53 (men) and 58 (women).		

Patient and public involvement

This study was initiated because the researchers had previously noted obstacles that prevented African American with T2D from using mental healthcare. The interviews conducted in this study increased the researchers' clarity on the specific barriers and facilitators the participants faced such that future studies can work to improve mental healthcare utilisation in this population.

Research team and reflexivity

The research team that engaged in data analysis included four individuals, JH, KAK, CS and FNS. Each researcher identified as a woman and held secondary degrees including master's and PhD-level training. Both JH and FNS identify as African American and KAK and CS identify as non-Hispanic white. At the time of the study, FNS also served as one of two study coordinators on the research team. No research team members had prior relationships with research participants. KAK and FNS were employed as research coordinators for the study and had extensive experience conducting qualitative research in the African American community, including performing semistructured in-depth interviews and focus groups. The interviews in the present study were conducted by FNS. CS was employed as a research assistant for the study with prior research experience related to chronic illness. JH was the principal investigator with several years of experience in diabetes health disparities and intervention development and adaptation with African Americans. The research team engaged in reflexive debriefing during each coding meeting including immediate reactions and in-depth discussion of individual reactions to interviewee responses. Motivation to pursue the research topic among research team members ranged from personal experience with diabetes to general interest in research on health disparities.

Analysis

We engaged in thematic content analysis with an inductive approach using the rigorous and accelerated data reduction (RADaR) method of qualitative analysis to manage and code data. RADaR is a group-based approach that was employed to organise the data and identify a codebook based on relevant TDF domains and constructs.^{22–26}

The 11 domains of the TDF identified to be most relevant to our research question (previously described) were used as the coding framework. All data were managed using the University of Michigan Dropbox application,²⁷ a (Health Insurance Portability and Accountability Act) HIPAA-compliant data storage system. The data reduction process described above took place in three phases.

First, immediately following interview transcription, our research team revisited the study's research question and four members of the research team (JH, KAK, CS and FNS) read through transcripts to become familiar with the data and to identify preliminary themes and subthemes that arose from the study participants.

Second, a table with the following subheadings to organise the data: interview guide question, text chunk, code, notes and theme was used. Using this table, JH, KAK and FNS organised each interview transcript by interview question and responses. Our team then engaged in open coding based on each interview question. Initial coding was conducted by two members of our research team (JH and CS). Codes were then discussed and revised with the other team members (KAK and FNS). On completion of coding, the research team compared coding selections and when discrepancies occurred, consensus was reached through group discussion. Saturation provides criteria for discontinuing data collection and/or analysis of qualitative data which occurs when researchers find that analysis of additional data no longer leads to new codes and emergent themes.²⁸ After analysis of half (15 participants) of our interview transcripts, the authors concluded that no new codes and themes were emerging from the data. As codes became saturated, they were organised into a specific list of themes by the research team (KAK, JH, CS and FNS).

We then engaged in a deductive approach assigning the themes with meaningful text to the identified TDF domains. Two team members (CS and FNS) confirmed codes and compatibility with TDF domains and constructs. If a code did not fit within a TDF domain and corresponding construct, it was not categorised or kept in the analysis. This was done to ensure that only data related to the identified TDF behaviour change domains was reported. A summary of participant responses was then tabulated for each of the TDF domains.

Lastly, the research team selectively reduced the transcripts to only segments of text relevant to barriers and facilitators to mental healthcare use and reached agreements on quotes that related directly to initial research questions. The reporting of this study was based on the Consolidated Criteria for Reporting Qualitative Research checklist.

RESULTS

Participant characteristics

Participant demographic characteristics are summarised in table 2.

Table 3 presents the identified facilitators and barriers to mental healthcare uptake and the relationship to the domains and constructs as determined by the guiding principles of the TDF. Seven of these domains emerged as key factors in the utilisation of mental healthcare: knowledge, beliefs about capabilities, beliefs about consequences, reinforcement, goals, environmental context and resources, and social influences. As stated, based on coded responses, the analysis team connected TDF domain constructs to participant quotes. Associated constructs are denoted under each domain's section.

