

Barriers to HIV Related Services among Men Who Have Sex with Men (MSM) in Rural Georgia

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ABSTRACT

Background: Gay, bisexual, and men who have sex with men (MSM) living in the Southeastern United States are at high risk of contracting HIV, and those in rural communities experience challenges in accessing HIV prevention and treatment.

Methods: Seven healthcare workers and 17 MSM in rural healthcare districts participated in semi-structured interviews. A theory-informed thematic analysis approach was used to summarize and compare perspectives between healthcare workers and MSM participants.

Results: Stigma, insufficient resources, and social structures of rural life emerged as barriers to accessing HIV-related services.

Conclusions: Overcoming these barriers are necessary to reduce HIV infection and improve outcomes for MSM living with HIV. The findings come at a critical time given the focus on rural areas affected by HIV as announced in United States' Ending the HIV Epidemic Initiative. Additional resources need to be allocated and research is needed to understand the relationship among rural health, HIV, and MSM.

Keywords: Health care utilization, HIV, rural health, sexual and gender minorities, Southeastern United States, stigma, telehealth

INTRODUCTION

The Southern region of the United States is severely impacted by HIV, accounting for the highest rate of new cases and death rate nationwide. Moreover, Southern states fall behind those in other regions of the country in terms of HIV prevention and treatment (Centers for Disease Control and Prevention, 2020b). Although location is a unifying feature of the epidemic in the rural South, these disparities are more complicated than geography. High-risk groups in the South are similar to those in other areas of the country including racial/ethnic minorities; gay, bisexual, and other men who have sex with men (MSM); those who live in poverty; and, those who have additional sexually transmitted infections (Reif et al., 2017; Reif et al., 2014).

Georgia ranks among the highest states in the nation for the number of people with HIV (Centers for Disease Control and Prevention, 2020a). Males represent 80% of new HIV diagnoses in Georgia and 83% of these infections are attributed to sexual contact between men. As of 2015, 36% of those living with HIV in Georgia resided outside Atlanta (Georgia Department of Public Health, 2016). Similar to other areas of the country, there are differences in HIV care continuum outcomes between individuals living in Atlanta compared to those living in suburban and rural counties (Tran et al., 2020). Outside Atlanta, the proportions of those linked to care within 30 days and those who are virally suppressed are lower, 72% (compared to 77% in Atlanta) and 42% (compared to 47% in Atlanta) (Siconolfi et al.,

2016). Disparities in HIV treatment and care disproportionately burden those living in rural Georgia (Lopes et al., 2017; Nelson et al., 2018).

The interaction of public health and social problems has revealed that a one-size-fits-all approach to public health practice cannot improve health disparities without understanding the social determinants of health (Braveman et al., 2011). Applying a tailored model of health service utilization is useful in identifying challenges that rural MSM face when attempting to access HIV-related services (Figure 1).

Building on the Andersen Behavioral Model, research has been expanded by Ulett et al. (2009) to include individual, social, and structural influences of HIV care (Andersen, 1995; Gelberg et al., 2000; Ulett et al., 2009). The use of this conceptual model allows for the description of differences in access to healthcare services for vulnerable populations based on characteristics grouped into domains of person characteristics, the healthcare, and external contextual environments, health behaviors, and health outcomes (Christopoulos et al., 2011; Hawk et al., 2017). These domains are further grouped into underlying constructs including predisposing and enabling factors (person-level characteristics of rural MSM); perceived need; healthcare system, clinic, and provider characteristics (the rural healthcare environment); and the external environmental context. Predisposing Characteristics are

