



‘She showed me a new path, a way forward’: exploring how navigation influences mental health among Guatemalan gay and bisexual men living with HIV

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Summary

Mental health problems, including anxiety and depression, are a common comorbidity among gay, bisexual and other men who have sex with men (GBMSM) living with HIV. Informed by social support theory, health navigation is a strengths-based intervention that has been demonstrated to improve HIV care outcomes. The purpose of this study was to explore how health navigation influences the mental health of GBMSM living with HIV. We analyzed longitudinal qualitative in depth interviews conducted with GBMSM ($n = 29$) in a 12 month multi component intervention to improve HIV care outcomes, including health navigation. We used narrative and thematic analytic approaches to identify salient themes, including if and how themes changed over time. Participants described that navigator support helped them maintain good mental health, prevent crises and respond to crises. Navigator support included providing motivational messaging, facilitating participants’ control over their health and improving access to care, which aided with supporting mental health. Navigators also responded to acute crises by providing guidance for those newly diagnosed with HIV and support for those experiencing critical life events. Participants emphasized the importance of feeling heard and valued by their navigators and

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gaining hope for the future as key to their wellbeing. In conclusion, health navigation may be an effective intervention for promoting mental health among GBMSM living with HIV. Additional research is needed to examine mediating pathways between navigation and mental health, including informational support, or if navigator support moderates the relationship between stressors and mental health outcomes for GBMSM.

INTRODUCTION

Many gay, bisexual and other men who have sex with men (GBMSM) living with HIV experience mental health problems, including depression and anxiety (Brandt *et al.*, 2017; So-Armah *et al.*, 2019). Documented factors driving mental health comorbidities include the perception that HIV is a life-threatening illness that can be difficult to manage and is greatly stigmatized (Uthman *et al.*, 2014; Yang *et al.*, 2020). Several studies have found that among GBMSM living with HIV, mental health problems are associated with suboptimal engagement in HIV care and adherence to anti-retroviral therapy (ART) (O’Cleirigh *et al.*, 2013; Batchelder *et al.*, 2017; Tao *et al.*, 2017). Accordingly, there are increasing calls by researchers to address the role of mental health in keeping GBMSM living with HIV in care and on treatment (Bcyrcr *et al.*, 2016; Batchelder *et al.*, 2017; Silvestrim *et al.*, 2020).

Health navigation is a strengths-based intervention model originally developed in the context of cancer care that has been adapted as a way to support people living with HIV (PLHIV) to negotiate social and structural barriers to care (Bradford *et al.*, 2007). Navigators provide different types of social support, including emotional, instrumental and informational support through in-person meetings and accompaniment to medical appointments, and remotely via phone calls and text messages. They also assist individuals in identifying and using existing resources and connecting to additional resources to maintain health and wellbeing (Mizuno *et al.*, 2018). In 2018, Mizuno and colleagues published the first systematic review of the associations between health navigation and HIV care continuum outcomes. Of the 20 studies included in their review, 17 reported at least one positive association between navigation and HIV care outcomes; navigation was more likely to be positively associated with linkage to care, retention in care and viral suppression compared to ART uptake and adherence (Mizuno *et al.*, 2018).

While mental health is one pathway through which navigation may influence HIV care outcomes, few studies have measured the impact of health navigation on mental health outcomes among PLHIV. In a meta-synthesis of seven qualitative studies of navigation among PLHIV in the USA, Koland and colleagues found that participants reported feelings of hope and improved emotional wellbeing as a result of their navigation experience (Roland *et al.*, 2020). Outside of the HIV care context, however, health navigation has been found to improve clients’ mental health directly (Kneipp *et al.*, 2011; White *et al.*, 2012), in addition to being promoted as a solution for navigating mental health care services globally (Knesck and Hemphill, 2020).

To improve understanding of how health navigation influences the mental health of GBMSM living with HIV, we conducted longitudinal qualitative interviews with GBMSM ($n = 29$) participating in a 12-month multi-component intervention in Guatemala, including

health navigation. We explored participants': (i) descriptions of the support they receive from navigators and (ii) how these different types of support affected mental health.

