

## Universal Screening for HIV and Hepatitis C Infection: A Community-Based Pilot Project



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**Introduction:** Black men in the Deep South have been disproportionately affected by high HIV and hepatitis C virus infection rates. Conventional clinic-based screening approaches have had limited success in reaching those with undiagnosed HIV or hepatitis C virus infection. The purpose of this study was to evaluate the acceptability, feasibility, and best practices of an integrated HIV and hepatitis C virus community-based health screening approach.

**Methods:** The study used a mixed methods approach: focus group discussion, individual interviews, and surveys that assessed perceptions, perspectives, and HIV and hepatitis C virus awareness among six communities across Alabama and Mississippi. Data were collected and analyzed in 2014–2017.

**Results:** Although HIV and hepatitis C virus knowledge was limited among community members surveyed, the results of this study suggest that (1) using an integrated, community-based HIV and hepatitis C virus testing approach is acceptable and feasible; (2) formation of a community advisory board is a key element of successful community mobilization; (3) education and training of community members on disease-specific topics and overcoming stigma are essential; and (4) focus on and inclusion of young community members will be critical for the sustainability of screening efforts.

**Conclusions:** Including and engaging communities at risk for HIV and hepatitis C virus infection in prevention research is a promising strategy to overcome existing barriers of stigma and discrimination. Integration of HIV and hepatitis C virus testing in universal health screening efforts utilizing a Community Health Advisors model encourages unbiased communication with a focus on overall community health. Community health advisors are recognized as important agents in this effort.

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### INTRODUCTION

**A**cross the U.S., black men are disproportionately burdened with HIV and hepatitis C virus (HCV) infection. The Centers for Disease Control and Prevention (CDC) estimates that one in 16 black men will acquire HIV in their lifetime. Although blacks account for only 13% of the population,<sup>1</sup> they constitute 40% of the

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people living with HIV (PLWH)<sup>2–4</sup> and 25% of the population living with HCV infection.<sup>5,6</sup>

To combat disparities in screening and linkage to care, CDC recommends (1) HIV screening for all individuals aged 13–64 years and at least annually for those at high risk<sup>7</sup> and (2) HCV screening for people born between 1945 and 1965, and individuals with a history of IV drug use or other personal or occupational risks.<sup>8</sup> Yet, most PLWH or people living with HCV are diagnosed late in the disease process, significantly increasing risk for morbidity and mortality<sup>8,9</sup> and transmission risk.<sup>8–10</sup> An estimated 15% of PLWH who are unaware of their HIV status are estimated to be responsible for nearly half of new HIV transmissions.<sup>4,11</sup> Similarly, 85% of individuals with HCV are unaware of their status, rendering them unintentional vectors of transmission.<sup>12</sup> Rural communities, as in much of the South,<sup>13</sup> remain particularly vulnerable because of increased poverty levels, inadequate health care, poor access to care, and higher levels of stigma.<sup>14,15</sup>

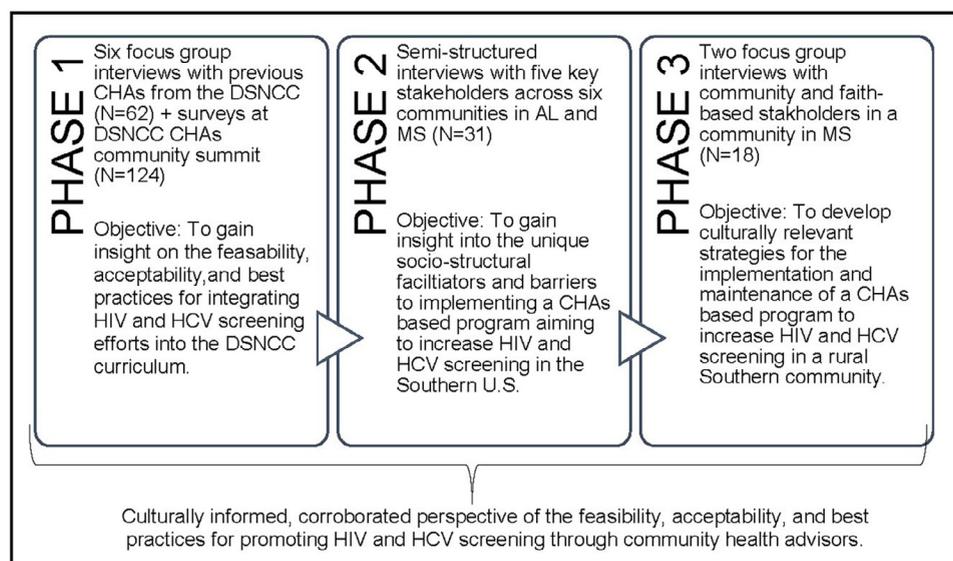
To increase awareness and linkage to care in vulnerable populations, sociocultural variables hindering awareness must be addressed.<sup>16</sup> Community-based participatory research (CBPR) has been shown to help identify the root causes of social and political injustice in communities, and provide a guide to the contextual variables pertinent to the solution.<sup>17</sup> The importance of racial minority involvement in addressing health disparities has been recognized.<sup>18–22</sup> The Deep South Network for Cancer Control (DSNCC) is an example of a collaborative approach that resulted in reduction of disparities related to breast, cervical, and colon cancers in the Southern U.S.<sup>22</sup>

