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Heavy is the Head that Wears the Crown: Black Men's Perspective on Harmful Effects of Hair Product Use and Breast Cancer Risk

Dede K. Teteh

Chapman University, teteh@chapman.edu

Marissa Chan

Harvard School of Public Health

Bing Turner

Loma Linda University

Brian Hedgeman

3

Marissa Ericson

University of Southern California

See next page for additional authors

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Heavy is the Head that Wears the Crown: Black Men's Perspective on Harmful Effects of Hair Product Use and Breast Cancer Risk

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The authors

Authors

Dede K. Tete, Marissa Chan, Bing Turner, Brian Hedgeman, Marissa Ericson, Phyllis Clark, Eudora Mitchell, Emily Barrett, Adana Llanos, Rick Kittles, and Susanne Montgomery

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Dede K. Teteh¹ , Marissa Chan², Bing Turner³, Brian Hedgeman³, Marissa Ericson⁴, Phyllis Clark⁵, Eudora Mitchell⁶, Emily Barrett^{7,8}, Adana Llanos^{7,9}, Rick Kittles¹, and Susanne Montgomery³

Abstract

Racial disparities in breast cancer are well-documented, and Black women assume a disproportionate burden of breast cancer mortality. Black women also commonly use hair products containing endocrine disrupting chemicals (EDCs) more often at an increased rate, as compared to other racial/ethnic groups. Emerging findings have reported the use of hair and other personal care products containing EDCs may contribute to breast cancer risk. While some sociocultural perspectives about hair and identity have been explored, the role of beauty expectations upheld by males has not been studied. Through a community-based participatory methodology, we explored perceptions and beliefs held by Black men regarding Black women’s hair, chemical exposures in hair products, and breast cancer risk. Focus groups and key informant interviews—among men with and without partners with a history of breast cancer—were used to examine the male perspective regarding the attractiveness of Black hairstyles, opinions of beauty norms, and knowledge of breast cancer risk factors. Interviews were audio-recorded, transcribed, and analyzed guided by grounded theory methods. From the 66 participants interviewed, there was general support for natural hairstyles, which were associated with confidence and self-esteem in women. Men agreed that beauty standards and societal pressures play notable roles in the women’s personal behaviors though they mostly lacked knowledge of women’s breast cancer risk related to EDCs found in personal care products. Participants suggested a multipronged strategy centered on community education involving social and traditional media campaigns, and the engagement of policy makers in intervention efforts.

Keywords

black men, black women, breast cancer risk, hair, culture identity

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In the United States, approximately 276,480 new cases of invasive breast cancer are estimated to occur in 2020 (American Cancer Society, 2019). There were nearly 42,260 deaths due to breast cancer in 2019—representing approximately 7% of all cancer deaths (National Cancer Institute: Surveillance, 2019). Compared to other racial/ethnic groups, Black women are more likely to be diagnosed with triple-negative breast cancer and to have the lowest survival rate for stage 1 breast cancer.³ Breast cancer death rates are at least 40% higher in Black women than White women (DeSantis et al., 2019). Contributing factors to these disparities include socioeconomic status,

biological factors, access to health care, late-stage detection, and other social and environmental determinants (Hunt et al., 2014; Iqbal et al., 2015). Although racial disparities persist in survival and type of breast cancer, there has been a recent convergence in the incidence rates between Black and White women (126.7 vs. 130.8 per 100,000; DeSantis et al., 2019).

Emerging evidence suggests the use of hair and other personal care products may contribute to breast cancer development (Breast Cancer Prevention Partners, 2018; Eberle et al., 2019; Helm et al., 2018; Llanos et al., 2017; Stiel et al., 2016). Personal care products may contain



endocrine disrupting chemicals (EDCs)—chemicals that may interfere with the body's endocrine system and produce negative developmental, reproductive, neurological, and immune effects in both humans and animals (National Institute of Environmental Health Sciences, 2020). EDCs that are commonly found in personal care products (such as phthalates and parabens) are typically nonpersistent, meaning that they have relatively short half-lives in the human body (Diamanti-Kandarakis et al., 2009). EDC exposure is ubiquitous, and studies consistently find that phthalate metabolites are detectable in >90% of participants (Ferguson et al., 2015; Morgenstern et al., 2017; Philips et al., 2018; Zota et al., 2014). Black women often purchase and use specific hair care products to a more significant degree as compared to other female groups (Mintel, 2018).