METHODS

Setting and parent study

In Guatemala, HIV prevalence is over 13 times higher (10.5%) among GBMSM compared to the general adult population (0.8%) (Guardado Kscobar et al., 2017). While little research has been conducted on the mental health of GBMSM in Guatemala, they report lack of social support, fear, and stigma and discrimination due to their sexual orientation as negatively affecting their mental health, and inhibiting HIV testing and engagement in HIV care (Barrington et al., 2016; Davis et al., 2017; Munson et al., 2021; Rhodes et al., 2015). Between 2017 and 2018, we implemented health navigation as part of a 12-month multi-component intervention for GBMSM living with HIV ($n = 374$) in Guatemala City, which also included decentralization of HIV care and treatment, individual counseling from a trained psychologist and automatic mobile health (mHealth) appointment reminders (Barrington et al., 2020).

Navigation was offered to all participants and 97% ($n = 364$) accepted the component. Nine navigators provided appointment reminders (in addition to the mHealth appointment reminders) as well as accompaniment to HIV appointments if desired by the participant. Additionally, navigators provided support on an as-needed basis, such as assisting in disclosure of HIV status to family, friends and partners; sending regular motivational messages; and talking through personal, professional and HIV-related issues with participants. Navigators also assisted in study tasks, such as coordinating qualitative interviews, survey completion and locating participants who were lost to follow-up (Alvis-Estrada et al., 2021).

Average age of navigators was 28 years and the majority had completed at least some university education; several had studied or were studying psychology. Most of the navigators were not peers of the participants in terms of HIV status or sexual orientation. Over half identified as heterosexual men ($n = 5$), one was a heterosexual woman, one was openly living with HIV and over half had previous experience working with HIV programs. All navigators were trained in the study objectives, protocol, basic HIV knowledge and how to provide support to participants using a structured navigator manual created by the study team. After 2 weeks of didactic training, new navigators underwent practical training by shadowing two experienced navigators from a previous navigation pilot study before being assigned their own patients. It was suggested that all navigators maintain, at a minimum, monthly communication with each participant, beyond providing appointment reminders. Throughout the study period, navigators were assigned 30–60 participants at any given time. A study coordinator continuously monitored the work of the navigators, facilitated weekly meetings to discuss challenges and provide feedback and was available to provide additional support to navigators as needed. The study was reviewed and approved by the Ethics Committees for the Protection of Human Subjects of the Guatemalan Ministry of Health and the Universidad del Valle de Guatemala and the Institutional Review Board of the University of North Carolina at Chapel Hill. This project was also reviewed in accordance with the

Centers for Disease Control and Prevention (CDC) human research protection procedures and was determined to be research, but CDC investigators did not interact with human subjects or have access to identifiable data or specimens for research purposes.

Recruitment

Eligibility included: being at least 18 years old, male, self-reported ever having sex with men, spoke and understood Spanish and received HIV care and treatment at one of the main HIV clinics in Guatemala City. Upon enrolling in the study, participants were asked by study coordinators if they would be willing to participate in qualitative interviews. A study team member then invited individuals to participate in a qualitative interview during their next clinic appointment. A sub-group of 29 participants was purposively sampled to represent each of the three intervention groups: Group 1 ($n=14$) consisted of men who were engaged in care and chose to attend one of the three decentralized clinics. We purposively recruited four to five participants from each of three clinics to explore any differences in experiences between the decentralized clinics for the parent study. Group 2 ($n = 5$) included men who were similarly engaged in care but chose to remain at the centralized clinic. Group 3 ($n = 10$) included those who were recently diagnosed with HIV or were re-engaging in care at the centralized clinic.

Data collection

Face-to-face interviews were conducted in private spaces at the centralized or one of the decentralized clinics by a member of the study team with experience in qualitative data collection. All participants provided informed consent. We conducted three qualitative interviews with each participant at baseline, 6 and 12 months. One participant only completed the baseline interview, and one did not complete the 12-month interview; however, they were both still included in the analysis. Semi-structured guides were designed to elicit participants' experiences with HIV before and during the intervention. The guides for the 6- and 12-month interviews were refined based on the preliminary analysis of baseline data. In these follow-up interviews, interviewers asked about experiences with each of the intervention components as well as other factors that may affect retention and adherence, such as violence, stigma and mental health. All of the qualitative interviews were audio-recorded and transcribed verbatim in Spanish.