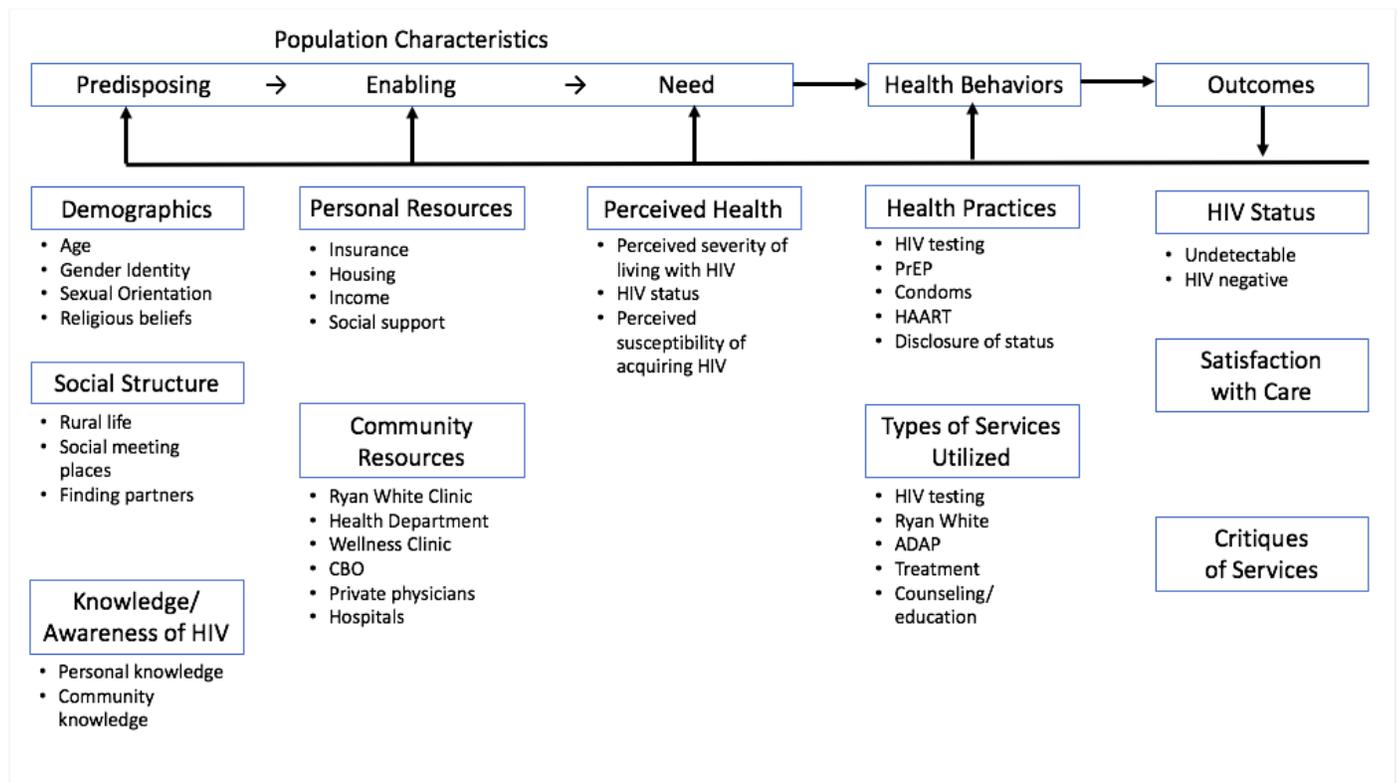
those which exist before illness and that affect one's tendency to engage in healthful or risky behaviors. Example factors include age, race, gender, sexual orientation, perceptions of social structure, and knowledge of HIV services and prevention. Enabling Characteristics are means by which individuals utilize healthcare services including the internal and external factors that help or hinder people from adopting healthy behaviors. Examples include personal resources (insurance, social support, transportation) and community resources (local HIV clinics, physicians, and hospitals).

Combined, these domains affect health behaviors and utilization of healthcare services. These domains also influence health outcomes and satisfaction with healthcare services, such as time spent with a provider, and cost, ability, coordination and communication of services. Considering this and the important role that healthcare

providers play in HIV prevention and treatment, this study extends the use of this model by adding the perspective of healthcare workers to validate the information provided by the MSM participants.

This study was guided by a tailored HIV-specific adaptation of the Anderson Behavioral model that emphasizes background risk or exposures such as the healthcare environment and contextual environmental factors combined with personal factors and the behavioral risk and protective factors of one's own interactions with the healthcare system (Ulett et al., 2009). Because of the lack of research surrounding healthcare utilization and HIV among rural MSM, especially in the South, this study includes the Predisposing and Enabling characteristics to understand healthcare needs concerning HIV prevention, care, and treatment, of self-identified MSM who live in rural Georgia.

Figure 1
Conceptual framework map: Tailored Andersen behavioral model



METHODS

Sampling and Data Collection Procedures

Data collection occurred between June and September 2016 and involved the following sequential phases: 1) phone interviews with healthcare workers; and 2) phone interviews with MSM. To identify healthcare workers, researchers contacted the Georgia State Department of Health and made the initial contact with the healthcare workers in the public health districts to be studied. Health care workers were purposely recruited based on existing relationships with

research partners. Eligible healthcare workers must have: 1) worked in one of the public health districts chosen; 2) had responsibilities in regards to HIV prevention/care/treatment services; 3) been familiar with services available for MSM, and 4) been fluent in English. All participants provided written consent before participating in the study. A total of eight healthcare workers (two from each selected public health district) were contacted and scheduled for a phone interview. Of the eight healthcare workers recruited, seven completed an interview. As part of the recruitment process for MSM, healthcare workers were asked to identify known community leaders who fit the inclusion criteria. The

Institutional Review Boards of both Emory University and the Georgia Department of Public Health approved this study.

Recruitment and interviews with MSM participants followed a similar strategy to the healthcare workers. Purposive sampling was first employed using the list of MSM nominated by healthcare workers. MSM were contacted by an interviewer, informed about the study, and screened for potential enrollment. Recruitment posters were distributed through listservs, on social media, and were displayed in local healthcare clinics. We also recruited MSM through a geospatial mobile dating application for MSM. This dating application could identify potential participants by zip code and allowed for anonymity for the participants. To be eligible, MSM must have 1) been male (defined as sex at birth); 2) 18 years or older; 3) had sex with any man in their lifetime (oral, anal, or both); 4) the ability and willingness to provide verbal consent; 5) been able and willing to undergo an in-depth phone interview; 6) lived in one of the public health districts studied, and 7) been fluent in English. We also relied on snowball sampling as participants were encouraged to refer other potentially eligible individuals to contact the study team for screening. All participants provided verbal consent. Across the selected healthcare districts, 37 participants were screened, 30 met eligibility requirements, and 17 consented and enrolled in the study. Participants received a \$10 Walmart gift card for completing the interview.