Domain #1: knowledge

The knowledge domain encompasses an understanding of behaviour as well as the schemas and mindsets about it.²² In our study, participants described perceived systemic racism in healthcare systems as a factor that increases risk, specific to African Americans, for developing depression and subsequent lack of access to mental healthcare. One participant stated: '*[We] are unable to live the lifestyle that [we] want to because of barriers due to systemic racism and community just not supporting. Being unsupported...by the family members, all the institutions in the community: the church, the educational system, yeah, the whole gamut.*' [PID103, Female, 71]

Participants recognised a two-step process as a facilitator to reduce the risk of depression: first, self-recognition and acknowledgement of the signs and symptoms of depression, then taking action to prevent or alleviate depression: '*Number one, you have to be aware of it. And this is where the environment and the culture and the group that you are in helps. You have to be aware of it, and you have to determine how do I take care of myself in this environment.*' [PID 201, Male, 87] Another participant emphasised the second step of this process, stating that once symptoms are identified, people must '*get out of the situation [as] fast as possible. Don't linger in a situation.*' [PID101, Female, 60] Emphasis was also placed on the importance of identifying signs and symptoms of depression and knowing when to seek professional help. One participant stated '*if you're that depressed and stressed out, then evidently what you're doing is not working. So you need to go get help, because you're not helping yourself that way.*' [PID110, Female, 54]

Domain #4: beliefs about capabilities

This domain relates to perceived self-efficacy.²² Participants were asked how confident they were in speaking to their providers about mental health concerns. On a scale of 0–10 with 10 being the most confident, ratings mostly ranged between scores of 8 and 10 with the majority reporting a 10. Facilitators included feeling an intrinsic responsibility to take care of oneself, having confidence or faith in their current doctor and using faith and spirituality practices as support for seeking out mental healthcare. Regarding faith and spirituality, a participant

explained '*Well, because that's part of what I do. I have to watch my physical, mental, emotional, spiritual health in order to function. So if I needed help, I definitely would talk to one of my physicians about it.*' [PID 103, Female]. A participant also elaborated on how physician–patient confidentiality increased her trust in her provider, and subsequently her confidence in communicating with them: '*Well, I have a therapist that I talk to. Yeah, at the pain clinic I go to. I talk with her and she doesn't even tell the doctor personal things we talk about.*' [PID 110, Female, 54] This statement also suggests that participants have high self-confidence in judging a provider's trustworthiness in disclosing concerns. This content also aligns with Domain #7 (Reinforcement) and indicates a connection between these domains. Another participant reported a confidence level of 5–6 and explained this number would increase if her physician was of the same gender.

When asked to further explain their confidence rating one participant stated that the amount of time physicians spent with him influenced his confidence level in speaking about mental health concerns: '*... one of the things is how my doctors were selected and how I feel about those doctors... I wouldn't stay with a doctor that I didn't have any confidence in...[The] things that [keep] me from being able to talk to them sometimes about things [is] they're kind of graded on how fast they can get in and out [and] before you think of what you wanted to say...about the mental conditions and so forth... it's like, "Okay. Here is your prescription. Go get your next visit with the girl at the desk."*' [PID 203, Male, 74]

Domain #6: beliefs about consequences

Beliefs about consequences include constructs about the expected outcomes of a behaviour.²² While responses to these questions indicated a belief that attending mental health exams held more value and benefits than not attending, responses also identified the stigma attached to mental healthcare as a barrier to receiving mental healthcare exams.

One participant explained while the benefit of a mental health exam may decrease the burden of living with the condition, there is still a stigma associated with these appointments. '*...The negatives come from the environment, from people who are not well-educated and well-trained enough to believe... society says that if you go to see a psychiatrist, then you're crazy. That's the verbiage in the street...But again, the individual has to reach a point where he says, "How do I take care of me?" That's the most important.*' [PID201, Male 87]

Another participant noted a mental health diagnosis in a medical record may cause healthcare providers to '*[always] judge you as the state of mind you [were] in. They don't see that you have improved*' [PID101, Female, 60].