The purpose of this project is to assess feasibility and acceptability of the integration of HIV/HCV screening into the previously successful DSNCC. The DSNCC was a community–academic partnership program funded by the National Cancer Institute. This network of researchers and community partners built an infrastructure to address cancer health disparities in medically underserved minority communities across Alabama and Mississippi. The program utilized a Community Health Advisors (CHAs) model to train motivated volunteers to increase awareness and use of screening services for the detection of breast, cervical, and colon cancers.<sup>20,21</sup> The CHAs used community-wide events to provide education on the importance of screening and early detection, and served as patient navigators to assist individuals in removing barriers to screenings. In this project, the insights of previous CHAs, key community stakeholders, and community members are collected and thematically analyzed to determine the acceptability, feasibility, and best practices for implementing a culturally adapted CBPR approach to reducing HIV/HCV screening disparities in black men. The organization, 100 Black Men of America, Inc., whose focus is on improving conditions for black men in their community, is included as a community partner in this project.

## METHODS

### Study Setting

The study, conducted in three phases from 2014 to 2017 across six counties in Alabama and Mississippi, aimed to gain insight into



**Figure 1.** Phase 1, 2, and 3 design and objectives.

CHA, community health advisor; DSNCC, Deep South Network for Cancer Control; HCV, hepatitis C virus; AL, Alabama; MS, Mississippi.

the feasibility, acceptability, and culturally sensitive strategies associated with integrating HIV/HCV screening into the DSNCC curriculum, which has proven successful in increasing cancer awareness and screening in the Southern U.S. (Figure 1). The DSNCC curriculum is based on capacity building that empowers community members to value their resources and individual skill sets in their communities to address specific problems from the inside out. This research utilized expertise from previous CHAs and key informants to produce a culturally informed, collaborative perspective of the feasibility, acceptability, and best practices for promoting HIV/HCV testing. The IRB at the University of Alabama at Birmingham approved this study.

### Study Design

Phase 1 included six focus groups, one from each participating county, ranging in size from eight to 12 participants each, that were conducted with previous DSNCC CHAs ( $n=62$ ). After informed consent, participants completed a demographic questionnaire. Focus groups concentrated on community perceptions and knowledge of HIV/HCV as well as feasibility and acceptability of integrating HIV/HCV screening into the DSNCC curriculum based on commitment and engagement within respective communities and reflection on experiences and lessons learned through their role (Appendix Table 1, available online). HIV and HCV knowledge was assessed through validated instruments<sup>23,24</sup> administered at a DSNCC CHAs Institute ( $n=124$ ).

In Phase 2, to validate focus group data, additional data were collected from community stakeholders ( $n=31$ ) representing each of the six communities in Phase 1. Participants in Phase 2 represented key roles identified by CHAs in Phase 1: medical professionals ( $n=6$ ); peer educators ( $n=7$ ); church ministers ( $n=6$ ); youth advocates ( $n=6$ ); and county health department representatives ( $n=6$ ). Participants completed a demographic questionnaire and participated in individual interviews aimed to elicit information regarding the feasibility and acceptability of a community-based HIV/HCV screening program in their community. During interviews, participants were asked to share their recommendations for the most important considerations and best methods to reach their community, including examples of what has been effective during their past work with community intervention programs (Appendix Table 1, available online).