Measures

Data collection for healthcare workers and MSM consisted of an in-depth, semi-structured interview method. We created an interview guide informed by the Andersen Behavioral Model for Vulnerable Populations for healthcare workers and MSM. An abbreviated list of interview questions along with their associated theoretical constructs is shown in Table 1. Following the first interviews, and in keeping with semi-structured interviewing techniques to improve flow and understanding, we modified and updated each interview guide. All participants completed a short questionnaire assessing demographic and health-related information after their interview. Interviews ranged from 30-60 minutes in length, were conducted in a private and soundproof room at a university-based interview site, and were audio-recorded to passcode-protected devices. Data collection was stopped when data saturation was reached and the audio recordings were then transcribed verbatim by the principal investigator as well as a third party.

Data Analysis

All interviews were transcribed verbatim and imported into MAXQDA, a qualitative data analysis software. A combination of inductive and deductive coding was used for these analyses. Preliminary codes were developed by reviewing transcriptions of interviews and memos. Inductive codes from the theoretical framework provided a starting place for the coding process. To enhance intercoder reliability, two coders coded three of the same transcripts

separately and then compared their results, discussing and resolving any discrepancies. They also proposed preliminary codes for the final codebook and potential themes that emerged during the coding process. The codebook was finalized after coding the first few transcripts. After a final codebook was developed, the coders divided the remaining transcripts and coded separately, taking notes during the process (Birks et al., 2008). Nineteen codes were agreed upon between the coders based on theoretical constructs as well as codes that emerged from the interview transcripts. Thematic analysis was selected due to its allowance of themes to be inductively and deductively derived from the data (Braun & Clarke, 2006).

RESULTS

General Sample Characteristics

Health care workers had an average age of 46 years (range: 35-62 years), over half were white (57.1%), female (71.4%), and heterosexual or “straight” (85.7%). Each healthcare worker indicated they provided HIV-related services within the study geographic area.

The majority of MSM participants were white (n=13, 76.5%) with an average age of 40 years (range 23-68 years). Additionally, a majority of participants identified as homosexual/gay (15, 88.2%), and the remaining identified as bisexual. At the time of the interview, most participants were in some relationship (10, 58.8%), which they reported was monogamous (n=6, 35.3%). Nearly a quarter of the participants reported that they were HIV-positive. Finally, employment-based insurance was the most common source of health coverage (n=12, 70.6%), followed by government-based insurance (n=3, 17.6%).

Qualitative findings

Based on our thematic analysis of the interviews, we outlined two factors and their respective themes according to the Anderson Behavioral Model:

1. Predisposing Factors: a) Basic needs for living; b) Community culture; c) Stigma
2. Enabling Factors: a) Health care interactions; b) Available community and personal resources; c) Traveling for community and care

Verbatim quotes are presented from the data highlight and expand on connections. Table 2 provides additional quotes divided by healthcare workers and MSM participants.

Predisposing Factors: Basic needs for living

The prioritization of basic needs for living over HIV prevention, care, and treatment emerged as a key finding from both MSM and healthcare workers. The lack of these basic needs was identified as barriers to accessing HIV-related healthcare. Commonly mentioned barriers included lack of transportation, lack of available HIV services, inaccessibility to pre-exposure prophylaxis (PrEP), substance use, mental health issues, underinsured and

Table 1

Example of semi-structured interview questions guided by the Anderson behavioral model

PREDISPOSING CHARACTERISTICS	ENABLING RESOURCES	HEALTH BEHAVIORS	OUTCOMES
<p>Demographics</p>	<p>Personal Resources Please describe to me past experiences with healthcare providers.</p> <ol style="list-style-type: none"> Do you have a primary physician? Where are they located? 	<p>Health Practices</p> <ol style="list-style-type: none"> Have you ever been tested for HIV? How often do you get tested? Where? 	<p>HIV Status</p>
<p>Social Structure Please tell me about the experiences with your sexuality and living in the community:</p> <ol style="list-style-type: none"> Do you feel comfortable discussing your sexuality with people in your life? 	<p>Community Resources Please describe to me the kinds of support you would receive if you were to become HIV positive? (Family? Friends? Doctor? Partner(s)?)</p>	<p>Health Services Utilized Please tell me about the times you have gone to places where you can get HIV prevention services:</p> <ol style="list-style-type: none"> How long ago was that? Where did you go? Were you tested for HIV? 	<p>Satisfaction with Care Please tell me about the times you have gone to places where you can get HIV prevention services</p> <ol style="list-style-type: none"> How did you feel about the experience?
<p>Knowledge/Awareness of HIV/AIDS</p> <ol style="list-style-type: none"> What do you know about HIV/AIDS? What do you think your friends know about HIV/AIDS? 			<p>Critique of Services Please describe to me what changes you would like to see in your community regarding HIV/AIDS.</p> <ol style="list-style-type: none"> What changes, if any, would you like to see with your doctor about HIV/AIDS?