Respondents described that an extended time without mental health treatment may lead to depressive symptoms becoming common and may cloud judgement and decision-making skills requiring the person to tap into their social network for support. '*A person would have to do something to alleviate that depression, so they would need help in working their way out of that. It's like a hole....Maybe a family*

Table 3 Facilitators and barriers to Mental Health Care Uptake of older African American people with type 2 diabetes (n=30)

Domain/question	Construct	Facilitator	Barrier
Social identity/role In your opinion, would women, particularly Black women, be open to talking to a professional, such as a counsellor, to help you deal with stress and/or depression?	Group norms Social norms	Encouragement from family/friends Opinions of mental health changing to socially accept help Past experience with mental health professionals Faith in professional	Fear of appearing weak Lack of trust in medical/mental health community Not approached in a culturally appropriate manner Distrust of doctors
Beliefs about capabilities One a scale of 0–10, where 0 is 'not at all confident' and 10 is 'very confident', how confident are you that you can talk to your doctor or counsellor about mental health concerns? What makes it easy/hard?	Self-efficacy	Responsibility to take care of holistic self Faith in current doctor 'Just have to let it out' Not afraid to speak up for self Faith practices as a support	
Knowledge What makes women at risk for depression? What can someone do to reduce their risk of depression?	Knowledge about condition Knowledge	Receive education and start a job/career Reach out to others and offer support	Loneliness, feeling unsupported by family and relatives Financial barriers and/or lack of finances Systemic, interpersonal and experienced racism
Beliefs about consequences What are the positive benefits to having a mental health exam? What are the negatives or downsides to having a mental health exam?	Beliefs		Tests run to diagnose any mental health concerns may scare people from going
Beliefs about consequences What do you expect will happen if you or someone you know was depressed but did not have regular mental health examinations?	Outcome expectancies Beliefs Consequences	Family and/or friends would step in as a support to encourage a mental health visit	Stigma around mental health visits still exist and may preclude people from seeking help Someone may be depressed for so long, they think it is normal Their mental health concern would become worse and they would experience decision-making problems

Continued

Table 3 Continued

Domain/question	Construct	Facilitator	Barrier
Reinforcement Did the experience of talking with a mental health care provider make it more or less likely that you would have another one in the future?	Incentives	Past experience with a counsellor or mental health professional was helpful Knowing that the counsellor would keep discussions confidential made them more likely to return Feeling better about a particular mental health concern as a result of therapy made it more likely to go back to the counsellor	Learning the coping strategies helped in a such a way that they would not return because they would have learnt the skills needed for a particular mental health concern
Goals Considering your other priorities, if you or someone you knew was feeling depressed or stressed how important would it be to seek help? What are higher priorities and why?	Goal priority	Seeking help is very important because if a mental health concern is not addressed, it can decline in such a way that could be fatal Seeking help is very important and it is advantageous if the person recognises that they need and want help Seeking help would release the stress and pressure off the person	Priority level would depend on the person, but the financial cost of seeking help can preclude people from attending sessions
Environmental context and resources Sometimes our plans are hindered by things outside of our control. What things, outside of your control, could make it harder for you to have regular PCP exams for your diabetes and mental health treatment? What things could make it easier?	Environmental stressors		People not recognising what their needs are may make it harder to receive regular care Only receiving telephonic/virtual 'visits' makes it harder to receive care Financial costs of care Unreliable or lack of transportation Insufficient or unreliable medical insurance to pay for care High cost of necessary medications Changes to assistance programme that make it more difficult or impossible to receive regular care
Social influences Have you been prompted by someone to have mental health treatment? If Y, who?	Barriers and facilitators Social support	Past experience as a motivating factor to go and receive care Feeling good about receiving care Appointments scheduled consistently and on a regular basis 6 respondents have been prompted to receive mental healthcare Examples of prompters include pain doctors, family, friends, academic leaders, employers	7 respondents have never been prompted to receive mental healthcare

Continued



Table 3 Continued

Domain/question	Construct	Facilitator	Barrier
Social influences What do you think prevents women, particularly Black men/women, from seeking depression treatment?	Social norms		Not wanting to tell someone about their private life, wanting to maintain privacy Fear of being judged, fear of being seen as weak Seeking professional help is highly stigmatised Insufficient or lack of financial resources to seek care Lack of awareness of resources as professional help is not talked about and/or stigmatised Not aware that a problem exists that may require professional help A sense of pride may inhibit someone from recognising or acknowledging a problem and seeking help
Social Influences influences What resources would be helpful to you if you were feeling stressed or depressed?	Resources	Seeing a mental health professional Having regular therapy-related discussions with a group Exercise groups or classes Going to social events or seeking supports from social networks Being able to reach a doctor or other medical professional when needed Being able to take medications regularly Journaling and conscious gratitude	
PCP, Primary Care Physician.			