Following the analysis of Phase 1 and 2 findings, Phase 3 involved selecting one of the six communities to more deeply explore the feasibility and acceptability of implementing a community-based approach to increase screening and linkage to care for HIV/HCV among black men. Collaboration with community partners from the DSNCC and 100 Black Men of America, Inc., facilitated recruitment. Participants ( $n=18$ ) consisted of community stakeholders, including educators, social workers, and faith-based leaders. Participants completed a demographic questionnaire prior to the initiation of focus groups ( $n=2$ ), with questions developed to elicit information regarding who would best serve as the CHA and how the program would best be implemented and sustained (Appendix Table 1, available online).

### Data Analysis

Participant characteristics from each phase were tabulated and descriptive statistics computed for variables of interest using Excel 2016. Focus groups and semi-focused interviews collected

qualitative information on feasibility, acceptability, and culturally sensitive strategies. Interviews and focus groups were audio recorded, transcribed verbatim, and downloaded onto password-protected computers, and C.O. and J.W. conducted descriptive and thematic analyses using open coding with NVivo, version 11. Researchers discussed discrepancies until common codes were agreed upon.

## RESULTS

Across the three phases, the feasibility, acceptability, and best practices associated with integrating HIV/HCV screening efforts were progressively explored. This section discusses the quantitative, qualitative, and collaborative findings synthesized from this research organized by phase. Phase 1 participants were experienced CHAs, whereas participants in Phases 2 and 3 were community members and stakeholders. Table 1 summarizes demographic details of Phase 1, 2, and 3 participants.

Phase 1 consisted of soliciting previous CHAs' ( $n=62$ ) insights into barriers, facilitators, and cultural considerations regarding HIV/HCV screening approaches. The majority of participants were black (98.3%); female (95.1%); and aged  $\geq 50$  years (87.6%). Most were single (27.4%); divorced/separated (24.2%); or widowed (22.6%) and not living with children (66.1%). Only 27% knew PLWH and even fewer (17.2%) knew someone with HCV. Most (76.4%) rarely or never worried about getting infected with HIV; 77.4% perceived it extremely unlikely or very unlikely to become infected with HIV. Almost all (95.2%) of the participants considered themselves to be a moderate or very religious/spiritual person. When asked, "To what extent do you feel religious or spiritual beliefs will impact the integration of HIV/HCV screening into universal screening efforts?" a total of 75.8% felt that religious or spiritual beliefs would have a moderate or greater impact.

Educational needs were assessed through HIV/HCV knowledge scales at a DSNCC CHAs Institute. Participants from Phase 1 focus groups were part of the larger group of survey participants ( $n=124$ ). In spite of the commitment of CHAs to community health and previous involvement in health promotion activities, knowledge deficits existed (Table 2).

Phase 1 focus groups revealed that community stakeholder interviews were necessary to understand social and structural contexts affecting HIV and HCV screening efforts in the South and, hence, were included in Phase 2. The majority of Phase 2 participants were black (93.3%); female (56.7%); and aged  $\geq 50$  years (60.0%), with 51.7% currently not being married and 63.3% not living with children. Approximately three of four (76.7%) Phase 2 informants knew PLWH and 64.3% knew someone with HCV. More than half (66.7%)