Table 2

Themes and subthemes with example quotes from healthcare workers and MSM participants

Theme/ Subtheme	Domain	Healthcare Worker	MSM Participant
Basic needs for living			
Transportation	External environment	<i>The biggest thing that I see as far as clients we deal with, because our district is so large there's a huge transportation issue... Most of them don't really own cars because their income doesn't allow them to...be able to afford it. —Community HIV Educator, Female, African-American, 36</i>	<i>[It] took me too long to actually go to the clinic and get my pills. I had to cancel because of work-related issues. And I didn't have a car. So I went 8 months without pills...—Black/African American, non-Hispanic, 24</i>
Employment	External environment	<i>There's lack of jobs...the dichotomy between the rich and the poor is pretty extreme, and the middle class is very small, especially once you get outside of a town like "Southwestern district". —HIV Coordinator, Male, White, 53</i>	<i>But I am having to change careers due to a separate health issue that has crept up in my life. It keeps me from being on my feet for long hours of the day.—White, non-Hispanic, 27</i>

Theme/ Subtheme	Domain	Healthcare Worker	MSM Participant
Insurance	Healthcare environment	<i>If he had to go to the private doctor, he'd have to come up with \$300 out of pocket, which he doesn't have, so we have those barriers in some cases, so it just depends.</i> —Ryan White Program Associate, Female, Hispanic/Latino, 40	<i>I have to go to the ER or to the urgent care. I applied for the whole healthcare thing but at my job it's I'm on that threshold where I don't make enough, it's like I don't make enough to qualify for it.</i> —Black, non-Hispanic, 33
Community Culture			
Close knit communities	External environment	<i>...big city anonymity getting to be kind of secret or living your life without having to worry about everybody knowing you, right? So here, basically, everybody knows you. So if you come out, everybody's going to know you're out.</i> —HIV Coordinator, Male, White, 53	<i>I come from a very religious family, and that's a lot of people that live out there and that's just not my scene. And... it's also very small, a very small knit community that's growing and people there don't want it to grow so people are... they're kicking and screaming because there's so much growth in the area.</i> —White, non-Hispanic, 32
Conservative/traditional community	External environment	<i>We're more still somewhat conservative to an extent because it's hard to – I'm not going to say it's hard, but the city itself is not open to too many newer suggestions...</i> —Wellness Clinic Linkage and Retention Specialist, Female, African American, 42	<i>The area that I live is very – it's just a very traditional Southern community, very pro-life, very conservative, very, "Take the Bible as it was written on my views on what I think others should be but don't let those views apply to me, as long as I'm happy and doing what I want to do."</i> —White, non-Hispanic, 58
Secretive culture / In the closet	External environment	<i>You can't use the terminology 'MSM' or 'gay' or 'bisexual' because most of them don't identify with any of those terms because they feel like it's something they do behind closed doors and it's nobody's business.</i> —Wellness Clinic Linkage and Retention Specialist, Female, African American, 42	<i>It's "dating" very discreet, looking for fun, closeted, will not trade pics kind of deal. It's very, "I'm in the closet for a good reason, and I'm going to stay in the closet," kind of deal.</i> —White, non-Hispanic, 58
Available Resources			
Health Department	Healthcare environment	<i>Well, we have the STD Clinic...and some are still in care, so that's the only thing we have right now, but right now, they're short staffed...</i> —Ryan White Program Associate, Female, Hispanic/Latino, 40	<i>Right now, I think the biggest and most accessible place is the county health department, which is a pretty huge building, and it's located downtown near the urban areas, so it's convenient for a lot of people. So I think that there's that.</i> —White, Hispanic, 38
Ryan White	Healthcare environment	<i>We had some change in staff several months ago, and we're actually sharing the doctor over the Ryan White Clinic and the district next to us, and they're working with telehealth.</i> —District Epidemiology Supervisor, female, White, 35	<i>...with the Ryan White Clinic here... you get friendly staff, knowledge, above and beyond and they take care of you and make you feel like you matter.</i> —Hispanic/Latino, 25
Private doctors	Healthcare environment	<i>There's an infectious disease doctor that's probably 3 or 4 miles from here. And that's new...it was recently within the last couple years. And then the "Northeastern district" area, which is one of our counties, they have some infectious disease doctors over there. And if not, we refer them...into Atlanta to go for care.</i> —Ryan White Coordinator, Female, White, 62	<i>In the area, yes. They have the main hospital and then they have – there's lots of different doctor's offices. There's almost as many doctor's offices as there are churches.</i> —White, Hispanic, 38
Healthcare Interactions			

