Leveraging social networks of Black women in beauty salons to improve uptake of pre-exposure prophylaxis

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Abstract

Objective: The purpose of this study was to assess social networks among Black women and beauty salons to see whether these could be leveraged to increase the awareness, knowledge and uptake of pre-exposure prophylaxis (PrEP) in this population.

Design: Qualitative descriptive design.

Setting: Beauty salons in counties in North Carolina, USA, with high rates of HIV among the local Black population.

Method: A total of 13 focus groups were conducted: 6 with stylists and 7 with Black women customers. In addition, six individual interviews were conducted with salon owners. Structured focus group questions were used to explore participants' perspectives on the functions and characteristics of the social networks in salons and among women customers and how these might inform a PrEP intervention.

Results: Results across all subgroups indicated social networks are pre-formed, developed and nurtured in a beauty salon setting. In addition, there is a positive influence of social networks on information sharing, specifically with respect to health-related topics. Variations in the results suggest salon settings differ and interventions within these settings should be tailored to specific salon's characteristics.

Conclusion: Black women are disparately affected by HIV, having the highest incidence rates among all women in the USA. PrEP is an effective HIV prevention strategy, yet there is low uptake among Black women due to lack of awareness and knowledge of PrEP, HIV- and PrEP-related stigma, and medical mistrust. Social networks are a powerful source of influence on health behaviour. Findings from this study suggest a social network–based PrEP intervention in a salon setting may be promising and has the potential to extend the reach beyond its initial participants.

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Pre-exposure prophylaxis (PrEP) is an effective HIV prevention strategy, yet uptake remains low among populations at risk for HIV in the USA, especially among Black self-identified women living in the southern region of the country (Centers for Disease Control and Prevention [CDC], 2016c). Black women comprise only 13% of women in the USA, but account for nearly two-thirds (64%) of new HIV infections among women in the USA (CDC, 2016a, 2017; Raifman et al., 2019) and 69% of all new infections in the south (CDC, 2016b). Barriers for PrEP uptake among Black women in the south are complex (Chapman et al., 2018) and include lack of awareness and knowledge of PrEP (Collier et al., 2017; Patel et al., 2019), anticipated stigma associated with HIV and PrEP (Aaron et al., 2018; Auerbach et al., 2015) and medical mistrust (Flash et al., 2014; Goparaju et al., 2017).

Multiple studies have explored awareness and knowledge of PrEP among women in the USA (Collier et al., 2017; Patel et al., 2019). For example, Patel and colleagues (2019) found that among 225 women living in southern USA, 72% were PrEP eligible. However, PrEP awareness was low with only 11% of women ever hearing about PrEP. Marketing campaigns have been used in clinical settings among providers, and multiple studies have explored the types of messaging women prefer to receive (Collier et al., 2017; Grant and Koester, 2016); however, it is still unknown if, how and whether these preferred messages improve PrEP uptake.

Women have reported anticipated stigma within their social networks towards PrEP and HIV. Anticipated stigma is the belief that prejudice, discrimination and stereotyping will be directed at the self from others in the future (Earnshaw et al., 2012). Several studies have reported that women may not take PrEP because of fear that family or friends may assume that they were taking medications because they were living with HIV (Aaron et al., 2018; Auerbach et al., 2015; Calabrese et al., 2018; Collier et al., 2017). This perspective is consistent in the literature and suggests that social support from one's social networks plays a key role in determining women's decision to start PrEP (Goparaju et al., 2017). Leveraging social networks and linkages between people who may provide social support and those who may serve other functions such as companionship provides a powerful approach for health behaviour change (Goparaju et al., 2017).

Social connections and the quality of relationships have been found to impact physical health. Having a more diverse social network has been associated with better health outcomes such as greater immunity to infectious disease and better cardiovascular health (Hunter et al., 2019). In the field of HIV, integrating social networks has been successful in reducing HIV risk behaviours among people who inject drugs and men who have sex with men (Hunter et al., 2019; Latkin and Knowlton, 2015; LeGrand et al., 2016). Social network interventions use existing social structures (support, exchange and influence) to connect individuals in relation to a specific health topic (LeGrand et al., 2016) and work to redefine social norms against high-risk behaviours (Hunter et al., 2019). Interventions that target social networks also enhance effectiveness, sustainability and reach to those most in need (LeGrand et al., 2016). For example, LeGrand and colleagues (2016) developed a mobile application (app) for young men who have sex with men to improve treatment adherence. The app included a social networking gaming aspect that was well received by end users, citing a feeling of togetherness. Hunter et al. (2019) found that social network interventions resulted in longer term (>6 months) effectiveness for sexual health outcomes.