member can intervene....Some people have been [been depressed for] so long, they think it's normal.' [PID103, Female, 71]

Ultimately, most participants perceived seeking help for mental health concerns as very important because, if left untreated, serious effects may occur: 'If I was really depressed or stressed, I think it would be pretty important, again, because those are things that [seem] like, left alone, they just get worse. And the next thing you know, you're really in a crisis-type situation.' [PID113, Female, 74]

Domain #7: reinforcement

The reinforcement domain investigates how other factors incentivise or disincentivise a behaviour.²² Participants indicated a previous positive experience with a mental healthcare provider made them more likely to seek out additional mental health treatment. For instance, following a positive experience, participants felt more willing to return for a future visit because of their familiarity with the provider. Recognising the positive benefits of using coping skills taught by the provider also encouraged participants to attend future visits. Other participants felt that once they learnt the coping skills they did not need to return to sessions because they felt they already knew how to approach stressors.

Participants also pointed out the necessity of having a trusted healthcare professional to discuss their options for mental healthcare, 'well, there's a nurse practitioner that I would call at the VA... then if I needed to see a psychiatrist or whoever, she could put me in touch with the ones at the VA hospital. [Also,] I do see my doctor at [another] hospital [and it] has the facilities for it. So all I would need would be just to be pointed in that direction.' [PID 203, Male 74] Other participants mentioned factors such as obtaining referrals through their insurance company, seeing mental healthcare providers and seeking help from '...spiritual personnel' [PID201, Male, 87] as helpful resources for coping with stress and depression.

Domain #9: goals

The goals domain relates to target outcomes and how a person plans to achieve them.²² The majority of participants felt they would seek help when feeling depressed or stressed. Many participants indicated, '[seeking help] should be a very high priority if you think you [have] some mental issues.' [PID212, Male, 67] Participants also felt individuals experiencing depression or stress should intrinsically want professional help to alleviate symptoms of depression and stress. One participant felt that seeking help is only beneficial if the person acknowledges there is a problem and wants help for it.

Domain #11: environmental context and resources

This domain includes conditions of an individual's situation or environment that affect a behaviour.²² The availability of financial resources impacted many participants' ability to seek health resources. Participants cited costs of care as a potential barrier to visit their primary care physician '...if I didn't have the money to pay for it now. I think

that would be a problem...' [PID211, Male, 80] Another participant expressed that although the need to seek help for depression or stress is the individual's responsibility, the financial burden of getting mental healthcare may prevent the person from receiving care. 'Well, it would depend...on the person, how they're reacting to the stress, what's causing the stress, and whether or I knew of somebody that I've at least thought could help them, and if I thought they had a way to afford it. That gets to be a big- that can get to be a big factor too.' [PID203, Male, 74]

Some respondents expressed their reliance on insurance covering medication costs. One participant stated 'if I don't have no insurance, I can't get my medicine. And if I lose my insurance, I have a hard time trying to pay my rent, my bills, and to have food on my table, if I lose my insurance. Because these medications are high. There's some things I don't have no control over.' [PID105, Female, 70]

Participants also identified issues such as unreliable transportation and lack of support as barriers to receiving care, 'Only thing is when I don't have my transportation... I don't like to ask anyone to do anything for me. I know my daughters, they don't mind, but I don't like to interrupt their life, especially since they're working.' [PID104, Female, 71]

Domain #12: social influences

The social influences domain covers interpersonal relationships and their effect on behaviour.²² While seven participants indicated never being prompted by others to seek mental healthcare, six participants indicated they were. These participants were encouraged by pain management physicians, family members, friends and academic leaders. One participant stated '... the first time was actually at marriage counselling and somehow or other that came about out of my boss, and she kind of referred me [to additional mental health care].' [PID203, Male, 74]