Theme/ Subtheme	Domain	Healthcare Worker	MSM Participant
Providers	Healthcare environment	<i>... and I'm thinking, "What kind of test could you have done in 30 minutes that would be a definitive positive?" ...because I know they're doing the fourth generation tests in most hospitals. I said, "Did you do that test?" And she was like, "No. He came in, and he's constipated, so he told us his sexual preference, so we're just assuming that he's positive." —Wellness Clinic Linkage and Retention Specialist, Female, African American, 42</i>	<i>He [provider] did start asking more questions about why I wanted to be on it [PrEP]. He asked about the nature of my relationship, if we were monogamous. ...And he did then tell me... "I understand that a lot of insurance companies push back on this, and it is probably expensive enough that you will not be able to do it on your own," and he was right.—White, non-Hispanic, 46</i>
Health Department	Healthcare environment	<i>Sometimes, when we have new staff, people need to get used to the new people that work here, and they don't feel comfortable with the new employee, so it takes time for them to be able to trust. —Ryan White Program Associate, Female, Hispanic/Latino, 40</i>	<i>I think that they are so overworked, understaffed, underfunded, and underpaid, that they do the bare minimums, as required by state and federal law. As far as going above and beyond or trying to provide that one-on-one doctor/patient stuff you would get from going to your general practitioner and paying for it? No, not at all.—White, non-Hispanic, 31</i>
Ryan White	Healthcare environment	<i>And we're not there to test people. We're there to see the patients that are positive. So they were putting us in a spot, like, "Hey, that clinic is there, and you can get free tests," and yeah, the nurses are willing to do the test – if she's there, she doesn't have a problem with that... —Ryan White Program Associate, Female, Hispanic/Latino, 40</i>	<i>They [Ryan White Clinic] have their way of doing things, and somehow it's all about protocol, protocol, protocol, which is crippling to them because they have a lot of good workers over there...so because of their protocols, which is just their way of making sure nothing bad comes back on them, they don't really do much of anything, and it's preventing the people over there from actually helping people...—Black, non-Hispanic, 24</i>
Educating providers	Healthcare environment	<i>It's kind of hard just to get [providers] to think. If a person comes in with a certain issue, just don't assume it's [HIV], because most of it is based off of their sexual orientation...—Wellness Clinic Linkage and Retention Specialist, Female, African American, 42</i>	<i>Because recently I asked him [physician] about getting on PrEP, and he had no clue what I was talking about. I had to further explain it to him and it finally registered with him. So I don't think he has much knowledge about that he hasn't had too many people ask him about it...—White, non-Hispanic, 48</i>
Traveling for Community and Care			
Stigma	External environment	<i>Because of the stigma in our whole district the patients would rather drive down here for their appointments whereas they could be right there at the health department there but they'll drive 45 miles away—Ryan White Coordinator, Female, White, 62</i>	<i>Because I've talked to some HIV positive people, and they were very in the closet about it...They said that they go to the doctor in Tallahassee. They don't even go to the doctor here. That was just something that they just do not want people to know about.—White, non-Hispanic, 28</i>
Close knit	External environment	<i>There are a good bit that go outside the district to seek that kind of care because, like I said, it's almost like the farther away from home the better like, I don't have to deal with walking in the clinic and I might see cousin so and so or uncle whoever or my mom's best friend and that kind of thing.—Community HIV Educator, Female, African-American, 36</i>	<i>I don't actually use the health department where I live just because all of their blood goes to the hospital and it goes through the main laboratory, which is where I used to work, and I don't like the fact that everybody would see. Even though they know I get tested and they know my sexual orientation, I just don't want – that's</i>

Theme/ Subtheme	Domain	Healthcare Worker	MSM Participant
Social life	External environment	<i>We do not have a gay bar in our area. If we want to go to a gay bar, we have to drive to Atlanta or Chattanooga.—Community Educator, Male, White, 56</i>	<i>something that is kept between you and yourself and if you're with somebody.—White, non-Hispanic, 58</i> <i>I mean they're going to go to Atlanta. They're going to drive the 45 minutes into the city and go there. There may be, I mean if there's a bar down in "Northwestern district" county that's LGB, they'll go there, but most likely people are going to go down to the city limits of Atlanta—White, non-Hispanic, 32</i>
Doctor availability	Healthcare environment	<i>Say, if they were in "Southeastern district" and they needed to see the nearest next ID provider and they had insurance, they would have to go across the state lines...—Wellness Clinic Linkage and Retention Specialist, Female, African American, 42</i>	<i>I have hung onto my general practitioner in Atlanta mainly because he knows me. There are two doctors and a couple of nurse practitioners in the practice, and once somebody has all your health records, if you like them, stick with them. It is not worth filling out all the forms kind of thing.—White, non-Hispanic, 46</i>
Stigma			
Internalized	Personal-level characteristics	<i>People don't want to be real and get real about what's going on. They want to keep things in or relying on how it's supposed to be or how it should be and not how it really is. And so that's really big in our district because they just don't want to accept things and there's a lot of judgement. And so because people know that they're going to be judged, they're less likely to be open be who they are.—Community HIV Educator, Female, African-American, 36</i>	<i>I just think we as a community have made ourselves really confusing for the rest of the world to understand, and I guess that bothers me. I don't think we promote inclusion. I think we generally promote, "You can't talk to me because you don't know how to talk to me," and I don't know. I just think we confuse people. And make them afraid to talk to us.—White, non-Hispanic, 46</i>
Family	Personal-level characteristics	<i>Some of them have had...you hear their stories of how the family totally disowns them and the rest of that stuff. But I would say probably 40 to 50 maybe 35 to 40% of our patients really don't have anything to do with their family which is really pretty sad.—Ryan White Coordinator, Female, White, 62</i>	<i>the last couple of years have been really rough, just dealing with my parents, because they do not approve of my sexuality. They have thrown many things in my face and tried to discourage the way I am—White, non-Hispanic, 28</i>
Community	External Environment	<i>...that fear... "somebody seeing me get tested, oh that automatically means that I am doing something so terrible that I need an HIV test." People are worried about their perception and how things look...—Community HIV Educator, Female, African-American, 36</i>	<i>I: Do you feel comfortable discussing your sexuality with people in your community, with your friends and people like that?</i> <i>P: I'm comfortable in every other city and state except Gainesville, GA. Just cause this is the town that I grew up in. And all my friends, pretty much all of my friends know of course. —Latino, 25</i>
Healthcare providers	Healthcare Environment	<i>There's still these old school docs that don't know how to deal with MSM populations or gay men or gay women, and they get scared of them. Because they're afraid—either they don't understand it or they're afraid they're going to say something wrong or do something wrong, so they just don't want to deal with it. —HIV Coordinator, Male, White, 53</i>	<i>I had a doctor – he was my doctor for years. The first time I told him I was gay, he jumped back three feet. That kind of shocked me, but I think he thought I was going to put the make on him or something, I don't know—White, non-Hispanic, 58</i>

