

# Experienced HIV-Related Stigma in Health Care and Community Settings: Mediated Associations With Psychosocial and Health Outcomes

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**Introduction:** There are multiple dimensions of HIV-related stigma that can compromise the mental and physical health of people living with HIV. We focused on the dimension of experienced stigma, defined as exposure to acts of discrimination, devaluation, and prejudice, and investigated its relationship with HIV health and psychosocial outcomes.

**Methods:** We examined associations between experienced stigma in the community and health care settings and psychosocial and health outcomes for people living with HIV (N = 203) receiving care at an urban HIV clinic in the Southeastern United States. We also investigated whether those effects are unique to experienced stigma or are mediated by other dimensions of HIV-related stigma.

**Results:** Experienced stigma was associated with suboptimal clinical outcomes such as viral nonsuppression, as well as poor affective, cognitive, and mental health outcomes (self-esteem, depressive symptoms, avoidance coping, and blame coping) and interpersonal outcomes such as social support and physician trust. Furthermore, serial mediation models suggested significant indirect

effects of experienced stigma through internalized stigma and anticipated stigma from various theoretically expected sources of stigma (eg, community members, friends and family, and health care workers), with varying effects depending on the source.

**Conclusions:** These findings suggest nuanced mechanisms for the effects of experienced HIV-related stigma, especially in health care settings, and may be used to inform stigma-reduction interventions. Interventions designed to address experienced stigma in health care settings might be more tailored to specific outcomes, such as depression and physician trust, than interventions designed to address experienced stigma in the community.

**Key Words:** HIV, stigma, experienced stigma, anticipated stigma, internalized stigma, mediation

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## INTRODUCTION

HIV stigma is a social, context-driven process that interferes with the psychological and physical well-being of people living with HIV (PLWH).<sup>1–3</sup> Through contextual stigma mechanisms, PLWH respond to social cues that they are not valued because of their HIV status, which may undermine their sense of self-worth.<sup>3</sup> HIV-related stigma can also negatively affect health by acting as a barrier to retention in HIV care and adherence to antiretroviral therapy (ART),<sup>4,5</sup> both of which are integral components of the HIV care continuum<sup>6</sup> and are necessary for viral suppression.<sup>7</sup>

Stigma may be conceptualized in terms of different dimensions.<sup>3</sup> These include perceived community stigma (sensed/believed existence and severity of stigmatizing attitudes in the community against PLWH), experienced stigma (exposure to acts of discrimination, devaluation, and prejudice), anticipated stigma (expectation of being treated negatively), and internalized stigma (acceptance of negative societal characterizations and applying these to oneself).<sup>2,3</sup> There are also different sources of HIV-related stigma, which may include institutions, health care workers, coworkers, community members, family, friends, and sexual partners.<sup>8</sup>

The multidimensionality of HIV-related stigma is of increasing interest because of evidence that different stigma dimensions have distinct effects on specific psychosocial and health outcomes.<sup>3,9</sup> In their seminal HIV stigma framework, Earnshaw and Chaudoir conceptualized how different

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dimensions of stigma (experienced, anticipated, and internalized) are associated with distinct, measurable outcomes for PLWH.<sup>3</sup> For example, internalized stigma is uniquely associated with poorer psychological well-being (eg, depressive symptomology), and anticipated stigma is associated with suboptimal health service utilization (eg, lower adherence to ART).<sup>2,9</sup> A recent meta-analysis also supports this framework; for example, although internalized and anticipated stigma consistently predict health ART adherence, experienced stigma does not.<sup>10</sup> Instead, previous research has suggested that experienced stigma has a direct effect on physical health (eg, viral load) because of the toll it takes on the body as a chronic stressor.<sup>9</sup>