The structure of social networks can be described in terms of individual characteristics (i.e. characteristics of specific relationships between the focal individual and other people in the network) and in terms of characteristics of the network as a whole (Heaney and Israel, 2008). Examples of the former characteristics include the extent to which resources and support are both given and

Table 1. Social network (as a whole).

Construct	Definition	Focus group questions
Density	Extent to which network members know and interact with each other	Describe how women customers in the salon know and interact with one another inside and outside of the beauty salon
Homogeneity	Extent to which network members are demographically similar	Give us an overview of the characteristics of the women who come to this salon (age, race/ethnicity, marital status, etc.)
Geographic dispersion	Extent to which network members live in close proximity to focal person	Where do women who use this salon live? What are some social networks that women have in common who visit this salon?
Directionality	Extent to which members of the dyad share equal power and influence	Describe the relationship women who visit this salon have with their stylist and other women in the salon. Describe the relationship stylist have with women who visit this salon. How do these relationships influence health?

Table 2. Social network relationship characteristics.

Construct	Definition	Focus group questions
Reciprocity	Extent to which resources and support are both given and received	Describe women's willingness to receive PrEP information from her stylist and women's willingness to give her stylist PrEP information
Intensity/strength	Extent to which social relationships offer emotional closeness	How would women compare the relationship they have with their stylist to the relationship they have with their physicians?
Complexity	Extent to which social relations serve many functions	Describe the relationship stylist have with women who use this salon outside of doing the women's hair
Formality	Extent to which social relationships exist in the context of organisational or institutional roles	Would women in this salon limit their interactions with their stylist to beauty tips only? Please explain

received in a relationship (reciprocity), a relationship is characterised by emotional closeness (intensity or strength), a relationship is embedded in a formal organisational or institutional structure (formality), and a relationship serves a variety of functions (complexity). Examples of characteristics that describe a whole network include the extent to which network members are similar in terms of demographic characteristics such as age, race and socioeconomic status (homogeneity); live in close proximity to the focal person (geographic dispersion); and know and interact with each other (density) (see Tables 1 and 2). Exploring how these constructs apply to social networks of Black women holds great promise in improving the awareness and uptake of PrEP among this population.

Social networks such as beauty salons are trusted places for Black women to have open conversations and could potentially provide ideal settings in which to improve PrEP awareness, trust and uptake. The use of salons and stylists also provides a unique opportunity for women to increase awareness to PrEP within the networks they associate and influence. Beauty salons have been

increasingly highlighted as culturally and socially appropriate venues for health promotion among Black people in general, and Black women specifically for breast health (Linnan et al., 2014; Luque et al., 2014). Although salon-based interventions to promote breast health among Black women have met with success, there is reason to question the extent to which an intervention focused on HIV prevention and PrEP would yield similar results.

Details about HIV prevention and PrEP may be viewed as too personal and/or too embarrassing to discuss within social networks of women and may even meet with hesitation among women customers in the salon. Given the unique aspects of HIV prevention in the community, it is necessary to first determine how the social networks of Black women in beauty salons can be used in HIV prevention to promote awareness and uptake of PrEP. Thus, the purpose of this study was to determine how social networks of women in the salon setting might influence an increase in the awareness and uptake of PrEP among Black women living in the US South.

Linnan and colleagues (2014) recommend using community-based participatory approaches when designing barbershop- and salon-based health promotion interventions. Therefore, two salon owners were engaged in the project as community expert consultants, each with over 20 years of experience as a salon owner and stylist. A community advisory council was also established which consisted of two salon owners/stylists, two barbershop owners/barbers, one local business owner, one HIV educator, one social worker, one nurse practitioner and educator, one member of university academic faculty and one nonprofit executive director.

Methods

Recruitment

Recruitment for the individual and focus group interviews took place in salons in counties with high rates of HIV among the Black population according to North Carolina HIV/STD/Hepatitis Surveillance Unit (2019), and was conducted with salon owners first, followed by salon stylists then women customers who frequented the salon. Salons were identified by members of the project community advisory council and beauty salon owners who were consultants to this project.