Data analysis

Our analysis was informed by Maxwell and Miller's theory of qualitative analysis that calls for integrating narrative and thematic approaches in order to more holistically understand experiences within and across individuals over time (Maxwell and Miller, 2008). We began by reading each participant's interviews chronologically. We simultaneously wrote memos of emerging themes as they related to our overall research question about how navigation affected mental health, such as hope and positive determinants of mental health (Saldana, 2009). We then wrote a narrative summary of each participant's mental health story, including their experiences of being diagnosed with HIV, seeking treatment and participating in the intervention, in addition to characterizing their overall mental health during the course of the 12-month study period to contextualize participants' mental health journeys over the course of the intervention (Barrington et al., 2021).

We then designed a codebook with deductive codes based on domains covered in the interview guides (e.g. navigation support, anxiety, mental health services, etc.), as well as inductive codes based on the themes we identified in the memos and narrative summaries (e.g. hope, resilience, etc.) (Gibbs, 2018). We coded all interviews using Atlas.ti. We used coding reports from Atlas.ti together with the narrative summaries to create time-ordered, sequential matrices ‘to help preserve the chronological flow of the data and permit understanding of what led to what’ (Grossoehme and Lipstcin, 2016), while also greatly reducing the data from the three interviews. The first set of matrices organized by themes along the Y-axis and time (three waves of qualitative data) along the X-axis for each participant. This allowed us to analyze and summarize how certain themes changed over time at the individual level (such as the pathways to improving/worsening mental health and the role that navigators played in these processes) and intervention group level. We then created a longitudinal analysis matrix with summarized changes in themes along the Y-axis (pulled from the individual matrix) and participants along the X-axis, which allowed us to identify whether themes changed over time or remained stable for the sample. From the matrices, we identified the most salient processes through which navigation support affected the mental health of GBMSM living with HIV over time.

RESULTS

After describing participant characteristics, we present our findings on the two major ways in which navigation supported mental health: (i) maintaining good mental health and preventing crises and (ii) responding to mental health crises. Pseudonyms have been used to maintain confidentiality of participants.

Description of participants

As shown in Table 1, mean participant age was 34 years (range 19–51), the majority identified as Ladino (mixed European, Indigenous and African ancestry) and more than two-thirds identified as gay ($n = 21$). Over one-third ($n = 11$) had completed some university and 21 had some form of employment at the time of their first interview. More than half ($n = 17$) lived with their family and mean years since HIV diagnosis was 4.3 (range: 0–29).

Maintaining good mental health and preventing crises

Health navigators completed a variety of tasks and provided different types of support to assist participants in maintaining good mental health and preventing mental health crises. Participants described that this support provided encouragement and motivation, helped facilitate control over one’s health and improved access and quality of care.

Providing encouragement and motivation—One of the most common ways in which participants described how navigators supported their mental health and wellbeing was via motivational messages and encouragement. They often used passionate language to describe how their navigators lifted their spirits when they were feeling down. This commonly happened with messages sent via WhatsApp, sometimes in the form of GIFS or memos, at the beginning of each week.

They help me a lot, because sometimes I'm sad and with what he sends me. my spirits are lifted a bit.. because the happiness that he transmits to you...-this happiness, it helps you to keep going... (Luis, 48 years old. Group 1)

At times, these weekly messages would prompt a response from the participant and lead to a more in-depth discussion of what was going on in their lives at that moment. More often, however, participants would simply acknowledge the message with a 'thank you', while others would not respond at all. However, regardless of whether they responded, participants attributed an improvement in their emotional state to just knowing that someone was thinking about them and was concerned about their well-being.

