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Authors

Banks, Devin

Ramm, Kate

Viducich, Isabella

et al.

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Strengths and challenges among Black and Latinx people living with HIV during COVID-19: A mixed methods investigation of the translation of self-management across syndemic health crises

Devin Banks¹, Kate Ramm², Isabella Vidulich³, Quonta Beasley⁴, Juan Barron⁵, Elizabeth Lee Chen⁶, Enricka Norwood-Scott⁷, Kimberly Fuentes⁸, Muyu Zhang⁷, Arleen F. Brown⁵, Gail E. Wyatt⁷, Alison Hamilton^{7,9}, Tamra B. Loeb^{7,*}

¹Department of Psychological Sciences, University of Missouri–St. Louis, St. Louis, MO

²Department of Medicine, UCLA Health, Los Angeles, CA

³Jennifer Keaney and Associates, Inc., Los Angeles, CA

⁴Graduate School of Education and Psychology, Pepperdine University, Los Angeles, CA

⁵Division of General Internal Medicine and Health Services Research, University of California, Los Angeles, CA

⁶Fielding School of Public Health, University of California, Los Angeles, Los Angeles, CA

⁷Department of Psychiatry and Biobehavioral Sciences, Semel Institute for Neuroscience and Human Behavior, University of California, Los Angeles, Los Angeles, CA

⁸Luskin School of Public Affairs, University of California, Los Angeles, Los Angeles, CA

⁹Center for the Study of Healthcare Innovation, Implementation, & Policy, VA Greater Los Angeles Healthcare System, Los Angeles, CA

Abstract

Black and Latinx people are disproportionately impacted by HIV, COVID-19, and other syndemic health crises with similar underlying social determinants of health. Lessons learned from the HIV pandemic and COVID-19 response have been invoked to improve health equity at the systemic level in the face of other emergent health crises. However, few have examined the potential translation of strategies between syndemics at the individual level. The current mixed methods study examined strategies used to manage HIV during the COVID-19 pandemic and the extent to which they were helpful in managing COVID-19 vulnerability among Black and Latinx people living with HIV. Participants (n = 30) were interviewed by telephone and completed demographic, mental health, alcohol and substance use, health literacy, and clinical measures in October and November 2020 in Los Angeles County. Rapid qualitative analysis, descriptive statistics, and mixed methods merging were used to analyze the data. Qualitative results demonstrated that participants found HIV self-management strategies translated to aspects

*Corresponding author at Semel Institute for Neuroscience and Human Behavior, University of California, Los Angeles, Los Angeles, CA, tLoeb@mednet.ucla.edu.

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of the COVID-19 pandemic including hygiene and social distancing and coping with a health-related stressor. Although telemedicine provided continuity of HIV care for most participants, technology access and literacy posed a potential barrier, particularly to those facing other sociodemographic marginalization (i.e., low education, disability). Findings suggest providers can encourage leveraging individual HIV self-management strategies in response to public health crises at. However, these interventions must be culturally responsive and address intersecting social determinants of health. Future research should examine mechanisms that predict individual translation of HIV management strategies to other health concerns.

Keywords

HIV/AIDS; racial inequities; COVID-19; self-management; mixed methods

Introduction

The COVID-19 pandemic and associated public health response exacerbated racial health inequities in the United States, including those related to HIV. Black and Latinx communities are disproportionately impacted by morbidity and mortality associated with the intersecting pandemics of HIV and COVID-19, with systemic racism underlying these health inequities by manifesting in social determinants of health (SDOH) (Spinner, 2021). For example, Black and Latinx people living with HIV (PLWH) have increased risks of living in poverty, experiencing barriers to healthcare access, and exposure to trauma, all of which increase vulnerability to substance use and mental health problems (Brezing et al., 2015; Remien et al., 2019; Waterfield et al., 2021). SDOH also make Black and Latinx PLWH more vulnerable to medical comorbidities associated with a severe course of COVID-19, like cardiovascular disease (CVD), the leading cause of mortality in the United States (Javed et al., 2022; Weiser et al., 2021).