It is possible that other dimensions of stigma may mediate the effects of experienced stigma on adherence and other outcomes. Indeed, a recent conceptual framework on the effects of HIV-related stigma suggests that one dimension of HIV-related stigma may mediate the effect of another dimension.<sup>8</sup> This conceptual framework also added the dimension of perceived stigma to the HIV stigma framework,<sup>8</sup> as supported by recent empirical findings that internalized stigma mediates the effect of perceived stigma on relevant affective, cognitive, and mental health outcomes, as well as health outcomes.<sup>2</sup> In this study, we explore whether other dimensions of stigma may mediate the effect of experienced stigma on outcomes. As was found with perceived community stigma,<sup>2</sup> we hypothesize that internalized and anticipated HIV-related stigma may mediate the effect of experienced stigma on psychosocial and health outcomes for PLWH. That is, when PLWH experience stigma and discrimination from others, this may lead them to internalize and anticipate stigma, which is often automatic in nature.<sup>11,12</sup> Internalized and anticipated stigma, in turn, may have downstream negative effects on physical and psychological health.

Sources of stigma are also relevant to health outcomes. Experienced stigma in health care settings can manifest as refusal of treatment to PLWH and failure to protect the confidentiality of patients' HIV status.<sup>13,14</sup> Some PLWH have described feeling particularly affected by the stigma and discrimination they experience as patients, given the expectations that providers have expert medical knowledge and adhere to the value of beneficence.<sup>15</sup> In these circumstances, PLWH report negative emotional reactions, such as offense and humiliation,<sup>16</sup> and depressive symptoms.<sup>17</sup> In addition, PLWH who experience stigma in health care settings may also anticipate stigma in the same setting and, consequently, have lower trust on health care providers.<sup>18</sup> Mistrust interferes with the physician–provider relationship<sup>19,20</sup> and may increase counterproductive health behaviors, such as ART nonadherence.<sup>21</sup>

By contrast, experienced stigma in community settings can manifest as expression of negative attitudes toward PLWH and social isolation and rejection of PLWH in places of public accommodation (eg, parks, schools, restaurants, retail stores, etc.).<sup>22,23</sup> Previous scientific literature suggests that PLWH who experience HIV-related stigma in community settings may also anticipate and internalize stigma,<sup>9,23</sup> presumably in the same settings. Thus, experienced stigma in

the community can increase levels of psychological distress (ie, anxiety and depression) among PLWH.<sup>24</sup> In the current study, we expect that the specific health effects of experienced stigma differ depending on the source or context (ie, health care providers and staff versus the community).

To better inform the development of health interventions for PLWH, it is important to differentiate between dimensions and sources of HIV-related stigma and to identify mediating pathways between HIV-related stigma and health outcomes.<sup>8</sup> In this study, we examined several relationships not yet explored in the extant scientific literature. Specifically, we examined associations between experienced HIV stigma (in both community and health care settings) and interpersonal, psychological, mental health factors, and HIV-related health outcomes. In addition, we examined whether these relationships are mediated by other dimensions of HIV-related stigma (ie, internalized and anticipated).

METHODS

Participants and Procedures

We used purposive sampling to identify patients from an HIV clinic at a large urban university in the Southeast using the following inclusion criteria: current ART use, substance nonuse, and recent (in the 6 months preceding the time of the study) clinical record of viral load (Table 1). We contacted eligible participants and invited them to complete computer-based study measures at a separate research visit. Among the eligible participants, 74 female-identified and 129 male-identified individuals (73 white and 130 black) with an average age of 44.8 years (SD = 11.1 years) completed computer-based study measures. Clinical records data were obtained for these patients on depressive symptoms, duration of ART, and viral load. The final sample included 203 patients.

HIV Clinical Outcomes

Lu et al<sup>25</sup> one-item measure was used to assess ART adherence: “In the past 4 weeks, how was your ability to take

TABLE 1. Background Characteristics for Study Participants (N = 203)

Characteristic	n (%)
Sex	
Male	129 (63.5)
Female	74 (36.5)
Race	
Black/African American	130 (64.0)
White	73 (36.0)
Characteristic	Mean (SD)
Age (yrs)	44.8 (11.1)
Socioeconomic status*	2.7 (1.0)
Time on ART (mo)	95.8 (63.1)

\*Defined as socioeconomic status level, indicated from lower (1) to upper (5).