Additionally, Black women are exposed to personal care products at younger ages, and more frequently to products containing higher levels of EDCs. An analysis of hair products most commonly used and marketed to Black women found 45 endocrine disrupting or asthma-associated chemicals with hair relaxers marketed to children containing the highest levels of banned or regulated chemicals (Helm et al., 2018).

Black women often use hair products containing EDCs starting from the early stages of life (e.g., infants, toddlers) and may even be exposed to these substances in utero (Bellavia et al., 2019; Braun et al., 2014; Donovan et al., 2007). Some evidence suggests that African American adults and children use products containing estrogen or other hormones about 6–10 times more frequently than Whites (Donovan et al., 2007, p. 763). Exposure to estrogen, both endogenously and exogenously, may contribute to an increased risk of breast cancer (Chen, 2008). Additionally, EDCs are found to have a number of different modes of actions including a weak affinity for estrogen receptors and an ability to induce PPAR β in adipose tissue (Gore et al., 2015). The early exposure to hair care products among Black girls may contribute to premature sexual development (James-Todd et al., 2011; McDonald et al., 2018). Scholars have

concluded instances of premature menarche and sexual maturation are more common among Black than White females (Buttke et al., 2012; Donovan et al., 2007; Freedman et al., 2002; Reagan et al., 2012). Exposure to EDCs in personal care products starting at early ages is an important risk factor for the development of breast cancer during later stages of life (Iwasaki et al., 2007; Malkan, 2013). As a result, continuous personal care product use from a young age along with early menarche may increase cumulative estrogen and EDC exposure and stimulate the development of breast cancer in Black women (Donovan et al., 2007, p. 764; Iwasaki et al., 2007; Klein et al., 1999).

Given these inherent risks, the question arises why Black women are using hair care products containing EDCs to such a greater degree in comparison to other female groups? Recent studies suggest that societal perceptions of female beauty and hair care may play a significant role. Hair has deep cultural and familial roots for Black communities, and it has been noted that Black women are taught either directly or indirectly what is considered acceptable by society from their families (Bryant, 2013; Tete et al., 2017). Mainstream displays of beauty and desirable physical attributes among Black women continue to be strongly influenced by European standards of beauty (Ashe, 1995; Byrd & Tharps, 2014; Rooks, 1996). For centuries, systems rooted in racism and colorism have promoted European beauty standards, which have significantly influenced the manner in which society currently defines physical attractiveness (Byrd & Tharps, 2014). The impact of European colonization and dominance has resulted in lighter skin and straighter hair being seen as desirable features that will assist in the attainment of positive social economic status (Ashe, 1995; Byrd & Tharps, 2014; Johnson & Bankhead, 2014). Therefore, many Black women alter their physical looks in order to gain approval (consciously or subconsciously) from dominant societal groups. The sociocultural significance of hair to Black women has been documented throughout history; however, the connection between hair product use, breast cancer risk, and Black identity through

¹Department of Population Sciences, Division of Health Equities, City of Hope Comprehensive Cancer Center, Duarte, CA, USA

²Department of Environmental Health, Harvard School of Public Health, Boston, MA, USA

³Behavioral Health Institute, Loma Linda University, Loma Linda, CA, USA

⁴Department of Psychology, University of Southern California, Los Angeles, CA, USA

⁵Healthy Heritage Movement, Riverside, CA, USA

⁶Quinn Community Outreach Corporation, Moreno Valley, CA, USA

⁷Department of Biostatistics & Epidemiology, Rutgers School of Public Health, Piscataway, NJ, USA

⁸Environmental and Occupational Health Sciences Institute, Rutgers University, Piscataway, NJ, USA

⁹Rutgers Cancer Institute of New Jersey, New Brunswick, NJ, USA

Corresponding Author:

Dede K. Tete, DrPH, Department of Population Sciences, Division of Health Equities, City of Hope Comprehensive Cancer Center, 1500 E Duarte Rd. Duarte, CA 91010, USA.

Email: dtete@coh.org

hair is an important interplay, which is now gaining interest in the biomedical, epidemiologic, and social science literature (Teteh et al., 2017, 2019).