Given the syndemic nature of HIV and COVID-19 for both comorbid conditions and structural inequities impacting people of color (Eaton & Kalichman, 2020), many emphasized the importance of incorporating lessons learned from the HIV pandemic into the COVID-19 response (El-Sadr, 2020; Kalichman & El-Krab, 2022; Loeb et al., 2023) and more recently, using lessons from both to prepare for future public health crises (Auerbach et al., 2023; Loeb & Albarran, 2023). Although these “lessons” for new syndemics include anticipating racial health inequities and engagement of communities facing those inequities, they largely focus on filling *systemic* gaps exposed by HIV and COVID-19 (e.g., culturally incongruent public health messaging, poor community engagement, lack of behavioral health and scientific workforce integration) (Auerbach et al., 2023; El-Sadr, 2020; Kalichman & El-Krab, 2022; Loeb & Albarran, 2023). For example, one study demonstrated that PLWH who received Ryan White services were more likely to initiate COVID-19 vaccination than those who did not, highlighting the importance of integrated social and health services for syndemic conditions (Convery et al., 2023). However, the potential translation of *individual* strategies between the syndemics of HIV and COVID-19 has received less attention. Instead, studies among individual PLWH have focused on challenges they faced in the context of COVID-19, like increasing mental health symptoms,

social isolation, food insecurity, and socioeconomic stress (Hong et al., 2023; Meyer et al., 2023; Winwood et al., 2021; Wion & Miller, 2021). Conversely, few studies have examined strengths PLWH could leverage in a new public health crisis, despite evidence that PLWH translated some HIV self-management strategies to the COVID-19 pandemic. During COVID-19, PLWH reported strong adherence to social distancing guidelines (Kalichman et al., 2020; Meyer et al., 2023) and reported a decrease in sexual risk behavior (e.g., with a casual partner, number of sexual partners), particularly compared to those without HIV (Winwood et al., 2021). Black and Latinx PLWH also reported using existing coping mechanisms to manage their mental health during the early months of COVID-19. These included engagement with hobbies, stress-reduction techniques such as meditation, and increased remote communication with their existing social support networks (Gwadz et al., 2021; Rhodes et al., 2021). Better understanding the extent to which minoritized PLWH utilized skill transfer could inform interventions that reduce health inequities among disproportionately affected populations during future syndemic health crises (Loeb et al., 2023; UNAIDS, 2020).

Perhaps the most documented individual consequence of COVID-19 among PLWH is access to HIV/AIDS care. Two reviews of studies conducted during the COVID-19 pandemic's first 12–20 months found PLWH experienced changes in the way HIV care is provided (e.g., increased telehealth) and had varied perceptions of those changes (Meyer et al., 2023; Winwood et al., 2021). That is, some experienced few changes or even increases in care engagement and medication adherence whereas others experienced severe disruptions in provider and antiretroviral (ART) medication access. Increases in exposure to telehealth and some care disruptions are not surprising given COVID-19-related public health mandates forced changes in health service delivery, including clinic closures and scaling back or suspension of non-COVID-19 related health appointments (Waterfield et al., 2021). However, clarifying the lasting impact of COVID-19 on continuity of care is crucial as it is an important component of effective treatment (Cooper et al., 2016) and can be negatively impacted by protective strategies such as social distancing (Kalichman et al., 2020). This need is particularly relevant among Black and Latinx PLWH given evidence of disparities in ART medication and telehealth access among these groups (Ennis et al., 2022; Santos et al., 2021).

The current mixed-methods study examined strategies used to manage HIV during the COVID-19 pandemic and the extent to which they were helpful in managing COVID-19 vulnerability among Black and Latinx PLWH in Los Angeles County. Only one study to date has examined the impact of COVID-19 on HIV self-management strategies. The authors found no change in PLWH's quantitative reports of their daily self-management practices (e.g., managing HIV symptoms and medications) but decreases in self-management strategies related to social support, provider communication, and behavioral health (Wion & Miller, 2021). We extend these findings, assessing HIV self-management strategies among Black and Latinx PLWH via qualitative methods, which can help parse apart the complexity of these intersecting health crises. Given the intersection of self-management strategies with access to and continuity of care—particularly telehealth—the current study also examines participants experiences accessing HIV care and comfort

with telehealth, and whether these vary as a function of individual level SDOH (e.g., trauma, health literacy) and health comorbidities.

Methods

Participants and Procedures

Participants for this study were recruited from those enrolled in an ongoing parent trial designed to prepare Black and Latinx PLWH to prepare to engage in CVD risk reduction (Hamilton et al., 2020). Participants were recruited from HIV clinics where they received care in Los Angeles County. Inclusion criteria for the parent study, and in turn, the current study were: Black or Latinx race/ethnicity, aged 18–75 years, speak English and/or Spanish, diagnosed with HIV/AIDS, at least one CVD risk factor, history of trauma, and receive primary care in Los Angeles County (see reference for eligibility criteria details). Participants completed the parent trial baseline survey containing a range of psychosocial and clinical measures (Hamilton et al., 2020). Project staff contacted enrolled parent trial participants who were “on hold” in March 2020 due to COVID-19 University in-person patient engagement restrictions by telephone to invite them to participate in the study until the sample of 30 was reached. Interested participants were consented to participate over the phone at a mutually convenient time. Consented participants were interviewed by telephone by a staff member trained in interviewing skills and rapid qualitative analysis between October and November 2020, about their individual perceptions of and experiences with COVID-19, and management of COVID-19 risks. Interviews lasted approximately forty-five minutes. Participants received a \$25 gift card for completing the interview. All study procedures were approved by a university Institutional Review Board.