all of your anti-HIV medications prescribed by your doctor?" Participants responded using a self-report measure that asked them to indicate how adherent they believe themselves to be. The response choices were: (1) Very poor; (2) Poor; (3) Fair; (4) Good; (5) Very good; and (6) Excellent. Previous literature suggests that this subjective and relative measure of adherence is as useful and reliable as other self-report measures of adherence.<sup>26</sup> In our sample, 71% of participants reported excellent adherence. Therefore, responses were dichotomized ("excellent" adherence versus all other response options).<sup>27</sup> Although self-report measures tend to overestimate adherence, previous research supports the predicted value of self-reported nonoptimal adherence.<sup>28</sup> Viral load data from each participant's last clinic visit was extracted from clinic data as not suppressed ( $\geq 200$  c/mL) versus suppressed ( $< 200$  c/mL).

### HIV-Related Stigma Dimensions

To the best of our knowledge, no single existing psychometric stigma tool measures all stigma dimensions and sources that we sought to examine. Therefore, we used separate measures. We included 2 subscales of the revised HIV Stigma Scale,<sup>29</sup> each of which showed evidence of internal consistency in the current study sample: internalized stigma (7 items,  $\alpha = 0.85$ ) and experienced stigma in the community (11 items,  $\alpha = 0.93$ ). We adapted 9 items from the stigma mechanisms measure<sup>8</sup> to quantify anticipated stigma from the 3 following sources: friends and family, neighbors and others in the community, and health care workers. All anticipated stigma subscales were highly reliable in the present sample ( $\alpha = 0.90$ ,  $\alpha = 0.94$ , and  $\alpha = 0.83$  for friends and family, neighbors, and health care workers, respectively, each consisting of 3 items).

Experienced stigma in the health care setting was assessed using 8 items adapted from the field-tested version of the enacted stigma section of an international tool for measuring HIV-related stigma among health care workers (not necessarily HIV health care setting).<sup>30</sup> Two of the items were not positively correlated with the rest of the items, thereby reducing Cronbach alpha. Therefore, the mean of the remaining 6 items were used for the present analysis (Cronbach  $\alpha = 0.73$ ). The rating scale for experienced stigma in the health care setting included the following responses: (1) Never; (2) Rarely; (3) A lot of the time; and (4) Most of the time (see Supplemental Digital Content, <http://links.lww.com/QAI/B92> for items and rating scale used in this study).

### Cognitive, Affective, and Mental Health Factors

Rosenberg 10-item Self-Esteem Scale was used to measure global self-esteem ( $\alpha = 0.81$ ).<sup>30</sup> The 9-item Patient Health Questionnaire (PHQ-9) measured depressive symptoms ( $\alpha = 0.87$ ).<sup>31</sup> To assess coping by avoidance and coping by blaming, we used 2 subscales from the Ways of Coping measure (10 items,  $\alpha = 0.76$  and 3 items,  $\alpha = 0.81$ , for coping by avoidance and by blaming, respectively).<sup>32</sup>

### Interpersonal Factors

The 16-item Interpersonal Support Evaluation List (ISEL) assessed social support with good reliability ( $\alpha = 0.88$ ).<sup>33</sup> The 10-item Wake Forest Physician Trust Scale also showed internal consistency in our study ( $\alpha = 0.82$ ).<sup>34</sup>

### Statistical Analyses

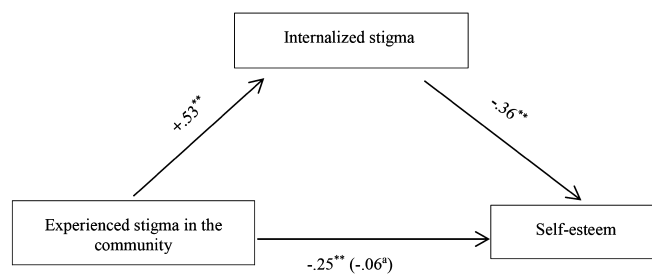
All analyses conducted were cross-sectional. First, we examined descriptive statistics for the present sample. Then, we tested associations between experienced stigma in the community and experienced stigma in health care settings with ART adherence or viral suppression using logistic regression. We also tested the associations between experienced stigma in the community and experienced stigma in health care settings and psychosocial outcomes (that were assessed as continuous measures) using linear multiple regression analyses. In all regression analyses, the following covariates were included: sex, race, age, socioeconomic status, and time on ART. These covariates were chosen based on previous research.<sup>6</sup>