One common theme emerged for facilitating coping with depression was finding and using social support systems. 'Well, I find that religion helps. Really, having friends and things that you can talk to certainly helps. Like the thing at the vet center, we get around, and basically, kind of discuss things that happened in Vietnam or things that happen as the result of PTSD and things that you can do to reduce stress...' [PID 203, Male, 74]

Participants indicated barriers to seeking and receiving care as lack of social support and feelings of isolation and loneliness. These two factors may create a cycle that enables and amplifies feelings of stress and depression. 'There's very little respect for the African American male in [America] so as a result of that—and this is why African American males usually have a lot of the illnesses that they have, because they have internalized their grief. And they don't have a voice. They don't have a voice...' [PID201, Male, 87]

When asked what resources would be helpful when feeling stressed or depressed, responses centred around engaging in community resources such as exercise classes, 'I hear some of these women say they take yoga. And then I hear some say they go to... Tai Chi' [PID102, Female, 73], and attending social events or seeking support from social



networks, 'going to events and—any time I feel like I'm stressed or depressed, I would go to events and be around people, and it takes your problems away.' [PID104, Female, 71]

DISCUSSION

These findings direct attention to the saliency of the range of barriers and facilitators African American men and women with T2D experience in seeking help for mental healthcare. We used the TDF to guide data collection and analysis and found nine key study themes associated with seven of the TDF domains. The most significant barriers included (1) experiences of systemic racism ('knowledge'), (2) normalisation of depressive symptoms ('beliefs about consequences'), (3) perceived stigma ('beliefs about consequences') and (4) costs of medications and healthcare ('environmental context and resources'). Themes for facilitators of seeking mental healthcare included (1) empowerment ('beliefs about capabilities'), (2) viewing mental health exams as beneficial ('beliefs about consequences'), (3) positive experiences with providers ('reinforcement'), (4) awareness of depressive symptoms as a motivator to seek mental healthcare ('goals') and (5) support networks ('social influences'). While previous studies have also investigated barriers and facilitators to mental healthcare usage, few have focused on African American persons with T2D. In what follows, we place our findings in the context of previous work on help-seeking behaviours.

Our analysis found that respondents perceived racism and discrimination as a risk factor for developing depression among African American men and women ('knowledge'). Similarly, Wagner and Abbott²⁹ point out that higher occurrence of perceived discrimination in healthcare settings among African American individuals with T2D was associated with higher depressive symptoms, probability of having clinically significant symptoms, and likelihood of being diagnosed with depression. Patients who had experienced more discrimination in that study were also less likely to take antidepressants as prescribed. A study by Williams *et al*²⁸ that compared diabetes distress among older African American and White Americans also found that perceived discrimination was linked with diabetes distress. In addition to the association of perceived discrimination and racism with suboptimal mental health outcomes, our work and that of others, note a similar impact on mental healthcare use. In general, African Americans are less likely to use mental health services, and if they receive care, the quality of care decreases compared with non-Hispanic white patients.^{28 30} Experiences of perceived racism and discrimination are two factors that contribute to usage of mental health services, negative mental health treatment experiences and not following treatment plans.³¹

The data from our interviews also indicate that African Americans may normalise and internalise depression ('beliefs about consequences'). Sussman *et al*³² analysed data from a psychiatric epidemiological survey of

African Americans and non-Hispanic White Americans and discovered that African Americans may consider their depressive symptoms to be normal and thus not seek mental healthcare. Green³³ determined that the strong African American woman social construct has led many African American women to become accustomed to serious emotional distress without having a chance to heal. Our findings imply that this may hinder their decision-making, which, in turn, could negatively impact their T2D self-management.