Quantitative Measures

SDOH Characteristics.

Demographics.: Demographic characteristics included age, gender, ethnicity, language, education, and employment status.

History of Trauma and Adversity.: Trauma and adversity exposure was assessed by the UCLA Lifetime Adversities Screener, a 5-item screening tool used to assess sexual abuse, interpersonal violence, community violence, family adversity and recent experiences of discrimination (Liu et al., 2015). Responses to the five items were summed and rescaled to create a score between 0 (*no to any experiences*) and 5 (*yes to all 5 experiences*). For the parent trial, a sixth item reflecting lack of finances was added (for a maximum score of 6).

Health Literacy.: Health literacy was measured using three questions from the Short Test of Functional Health Literacy in Adults (Chew et al., 2004). These included frequency of needing help with reading patient brochures or materials, confidence in filling out medical forms, and frequency of problems learning about a medical condition due to difficulty understanding the information. Responses were rated from 0 (never) to 4 (always).

Health Comorbidities

CVD Risk.—Participants were asked about CVD risk behaviors consistent with the American Heart Association’s “Life’s Simple 7” (LS7), including smoking status, physical activity, diet, blood pressure, cholesterol, blood sugar, and weight (Lloyd-Jones et al., 2010). Each of seven items was scored 0 (“poor”), 1 (“intermediate”), or 2 (“ideal”) with higher scores representing better cardiovascular health (i.e., lower CVD risk).

Mental Health.—Participants completed measures of depression, anxiety, and post-traumatic stress. Depression was measured by the Beck Depression Inventory–II, 21-item self-report items, each rated on a scale from 0–3 (Beck et al., 1996). Anxiety was measured using the Overall Anxiety Severity and Impairment Scale (Norman et al., 2006). Responses were rated from 0–4. Post-traumatic stress was assessed using the Posttraumatic Diagnostic Scale (Foa et al., 1997). Participants were asked if they had experienced an “unusually or especially frightening, horrible, or traumatic” event. If so, participants completed five yes/no questions about nightmares, avoiding situations or thinking about the event, being guarded or easily startled, feeling numb or detached, and feeling guilty or blaming oneself for the events.

Substance Use.—Participants completed the CAGE Adapted to Include Drugs Questionnaire (Brown & Rounds, 1995). The CAGE was dichotomized with scores of one or more representing a positive screener. Participants also completed the 3-item Alcohol Use Disorders Identification Test-Concise to measure alcohol use (AUDIT) (Bush et al., 1998). The AUDIT was dichotomized to represent a positive screener score of 3(women)/4(men) or more, respectively.

Qualitative Data Collection

Guided by the need to understand PLWH’s perceptions of and experiences with COVID-19, and management of COVID-19 risks, we developed a semi-structured interview guide that included six domains to assess COVID life changes, information sources, testing, treatment, health/health care, and interest in participating in a HIV and COVID-19-related support risk reduction intervention (i.e., similar to the one they were currently enrolled in) conducted over the internet. For this study, we focused on three items, each from one of three domains. We utilized one question pertaining to self-management of HIV (COVID life changes domain), continuity of care (health/healthcare domain), and electronic health access (interest in a COVID/HIV group).

Leveraging Self-Management of HIV to Minimize COVID-19 Risks.

Participants answered the question, “Do you feel like you may be approaching this virus differently because of what you have learned about taking care of yourself with HIV? If so, can you please explain?”

Continuity of Care.

Participants responded to the questions, “Has COVID-19 affected your HIV care in any way? How?” and “Has COVID-19 affected your ability to see a doctor when you need to in any way?”

Electronic Health Access.

After being asked if they were interested in participating in an HIV and COVID-19 related intervention conducted over the internet, participants responded to the question, “What could get in the way of your participating in a program over the internet?”

Data Analysis

Quantitative Data.—Correlations were calculated between survey variables and t-tests conducted to test for potential differences between racial/ethnic groups.

Qualitative Data.—Interviews were recorded and professionally transcribed in English or Spanish.