Hypothesized mediation models were informed by the recent conceptual framework<sup>8</sup> on the effects of HIV-related stigma and included single-mediator models (as depicted in Fig. 1) in addition to serial mediation models as depicted in Figure 3. Models were tested with the regression-based Process procedure, a statistical software macro that is compatible with SAS and SPSS.<sup>35</sup> The Process macro calculates an indirect effect between a predictor and an outcome from the product of path coefficients when the mediator(s) is present. Using this approach, the direct effect does not necessarily have to be significant for mediation to be present because of inconsistent mediation.<sup>36,37</sup> We calculated bias-corrected 95% confidence intervals (CIs) for the indirect effects using bootstrapping. A significant indirect effect is revealed when the CI does not include the value zero, which suggests that statistical mediation is present.

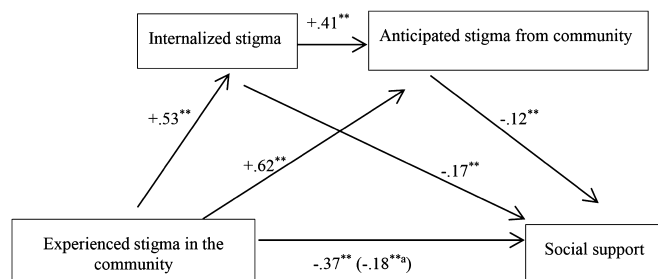
## RESULTS

### HIV Clinical Outcomes

Neither experienced stigma in the community nor experienced stigma in the health care setting was associated



**FIGURE 1.** Internalized stigma mediates the effect of experienced stigma in the community on self-esteem. Path coefficients are unstandardized. Sex, race, age, socioeconomic status, and time on ART are also controlled. \*When internalized stigma is in the model.



**FIGURE 2.** Internalized stigma and anticipated stigma from the community mediate the effect of experienced stigma in the community on social support (serial mediation). Path coefficients are unstandardized. Sex, race, age, socioeconomic status, and time on ART are also controlled. <sup>a</sup>When internalized stigma and anticipated stigma from the community are in the model.

with medication adherence. Nevertheless, we tested the indirect effects of the 2 experienced stigma dimensions on medication adherence because indirect effects can be significant even in the absence of nonsignificant total effects because of inconsistent mediation.<sup>36</sup> The indirect effect of experienced stigma in the health care setting on medication adherence through internalized stigma was not significant. However, the indirect effect of experienced stigma in the community on medication adherence through internalized stigma was significant ( $B = -0.42$ ,  $SE = 0.24$ , 95% CI:  $-0.93$  to  $-0.06$ ).

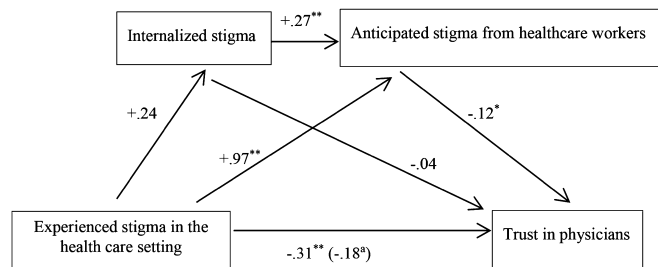
Most participants ( $n = 184$ ) had viral loads  $<200$  c/mL (suppressed). Results of logistic regression analyses using viral load (not suppressed = 1 versus suppressed = 0) as the dependent variable revealed a significant effect of experienced stigma in the health care setting on nonsuppressed viral load [adjusted odds ratio (AOR) = 3.23,  $P = 0.03$ , 95% CI: 1.15 to 9.06]. When added to the model, ART adherence was also a significant predictor of viral load nonsuppression (AOR = 0.17,  $P = 0.01$ , 95% CI: 0.05 to 0.61). In this model including ART adherence, the effect of experienced stigma in the health care setting changed very little (AOR = 3.33,  $P = 0.03$ , 95% CI: 1.15 to 9.66), suggesting that ART adherence does not mediate the association between experienced stigma