Another important consideration in understanding the role of beauty standards is determining who is upholding them. Black and White American men have remarkably similar judgments of the relative attractiveness of Black women, and women with longer, straight hair and lighter skin are perceived as more attractive (Cunningham et al., 1995; Johnson & Bankhead, 2014). The result is that Black women may experience higher levels of hair-related anxiety than White women (Johnson et al., 2017). A large proportion may not have the confidence to wear their hair natural in fear of how they will be treated in social and workplace environments (Bankhead & Tabora Johnson, 2014; Johnson et al., 2017). Thus, many have resorted to using relaxers and other hair care products to alter their appearance and successfully assimilate into society (Ahmed, 2007; Mintel, 2015).

Black men's attraction to, as well as, perceptions and preferences regarding, Black women's hair (specifically related to beauty) may directly contribute to women's use of chemicals, extensions/weaves, and products. Romantic relationships for Black women are another segment of life impacted by European beauty standards (Bryant, 2013). Black females are least likely to marry outside of their race, and less than 10% of Black women select non-Black men as their spouses (Wang & Taylor, 2012). On the contrary, the largest percentage of interracial marriages are between Black men and White women (Fryer, 2007). Therefore, Black male perceptions and preferences related to hair and beauty may hold tremendous weight regarding how Black women style their hair. However, there is limited information as to whether Black men are aware of the types of hair products women use, their potential connection to breast cancer risk, and the differences in knowledge between men with or without a partner with a history of breast cancer. Therefore, the purpose of this study is to examine Black men's perceptions, awareness, knowledge, and attitudes regarding Black women's hairstyles, use of hair products, the harmful properties of hair products, and breast cancer risk factors. The inclusion of men of partners with and without a history of breast cancer is a novel comparison on their knowledge and beliefs surrounding hair product use and breast cancer risk.

Methods

This qualitative study consisting of key informant and focus group interviews was designed to explore emerging concerns regarding the potential health risks posed by chemicals in hair products and breast cancer etiology.

The participants were Black men (with or without partners with a history of breast cancer) recruited through convenience sampling—word of mouth via community stakeholders—between January 2014 through May 2015. Eligibility criteria included: (a) African American or Black, (b) age greater than or equal to 18 years, and (c) current residence in the Inland Empire regions of Southern California (Riverside and San Bernardino Counties). The study methods and protocol were approved by the institutional review board of Loma Linda University (IRB# 5130226), and all participants provided written informed consent.

Data Collection

Community-based stakeholders and an academic partner co-developed the interview questions for the 12 key informant and three focus group interviews with 10–15 participants per focus group. We recruited a wide range of participants based on age, marital status, and income levels. Interviews took place in spaces that facilitated privacy and full disclosure of responses from participants (e.g., barbershop, private home, hotel conference room). Participants were asked open-ended questions related to attractiveness, perspective of hair and beauty norms, and risk factors related to breast cancer risk (Teteh et al., 2014). All interviews were audio-recorded and transcribed verbatim. Participants also completed a sociodemographic survey.

Data Analysis

The transcripts were analyzed using open coding and guided by grounded theory methods of analysis (Strauss & Corbin, 1997). Line by line analysis was used to create labels and general preliminary concepts for each transcript. Key concepts were grouped into specific categories and were later examined for their properties by two coders. After the initial overview, all transcripts were analyzed a second time to identify specific factors that influenced expressed opinions, which were then represented as emerging themes. To ensure trustworthiness of our data, we implemented several steps. A summary of detailed field notes from each interview and focus group were maintained, reviewed, and referenced throughout the coding process. We held weekly meetings to discuss the transcribed materials while referencing the field notes. Lastly, we had two independent reviewers—who were not involved in the original coding process—review the transcripts and identify their own categories and themes. Their codes and themes were compared with the original code book. Coding and theme ambiguities or disagreement were resolved using consensus negotiation techniques (Zade et al., 2018).

Table 1. Sociodemographic Characteristics of Participants (N = 66).