Spanish transcripts were then professionally translated to English. Transcripts were reviewed in detail by the research team. After familiarization with the transcripts, the team used rapid qualitative analysis, utilized in health services and implementation research (Hamilton & Finley, 2019). In accordance with the procedures of rapid qualitative analysis, interrater reliability was established by having 6 trained coders create templated summaries of the same two transcripts. These transcripts were reviewed by the study PI and a qualitative methodology expert for consistency with respect to content, level of detail, and selection of quotations to illustrate themes. The coding team then met to amend the template to consensus. This template was then used by individual coders to create a summary for each participant, creating an inventory of responses to the three interview questions. Summaries were combined into matrices for identification and comparison of themes across leveraging self-management of HIV to manage COVID-19 risks, continuity of care, and electronic health access.

Mixed-Methods Data.

Guided by the primary themes from the analysis of continuity of care, electronic health access, and leveraging self-management of HIV domains, participant interview responses were grouped into categories (e.g., with and without electronic health access). Using a merging mixed methods approach, (Fetters et al., 2013) qualitative categories were integrated with person-level survey data variables, and then each theme’s categories were compared using t-tests for continuous variables and chi square tests for the categorical variables.

Results

Descriptive Results

Demographic characteristics of the sample (N = 30) and descriptive statistics for quantitative measures are reported in Table 1. Most of the sample was over the age of 50 (n = 22,

73%), male (n = 18, 60%), and spoke English (n = 23, 77%). Almost half of the sample had less than a high school education (n = 14, 48%). A sizeable minority were not working (n = 13, 45%) and disabled (n = 12, 41%). Means obtained for mental health symptoms (depression, anxiety, post-traumatic stress) were in the low range whereas CVD risk was in the average range (Folsom et al., 2016). Regarding substance use, the rate of positive screeners for alcohol use were aligned with reports from other primary care and hospital settings but over one-third of the sample screened positive on the CAGE, which is ten times the rate reported in previous studies (Brown et al., 1998; Pilowsky & Wu, 2012). No significant racial/ethnic differences were observed for any demographic characteristics other than for language of study materials with all Black participants completing study materials in English and approximately half of Latinx participants completing materials in Spanish. No significant racial/ethnic differences were noted for any health or SDOH variables.

Qualitative Results

Leveraging HIV Self-Management to Minimize COVID-19 Risks.—All but 3 participants (n = 27, 90%) reported leveraging HIV-related skills, strategies, or attitudes to manage their health during the COVID-19 pandemic. Participants reported feeling prepared to cope with the pandemic because of their experience managing HIV and similarities between HIV and COVID-19 risk management techniques with one even referring to a mask as a “condom over my mouth.” Participants found having HIV meant already knowing what to do to stay protected from COVID-19: “I totally know how to take care of myself when it comes down to COVID and all that, just keeping yourself more away from people, keeping my mask on.” They discussed how the current crisis necessitated little deviation from the routine they already kept to remain safe with HIV: “It’s just another aspect of paying attention to how I treat myself and how I’m protecting myself from getting sick in any way, because I was already thinking about that to begin with.” Participants also noted how living with HIV prepared them for hygiene-related behaviors that were recommended to prevent the spread of COVID-19, with one participant stating, “[HIV] made me be a little bit more high-maintenance on being clean and staying my distance from people.” Another described intensifying their existing hygiene behaviors “I always wash my hands before I eat, but now it’s like even coming from outside, if I feel I’m going to be touching my face or anything, the first thing I do is wash my hands.”

Some participants described heightened perceptions of risk they felt as PLWH and how they took precautions to minimize COVID-19: “I’m really at risk here and I know that I am”; “COVID-19 is more dangerous and more fatal, more quickly [when you live with HIV]”; “since one [living with HIV] has fewer defenses, if you become infected one can die”; and “I’m a high-risk person... I can contract the virus easily because my defenses are low.” For many, these perceptions of elevated risk led to taking greater precautions against COVID-19: “I don’t go outside, because I know that I’m at the risk of contracting it”; “I guess it makes me more leery of being around people, because I do have HIV”; and “I know that I’m vulnerable, so I’ve got to watch who I be around.”

Participants also discussed applying HIV-related information seeking and coping attitudes to navigate the fear associated with a new, deadly public health crisis. For example, one

participant reported that living with HIV helped them manage pandemic-related fears related to isolation, finances, and medical care, stating, “the education I received about HIV helped to not panic as much as I’m actually afraid.” Another participant noted how their trusted information sources for COVID-19 information were the same as those for HIV-related information. Participants also described their own tenacity in the context of their HIV diagnosis as shaping their attitude toward COVID-19: “If HIV didn’t kill me, pretty sure ...I could survive this one, too.” These and other descriptions were illustrative of participants’ who have already faced the anxiety of a potentially fatal diagnosis. “I take it very seriously and I don’t take nothing for granted...After I talk to you, I’m calling my kids just to tell them that I love them...I’ve also learned how to be grateful for what I do have.”