Prospective participants were recruited with the use of flyers or word of mouth by the research team. They were informed about the purpose of the study and that they would receive $50 compensation for their participation in either an individual interview (salon owners) or a 2-hour focus group discussion (stylists and women customers). The study received full review and approval from the Institutional Review Board of Duke University.

The inclusion criteria for all participants were being at least 18 years of age, self-identifying as Black or African American, and frequenting the beauty salon at least every 2 weeks. Gender identity was assessed on the demographic data form; however, to be included in the study, women had only to self-identify as a woman. No women self-identified as transgender. Women who frequented the salon at least every 2 weeks were included to be able to provide a more detailed perspective of their 'lived experience' of the beauty salon culture.

Participants

A total of 6 individual interviews were conducted with salon owners, and 13 focus groups were conducted: 6 with stylists and 7 with women customers. Salon owners (n=6; 5 women, 1 man) reported that their salon served primarily Black women who frequented the salon at least twice a month. Stylists (n=25; 22 women, 3 men) also reported seeing primarily Black women customers. Women customers (n=44) self-identified as Black or African American.

Focus group design and topics

Prior to initiating the individual interviews with salon owners and focus group discussions with stylists and women customers, a 15-minute presentation was delivered by a member of the research team about HIV among Black women in the US South together with a brief overview of what PrEP is and what it can do. Focus group questions were developed based on the constructs of how social networks are structured, as described by Heaney and Israel (2008) (see Tables 1 and 2).

Session proceedings

All sessions were digitally audio-recorded, and a designated note-taker was present to summarise content. Focus groups were facilitated by the first and third authors, both Black women. Participants were given the opportunity to add any additional information or ask questions at the end of the discussion. Facilitators held debriefing sessions on the group discussions offering summaries of them and areas for improvement for next session.

Analysis

All audiotapes were professionally transcribed and the transcripts then analysed by a four-person analysis team, including four of the authors (S.D.R., R.J., D.M., D.W.). The analytic process was conducted in three waves, following the order of recruitment. Specifically, the first wave of analysis was conducted with transcripts of salon owner interviews, followed by those of salon stylists and last, those of women customers. Focus groups were audio-recorded and transcribed verbatim. Directed content analysis was used to analyse the focus group data. Directed content analysis is a structured process using existing research and theory to validate and extend knowledge. The method was selected because it allows for the constructs of the social networks model to guide the reporting and discussion of the qualitative data, which was the research team's desired format in which to present focus group findings.

Prior to analysing data, an initial codebook of primary deductive codes based on the social network constructs explored in focus group sessions was developed by the first author. Secondary codes consisted of key concepts examined under each social network construct. Coding was completed using a four-phase approach. First, the first author independently reviewed all transcripts and applied the deductive codes. Second, two other members of the research team independently reviewed the coded data to ensure congruence between the deductive codes and the qualitative narratives of participants. Third, three research team members discussed the coded data as a group to reach consensus about the most appropriate coding of the data.

After the coding meeting was over, the first author again reviewed all transcripts and ensured deductive codes were applied appropriately to the qualitative data. After all data were coded, the first author reviewed the coded data for repetitive themes within and across the specific social network constructs explored. These recurrent themes formed the basis from which findings were derived from the qualitative assessments. Fourth, the data were then reviewed by the last author who was not engaged with data collection to validate findings against the transcripts. The final phase of data analysis occurred when the research team met with eight participants who participated in focus groups to present findings to them, review the results and verify the team's interpretations. Findings reported reflect a consensus interpretation of the study by all members of the research team.

Findings

Although conducted and analysed separately, the themes that were developed from individual interviews with salon owners were markedly consistent with those from focus groups with stylists. As such, the themes from salon owners and stylists are represented collectively as themes from 'salon staff' (owners and stylists). Given the commonalities, we combined the following constructs and discuss them as a unit: (1) density, directionality and complexity; (2) homogeneity and geographic dispersion; and (3) reciprocity, intensity/strength and formality. Sub-themes are discussed under each of these.