**Table 1.** Participant Demographics for Phases 1, 2, and 3

Demographics	Phase 1, n (%) (n=62)	Phase 2, n (%) (n=31)	Phase 3, n (%) (n=18)
Gender			
Male	3 (4.9)	13 (43.3)	12 (66.7)
Female	58 (95.1)	17 (56.7)	6 (33.3)
Race			
Black	59 (98.3)	28 (93.3)	18 (100.0)
White	0 (0.0)	2 (6.7)	0 (0.0)
Other	1 (1.7)	0 (0.0)	0 (0.0)
Age, years			
20–39	1 (1.8)	6 (20.0)	1 (5.6)
40–49	6 (10.7)	6 (20.0)	5 (27.8)
50–59	17 (30.4)	10 (33.3)	4 (22.2)
≥60	32 (57.1)	8 (26.7)	8 (44.4)
Education			
Attended graduate school	7 (11.7)	9 (31.0)	6 (33.3)
College graduate	21 (35.0)	8 (27.6)	9 (50.0)
Attended college	19 (31.7)	7 (24.1)	2 (11.1)
High school graduate	9 (15.0)	3 (10.3)	1 (5.6)
Did not graduate high school	4 (6.7)	2 (6.9)	0 (0.0)
Marital status			
Married	16 (25.8)	14 (48.3)	14 (77.8)
Single	17 (27.4)	6 (20.7)	2 (11.1)
Living with partner	0 (0.0)	0 (0.0)	1 (5.6)
Divorced/separated	15 (24.2)	6 (20.7)	1 (5.6)
Widowed	14 (22.6)	3 (10.3)	0 (0.0)
Living situation			
With spouse/partner and children	8 (12.9)	6 (20.0)	8 (44.4)
Living alone with children	10 (16.1)	5 (16.7)	0 (0.0)
With spouse/partner	11 (17.7)	8 (26.7)	7 (38.9)
With family	4 (6.5)	2 (6.7)	1 (5.6)
Alone	26 (41.9)	8 (26.7)	2 (11.1)
Annual household income			
\$0–\$19,999	24 (40.7)	5 (17.2)	2 (11.1)
\$20,000–\$29,999	7 (11.9)	11 (37.9)	1 (5.6)
\$30,000–\$49,999	18 (30.5)	1 (3.4)	1 (5.6)
≥\$50,000	10 (17.0)	12 (41.4)	14 (77.8)

worried about getting infected with HIV none of the time or rarely, and 50% responded that it was very or extremely unlikely that they would be infected. The overwhelming majority (90%) considered themselves to be moderately or very religious or spiritual. Like Phase 1 participants, the majority of Phase 2 participants felt that the community's religiosity and spirituality would influence the feasibility of integrating HIV and HCV screening efforts.

The majority of Phase 3 participants ( $n=18$ ) were male (66.7%); black (100%); and aged  $\geq 50$  years (66.6%). Most were married (77.8%) and 44.4% were living with children, with 66.7% knowing PLWH and 38.9% knowing someone living with HCV.

Qualitative data from Phases 1 and 2 were collected from focus groups and individual interviews, soliciting feedback from CHAs and community stakeholders regarding the integration of HIV/HCV screening. Table 3 displays examples of quotes based on themes that emerged across all three phases.

CHAs and stakeholders were asked, "How do you think your community perceives HIV/HCV testing?" Some expressed that the community was "on board" and recognized the need for increased screening. Others thought that stigma would cast an overall negative perception on testing.

Participants were asked, "What are your thoughts about the ability of including HIV/HCV in our outreach