Continuity of Care.—Patients acknowledged the benefits of telehealth in maintaining or improving continuity of care during COVID-19, with several participants reporting communication with HIV providers using cell phones. Several participants described a positive experience when asked about their phone appointments since COVID-19 started, with one participant stating, “I think it’s become more accessible, like [providers are] more on it.” Nineteen participants (63.3%) indicated that COVID-19 had either increased or not affected their HIV care and ability to seek medical treatment.

Other participants noted drawbacks to the transition to telehealth during COVID-19, including difficulties making appointments, shorter and less personalized appointments, irregular or canceled visits, and compromised ability to receive diagnoses and treatment for some conditions. One participant described how “a lot of doctors are not open or they’re understaffed,” describing that they were forced to locate another doctor where they received “worse care.” Another expressed, “I feel neglected” because of a delay in receiving results from lab testing. Participants also expressed difficulty connecting to video calls and dislike of phone appointments. For instance, participants were concerned with not seeing their doctors “eye-to-eye” or “face-to-face” and reported discomfort discussing physical symptoms, such as rashes or “spots” to a doctor over the phone.

Electronic Health Access.—Participants reported barriers to electronic health (eHealth) access, including a lack of technological knowledge as well as a lack of access to technology. For instance, participants reported barriers to participation in an online group due to both lack of access to the internet or a computer and lack of familiarity with computer and internet use. For example, one participant stated, “Zoom is kind of challenging if you don’t have internet.” Participants were aware of their own lack of electronic health literacy, with one stating: “I almost don’t know how ... how do you say it...[to] use the internet.” Another reported that if they had appropriate instruction on how to operate online programs, they would be able to participate in an eHealth program. Regarding strategies to increase access, several participants said they could ask family or friends to borrow a computer or for help with technology.

In addition to access and knowledge concerns, participants noted medical, scheduling and privacy concerns related eHealth. For example, one participant reported that dizziness and blurry vision due to diabetes would be a barrier to participation. Another reported that their participation in an eHealth group would depend on privacy: “It depends if do we have to tell

our name and all that stuff, if we have to disclose our personal information. If we can remain anonymous, no problem.” Despite these barriers, some participants appeared comfortable with eHealth options. Five participants (16%) noted no obstacles they could think of in participating in an online program.

Mixed Methods Results

The mixed methods results presented below are summarized in Table 2.

Leveraging HIV Self-Management.

No significant difference was observed between participants reporting leveraging HIV self-management to mitigate COVID-19 risks ($n = 27$), those who did not leverage HIV ($n = 2$), and one who provided a comment that was difficult to interpret as leveraging or not leveraging HIV self-management in their approach to COVID-19 ($n = 1$; “If you let fear run your life, your life is over with”).

Continuity of Care.

A significant difference in depressive symptoms was found between participants who reported discontinuity of care ($n = 11$) and those who did not ($n = 19$): $M(SD) = 12.3(9.7)$ vs $4(4.6)$, ($p = 0.020$), with the former group reporting higher depressive symptoms. No other significant differences were observed in SDOH or health comorbidity variables.

Electronic Health Access.

A significant difference in CAGE scores was observed between participants who reported lack of technology access/availability ($n = 17$) and those reporting no obstacles ($n = 5$): 12% ($n = 2$) of those reporting lack of accessibility screened positive for substance use problems whereas 80% ($n = 4$) of those reporting no obstacles screened positive ($p = 0.009$) (another 8 participants were excluded from these analyses as they made responses with no meaningful content). Although no other significant differences were observed, those reporting a lack of accessibility scored two points lower on average on measures of depression, anxiety, and health literacy than those reporting no obstacles: depression: $M(SD) = 6.4(7.4)$ vs. $8.4(5.7)$; anxiety: $M(SD) = 2.9(3.5)$ vs. $4.8(5.4)$; health literacy: $M(SD) = 6.3(2.4)$ vs. $8.6(3.9)$. Regarding demographics, although no significant differences were observed between groups, 80% of those reporting no obstacles were Black, 80% were disabled ($n = 24$, respectively), and 100% spoke English. Additionally, 60% ($n = 18$) of those reporting no obstacles had at least some college education, whereas 63% ($n = 19$) of those reporting a lack of accessibility had less than a high school education.