Core themes from beauty salon staff

Density, directionality and complexity. Relationships between women customers in the salon were positive. Salon staff reported that the majority of their customers had good relationships with each other as well as with salon staff. These relationships existed both inside and outside the salon. Several stylists reported having clients who knew each other prior to attending the salon – as family members, co-workers or friends. All the stylists stated that relationships formed at the salon resulted in clients requesting that their appointments be scheduled with certain individuals or groups of clients. One stylist stated that her clients 'build relationships' in the salon. Another stylist stated,

> They ask so when I come is such and such going to be there. Because they know they can talk about, you know, anything whether it be their own personal health, someone in their family is going through a situation or you know anything.

Women were reported to have open relationships with their stylists: All salon staff described their salons as safe places where women customers viewed them as trustworthy confidantes and friends. Salon staff believed the salon to be a safe space for group discussion as well as one-on-one conversations with the stylist. One stylist shared,

> I think for me it's a little bit bigger than just hair and I realised that a long time ago. You have clients that come in and they confide in you with stuff . . .

As a result, the depth of conversation between stylists and women customers was often extensive. A consistent topic of conversation was sex. One stylist stated,

> So, they will talk about what they did last night, who they with, where they went, oh I'm going here this weekend and girl I'm about to, you know, and will tell you every aspect, everything . . . They are free to talk about whatever is on their mind because we have that rapport.

Conversations varied for certain age groups of women customers. Salon staff explained that their 18- to 30-year-old clients were more comfortable discussing sexual health topics. However, they still saw benefit for older clients. One stylist shared,

> You've got great grandmothers still trying to get some [sex].

Another stylist added,

> They might be like oh I need to listen to this but don't act like I'm listening.

Hair and health are connected. Salon staff expressed how hair is often an indicator of health, and they were diligent in evaluating hair. As one stylist put it, 'Any type of thyroid, high blood . . . anything that has to do with the blood. All of this affects your hair'.

Stylists indicated that they consistently gave feedback to their customers regarding their health based on the condition of the customer's hair. This feedback often influenced clients to seek evaluation and treatment by a licenced health care provider. One stylist stated that she asked questions of customers such as

> Is your blood pressure high? Did you check your blood pressure medication? Diabetes or your thyroid, something going on cause your hairs extremely dry and feeling a little bit more brittle, a little more dehydrated. Some if my radar goes up anyway because I know your hair.

Homogeneity and geographic dispersion of salons. Salon staff reported that the customer base varied according to the salon. The average age of their customers was between 19 and 30, and this correlated with the age group that salon staff felt are most comfortable with having sexual health conversations, especially on subjects such as PrEP.

Client demographics varied by salon, with some salons catering to a more professional clientele while others saw greater variety. Salon staff again reiterated that women customers shared various social networks both inside and outside of the salon. Because of relationships formed in the salon, women customers often engaged outside of the salon in various networks as well. One stylist shared,

> A lot of us are social media friends or we roll in the same groups or private groups on social media. That probably came from the rapport from being in the salon.

Salon staff also reported having a salon social media page that they used to network with their customers and share business and social information.

> I have it for my salon. I have 2,000 [followers] on my salon page.

Reciprocity, intensity/strength and formality. Salon staff believed the salon to be a source of diverse information exchange between salon staff and women customers. Although women customers shared personal information with their stylists, there were no reports of stylist sharing personal information with their customers. That said, salon staff expressed confidence and willingness to share information on PrEP to customers after receiving sufficient training. However, some staff were worried about whether women customers would be willing to receive this information from salon staff based on the extent of the relationship. How long women and stylists had known each other and the connection between the two was important.

Core themes from beauty salon women customers

Density, directionality and complexity: extent to which network members interact and influence one another. Relationships between women customers and their stylist and other women varied. Across focus groups, women reported having a good relationship with their stylist. However, this relationship varied, with one woman stating, 'Some women have a personal relationship with their stylist and some women have just a casual, hey, how you doing? Now, let me sit here for an hour and a half and I'm out'. Another woman described her relationship with her stylist as, 'It like an intimate relationship'.

The layout of the salon influences conversation and relationships. Across focus groups, women spoke about how the layout of the beauty salon has changed over the years, from being an open space with stylists working at multiple stations, to stylists now working in private spaces. Women reported that salons were changing their layouts to private spaces and booths with closed in areas, which can limit interactions between customers. One participant stated,

> Salons used to be an open area, almost like a barber shop where everyone had chairs, and when you got in discussions, it was big discussions. I mean everybody talked whether you knew the people or not. But now, everyone's going to their own private bays or their private units and so you really just interact with your stylist. Every now and then there might be people in the waiting area or whatever that you might talk to, but for the most part I like my conversation is just with her [referring to the stylist].