in health care settings and viral nonsuppression. However, the association between experienced stigma and viral nonsuppression outside health care settings was not significant (AOR = 1.32,  $P = 0.57$ , 95% CI: 0.51 to 3.38). Supplementary analyses examining inconsistent mediation effects did not reveal significant indirect effects through internalized stigma for either experienced stigma in the health care setting or in the community.

## Affective, Cognitive, and Mental Health Factors

We conducted linear regression analyses to examine the relationships between stigma in health care and community settings and affective, cognitive, and mental health factors (ie, depressive symptoms, self-esteem, avoidance coping, and blame coping) (Table 2). For experienced stigma in the community, all associations were significant. Positive associations were found with depressive symptoms ( $B = 1.75$ ,  $SE = 0.50$ ,  $t = 3.50$ ,  $P = 0.001$ ), avoidance coping ( $B = 0.53$ ,  $SE = 0.07$ ,  $t = 7.44$ ,  $P < 0.001$ ), and blame coping ( $B = 0.39$ ,  $SE = 0.11$ ,  $t = 3.71$ ,  $P < 0.001$ ). However, a negative association was found with self-esteem ( $B = -0.25$ ,  $SE = 0.05$ ,  $t = -5.33$ ,  $P < 0.001$ ). Similar to experienced stigma in the community, stigma experienced in health care settings was positively associated with both depressive symptoms ( $B = 1.76$ ,  $SE = 0.79$ ,  $t = 2.24$ ,  $P = 0.03$ ) and avoidance coping ( $B = 0.46$ ,  $SE = 0.12$ ,  $t = 3.81$ ,  $P < 0.001$ ). However, it was not significantly associated with coping by blaming or with self-esteem.

We tested whether the effect of experienced stigma in the community on affective, cognitive, and mental health outcomes was mediated by internalized stigma. The indirect effect of experienced stigma in the community on self-esteem through internalized stigma was significant ( $B = -0.19$ ,  $SE = 0.04$ , 95% CI:  $-0.27$  to  $-0.13$ ), suggesting that internalized stigma mediates the effect of experienced stigma on self-esteem (Fig. 1 for all path coefficients). Similarly, mediation analyses of depressive symptoms and coping outcomes yielded significant indirect effects of experienced stigma in the community through



**FIGURE 3.** Internalized stigma and anticipated stigma from health care workers mediate the effect of experienced stigma in health care settings on trust in physicians (serial mediation). Path coefficients are unstandardized. Sex, race, age, socioeconomic status, and time on ART are also controlled. <sup>a</sup>When internalized stigma and anticipated stigma from health care workers are in the model.

**TABLE 2.** Associations Between Community and Health Care Setting–Experienced HIV-Related Stigma and Affective, Cognitive, Mental Health, and Interpersonal Factors

Factor	Community Stigma			Health Care Setting–Stigma		
	B	SE	P	B	SE	P
Self-esteem	−0.25	0.05	<0.001	−0.07	0.08	0.38
Depressive symptoms	1.75	0.50	<0.001	1.76	0.79	<0.05
Avoidance coping	0.53	0.72	<0.001	0.46	0.12	<0.001
Blame coping	0.39	0.11	<0.001	0.19	0.17	0.26
Interpersonal support	−0.37	0.05	<0.001	−0.27	0.09	<0.01
Physician trust	−0.09	0.06	0.17	−0.31	0.09	<0.01

Covariates' sex, race, age, socioeconomic status, and time on ART were also entered in all analyses.



internalized stigma. Indirect effects for depressive symptoms, avoidance coping, and blame coping, respectively, were as follows: ( $B = 0.67$ ,  $SE = 0.36$ , 95% CI: 0.02 to 1.43;  $B = 0.24$ ,  $SE = 0.05$ , 95% CI: 0.14 to 0.35;  $B = 0.45$ ,  $SE = 0.09$ , 95% CI: 0.31 to 0.64).