Characteristic	n (%)
Racial affiliation	
African American	37 (54.4)
African	23 (33.8)
Caribbean	3 (4.4)
Central & South American	2 (2.9)
Other	1 (1.5)
Marital status	
Married	35 (51.5)
Single	23 (33.8)
Divorced	5 (7.4)
In a relationship/living with someone	4 (5.9)
Education level	
≥ Some high school	10 (14.7)
≤ College degree	30 (44.1)
Graduate degree	21 (30.9)
Professional certification	6 (8.8)
Age	
≤ 29	16 (23.5)
30–39	7 (10.3)
40–49	13 (19.1)
50–59	19 (27.9)
≥ 60	12 (17.6)
Household income	
≤ \$25,000	21 (30.9)
\$26,000–\$50,000	17 (25.0)
\$51,000–\$75,000	9 (13.2)
> \$75,000	18 (26.5)
Insurance status	
Insured	59 (86.8)
Uninsured	8 (11.8)
Birthplace	
United States	37 (54.4)
Non-United States	31 (45.6)

Note. Due to missing values, column percentages do not total 100%.

Results

Participants

Table 1 presents the sociodemographic characteristics of 66 male participants. The majority of men were between the ages of 50 and 59 years (27.9%) and married (51.5%). While 75% reported a college or graduate degree, 30.9% reported household incomes of less than \$25,000.

Three main themes emerged (summarized in Table 2): perceptions about Black women's hairstyles, lack of knowledge regarding potentially harmful effects of hair product use and breast cancer risk, and the importance of educating the community about the potential risk of chemical ingredients in hair products and breast cancer etiology.

Theme 1: Perceptions About Black Women's Hairstyles

In their description of Black women's hairstyles, participants discussed the types of styles they preferred and/or were most attracted to as well as which styles in their minds signified beauty, self-confidence, and high self-esteem. The hair preferences could be categorized into the following subcategories: relaxed/chemically straightened, natural, straightened without chemicals, long, or no preference. There were no differences in hairstyle preferences observed between men whose partners were breast cancer survivors and those with partners without a history of the disease. Participants stated that their preference was for women who wore their hair in natural styles. The presentation was viewed as an expression of a woman's high self-esteem and confidence. A natural hairstyle was referenced as healthier than chemically altered hair.

"I think first I would have to say I'm a fan of whatever is natural first, and then I think there is a line that would come there because if its natural in that being then it's not." (Participant with partner without a history of breast cancer)

"When I see a black woman wearing her hair natural or short, I see self-esteem as high." (Participant with partner without a history of breast cancer)

For one participant whose partner survived breast cancer, natural hair devoid of chemicals, color, or relaxers were noted to be more attractive.

"I'm not for the color and all that I just like the natural. It grays there and grays there. . . I don't go for all the blonde and chemical stuff, that ain't me." (Participant whose partner survived breast cancer)

By contrast, other participants indicated they were not attracted to natural hairstyles. These men preferred long, straightened, or processed styles. Others acknowledged that they liked natural hairstyles, but they were most attracted to Black women with a processed or straight hairstyle. Lastly, some participants did not have a specific hairstyle preference.

"I think now I'm beginning to see modified afro, instead of putting in a style, they're letting it grow and shape it. It's a busy look. But, at my age now, I'm still with the conservative pressed down and trimmed." (Participant with partner without a history of breast cancer)

"Just no wig, or weave, you know just hair, it was relaxed. I told her I only liked the relaxed hair." (Participant with partner without a history of breast cancer)

Table 2. Three Dominant Themes and Supporting Quotes.