We also found that stigma surrounding mental healthcare is a barrier to seeking professional help ('beliefs about consequences'). This parallels previous research focused on the African Americans.^{13–15} Multiple participants with T2D in Egede³⁴ noted shame and stigma in the African American community regarding a depression diagnosis. In addition, a male participant in that study further indicated that African American men would not feel comfortable discussing depression in front of a woman.³⁴ Likewise, another study with only African American male participants found that the stigma surrounding mental healthcare, compounded with the perception that African American men should not show weakness, prevented them from seeking help.³⁵

In terms of the environmental context and resources domain, our study suggests that the affordability of mental healthcare was a key barrier to making and attending appointments. A qualitative study centred on African American men also documented the critical association of financial barriers with not seeking treatment for depression.³⁶ According to recent data from the Substance Abuse and Mental Health Services Administration,³⁷ cost or insurance concerns were a reason 39% of African Americans with a need for mental health services did not use them. Furthermore, when limiting analysis to African Americans with T2D, there is an even greater financial burden, as they often have additional T2D medication costs and medical services they are responsible for. In focus groups with 25 African Americans with type 2 T2D, Egede³⁴ discovered that cost of medications and having to take multiple medications were barriers to seeking mental healthcare, which supports our findings that financial resources limit mental healthcare usage.

Our study also revealed that empowerment and an intrinsic responsibility to take care of oneself were facilitators for seeking mental healthcare ('beliefs about capabilities'). A majority of participants in our study were confident about their ability to speak with a provider about mental health concerns. Although participants described a stigma towards seeking professional help and perceived racism and discrimination as a barrier, as noted above, they personally felt comfortable discussing depression concerns with their providers. Previous research indicates that encouragement from providers, family and friends may empower African Americans to begin therapy.^{38 39} This study also found that personal behaviours facilitated treatment participation. The participants noted that being proactive was crucial because of the prevalence of

inadequate treatment in the mental healthcare system. Bronder *et al*³⁹ found that active coping is associated with lower depressive symptoms in African American women, although this may be due to factors besides seeking professional help. More research is warranted to better understand why African Americans with T2D still pursue mental health services despite their acknowledgement of stigma and perceived racism and discrimination among healthcare professionals.

Participant responses in our study also suggest that African Americans with T2D view seeking mental health usage as beneficial despite the barriers described above ('beliefs about consequences'). Comparably, a study of 26 African American men in St. Louis documented the men as being supportive of depression treatment. Although they feared being labelled as 'weak' or 'crazy' if they did pursue mental healthcare, they still believed seeking help for depression was important.³⁶ An earlier focus group-based study found an interesting paradox regarding depression in the African American community.³⁵ The majority of the participants stated that it would be beneficial to treat depression, with some advocating for psychotherapy and others for medication.³⁵ However, most of the participants in that study did not think they themselves would get depressed and believed that if they did, they would be able to deal with the depression on their own.³⁵

A novel finding in our study was that having a positive interaction with a mental healthcare provider was a facilitator for seeking additional care ('reinforcement'). In focus groups with African American and White patients, participants in a prior study stated that the interpersonal skills of their providers impacted their willingness to disclose their feelings and complete their treatments.⁴⁰ Furthermore, the African American patients in that study were concerned about being used as 'guinea pigs', which reflects the impact of trust in physician relationships for this population.⁴⁰ Another study found that lower levels of diabetes distress correlated with increased physician trust, indicating positive relationships with providers are beneficial.²⁸ These findings emphasise the importance of trust and the need for the development of strategies to better facilitate relationships between mental healthcare providers and African American patients with T2D.

Awareness and recognition of depression were also identified as a facilitator to seeking treatment in our study ('knowledge', 'goals'). Sussman *et al*³² found that depression was more medicalised in non-Hispanic white communities than African American communities. White participants had a greater likelihood of recognising their symptoms to be problematic and seek help from a professional, while African American participants tended to not find them abnormal.³² It is possible that this difference is due to depression being more normalised in African American communities, which emphasises the need for more focus on these populations. However, our results suggest that once depressive symptoms are recognised, seeking professional help to alleviate these symptoms

is seen as a priority, which can lead to positive health outcomes. This is further supported by another study that found recognition of depression may be associated with decreased risk of mortality in elderly men with T2D.⁴¹

Our study, alongside existing literature, underscores the significant role of both formal and informal social support in managing stress and promoting mental healthcare among African Americans with T2D ('social influences'). The broader implications of social support extend to physical health, particularly in managing T2D, as evidenced by reduced symptoms and better health outcomes.⁴² However, other research has reported a general dissatisfaction with social support among African Americans with T2D, underscoring a significant area for improvement.⁴² Our findings align with a prior study that found higher levels of perceived social support were linked with fewer depressive symptoms in African American women.⁴³ Gender differences in this context are also noteworthy. In a study involving 168 African American college students, gender was found to moderate the relationship between loneliness and symptoms of anxiety and depression, with women reporting more of these negative affect symptoms.⁴³ Although this study did not specifically focus on African Americans with T2D, its findings still have important implications for this population.