**Table 2.** HIV and Hepatitis C Knowledge Assessment Among DSNCC Community Health Advisors (N=124)

Questions	Total	% correct
HIV knowledge questions		
People are likely to get HIV by deep kissing, putting their tongue in their partner's mouth, if their partner has HIV (F).	124	36.3
There is a female condom that can help decrease a woman's chance of getting HIV (T).	122	50.8
A natural skin condom works better against HIV than does a latex condom (F).	121	59.5
A person can get HIV by sharing a glass of water with someone who has HIV (F).	122	63.9
All pregnant women infected with HIV will have babies born with AIDS (F).	123	67.5
Coughing and sneezing DO NOT spread HIV (T).	122	68.0
Taking a test for HIV one week after having sex will tell a person if she or he has HIV (F).	123	77.2
Using Vaseline or baby oil with condoms lowers the chance of getting HIV (F).	123	78.1
A person can get HIV by sitting in a hot tub or a swimming pool with a person who has HIV (F).	122	79.5
A woman can get HIV if she has anal sex with a man (T).	116	83.6
There is a vaccine that can stop adults from getting HIV (F).	119	82.4
A person can get HIV from oral sex (T).	122	83.6
Pulling out the penis before a man climaxes/cums keeps a woman from getting HIV during sex (F).	123	89.4
Showering, or washing one's genitals/private parts, after sex keeps a person from getting HIV (F).	124	89.5
A woman cannot get HIV if she has sex during her period (F).	120	90.8
People who have been infected with HIV quickly show serious signs of being infected (F).	124	91.1
A person will NOT get HIV if she or he is taking antibiotics (F).	123	92.6
Having sex with more than one partner can increase a person's chance of being infected with HIV (T).	121	93.4
Hepatitis C knowledge questions		
There exists a hepatitis C vaccine that can be used to prevent people from getting infected with the hepatitis C virus (F).	112	36.6
Successful hepatitis C treatments can result in the hepatitis C virus being completely removed (or cleared) from one's blood (T).	111	46.9
People with hepatitis C can safely take any herbal medicine (F).	113	52.2
There is some risk that hepatitis C can be given to someone by snorting cocaine with shared straws, rolled money, etc. (T).	111	52.3
The hepatitis C virus can be spread from shared kitchen cups, plates or utensils (F).	118	72.0
Coughing and sneezing can spread hepatitis C (F).	116	73.4
Hepatitis C can be given to someone during sexual intercourse (T).	116	74.1
Once someone's hepatitis C virus has been completely treated and cleared, one cannot get re-infected with hepatitis C (F).	117	82.1
People who received a blood transfusion in Canada before 1991 may have been infected with hepatitis C (T).	109	82.6
It is a good idea for people living with hepatitis C to be vaccinated against hepatitis A and B (T).	115	83.5
Babies born to hepatitis C pregnant women can be infected with hepatitis C at birth (T).	116	84.5
People can live with hepatitis C for many years without knowing that they have been infected with the virus (T).	117	86.3
Studies show that more than 60% of people who inject street drugs with "used needles" are infected with hepatitis C (T).	119	87.4
People can get infected with hepatitis C from tattoos and body piercing (T).	119	89.1
Using "new" (i.e., never used before) needles, syringes, and equipment reduces the risk of being infected with hepatitis C (T).	118	89.8
Some treatments for hepatitis C, such as interferon, can cause depression as a side effect in some patients (T).	112	92.9
People with hepatitis C can safely share their toothbrushes and razors with other people (F).	121	94.2
People living with hepatitis C can damage their liver when they drink alcohol (T).	122	94.3
Hepatitis C can be given by hugs or handshakes (F).	120	95.8

DSNCC, Deep South Network for Cancer Control; F, false; T, true.

efforts?" Overall, responses indicated that the integration of HIV/HCV screening into a community-based framework is feasible. All groups discussed that integration would promote testing and early diagnosis and broaden

the picture of health issues. Some CHAs, peer educators, ministers, and youth advocates voiced support. With the exception of medical professional participants, who did not specifically address the subject, groups discussed

**Table 3.** Summary of Emerging Qualitative Themes With Exemplar Quotes

Theme	Exemplar Quotes
Phases 1 and 2: Acceptability and feasibility	
Acceptability	
Perceptions of HIV and HCV testing	Oh, my community, they perceive it as, “I don’t wanna be tested. I don’t want nobody to know I’m getting tested.” They feel like people will judge them.  I think that the community’s on board and that we as a community, we’re aware of a need for testin’ and screening.
Integration of testing	... it’s very important that you’re trying to really help people understand more about it, and what’s really going on.
Feasibility	
Forming a community advisory board	Get a variety of people that can reach out to the community on different levels.  It’s kinda like sometimes when adults talk about what we need to do for youth. We all come together with these great minds and we look around the table and there’s no youth at the table.
Encouraging open dialogue	I think it’s very good that we do talk about it. I mean, a lotta people are scared of it. If we can get more information out there I’m sure a lotta people would be much healthier.
Training	... we should get the same trainin’ for the HIV- and the hepatitis C as we did for the breast cancer.  When we go out and talk about these issues, HIV and Hepatitis C, we should have a place where we can refer them. We’re gonna need education.
Phase 3: Best practices and implementation	
Recruitment of CHAs	
Demographics	We got to train both the husband and the wife.  (T)here are a lot of young male adults there who volunteer their time to do coaching ... They have an opportunity to reach out to a lot of young male adults who ... have no idea where their health stands.
Traits	You have to find somebody that’s trustworthy. ... Someone who in the community is not afraid to talk about it, to address it, and to walk down that path with him.
Training topics	
Disease education	This is some of the things we have to combat, we have to get grounded in medical reality instead of—ignorance
Addressing stigma and bias	I just think we just gotta—instead of learnin’ some stuff, we gotta start unlearnin’ some stuff
Listening and rapport building	They gonna tell you what’s goin’ on, but, now, some of us need training in how to recognize this.
Implementing and sustaining screening efforts	
Comprehensive health	... they sit and talk about, “We gonna do a health fair, all we talk about is checkin’ your high blood pressure and checkin’ your glucose. That’s not a health fair. I think a health fair oughta be ... covering everything.
Community networking	Things like American Red Cross, fraternities, sororities, AmeriCorps, to actually get people to commit to screening. Blood Service will be a real good one.
Audience appropriate materials	... we know that our target population is African American men, but then you also have to remember your population as far as age groups. Some of these younger people, not necessarily are going to care about hepatitis C. Then you have more mature ... men who feel like they’ve lived this life and they haven’t caught anything up till this point so they’re not trying to hear about HIV.
Empower youth	... you were talkin’ about the children, if we empower them, peer pressure, then they can have a positive influence on some of their friends. They listen to peers. More so than they will their parent. If we can empower some of them, then that’s the way of gettin’ some more information out.