Themes	Key Points	Quotes
Theme 1: Perceptions on Black women's hairstyles	There were a variety of opinions about Black women's hair—both supportive and opposed to natural hair styles and straight hair achieved through chemical relaxers or other methods. Beauty standards, media, convenience, work expectations, and social/familial pressures were identified as potential influences.	<p>“Sometimes I look at African American women with processed hair less attractive, because I like natural hair, because rocking the natural look it tells me about their confidence.” — Participant without a partner (single)</p> <p>“We're all products of our environments. When you seen an image of a black woman with nice hair, when you get of age that's what you want to imitate.”—Participant with partner without a history of breast cancer</p> <p>“Subconsciously they're doing it because they want to look white. Some people are trying to do that, they want white hair. These black women in America are trying to emulate white women in Europe.”—Participant with partner without a history of breast cancer</p> <p>“Hair is a big deal for African American women; it's the symbol of beauty. And I don't know if they value their health enough to change their hair. There's a demand you know, and I think it's wrong.”—Participant with partner without a history of breast cancer</p> <p>“I think there's room for consciousness and we may be on the edge of the ship, but it takes a lot to move people. I think it would take a lot to be moved. So, for instance, if there was a labeling change, I don't think that would make much of a difference. But say there is a series of research pieces, and it got into the mass media and you ended up with a smoking gun connection. . . you're able to have a clear cause or link that validated by not only the academy but also the national media, you probably would see a situation where we are free enough now where we could have a ship, that would be enough [to] move us away.”—Participant with partner without a history of breast cancer</p> <p>“There's a little note on every package of cigarettes, harmful to your health, may cause cancer, my mom and dad smoked their whole lives, they never got cancer, I try to believe even if that the studies show black hair products cause cancer, you're going to get those men and women that say well not everyone is going to get it.”—Participant with partner without a history of breast cancer</p> <p>“This cannot only [be] on one person; this behooves everybody in the community to get involved in it.”—Participant whose partner survived breast cancer</p> <p>“I think information needs to be centralized, I think regular people need to be in power to share out, something like a seminar but people need to get to them to hear the information, I think maybe if you could get women who had breast cancer, or women who care enough about their body to go out and spread the information and have those conversations, just a conversations about it need to happen, I think those are the first places we need to start.” — Participant with partner without a history of breast cancer</p> <p>Write your congressman, write your senators, write your state representatives and so forth. But if people just talk to people so much information can just get out about certain things.”— Participant whose partner survived breast cancer</p> <p>“ . . . you got to go to shops, when we used to do the black barbershop, you got to go to the salons, and the shops because you're going to have the audience.”—Participant with partner without a history of breast cancer</p>
Theme 2: Lack of knowledge regarding potentially harmful effects of hair product use and breast cancer risk	Knowledge regarding the chemicals in hair products and the link to breast cancer was mixed. However, there was a commitment to encouraging spouses to forgo harmful products—some participants were not convinced that they would give up the products, while others were more optimistic.	
Theme 3: Importance of educating the community about potential risk of chemical ingredients in hair products and breast cancer etiology	Education about the potential risks of hair product chemicals and breast cancer risk factors will require multiple efforts centered around educating communities, involving researchers and media, and engaging policy makers. Community-driven efforts and education are the keys to producing change.	

"I don't think a woman's hair can make you feel a certain type of way romantically."

(Participant with partner without a history of breast cancer)

Men with partners without a cancer history commented on their subconscious preferences of natural hair due to their familial exposure and peer pressure from other men. However, societal demand and overwhelming acceptance of straight hair norms may inform the decision of women (especially younger women) leading to hair loss complications.

"I think that the idea that the type of hair that your mother and your sisters and aunts probably did affect [me] subconsciously, what affected [me] consciously was growing up in my neighborhood as peers we all influenced each other so it was whatever my peers wanted, we didn't want nobody with no weave, you didn't get a girl that your homies would be bagging on you about." (Participant with partner without a history of breast cancer)

"They know its pulling their hair out, and my oldest daughter just graduated and a lot of her friends still wear weaves and now their hair is pulled out, and they can't do anything but wear a wig or weave, but the stereotype is still long hair. Because as a young boy, boys are sold that long hair is beauty, so now it's just a demand." (Participant with partner without a history of breast cancer)

For instance, participants shared trends in Black women's hairstyles are influenced by the desire to "be White," media (e.g., *Ebony Magazine*), age, and societal expectations of beauty and professionalism.

"We're all products of our environments. When you seen an image of a black woman with nice hair, when you get of age that's what you want to imitate." (Participant with partner without a history of breast cancer)

"Uh so uh I think that a lot of women now if you look at some of their magazines and so forth. Like *Ebony* and so forth. That's the style. I think the younger generation they; they don't care. Uh, but women who work. They're in the workplace. Uh, an office type workplace. I think are more conscience of their *hairstyles*." (Participant whose partner survived breast cancer)

"TV is drilling a hole in everybody's head; these images on the TV telling them what they supposed to look like." (Participant with partner without a history of breast cancer)

One participant with a partner without a breast cancer history was vocal about the imitation of Whiteness as the primary reason Black women relaxed or straightened their hair. However, most participants did not agree with this sentiment and provided alternative rationales related

to convenience and maintenance of grooming relaxed rather than natural hair as an easier task. Other participants alluded to the acceptability of straightened/relaxed hair in corporate or professional settings rather than the imitation of Whiteness to explain the preference of straightened/relaxed hair over natural hair.