uninsured, housing instability, residing in a close-knit, rural, and spread out communities, and medical mistrust.

Health care workers offered a more objective view of basic needs that served as barriers for those within their respective regions. One healthcare worker indicated that for those living with HIV, basic needs for living were the primary priority of MSM.

HIV unfortunately is not their biggest issue when they get up every morning. They've got to find housing. They've got to find a job...We've got one clinic for ten counties, and we can do gas vouchers and things like that, but there's no transportation...And then we treat people who tend to be living in extreme poverty.

--Health care worker

While healthcare workers often expressed what they felt were barriers across their region or the state, MSM participants described more personal barriers, including relationships with and needs of other MSM. Commonly described barriers included a lack of community resources for HIV testing and treatment, seemingly no communication about existing services, little to no advertisement and access to PrEP, and difficulties navigating the health departments.

Predisposing Factors: Community culture

MSM participants provided specific insights about the rural culture and challenges to fit in. One participant compared rural Georgia to The Andy Griffith Show, describing the quiet nature of the community, but also commenting on the more traditional, conservative, and religious views. In contrast to healthcare workers who felt there were few MSM, some MSM participants noted the surprising number of LGBT people in their community. However, some MSM further noted many of their peers are still closeted about their sexuality, supporting healthcare workers' claims that LGBT people do not have a strong presence in the community. There was also a distinction between older and younger participants. The older participants chose to return to the "country" because they wanted a quieter lifestyle and yearned for expansive land. However, the younger participants discussed their general distaste for rural life:

It's not very educated...what my sense of enjoyment is compared to what other's sense of enjoyment that are from there is completely split...I don't hunt I don't fish I don't own a pick-up truck, I don't go to church on a regular basis... that's just not my scene. And, it's a very small knit community that's growing and people there don't want it to grow so people are... kicking and screaming because there's so much growth in the area.--MSM participant

Some MSM reported being content with their rural lifestyle.

I love the rural life. That's why I'm here. People are friendly here...very friendly, very accepting, believe it or not, of gay people. Or they seem to be...We have several gay people in my church, and I know that some are openly gay, and everybody embraces them. I like that.--MSM participant

Health care workers and MSM participants discussed the general predisposing culture of the communities in which they lived and worked that increase healthcare vulnerabilities. Rural life in Georgia, as seen by healthcare workers, was defined by being physically spread out. The people who live in rural Georgia were described as having both low literacy and low health literacy, being socially conservative, being underinsured or uninsured, and having "close-knit" social connections. Health care workers added that LGBTQ people are not "out" to their family or community and use online dating sites and "hookup" apps. Many healthcare workers discussed the lack of social organizations specifically for LGBT people in their community. However, if there was a college or university in the region, there would be an LGBT organization closely tied to the school. Lastly, many healthcare workers discussed the issue without using "gay," "bi," and "MSM" because many in that community did not identify as such.

Predisposing Factors: Stigma

Stigma emerged as a predisposing theme that permeated throughout the other themes. HIV and sexuality-based stigma existed at multiple levels. Many people internalized the stigma from the community (family, friends, and healthcare providers) and this, according to the healthcare providers, increased their "risky behavior." Stigma about people living with and at risk for HIV as well as stigma towards the LGBT+ community was discussed by the healthcare workers and the MSM participants. Many people in rural communities are afraid of getting tested for HIV because of the stigma. Some people still equate HIV with AIDS and think it means a "death sentence." One participant stated that most people in the rural community did not think HIV was a "big deal," especially not in their community.

And the stigma. In this area, you're still dealing with people that view it as it was – the AIDS epidemic of the 80s that we get to study and read about, and in this area, that mentality, that mindset, that lack of knowledge, combined with an innate fear of somebody brushing up against me walking down the street, and I'm going to catch it, it's prevalent. And it's sad and absolutely horrible.-- MSM participant

Not only did stigma increase "risky sexual behavior", but it also affected the utilization of HIV prevention and treatment. Because of the small community, some participants did not feel comfortable receiving HIV prevention and treatment services in the area in which they live. Other participants are not "out" about their sexual behavior to their physicians and do not receive testing through that venue. One participant discussed his use of at-home HIV testing kits which he orders online.