Discussion

This study aimed to understand the healthcare experiences of Black and Latinx PLWH during the COVID-19 pandemic, given the potential translation of public health strategies for HIV to those for COVID-19 and ultimately, future novel public health crises. Results suggest that some PLWH found that HIV self-management strategies helped equip them for the hygiene and social distancing practices recommended to mitigate COVID-19 infection and may have prepared them to cope with another potentially fatal public health concern. We

also found that PLWH experienced various levels of care continuity during the pandemic, with a majority experiencing a lack of access to or lack of familiarity with technology that precluded digital telehealth engagement even if their care was maintained through phone call communications with providers. Results also point to mental health and SDOH factors that may perpetuate inequities in HIV care continuity and access among racialized patients disproportionately affected by morbidity and mortality for HIV, COVID-19, and other syndemic conditions.

Qualitative results of the current study suggested that some Black and Latinx PLWH were aware of heightened COVID-19 risks due to HIV and may have engaged in protective health strategies gained from HIV self-management. These findings are consistent with quantitative research showing high rates of COVID-19 protective behaviors (i.e., social distancing) and qualitative research showing a high level of vigilance about protective behaviors among PLWH (Gwadz et al., 2021; Kalichman et al., 2020). Although we found that some participants were concerned about their heightened risk of COVID-19 morbidity, others appeared confident that their existing protective behavioral strategies to prevent infections—particularly good hygiene—prepared them to prevent COVID-19 infection as well. In addition to infection mitigation strategies, participants reported using cognitive coping strategies they gained from living with HIV to manage COVID-19-related anxiety. This finding extends previous research demonstrating translation of behavioral coping strategies (e.g., social networking, meditation) from HIV to COVID-19 among Black and Latinx PLWH (Gwadz et al., 2021; Rhodes et al., 2021). Taken with previous research, results suggest that individual patient management strategies were translatable from HIV to COVID-19 just as system-level public health efforts were. These results build upon previous work demonstrating that the “hustling” minoritized PLWH have cultivated to meet material needs, navigate systems of care, and adapt to challenges associated with their diagnosis and their identity may well-prepare them for individual management of emergent public health crises (Gwadz et al., 2021).

Regarding continuity of care, our results were consistent with previous research suggesting that many reported no disruptions in HIV services during COVID-19 by maintaining cell phone communication with providers whereas others experienced challenges to care continuity. Specifically, the latter group of participants described difficulties accessing providers and canceled/delayed appointments; these participants also reported significantly more depressive symptoms than those reporting care continuity. Although several studies reported increases in depressive and other mental health symptoms during COVID-19, this was largely attributed to social isolation and economic concerns (Hong et al., 2023; Winwood et al., 2021). Our mixed methods results suggest that lack of care continuity may also be a stressor that in turn, negatively impacts mental health.

Although in-person care disruptions negatively affected many patients, at least as many adapted to or preferred remote treatment services with several finding telephone-based appointments made their HIV care “more accessible.” However, this ideal picture of telehealth changed when considering eHealth appointments. More than half of participants reported technology-related barriers to eHealth video appointments, revealing the barriers posed by both a lack of technology literacy and a lack of technology accessibility among

Black and Latinx PLWH. This is consistent with research demonstrating that Black and Latinx people desire computer access but lack needed skills; indeed, these populations were less likely to use video platforms than other racial/ethnic groups early in the pandemic (Eberly et al., 2020; Gwadz et al., 2021). Our results suggest that other SDOH including comorbid disability and language barriers may exacerbate these inequities, which pose an increasing health concern as COVID-19 becomes endemic and eHealth persists—particularly among immunocompromised people such as PLWH and Spanish-speaking patients (Hsiao et al., 2021). Previous research suggests some Black and Latinx PLWH prefer eHealth over in-person appointments, particularly in the context of transportation barriers (Gwadz et al., 2021). However, without healthcare policy solutions to increase digital technology access (e.g., loaned laptops and tablets) and interventions that incorporate eHealth education, Black, Latinx, and non-English speaking people will continue to be excluded from the potential benefits of eHealth-delivered medicine.

Notably, participants with consistent technology access reported more substance use and mental health problems on average. Participants with greater mental health concerns may have been more motivated to reduce barriers to telehealth treatment during the stress of COVID-19, or were engaged in care across settings (i.e., primary care, infectious disease, behavioral health), increasing their resources and socialization for telehealth. Indeed, telehealth visits were more commonly used for behavioral health visits relative to other outpatient visits during both COVID-19-related healthcare restrictions and subsequent periods of reopening (Yang et al., 2020).