Women were engaged through multiple networks. Women in all groups reported being engaged with other women in the salon through social networks, working together, attending the same church or being family members. One woman stated, 'I've actually made friends with some people in the salon'. This friendship extended beyond the salon setting to participating in social activities and attending special life events together.

Homogeneity and geographic dispersion. The majority of women in the study self-identified as heterosexual and two identified as lesbian and one identified as attracted to both men and women. Women ranged in age from 18 to 65 years of age and had education levels ranging from high school education, to some college education, to graduate school. In four of the seven focus groups, women customers travelled 3.5 to 45.8 miles from their primary residence to the salon. In the other three groups, the distance customers travelled to salons could not be determined.

Reciprocity, intensity/strength and formality. Across groups, women shared how stylists provided support to them in different life events, referring to their stylists as counsellors, nurses and social workers. Women reported varying degrees of their relationship with their stylist from casual to close. When compared to the relationship they had with a physician, some women reported the benefit of spending more time with their stylist and having a higher level of trust.

> I have a more open trusting relationship with my stylist than with the physician and you have more time to discuss whatever's on your mind.

This perspective was true for most women, but not for all. Other women reported having trusting relationships with their physicians mainly because of the length of time that they had known them. For example, one participant stated,

> And I'm a little bit different 'cause I'm more open and honest with my physician than I am with my stylist, so I feel like I would probably tell my physician.

Discussion

This study sought to determine how social networks among Black women in beauty salons might be used to develop a salon-based intervention to promote PrEP awareness and uptake. The acceptability of salon-based interventions for health promotion in Black communities has been established (Linnan et al., 2014) and several studies have addressed sexual health promotion specifically

(Luque et al., 2014). Findings here provide support for this model. However, to our knowledge, no existing studies have explored how culturally specific social networks could be used to influence the awareness and uptake of PrEP.

Overall, our findings are consistent with those of other research suggesting that social networks formed between stylists and women customers offer a safe and trustworthy environment for information sharing (Musa et al., 2009; Roberts-Dobie et al., 2018). In addition, however, we found that women customers who attend the same salon may have predetermined networks or develop networks via their salon use. These networks extend both inside and outside of the salon and could offer additional safety and comfort to women customers who might be the potential recipients of a salon-based PrEP awareness intervention. Therefore, there exists an opportunity for within-network information sharing between customers and their social networks in the wider community.

The characteristics of the salon dictate the degree of social networking that can take place between customers. Salon characteristics vary, suggesting interventions would need to be customised and tailored. The salon setting continues to evolve, from being an open area in which conversations take place among many women, to being a more private setting where conversations are limited to the customer and stylist only. Private salon settings offer opportunities for closer, more one-to-one conversations between the stylist and customer. Given the continued stigma related to HIV prevention and PrEP, this might increase women's comfort level discussing such a sensitive topic with their stylists while providing privacy and confidentiality. However, salons are not uniform in their design and interventions should be developed so as to take close account of salon layout and characteristics.

Limitations

This study is not without its limitations. Data collection placed women customers at the centre of intervention development rather than also gaining information from stylists about what would be needed to facilitate their participation in the intervention, such as stipends and type of training needed.

In addition, while salon-based interventions often consider the stylists as potential interventionists, few studies have taken the emotional status of the stylist into account when considering how conversations might be triggered.

With respect to external validity, this study lacks generalisability due to our sampling of salons in counties in only one state. Future interventions should consider a multi-site study engaging salons across the southern region of the USA.

Despite these limitations, the study adds to the existing literature regarding salon-based health promotion interventions. Like other research, it confirms that beauty salons continue to be safe places for health promotion among Black women. However, interventions need to be tailored based on salon and customer characteristics.

Implications for theory, policy and/or practice

Using social networks of Black women in trusted spaces such as beauty salons to promote sexual health and improve the uptake of PrEP offers great promise, not only to improve individual-level outcomes but also to influence social norms resulting in a community-wide impact. Future research may wish to consider the influence Black women's social networks may have on sexual health outcomes among male sexual partners as well.

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