Enabling Factors: Health care interactions

While MSM indicated that the majority of their interactions with healthcare providers were positive, there were instances they reported encountering concerns around

patient privacy and establishing an inclusive clinical environment (Table 2). As one MSM participant explains, he did not have a good experience with his local health department,

...on the front side of it, they try to be very pro HIPAA...but then again when you go in the room, they leave the door open, and they have everybody and their mother walking down the hall while this loudmouth nurse practitioner is discussing viral loads and medications and all kinds of stuff like that. It's very unprofessional, and honestly, I can see why guys our age and younger would not go to that, because it's completely demeaning and embarrassing...--MSM Participant

This concern over patients' comfort level and the lack of privacy of the health department was shared among many of the MSM participants. They mentioned interest in PrEP but said there was no way of receiving PrEP in their community. Some participants brought up PrEP with their providers and the provider had not heard of the medication nor did they feel comfortable prescribing it, and some providers asked why the patient couldn't "just wear a condom." Judgmental comments like this motivated some MSM to switch physicians. Other MSM had no problem educating their providers about PrEP and other MSM-related health topics choosing to keep their providers because of the existing relationship.

Health care workers also described hearing from patients that the patients would have to educate their providers about HIV and same-sex behavior. One healthcare worker described having to educate a fellow provider about a patient living with HIV.

We had a young man that came into the health department...He told me that he was MSM. Well, the nurse called in a panic...And she was like, "He said he was an MSM," and I'm like, "It's a man that sleeps with a man," and she's like, "Oh! Why didn't he say that? But what do I do?--Health care worker

Enabling Factors: Available community and personal resources

The main enabling resources of HIV-related services were local health departments, Ryan White clinics, and private providers. Health care workers commented on the increasing rate of underinsured and uninsured people in their community. Many people are not engaged in regulatory primary care and if they are living with HIV, the Ryan White Clinic is their sole source of healthcare. Additionally, there was also a lack of resources such as health insurance, transportation, housing, mental health, and substance use services. While the lack of resources was discussed in relationship to MSM, it was also expressed that these healthcare needs were felt throughout the community.

Echoing what the healthcare workers reported, MSM participants discussed private primary care providers, the health department, retail pharmacies, community-based organizations, and Ryan White Clinics as sources of

healthcare. Across the MSM participants, there was variation in satisfaction and experience with their healthcare. Many participants stated that they would have to research on their own to find HIV-specific services and that there is no advertising of HIV-related services in the community. Some participants viewed the health department positively, while others negatively. The majority of the MSM participants interviewed had health insurance and felt that they had enough resources to address their healthcare concerns, which is different than what the healthcare workers reported. For participants living with HIV, many receive care from private physicians with a few who utilized Ryan White Clinics. Other participants who were not insured used the hospital if they needed care.

Enabling Factors: Traveling for community and care

Most healthcare workers reported that there was no HIV prevention being done in the rural communities and only limited treatment of people living with HIV. For example, in one public health district, there was only one infectious disease provider and only one Ryan White Clinic for the entire public health district. Because of this, many people are forced to travel for treatment outside of the healthcare district, as explained below.

If they...needed to see the nearest next [infectious disease] provider and they had insurance, they would have to go across the state lines, but if they're in this district, we see insured, as well as uninsured, but if they chose not to come to us, they would have to add at least another two hours to the travel time that they already have coming to see us.-- Health care Worker

As noted in Table 2, MSM traveled out of their community not only for healthcare but also for social and sexual reasons. Health care workers reported that many of their clients go to bigger, "gayer" cities for social gatherings and sex and then return to their rural communities with STIs.

Some MSM participants discussed leaving their community for HIV prevention and treatment resources. Reasons for doing this included distance to service and anonymity. Because of the close-knit, small community, some MSM participants did not feel comfortable receiving HIV prevention and treatment services in the community in which they live. One MSM participant worked in the hospital that processed STI and HIV tests and for that reason, he would leave the state for HIV/STI testing. Echoing what the healthcare workers said, MSM participants talked about leaving their rural communities for other spaces to socialize with other MSM.

DISCUSSION

This research advances the current understanding about barriers to HIV-related services among MSM in rural Georgia and incorporates the views of both rural MSM and healthcare workers. The Andersen Behavioral Model constructs of predisposing and enabling factors were used to guide the development and analysis of this qualitative study and were supported by our findings (Hawk et al., 2017; Ulett et al., 2009). Our results from MSM indicate,

consistent with previous literature, that the predisposing and enabling factors of stigma, insufficient resources, and social structures of rural life emerged as barriers to accessing HIV-related services (Kazyak, 2011; Kelly et al., 2017; Reif et al., 2017; Reif et al., 2014). Concurrently, healthcare workers validated the findings from MSM participants by reporting many of the same barriers and were able to add further information about the healthcare systems in which they work.