Our findings have implications for healthcare providers to consider to better facilitate patients' self-management strategies across health conditions. Healthcare professionals can foster self-efficacy among patients living with chronic illness by building on best practice strategies and highlighting similarities in risk management approaches to health threats. Culturally responsive education and interventions may empower minoritized PLWH to apply their management of existing health and social resource problems to new health and social problems. For example, resilience and critical race consciousness have been identified as facilitators of HIV care and predictors of improved immune function among Black PLWH (Geter et al., 2018; Kelso et al., 2014). Interventions incorporating critical consciousness that promote awareness of and adaptive action against systemic racism and other SDOH manifesting from oppression may increase self-efficacy and reduce HIV risk behavior and other stigmatized conditions (e.g., substance use disorder) (Harper et al., 2023). Such interventions should be developed in participation with Black and Latinx PLWH to ensure their cultural and clinical relevance.

There are also specific implications for healthcare policy. As many have stated, the need for policies that scale up and support integrated medical and behavioral screening and intervention must be a lesson learned from HIV and COVID-19 (e.g., Auerbach et al., 2023). However, the current study suggests that such policies may also help healthcare systems capitalize on individual strengths developed by minoritized groups vulnerable to multiple health conditions. Behavioral health interventions can be scaled up in HIV care settings through expanded task shifting of screening and delivery to health workers with fewer qualifications and uptake of stepped care and transdiagnostic approaches (Remien et al.,

2019). Transdiagnostic approaches (i.e., those that implement uniform treatment strategies across conditions) may be a particularly effective for behavioral health interventions among Black and Latinx people, given shared SDOH that underlie risk for chronic, infectious, and mental health conditions (Auerbach et al., 2023). Such interventions may include reinforcement of best practice related to prevention of disease transmission and mental health and wellbeing for HIV, COVID-19, and related transmissible health conditions, as participants in the current study appeared to integrate such messaging into their daily lives. Broader public health campaigns relaying these messages can be bolstered by individual messaging interventions from healthcare providers, as evidenced by a recent study examining a COVID-19 knowledge intervention (Alsan et al., 2021). However, the authors also found that information seeking behavior—which may best translate among health conditions—was only predicted by race concordant messengers (Alsan et al., 2021). Thus, healthcare systems must also continue implementing policies that promote the diversification and inclusion of minoritized staff and leadership to best serve minoritized clients. Finally, research has demonstrated that increased social and care navigation services—such as those supported Ryan White—improved COVID-19 prevention behaviors (Convery et al., 2023). Expansion of these services to include telehealth navigation, particularly for older adult and minoritized PLWH, may be important for continuity or care and self-management as eHealth persists and may re-emerge as the norm in the face of a new public health crises.

Limitations of the current study include the small sample size, which while appropriate for qualitative research, was over dispersed, reducing the power to detect differences between thematic groups, particularly those related to HIV self-management strategies. The study was limited to Black and Latinx patients, limiting generalizability to other PLWH. Although open to all ages, the sample was also predominantly older adults (e.g., 73.3% were over the age of 50). This may have skewed the results regarding the high rate of telehealth barriers and continuity of care, both of which are more common among older individuals. In addition, study qualitative questions were narrow in scope. The telehealth question was particularly limited, asking participants about barriers to participating in a hypothetical HIV-related intervention delivered over the internet rather than asking more broadly about barriers to receiving healthcare services more generally. Interpretation of the qualitative and mixed methods results regarding telehealth are limited by the lack of breadth in this question as well as the study's failure to assess participants' previous experience with eHealth.

Mitigating emergent public health crises requires addressing structural gaps in healthcare access and public health messaging experienced by vulnerable subpopulations. However, the current study emphasizes the potential to also leverage individual-level behavioral and cognitive skills gained from self-management of chronic diseases like HIV. Future research aimed at minimizing new public health threats and their disproportionate impact on minoritized people and people with chronic conditions such as HIV should continue to examine factors that predict successful translation of self-management strategies.

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Public Policy Relevance:

The HIV pandemic—and later the COVID-19 pandemic—disproportionately affected Black and Latinx people due to underlying inequities in social determinants of health. This study found that Black and Latinx individuals translated individual patient management strategies from HIV to COVID-19 just as system-level public health efforts were translated across these diseases. Policies that scale up and support integrated medical and behavioral intervention may help healthcare systems capitalize on individual strengths developed by minoritized groups vulnerable to multiple health conditions.