Throughout the intervention, participants repeatedly described how important it was for them to feel heard. Having a navigator listen to what they were going through and show interest helped to validate their experiences. Andres described how receiving advice made him feel better equipped to change his HIV clinic, highlighting that the way his navigator delivered support made him feel valued:

...if it hadn't been for him, I would have felt very lost [at the new clinic], honestly I would have felt very, very lost, because like I said, he provides excellent attention and everything, but it's that it's so personalized that makes you feel...I don't know if this is the right word, spoiled...but it's that they're worrying about you, personally, even if they have 20 or 50 or 100 other people, the fact that they're always looking out for your best interest...it's incredible, and it really makes you feel good. (Andres, 44 years old, Group 1)

Participants described the value of having someone outside their family and partners who they viewed as 'neutral' to talk to about challenges related to their HIV treatment or other topics. Andres went on to describe how his partner of 32 years who had been living with HIV for 18 years was an important source of support and shared his HIV knowledge with him. But even having this partner, Andres depended on his navigator for additional emotional support and encouragement, especially when he was feeling down:

...even though I trust my partner 100%, there are times that you need someone else... sometimes I just need someone to coddle me, to indulge me...to tell me 'don't worry, you're going to be fine, go ahead, cry, make a fuss all you want', but after, you're going to feel calm and you're going to understand things better. So, having someone that has that sensibility is something we all need, you know? (Andres, 44 years old, Group 1)

The majority of participants, no matter the level of support they received from others, valued the encouragement and motivation provided by their navigators and, like Andres, directly attributed this to helping them cope with daily struggles and maintaining good mental health.

Facilitating control—In addition to encouragement, participants described how tasks performed by navigators facilitated a feeling of control over their HIV care. One of the most common ways that navigators did this was in the form of appointment reminders several days before their scheduled appointment at the HIV clinic. Many participants counted on these reminders and used them to prepare, which included requesting permission to miss

work and gathering money for transportation. Bryan lived in western Guatemala when he was diagnosed with HIV in 2012 but had recently started traveling to Guatemala City to receive care at the centralized clinic because of complications with ART and several stigmatizing experiences at other clinics closer to his home. He described at one point losing his cell phone and not having communication with his navigator for a short period around the time of his clinic appointment, and then realizing late one night he had an appointment the following day:

And I said, ‘Oh no!’ and I hadn’t prepared anything...I hadn’t told my boss, and most importantly, I didn’t have the money for the trip... I was a mess. On the other hand, when [the navigator] reminds you three days beforehand, or even one day before, you already have it in the back of your mind that you have to go to the hospital, and you can prepare yourself. (Bryan, 28 years old, Group 3)

When the navigator support was temporarily unavailable, Bryan was delayed in getting his ART, which he described as leading to a significant amount of stress and worry about his health.

For newly diagnosed individuals or those changing clinics, navigators helped to facilitate control over their health by addressing fears and worries about the workings of a new clinic. Navigators supported participants by explaining clinic workflows and what participants could expect in terms of care and treatment. Alex, a newly diagnosed participant, described the support provided by his navigator during his first clinic visits:

He orients me to what I should be doing, who I should go see next...like today, I came out of the doctor’s office and he was there waiting for me to tell me ‘now it’s time for your labs, which is over here’...he took me directly to the doctor’s door...he’s very attentive. (Alex, 32 years old, Group 3)

Having an idea of what to expect before arriving to the clinic for the first time, in addition to having a navigator present to accompany them from one clinic station to the next, helped to alleviate the fear and anxiety that participants often felt. While some participants preferred to receive navigator accompaniment to all clinic visits throughout the intervention, many described gradually feeling more comfortable with less in-clinic navigator support and more empowered in their knowledge of the clinic workflow. Although this was most prominent among Group 3 participants who were recently diagnosed and new to HIV care, it was also shared by participants from Group 1 who were beginning to receive care for the first time at the decentralized clinics.

Improving access and quality of care—In addition to the direct support provided by navigators, participants described that their navigators facilitated access to clinic providers that they would not have had without a navigator. Angel had been living with HIV for 2 years and, in general, liked the care that he received. However, when asked if he thought his experience at the centralized would have been different without a navigator, Angel replied:

Um, I think so, yes, because, for example, this last time that I came in...I saw the doctor and she told me ‘your triglycerides are high, so go buy this medication.’ And so, I leave and [the navigator] asks me ‘hey, how’d it go?’ I told her it went well

but that my triglycerides are high, and she says 'okay, give me a second' and she went and talked to the nutritionist and within a few minutes they took me to see the nutritionist. I think that without my navigator maybe they wouldn't have even seen me. (Angel, 30 years old, Group 2)

Jorge, who received care at a decentralized clinic, echoed Angel's sentiment when he described how he was treated when his navigator was present for his appointment:

I feel that it's [having a navigator] a support, an immediate support because before going in to see the doctor [at the decentralized clinic]...you already know that they [the doctors] are going to pay more attention to you, more direct attention to you, with the navigator there. (Jorge, 50 years old, Group 1)

Many participants, from all three groups and receiving care across different clinics, perceived that they received better quality treatment at the HIV clinics when navigators were present.