CHA, community health advisor; HCV, hepatitis C virus.

that a community-based approach could help decrease stigma associated with HIV and HCV infection. Three themes emerged capturing the recommendations of community partners to facilitate success of a community-based HIV/HCV screening program: (1) forming a

community advisory board (CAB); (2) encouraging open dialogue; and (3) training.

One widely discussed suggestion among CHAs and stakeholders was the creation of a CAB, which could help build relationships with existing community groups

(i.e., churches, schools, social organizations, and existing social networks). Participants indicated a successful CAB would include members who interact with the community in their everyday lives (e.g., coaches, dance instructors) or through professional employment (e.g., doctors and other healthcare workers, church leaders, and educators). Participants stressed that the CAB should include youth and members of the high-risk population.

Open dialogue within the community about HIV and HCV infection was identified as necessary for successful implementation, developing relationships within the community, and alleviating fears and stigma, which would increase acceptability of outreach.

Former DSNCC CHAs indicated a need for non-judgmental training on specific topics (including referring people to testing and treatment) and gave ideas on how to best train before implementing the screening program. Regarding format, training could be conducted through role-playing, videos, clinic visits, and guest speakers.

Following data analyses of Phases 1 and 2, Phase 3 explored specific questions related to best practices for recruitment and training of CHAs, and suggestions on implementing and sustaining screening efforts addressing the needs of black men. Such questions included “suggestions for reaching your community,” “what skills a CHA should possess,” and “what topics should be covered in training.”

Participants agreed that CHAs should include males and females across a wide range of ages, with an emphasis on young adults. The most important characteristics were the perception of being trustworthy and credible as well as compassionate. Community leaders also voiced the importance of selecting highly motivated people who have time to commit to the program. As with previous phases, Phase 3 participants voiced the need for CHAs to represent a variety of careers (e.g., blue-collar workers, professionals, pastors, and teachers) and live or work in the community. As one participant stated, “Because the best advocates live in the communities. African Americans are tired of people running in and out of our communities doing surveys.”

Phase 3 participants wanted information in three content areas: (1) disease education; (2) addressing stigma and bias; and (3) listening and rapport building. Specifically, participants identified that CHAs would need to receive basic education about each disease to improve confidence in providing accurate information to their community. Second, participants expressed the need to increase their skill sets necessary to decrease stigma and bias surrounding HIV/HCV within their community, particularly from a religious perspective. Finally, participants voiced the need to have training on listening and

rapport-building skills, which they believed to be a key component for success.