We also tested whether the associations between experienced stigma in health care settings and affective, cognitive, and mental health outcomes were mediated by internalized stigma. The indirect effects were significant only for depressive symptoms ( $B = 0.40$ ,  $SE = 0.26$ , 95% CI: 0.04 to 1.17) and blame coping ( $B = 0.20$ ,  $SE = 0.11$ , 95% CI: 0.001 to 0.43).

## Interpersonal Factors

We examined the relationships between experienced stigma in the community and experienced stigma in health care settings and interpersonal factors (ie, social support and physician trust). In linear regression analyses, experienced stigma in the community ( $B = -0.37$ ,  $SE = 0.05$ ,  $t = -6.97$ ,  $P < 0.001$ ) and experienced stigma in health care settings ( $B = -0.27$ ,  $SE = 0.09$ ,  $t = -3.03$ ,  $P = 0.003$ ) were both significant predictors of social support. Only stigma experienced in health care settings was significantly associated with physician trust ( $B = -0.31$ ,  $SE = 0.09$ ,  $t = -3.25$ ,  $P = 0.001$ ).

Next, we used a serial mediation model to examine the indirect effect of experienced stigma on physician trust and social support through internalized stigma and anticipated stigma. The indirect effect of experienced stigma in the community on social support through first internalized stigma and then stigma anticipated from the community (Fig. 2) was significant ( $B = -0.03$ ,  $SE = 0.01$ , CI:  $-0.06$  to  $-0.01$ ). The indirect effect of experienced stigma in the community on social support through internalized stigma and stigma anticipated from friends and family was also significant ( $B = -0.03$ ,  $SE = 0.01$ , CI:  $-0.06$  to  $-0.01$ ).

When examining physician trust, the indirect effect of experienced stigma in health care settings on physician trust through internalized stigma and stigma anticipated from health care workers (Fig. 3) was significant ( $B = -0.01$ ,  $SE = 0.01$ , CI:  $-0.03$  to  $-0.0007$ ). However, the indirect effect on physician trust was not significant when anticipated stigma from friends and family or the community were added to the serial mediation model. As a whole, these results suggest that experienced stigma in health care and community settings may have differential effects on interpersonal outcomes.

## DISCUSSION

We examined associations between different sources of experienced HIV-related stigma and pertinent health, psychosocial, and interpersonal outcomes and investigated whether these effects are mediated by other dimensions of HIV-related stigma. As in previous research,<sup>9</sup> our findings suggest that experienced stigma manifests in suboptimal physical health outcomes for PLWH. Although experienced stigma in health care settings was significantly associated with viral suppression, the same was not found for experienced stigma in community settings. Thus, experiencing

stigma in health care settings rather than in the community seems to have a greater impact on HIV-related health. This finding has implications for health care workers because respectful interactions with PLWH are critical to health. Our findings also suggest that experiencing stigma in health care settings can hinder progress through steps of the HIV care continuum, ultimately undermining achievement of undetectable viral load. Participatory methods of care may promote feelings of empowerment and inclusivity among PLWH with those who provide their care.<sup>13,38</sup> Although all persons who work in health care settings where PLWH receive services may benefit from training on stigma reduction, previous focus group feedback from PLWH suggests that nonmedical frontline personnel (eg, receptionists) may particularly benefit from these kinds of interventions because they are typically not as familiar with the needs and concerns of PLWH.<sup>13</sup>