"Subconsciously they're doing it because they want to look white. Some people are trying to do that, they want white hair. These black women in America are trying to emulate white women in Europe." (Participant with partner without a history of breast cancer)

"In my experience that some women, some black women, it's a convenience thing. Of course, they can burn it, fry it, twist it, shake it, it don't matter what they do to it because it ain't theirs and if its messes up they can just take it off." (Participant with partner without a history of breast cancer)

"But I really believe that some people are so into their image and how they look, my wife says it helps me maintain me do what I do every day, I got to get up 6 am and put my suit on and my hair being in braids, and using this perm is so I don't have to spend all this time getting ready to go out in this world." (Participant with partner without a history of breast cancer)

"They don't have weaves that look like, they have, most of them in a corporate world its getting more acceptable now but they're playing the game to get where they need to get. That's what that is, it don't matter if they look white." (Participant with partner without a history of breast cancer)

Theme 2: Lack of Knowledge Regarding Potentially Harmful Effects of Hair Product Use and Breast Cancer Risk

Knowledge and understanding of the potential consequences of using hair care products were mixed by participants. Some men had not heard anything explicit about hair products and negative health effects. Several mentioned that they were unaware of the type of products women used in their hair outside of sheen sprays and hair conditioners. Other participants did not consider a connection between hair chemicals and harmful health effects such as breast cancer. As one participant whose partner did not have a history of breast cancer stated, "It's on their hair, . . . I don't see the connection." In addition, our participants, in general, lacked knowledge about breast cancer etiology and associated risk factors. However, men whose partners survived breast cancer were more knowledgeable about risk factors, diagnosis, and treatment options than men who had partners without a history of breast cancer. Men with partners indicated they would support their partners in any way they could—including the decision to wear their hair naturally. On the

other hand, some participants were skeptical of the role of chemicals in hair products and breast cancer etiology and posited other explanations related to lifestyle factors and environmental toxins.

“I really think whatever pleases her and I don’t feel too particular about the way a woman wears her hair or what style she wears it.” (Participant whose partner survived breast cancer)

“I think most of the disease that are out here, most of them are already in us it just takes the right set or circumstances, the right combination, stress, age, food and it appears. That’s my answer to that question.” (Participant with partner without a history of breast cancer)

Though many participants lacked knowledge on the connection between chemicals in hair products and breast cancer etiology, participants would encourage their spouses to forgo products confirmed to be harmful. When asked the question “if your partner or spouse was using a certain hair product perceived as cancer causing and they were diagnosed with breast cancer would you discourage them from using those products?” participants responded:

“Absolutely, yes!” (Participant with partner without a history of breast cancer)

“I [would] encourage them to use no cancer-causing hair products I would say.” (Participant with partner without a history of breast cancer)

Our participants were convinced that Black women, in general, would not refrain from using hair products that have been linked to cancer. According to one participant whose partner survived cancer, when asked if Black women would forgo products known to have deleterious health effects, he stated, “generally speaking, I don’t think so, no I really don’t.” Even with knowledge of the potentially harmful effects of the products, participants believed the symbolism of beauty provided by these products to maintain Black women’s identity may outweigh any adverse health consequences. One participant noted even with evidence of harm, behaviors may not change because some will believe “not everyone is going to get [cancer]”—relating his parents’ experience with smoking and never getting cancer, as an example. Participants compared Black women’s decision to common knowledge of the detrimental health outcomes associated with consumption of pork products and smoking and the continual use of these products despite this knowledge. Other participant’s explanation for their convictions was the influence of media on Black women’s identity and acceptance of Eurocentric ideals of beauty in

Black culture. Most participants acknowledged that if more influential Black women wore hairstyles that were Afrocentric, both Black and White women would emulate those styles, therefore reducing exposure to potentially harmful products. Lastly, Black men’s acceptance of Eurocentric beauty norms was said to influence the types of hairstyles Black women emulated and the products used to achieve these styles.