Table 1

Demographic characteristics and descriptive statistics of the sample

	Latinx (n=13)	Black (n=17)	Total (n=30)
	M (SD)	M (SD)	M (SD)
Age			
18–49	5 (38.46%)	3 (17.65%)	8 (26.67%)
50–64	6 (46.15%)	12 (70.59%)	18 (60.00%)
65–69	2 (15.38%)	2 (11.76%)	4 (13.33%)
Gender			
Female	3 (23.08%)	7 (41.18%)	10 (33.33%)
Male	8 (61.54%)	10 (58.82%)	18 (60.00%)
Transgender	2 (15.38%)	0	2 (6.67%)
Language			
Spanish	7 (53.85%)	0	7 (23.33%)
VEnglish	6 (46.15%)	17 (100%)	23 (76.67%)
Education			
Less than High School	7 (58.33%)	7 (41.18%)	14 (48.28%)
High school	3 (25%)	3 (17.65%)	6 (20.69%)
College and above	2 (16.67%)	7 (41.18%)	9 (31.03%)
Employment			
Working part-time	1 (8.33%)	3 (17.65%)	4 (13.79%)
Not working	7 (58.33%)	6 (35.29%)	13 (44.83%)
VDisabled	4 (33.33%)	8 (47.06%)	12 (41.38%)
AUDIT positive	0	4 (23.53%)	4 (14.29%)
CAGE positive	4 (30.77%)	7 (41.18%)	11 (36.67%)
	M (SD)	M (SD)	M (SD)
Health Literacy (range: 3–15)	6.9 (2.5)	6.4 (3.1)	6.6 (2.82)
CVD Risk (range: 0–14)	7.3 (1.5)	6.6 (2.7)	6.9 (1.53)
Depression (range: 0–63)	10.1 (8.9)	5.1 (6.7)	7.1 (7.9)
Anxiety (range: 0–20)	3.6 (4.3)	2.5 (3.2)	3.0 (3.6)
Post -traumatic Stress (range: 0–5)	1.2 (1.7)	1.4 (2.0)	1.3 (1.9)
Trauma History (range: 0–6)	2.7 (1.6)	2.76 (1.6)	2.7 (1.5)

Note: numbers may not add to 100% due to some missing data; M (SD) = mean (standard deviation); AUDIT = Alcohol Use Disorder Identification Test-Concise; CAGE = CAGE Adapted to Include Drugs; CVD = cardiovascular disease

Table 2

Summary of mixed methods results

	Leveraging HIV Self-Management			Continuity of Care			Electronic Health Access		
	Did not leverage (n=3)	Did leverage (n=27)	P-value	Discontinuity (n=11)	Increased or no impact (n=19)	P-Value	Lack of access/ availability (n=17)	No obstacles (n=5)	P-Value
	N(%)	N(%)		N(%)	N(%)		N(%)	N(84%)	
AUDIT positive	0	4 (14.8%)	1.000	2 (18.2%)	2 (11.11%)	0.602	3 (17.7%)	1 (20.0%)	1.000
CAGE positive	1 (33.3%)	10 (37.0%)	1.000	4 (36.4%)	7 (36.84%)	1.000	2 (11.8%)	4 (80.0%)	0.009
	M (SD)	M (SD)		M(SD)	M(SD)		M (SD)	M(SD)	
Health literacy	6.3 (2.5)	6.7 (2.9)	0.850	6.5 (2.6)	6.7 (3)	0.899	6.3 (2.4)	8.6 (3.9)	0.121
CVD Risk	5.0 (1.7)	7.1 (2.1)	0.109	6.5 (2.5)	7.1 (2)	0.831	6.6 (2.2)	6.8(3.4)	0.903
Depression	7.0 (6.2)	7.2 (8.2)	0.975	12.3 (9.7)	4 (4.6)	0.020	6.4 (7.4)	8.4 (5.7)	0.595
Anxiety	2.3 (2.5)	3.0 (3.8)	0.758	4.2 (4)	2.2 (3.3)	0.165	2.9 (3.5)	4.8 (5.4)	0.373
Post-traumatic stress	1.0 (1.0)	1.3 (1.9)	0.766	1.6 (1.9)	1.1 (1.8)	0.469	1.4 (2)	2.0 (2.3)	0.563
Trauma Exposure	1.7 (0.6)	2.9 (1.6)	0.209	2.9 (1.3)	2.6 (1.7)	0.640	2.6 (1.3)	3.4 (2.4)	0.331

Note: Bolded rows represent significant differences between groups at $p < .05$; M (SD) = mean (standard deviation); AUDIT = Alcohol Use Disorder Identification Test-Concise; CAGE = CAGE Adapted to Include Drugs; CVD = cardiovascular disease