We did not find significant associations between community-experienced stigma or health care-experienced stigma and adherence. When also considering that the relationship between experienced stigma in health care settings and viral suppression was not found to be mediated by ART adherence, it seems likely that experienced stigma in the health care setting has a direct physiological effect.<sup>9</sup> Furthermore, previous research has suggested that stigma is a variable, within-person trait elicited by specific acts of discrimination.<sup>11</sup> Taken together, these results suggest that the effect of experienced stigma on adherence outcomes is most likely proximal, whether from community or health care settings.<sup>10</sup> These results also correspond with extant literature because studies that have examined multiple dimensions of HIV-related stigma have found that other dimensions of stigma (anticipated, perceived, and internalized) are more likely to predict nonadherence than experienced stigma.<sup>10,39</sup> The HIV stigma framework, in particular, distinguishes experienced stigma as a dimension of stigma not connected to behavioral outcomes, but rather physical outcomes, given that experiences of stigma are uniquely stressful experiences, which may chronically impact HIV disease progression.<sup>9</sup>

In examining psychosocial outcomes, our results on the effects of experienced HIV-related stigma echo previous research related to the effects of perceived HIV-related stigma in the community<sup>6</sup> and provide a novel understanding of the nuances of experienced stigma. We found that experienced stigma in the community was associated with all affective, cognitive, and mental health outcomes (depressive symptoms, avoidance coping, blame coping, and self-esteem), and these associations were each mediated by internalized stigma. Interventions aimed at reducing stigma at the community level may help prevent PLWH from experiencing these negative psychosocial outcomes by mitigating the internalization and subsequent anticipation of stigma. For example, Project CHHANGE (Challenge HIV Stigma and Homophobia and Gain Empowerment) has been shown to be both feasible and acceptable to community residents.<sup>39</sup>

As for interpersonal outcomes, although experienced stigma in community and health care settings were both significant predictors of social support, only experienced

stigma in health care settings was associated with physician trust. Serial mediation models added granularity to the complexity of the effects of experienced stigma on interpersonal outcomes. When examining effects on social support, anticipated stigma from the community and anticipated stigma from friends and family were both mediators on the pathway from experienced stigma in the community through internalized stigma. These results suggest that some of the effects of experienced and anticipated stigma are context-specific and expand on existing literature<sup>2</sup> by suggesting that experienced stigma in health care settings is more germane to anticipated stigma within (rather than outside) the health care setting.

HIV-related experienced stigma in health care settings (but not experienced stigma in the community) was associated with physician trust, and this association was first mediated by internalized stigma and then by stigma anticipated from health care workers (but not by stigma anticipated from friends and family or from the community). As in previous work,<sup>2</sup> these findings help substantiate the idea that the source of anticipated stigma as well as the context of experienced stigma are differential contributors to key psychosocial and interpersonal outcomes for PLWH. These results suggest that experienced stigma in the community may impact PLWH more broadly, whereas the scope of experienced stigma in health care settings may be narrower and may particularly benefit from targeted interventions.

This research should be interpreted in light of its limitations. The research design was cross-sectional, and, as such, we are unable to ascribe causality or gain insight into the temporality of the effects of experienced stigma. Furthermore, the self-reported measures of experienced stigma and adherence may have introduced bias into the analysis. In addition, although anticipated stigma from friends and family was grouped into a single category in this analysis, it is possible that it comprises 2 distinct categories. Anticipated stigma from sexual partners, although not explicitly measured in this study, may represent an additional distinct stigma dimension. Similarly, salient context for experienced stigma may exist outside the health care/non-health care dichotomy used in this research. Future research should investigate additional sources and settings of experienced and anticipated stigma. The present results may serve as an initial attempt to identify mediating pathways that can be tested in future studies using longitudinal designs.

Despite their limitations, these findings help illuminate the ways in which different experienced HIV stigma mechanisms affect the health and well-being of PLWH. One way in which clinicians and public health practitioners can translate these findings into practice is by providing health care providers and frontline staff with targeted interventions aimed at reducing stigma. Providers can also work with PLWH directly to address and ameliorate various dimensions of stigma. By understanding the complexities of stigma, researchers, clinicians, and public health practitioners are better equipped to reduce its overall harmful effects on the health and well-being of PLWH.

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