Fredy built on this sentiment when he described an experience in the decentralized clinic where he felt that the clinician was not taking him seriously. He was suffering from a rash that the provider disregarded and attributed to his HIV without reviewing it closely. Fredy told his navigator about the incident and the navigator arranged a same-day appointment at a different clinic with a provider who attended to his concerns. He said '...when no one else would listen to me, he [navigator] showed a great interest in me...he worried about me, which made me feel good. I'm so grateful'. In addition to addressing an aspect of his physical health, Fredy attributed having someone validate his feelings and help him as contributing to a more positive mental state. In a context where many participants felt vulnerable and anticipated stigma and rejection because of both their HIV status and sexual orientation, navigators listened to their problems, accepted without judgment and validated how they felt. Fredy went on to describe how he felt about his navigator support:

It's maybe been the best care that I've received in my life, in respect to having someone concerned about my health, concerned about my appointments, worry that I'm doing okay...the care that he provides, it's...it makes me want to give him an award or something! (Fredy, 51 years old, Group 1)

In addition to improving access to providers, participants described how navigators also improved their access to information. They described going to navigators with concerns over medications, including potential interactions with ART or when medications should be taken. Jorge described having a navigator was like 'having my own personal doctor, in addition to my clinic doctor'. Angel builds on this by describing the benefits of having a navigator to go to for non-urgent HIV-related questions.

...sometimes I would have a question about a medication, a question about side effects and he was always, eh always took the time to explain it to me and talk to me and make sure that I understood his answer. (Angel, 30 years old, Group 2)

Having quick access to a navigator via a phone call or message put Angel at ease when he had concerns about his HIV treatment and helped to reduce his anxiety and worry, which

was a common theme among participants from all groups. Jorge described the benefit of going to a navigator for quick access to information, especially for PLHIV:

Yes, it's really nice, because if you're feeling bad or have some sort of doubt, you know that you can go to them [navigator] and ask 'what do you recommend that I do?'...it's a huge support because when you're like this, with this disease [HIV], sometimes you feel that you're exposed to all kinds of things and you never know who to go to, you know? In my case, I couldn't say anything to a family member... because the first thing you have to tell them when you have an emergency is that you have HIV, you know? And if they [family] heard that, who knows what would happen, so it's better and I feel a lot of support having them [navigators] (Jorge, 50 years old. Group 1)

Jorge's statement reflects what many other participants shared, that living with HIV, especially for those recently diagnosed, causes substantial worry and anxiety. Concerns and questions related to HIV often arose between clinic appointments that, without a navigator, participants would have to hold on to for weeks or months before being able to ask a clinic provider. However, with the support of a navigator, participants often had immediate access to HIV-related information, which reduced HIV-related stress and worry.

Responding to mental health crises

In addition to assisting participants in maintaining good mental health, navigators also responded to varying mental health crises, such as severe depression and suicidality. As described below, many of these mental health crises were related to a new HIV diagnosis for those in Group 3 but were also experienced by participants in all three groups for reasons other than HIV.