Final questions addressed how to best implement and sustain a community program aimed at black men’s health issues. The most important theme to emerge was the need to engage in comprehensive health issues, including addressing multiple health issues at the same time (i.e., HIV/HCV testing, blood pressure, diabetes testing, and dental and eye services). As stressed by Phase 1 and 2 participants, Phase 3 participants also indicated that successful implementation and sustainability relied on teaming with existing community networks. Participants also recommended adjusting materials to the community. To aid with addressing the needs of high-risk populations, participants stressed empowering the community youth. Phase 3 participants helped to provide grounded suggestions for implementing a community program while also being realistic about a time frame. One church leader commented, “We’re gonna have to accept that it’s just gonna be some time involved. We are in the South. We’ve come a long way, but we have had to come over some things.”

## DISCUSSION

HIV and HCV incidence rates and late entry to care are exceptionally high in states in the Deep South, which are characterized by a concentration of HIV- and HCV-related morbidities and mortality among black, male, and rural populations.<sup>3,14,25–32</sup> Testing for HIV and HCV has been paramount in combating either epidemic because it serves as the necessary first step in linkage to care, treatment, and subsequently preventing further transmission. Although it is recognized that significant underscreening, testing, and linkage to care dominates the Deep South, conventional clinic-based screening approaches have had limited success in reaching populations most vulnerable to diseases such as HIV and HCV infection, in particular black men.<sup>10,33,34</sup> The current study provides an evaluation of the acceptability and feasibility of a CBPR approach to promote screening for HIV/HCV among black men living in the rural Deep South. Community members and stakeholders in the current study strongly endorsed a CBPR approach using CHAs. Integrating an HIV/HCV screening program into a universal health-screening program was seen as feasible, acceptable, and necessary to overcome stigma toward HIV/HCV testing. However, several characteristics of the program and the CHAs’ need for training and education were deemed necessary for the successful and culturally acceptable implementation of HIV/HCV screening efforts in their communities. Results from the HIV and HCV Knowledge Assessment (Table 2)

corroborated the need for education, with only 46% having knowledge of treatment for HCV infection.

The literature supports that CBPR is particularly helpful in addressing local problems because of the value community “insiders” bring to the table. This includes an expert understanding of the complexities influencing the implementation of local interventions within their community, including insight regarding which partnerships will prove most valuable and which approaches will demonstrate the most acceptability and effectiveness within the community.<sup>35</sup> In this research, characteristics and elements of a successful community-based HIV/HCV screening program included increased community outreach through the development of a CAB and open and direct communication with the community to increase awareness of risk and empower individuals to take charge of their health. The literature supports that horizontal outreach directly to community members and vertical outreach through strategic partnerships with existing community stakeholders have demonstrated success in promoting social and behavioral change necessary to increase HIV/HCV screening.<sup>36–40</sup> Participants further identified the most important characteristics of CHAs to be trained in promoting HIV/HCV screening to include trustworthiness and the ability to relate to people at risk. This finding corroborates previous research demonstrating the efficacy of using “natural opinion leaders” within the community to most effectively promote health change at the community level.<sup>21,22,41</sup>

### Limitations

Several limitations to this study should be recognized. Community members and stakeholders were predominately older individuals (i.e., aged 50 years or older) and therefore opinions may not be generalizable to younger age groups. However, youth advocates were included among the stakeholders to provide the perspective of younger people to the discussion. Phases 1 and 2 were not specifically focused on black men as a target group. Phase 3 of the study focused on one community in preparation for a demonstration project including HIV/HCV screening. Although opinions and perspectives may be limited to that setting, suggestions made by the community were supported by recommendations made by Phase 1 and 2 participants. The findings of this study are critical to the understanding of developing effective community screening programs aiming to increase HIV/HCV testing among black men in the Deep South.

### CONCLUSIONS

This study presents the first mixed methods study to evaluate community perceptions and perspectives

toward a community-based HIV/HCV testing approach. The results suggest that (1) using an integrated, community-based HIV/HCV testing approach is acceptable and feasible; (2) formation of a CAB is recommended to reach out and communicate with the community; (3) education and training of community members on disease-specific topics and overcoming stigma is essential; and (4) focus and inclusion of young community members will be critical in long-term success and sustainability of screening efforts. Innovative interventions incorporating the above recommended strategies, tailored to the specific needs of respective communities, are needed to address the existing health disparities of black men who are at risk for HIV/HCV infection. Next steps should include the implementation and evaluation of the effectiveness of a community-based participatory program to increase HIV/HCV screening in the rural South.

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