The current findings highlight that disparities in HIV in the rural South are more complicated than geography. MSM who live in rural areas face unique challenges to what they term as their basic needs (e.g., transportation, employment, and insurance). Additionally, consistent with other research, both MSM and healthcare workers reported that they understand living in rural areas presents challenges greater than for those in urban areas (Pellowski, 2013; Rosenkrantz et al., 2017).

MSM and healthcare workers also reported that the enabling structural deficiencies to basic living are compounded by stigmas related to being MSM and affected by HIV, which they felt were magnified in a rural environment as fostered by the historical culture in those communities, which can lead to marginalization and self-isolation (Audet et al., 2013). As described in other work, this lived experience of rural MSM in conservative communities is quite different from those who live in urban areas (Kalichman et al., 2017). Both participant groups also indicated that their communities were “close-knit” which led to a lack of privacy and secrecy being especially a problem in these conservative areas. These factors were further supported by the rural MSM in this and other studies, as they were able to point out differences in social climates, perceived rights, and healthcare within their communities, as well as feelings of sexual and social exclusion (Audet et al., 2013; Kazyak, 2011; Rosenkrantz et al., 2017).

Participants conceptualized the healthcare system based on characteristics such as the variety and types of services available, factors within clinics such as hours and appointment availability, and provider-level factors such as their experience with and perceptions of the disease and type of patient. Unique to this study, both MSM and healthcare workers identified issues surrounding the accessibility of facilities, as opposed to the more common reports of interactions between patients and providers (Hawk et al., 2017). Participants reported that access to these services was low, complicated, and not convenient to their location or schedules. This echoes findings that rural MSM are less likely than their urban counterparts to have ever been tested for HIV, been tested for HIV in the past year, receive HIV prevention services, and are often diagnosed with HIV later than those in urban areas (McKenney et al., 2017; Ohl & Perencevich, 2011; Trepka et al., 2014). Thus, the structural aspects of HIV prevention and care systems in rural areas seem to need improvement.

Additionally, there was agreement between study participants that the interactions between healthcare workers

and MSM needed improvement. Although few MSM indicated direct and open homonegativity, inexperience with treating MSM was cited as a persistent issue in these communities. Others have documented stigmatizing behaviors perpetrated toward MSM by healthcare professionals (Jann et al., 2015; Whitehead et al., 2016). Such findings corroborate existing studies that suggest healthcare workers in Southern states are exhibiting stigmatizing attitudes toward people living with HIV (Davtyan et al., 2017; Tan & Black, 2017).

Another barrier frequently mentioned by both healthcare workers and MSM was transportation. Reviewing the literature reveals that transportation and availability of local healthcare resources are physical barriers to care among MSM living in rural areas (Adimora et al., 2014; Pellowski, 2013). Our results indicate that common transportation issues included travel costs and time to and from healthcare providers and a lack of public transportation in many rural communities. These results validate needs assessment findings which revealed that structural barriers to HIV prevention and care in Georgia included the location of healthcare services, lack of community-based resources, transportation problems, and rural locations having limited resources (Georgia Department of Public Health, 2016). Such barriers may be addressed by the use of telehealth and mobile health technology, which are effective in increasing access to culturally competent care and promoting HIV preventative behaviors among marginalized populations, including MSM (Ybarra et al., 2017).

Finally, both participant groups described the intersecting stigmas related to MSM and HIV/AIDS. Although the above barriers were seen as important, participants often linked each of the other constructs to stigma and related it as a driving force behind their decisions for care and treatment. This agrees with research that AIDS-related healthcare system stigmas are driving factors and barriers to HIV prevention and treatment in rural areas, especially in the South (Davtyan et al., 2017; Kalichman et al., 2017; Pellowski, 2013; Reif et al., 2017).

Limitations

Despite the promising findings presented here, our study is not without limitations. While generalizability is not sought or feasible in qualitative studies, we recruited our participants across four rural public health districts in Georgia and strategically compared the experiences of healthcare workers and MSM. Second, the study team purposely recruited participants that were generally white, older, medically insured, HIV-negative, and were obtaining care. Despite these characteristics, our participants still reported experiencing barriers to care and treatment. Third, social desirability in responses is a common limitation of interview research, but our study team was trained and made efforts to establish rapport with participants to encourage honest communication.

CONCLUSION

Multiple issues are known to affect HIV prevention and care among MSM in rural areas. The current research has important implications for future research and practice. Results from this paper found several issues that highlight the need for access to care and the acceptability of care for MSM in rural areas; with most results being confirmed independently by healthcare workers. This is important, as shortages of medical providers have been consistently linked to poor healthcare outcomes in rural communities, especially surrounding HIV prevention and treatment (Kempf et al., 2010; Tran et al., 2020). Previous research has shown that 95% of rural counties lack a Ryan White medical provider, which is the safety net system for HIV care in the U.S. (Vyavaharkar et al., 2013). Without this safety net system, poorer rural residents will undoubtedly find barriers related to the affordability of healthcare (Adimora et al., 2014; Pellowski, 2013). In Georgia, there is a similar shortage of healthcare providers in rural areas who are trained and willing to treat HIV (Kelly et al., 2017). Outside of Atlanta there are very few HIV clinics, over half of the HIV workforce is concentrated in urban areas, and funding has decreased (Georgia Department of Public Health, 2016; Kelly et al., 2017).

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