Guidance for processing HIV diagnosis—Participants from Group 3 required more emotional support from navigators. Having been recently diagnosed, they were less likely to have disclosed their HIV status to their social networks, resulting in less social support. In these cases, navigator support came in the form of actively listening to participants share their fears and concerns about living with HIV. For example, Osmin was diagnosed with HIV at a private clinician's office after not feeling well for an extended period of time. The next day, he went for a confirmatory test, accompanied by his partner, and was immediately connected with a navigator. Osmin described how his navigator helped him with the initial shock of the positive diagnosis, as well as providing emotional support for his partner, who had a harder time accepting the news:

She was with me that entire first day, keeping me calm, because she saw how upset my partner was, too, he was really bad, but she [navigator] helped me a lot... she was just so confident that everything was going to be okay...she started to share all of her experiences, giving me real life examples of other people she knew who had gone through the same thing I was going through. (Osmin, 39 years old, Group 3)

While Osmin's navigator helped him begin to process his diagnosis, Diego described engaging more with his navigator a few months after he was diagnosed at a time when he was depressed. He and his partner, both recently diagnosed with HIV, were initially

supporting one another throughout the process of acceptance and linking to HIV care. However, a few months after he was diagnosed, they split:

So a month goes by after we broke up and at first I was fine, but then I began to feel really bad emotionally...I spoke with the navigator and I told her I felt bad and so she told me that I was probably just now going through the stage of grief [from HIV diagnosis]...so during this crisis that I had, the only person that I could have written in this moment was her because, maybe I could have spoken to someone in my family, but they wouldn't have understood, and I couldn't talk to any friends about it, so she was really the only person I wrote. And when she told me 'look, it's a period of grief, it's grief that you're going through' and that's when I understood that she was right, that I was just going to feel like this for a short period of time, it wasn't going to be like this forever. (Diego, 31 years old, Group 3)

When Diego was experiencing an emotional crisis, he actively reached out to his navigator and received both empathy and guidance for how to process these emotions from her. Diego later attributed the navigation support he received to feeling hopeful about his future:

...she gave me a chance to let it all out. but at the same time she showed me the road...it's like she opened a door and said 'look, this is the way to go' ...she showed me a new path, a way forward, and I'm very happy to have her.

For Osmin, Diego and other participants, navigators played a critical role in helping them process and accept their HIV diagnosis and in so doing, provided them with hope for the future.

Support for non-HIV crises—Both participants who were newly diagnosed and those who had been living with HIV for many years were susceptible to experiencing a mental health crisis. Often, these circumstances were caused by events that were not directly related to HIV, such as the loss of a job, experiencing intimate partner violence or the death of a loved one. Participants who had strong social networks would typically turn to family, friends or partners for help. But for others, navigators were their sole source of social support to help them through the crisis. For example, Fernando, 42, had been living with HIV for several years and reported having an undetectable viral load. He began receiving the support of a navigator the same month that he was involved in a car accident and severely injured his leg. As a result of the injury, he lost his job at a call center, which led to a mental health crisis. He described the support his navigator provided when he was feeling at his lowest:

Look, my navigator has been, in the moments that I've cried, he's been my handkerchief in a matter of speaking...I'm 42-years-old, but that doesn't mean that we're all brave in life, you know? We need someone to let it all out to and really [navigator] has been one of my pillars [participant begins to cry]...there are moments when I haven't had any money and he's helped me. And now [navigator] isn't just my navigator, he's my friend...I can call him my friend and I'm so grateful to him, he's [softs] really important to me, because he's helped me climb out of all of this. Yeah, he gave me the support that I never had from my friends, and I thank God for putting him in my path, you know? (Fernando, 42 years old, Group 1)

When asked if his experience would have been different without the support of his navigator, Fernando said ‘*I don’t think I’d be here....*’ He went on to describe how he felt so low and unable to go to his traditional support network that he considered suicide:

When this thing happened with my leg, I wanted to kill myself. I didn’t find comfort from anyone...not even from my family. I wouldn’t be here without him. really, I wouldn’t be here at this moment, because what I wanted to do was kill myself, but God was so good that he sent me my navigator, who has always taken care of me... (Fernando, 42 years old, Group I)

Mario similarly lacked a traditional social network in Guatemala. He had migrated to Guatemala 7 years earlier after being rejected by his family for being bisexual, as well as being recruited by local gangs. To make ends meet, he worked informally doing yardwork, painting houses and engaging in sex work. At the beginning of the intervention, Mario described living with his partner of 4 years and providing mutual support to one another. But over the course of the intervention, his partner became controlling and verbally, economically, physically and sexually abusive:

[The relationship] was horrible, and it became violent. I’d bring money home from work and he’d take it from me...he stole from me! The violence happened gradually, at different levels, First it was ‘ugh, I don’t like this food’, which he knew hurt me because I love to cook. And then came the yelling, and the psychological violence, and the blackmail, and then the physical violence. And he started saying he was going to call immigration on me and that they’d send me back. And then the violence became extreme...I told him I didn’t want to do it [have sex] with him and he started heating me and then he forced me to. (Mario, 28 years old. Group 1)

Before experiencing intimate partner violence, Mario’s partner was his primary source of social support. Mario decided to confide in his navigator who provided emotional support and instrumental support in the form of referral to counseling sessions with the study psychologist. Before Mario was able to leave his partner, he would still accompany him to his clinic visits. Mario describes how his navigator would go out of his way to check-in with him:

He always looked after me. sometimes I would text him at 11 at night and I would wake him up. but he would always answer. And he really knew how to handle my situation, he was always very private, because sometimes I would go to the clinic with my partner and he [navigator] would find a way to get me away from him, alone, so we could talk. (Mario, 28 years old, Group 1)

For many participants, navigators were their only source of support during their most difficult moments and provided invaluable support during crisis.

DISCUSSION

We found that GBMSM living with HIV attributed the support they received from health navigators to sustaining and improving their mental health. Navigator support aided with promoting overall mental health and wellbeing by providing motivational messaging,

facilitating control over health and improving access to care. Navigators also responded to acute crises by providing guidance for those newly diagnosed with HIV and overall social support for those experiencing critical life events. Participants emphasized the importance of feeling heard and valued by their navigators and gaining hope for the future through their interactions as key to their wellbeing.

Our findings suggest that motivational messages from navigators may directly influence the mental health of those navigated by providing encouragement and reducing stress. This is consistent with the health navigation literature, which has identified encouragement and motivational messages as important to developing the navigator-participant relationship and improving HIV care outcomes (Davis et al., 2017; Zamudio-Haas et al., 2019; Koland et al., 2020). Future navigation studies could consider employing factorial designs to disentangle the unique effect of motivational messaging on mental health when delivered with other components of navigation. While stand-alone text message interventions with supportive messaging can have a positive effect on a variety of mental health outcomes and may be more cost effective compared to navigation interventions (Berrouiguet et al., 2016), our findings suggest that the connection and relationship between the navigator and participant likely play an important role in influencing mental health.

Our finding that participants credited their navigator with facilitating access to healthcare providers echoes findings from Fuller and colleagues who reported that navigator support expedited their patients' connections to care and increased the quality of care (Fuller et al., 2019). Increased access to information related to HIV and the clinics also reduced fear and worry, especially among newly diagnosed individuals. This is consistent with findings from other navigation studies which reported navigators as being 'knowledge brokers' for their clients (Broaddus et al., 2017). This also supports our team's quantitative findings from this same study which showed that higher levels of informational navigator support was significantly associated with less anxiety (Davis et al., 2021). Although the delivery of informational support by an empathetic navigator likely plays an important role in this relationship, future research could consider other cost-effective interventions that provide informational support to PLHIV to improve mental health, such as mobile apps or hotlines. mHealth interventions that provide HIV-related informational support to GBMSM have improved HIV knowledge, anxiety and depression (LeGrand et al., 2016; Hightow-Weidman et al., 2017, 2018; Lelutiu-Weinberger et al., 2018) and may be especially viable in the Guatemalan context, where large proportions of the population live in rural settings, transportation is difficult and costly in urban settings, but 97% of GBMSM report having a smartphone.

Our longitudinal qualitative design allowed us to see how abruptly non-HIV-related life events can occur over the course of 1 year and which can have a sudden and dramatic impact on one's mental health and HIV care. We found that all participants were prone to needing additional support from their navigators, regardless of how long they had been living with HIV. Even for participants who consistently engaged in HIV care and had an undetectable viral load, and were thus considered 'stable', we found that they were one car accident, one job loss, one break-up away from a mental health crisis. This speaks to the precarity of GBMSM living with HIV in Guatemala and how a combination of structural

and social factors, including employment, socio-economic status, stigma and family support, among others, lead to an increased vulnerability to mental health problems, as our team has previously documented (Barrington et al., 2016; Davis et al., 2017; Miller et al., 2020; Munson et al., 2021).