Future studies should investigate mental healthcare utilisation in African American men and women with T2D separately to determine whether each group faces unique barriers. Addressing these findings could lead to enhanced patient health outcomes and overall well-being. Future interventions should prioritise strengthening social support systems to ensure they are inclusive, effective and satisfactory for all individuals, particularly those in underserved communities.

Strengths and limitations

A strength of this study is that it investigated the relationship between depression and T2D among African Americans. This allowed us to elucidate unique barriers and facilitators to seeking mental healthcare that may not be observable when only focusing on people with depression or diabetes alone.

However, the generalisability of this study may be limited. We conducted 30 interviews of African American men and women with in a Midwestern city who were at least 60 years old. The trends we identified may not apply to other groups of African American men and women who have T2D. Our analysis also did not stratify for individuals who have or have not received mental healthcare, which limited our ability to capture potential differences between these two groups.

Future research and practical implications

Our findings can be used as a springboard for future research on tailoring interventions to leverage facilitators and eliminate barriers to mental healthcare engagement and access among African Americans with T2D and depression. Our investigation is part of a slim number

of studies that explore barriers and facilitators to diagnose and treat depression in this population and more research is needed.

Our data, when placed in the context of previous literature, demonstrates a dissonance between patients' beliefs about depression and their behaviours regarding seeking help. While mental healthcare is seen as important, many felt they would not need external support if they themselves had depressive symptoms.^{32 34} Thus, interventions may benefit from integrating education regarding sources of depression, reiterate the importance of recognising symptoms and aid patients in seeking additional help as needed.

Conclusion

Our study identified multiple barriers and facilitators for African American men and women seeking mental healthcare. The data from our interviews parallels previous research indicating that stigma surrounding mental health, perceived discrimination in the healthcare system and the normalisation of mental illness in the African American community can negatively affect mental healthcare utilisation. Furthermore, the burden of healthcare costs on already strained financial resources poses a significant barrier to seeking treatment for mental health concerns.

Many of our participants indicated that positive experiences reinforced the value and importance of mental healthcare visits. Awareness of depressive symptoms, motivation to take care of oneself and viewing mental health exams as beneficial were also facilitators identified in our interviews. Participants described being referred to mental health specialists by other medical professionals and individuals within their social networks as important, highlighting the critical role of social support in facilitating access to mental healthcare.

These findings underscore the need for more tailored approaches and treatments for African American men and women with T2D and depression, emphasising culturally sensitive strategies to address the unique challenges this population faces in accessing mental healthcare, including the burden of healthcare costs.

Acknowledgements We would like to thank the University of Michigan School of Social Work and The Michigan Center for Urban African Aging Research for supporting this project. We would also like to thank the participants for their contributions to this research.

Contributors JH the PI of this study with support from LMJ, JM and GAP, FNS, KAK, CS and RN assisted JH in developing interview questions. JH, FNS, KAK and CS analysed the interview transcripts. JH, SS, KAK, CS and FNS contributed to various parts of manuscript development, editing and submission. JH is the guarantor of this work and, as such, had full access to all the data in the study and took responsibility for the integrity of the data and the accuracy of the data analysis.

Funding This work was supported by Michigan Center for Diabetes Translational Research (MCDTR) grant number P30DK092926 and the Michigan Mental Health Integration Partnership (MIP), a collaborative effort by the University of Michigan and Michigan Department of Health and Human Services).

Disclaimer Study sponsors had no role in the design of this research or writing this manuscript. The content is solely the responsibility of the authors and does not necessarily represent the official views of the MCDTR or the MIP.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval The study was approved by The University of Michigan Human Subjects Internal Review Board #HUM00170437. Participants provided verbal consent before the interviews began.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data sharing not applicable as no datasets generated and/or analysed for this study.

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ORCID iD

Jaclynn Hawkins <http://orcid.org/0000-0001-8132-790X>

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