The precarious stability of mental health among our participants aligns with Meyer's Minority Stress Theory (MST), which suggests that conditions in the social environment, in addition to personal events, are sources of stress that may lead to poor mental health (Meyer, 1995, 2003). In addition to the general stressors experienced by all people, Meyer posits that additional sexual minority stress directly affects mental health outcomes of lesbian, gay and bisexual individuals via prejudice events, such as discrimination and violence, as well as expectations of rejection, concealment of sexual orientation and internalized homophobia (Meyer, 2007). The MST also suggests that social support may moderate the relationship between these stressors and mental health. This may explain how social support provided by navigators in our study improved mental health among participants. Other health navigation interventions have found that navigators help to buffer against HIV stigma and shame from both care providers and family members (Broadus et al., 2015, 2017; Sullivan et al., 2015). This may also explain why we found that navigator support is as valued by participants with existing support networks as it is by those with weaker networks; individuals with support from family and friends still experience minority stress and likely still benefit from the support of a health navigator, as other navigation interventions have alluded (Fuller et al., 2019). As HIV is a chronic condition, more research is needed to determine how navigation can most effectively support patients over time as they experience moments of stability and instability. As emphasized by the MST, this is especially true for GBMSM living with HIV as there are substantial structures outside the individual's control that can affect their mental health throughout their lifetime. The sustainability of navigation interventions, including how they are funded, where they are housed and how to prevent navigator burnout, has significant policy implications which must be addressed (Mizuno et al., 2018; Roland et al., 2020).

An overarching theme from our findings was that participants appreciated and valued being heard and feeling validated by a navigator. This highlights that how navigator support is delivered is just as important to improving mental health as is the type of support provided; not being judged or criticized for any of their experiences was key to trusting their navigator and feeling safe, as other studies have noted (Westergaard et al., 2017). Future interventions could highlight active listening and empathy as part of their training of navigators.

There are some limitations to our study. As most of the interviews were conducted during HIV clinic appointments and typically lasted 1–2 h, it is possible that this excluded certain participants who were unable to spend additional time at the clinic due to work or other circumstances. Also, while interviews were conducted in private locations away from navigators, it is possible that participants felt uncomfortable providing negative feedback about navigators to a fellow member of the study team. Additionally, although we inquired about how participants were doing and feeling during qualitative interviews, we did not directly ask how they perceived changes in their mental health due to navigation. Future qualitative research with GBMSM living with HIV in Guatemala could more

directly explore their mental health; the MS'F may offer a productive framework for these investigations.

CONCLUSION

Health navigation influences the mental health of GBMSM living with HIV by helping individuals maintain good mental health in addition to responding to acute mental health crises. Additionally, how navigator support is delivered, in a respectful and non-judgmental way, may be just as important to improving mental health as the type of support provided. Additional research is needed to examine potential mediating pathways between navigation and mental health, including informational support, or if navigator support moderates the relationship between stressors and mental health outcomes for sexual minorities.

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ETHICAL APPROVAL

The study was reviewed and approved by the Ethics Committees for the Protection of Human Subjects of the Guatemalan Ministry of Health and the Universidad del Valle de Guatemala and the Institutional Review Board of the University of North Carolina at Chapel Hill. This project was also reviewed in accordance with the Centers for Disease Control and Prevention (CDC) human research protection procedures and was determined to be research, but CDC investigators did not interact with human subjects or have access to identifiable data or specimens for research purposes.

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Table 1:Baseline characteristics of study participants ($N = 29$)

Variables	$N(\%)$
Age (mean, range)	34(19–51)
Ethnicity	
Ladino	27 (93.1)
Indigenous Maya	2 (6.9)
Sexual orientation	
Gay	21 (72.4)
Bisexual	8 (27.6)
Education	
Some/completed primary	3(10.3)
Some/completed secondary	15(51.7)
Some/completed university	11 (37.9)
Currently employed	21 (72.4)
Living situation	
Lives with family	17(58.6)
Lives with partner	8 (27.6)
Lives with friend	1 (3.5)
Lives alone	3(10.3)
Years since HIV diagnosis, mean (range)	4.3 (0–29)