“There’s a little note on every package of cigarettes, harmful to your health, may cause cancer, my mom and dad smoked their whole lives, they never got cancer. I try to believe even if that the studies show black hair products cause cancer, you’re going to get those men and women that say well not everyone is going to get it.” (Participant with partner without a history of breast cancer)

“Because the level of addiction, like cigarettes, they know it’s bad, but they still do it. You could have a label that says lye in it, but people still use it because it does the job.” (Participant without a partner/single)

“No, they wouldn’t because there’s a link between pork and all kinds of stuff and we’re not giving up pork. Even I’m not giving up pork.” (Participant with partner without a history of breast cancer)

“Hair is a big deal for African American women; it’s the symbol of beauty. And I don’t know if they value their health enough to change their hair. There’s a demand you know, and I think it’s wrong.” (Participant with partner without a history of breast cancer)

“If the majority of commercials and ads that we saw looked like Lupita from *Twelve Years a Slave*, everything would be flipped on its head. Even white women would be trying to get their hair nappy. You’ll have hair products that turn straight hair nappy.” (Participant with partner without a history of breast cancer)

“If there [were] more brothers who liked that short hairstyle and they started saying you know man I’m not with that weave, I think women do what men want. As long as there [are no] bald black woman head on TV they ain’t going to, right.” (Participant with partner without a history of breast cancer)

On the contrary, some participants were more optimistic about the information about the connection between chemicals in hair products and breast cancer etiology influencing behavioral change among some Black women. One participant compared the acceptance of current musicians in the Black community as a shift in consciousness where prioritization of health over image may be a possibility. Participants were, however, cautious about the radical actions and messaging that would have to be implemented to implore Black women to end the use of potentially harmful products.

“So, I don’t know the bottom line of what I’m trying to say is you see what’s happening in popular music, like Kendrick Lamar, he couldn’t have the impact that has had 10 or 15 years ago. But that says to me we are on that edge of a new consciousness, and it’s been reflected in our music, and athletes, and how they look like business and our popular culture and this may be a reflection of us being on a shift and so if we were to see the very strong puzzle link between a particular kind of hair product and breast cancer I think now we have a little bit more room, we’ve created some room for ourselves, to be able to back away from that, and not be so tied to the image we would be willing to risk our lives.” (Participant with partner without a history of breast cancer)

“I think there’s room for consciousness and we may be on the edge of the ship, but it takes a lot to move people. I think it would take a lot to be moved. So, for instance, if there was a labeling change, I don’t think that would make much of a difference. But say there is a series of research pieces, and it got into the mass media and you ended up with a smoking gun connection. . .you’re able to have a clear cause or link that validated by not only the academy but also the national media, you probably would see a situation where we are free enough now where we could have a ship, that would be enough [to] move us away.” (Participant with partner without a history of breast cancer)

“My response you know, she seems to be, you know if something is scary enough, she will try and abide by it, but she’s pretty stubborn. If [they are] stubborn enough you know to say I don’t care. Yeah [the message] has to have power to say [yes] you know, this is powerful enough and I need to stop that.” (Participant with partner without a history of breast cancer)

Theme 3: Importance of Educating the Community About Potential Risk of Chemical Ingredients in Hair Products and Breast Cancer Etiology

The relationship between Black women and their hair is complex. A behavioral change intervention rooted in education that seeks to reduce the risk associated with harmful chemicals was viewed by our participants as difficult but achievable. Men felt that the community as a whole has to first take ownership of the problem, seek education on ways of minimizing risk, unite to take action to lobby for reporting products that are harmful, and facilitate dialogue with policymakers on the topic. As stated by one participant whose partner survived breast cancer, even if companies test these products and the products are harmful, the information may not be provided to the consumer due to the lack of transparency by manufacturers and the motivation to make a profit over preventing disease.

“What I think is because of the competitiveness in marketing, they are not putting enough information out concerning

products that are being used to make these products. And they are not listing what the side effects of them are and so forth. You see them down the line 10 or 15 years later when someone is advertising for something for somebody who’s had this disease or this disease when it could have been prevented up front if this information was exposed and brought out. But the way the business community works, they’ll hide everything they can to make a profit. Because it goes back to dollars and cents. Now you take for instance if a company is putting out a product, they know that this product, they’ve done the research and so forth and they know this product has products inside of it that are harmful to people. They mask it or do whatever they can to keep making this product. And they will sit back and wait until somebody reports it, then they’ll stop it.” (Participant whose partner survived breast cancer)

Participants provided actionable steps that could be adopted to potentially reduce harmful product exposure and reduce breast cancer risk for Black women, including encouraging community involvement in efforts centered on education and intervention. Another area of exploration would be providing educational opportunities in group settings with involvement of influential organizations, like sororities and community spaces including schools, churches, barbershops, beauty salons, and use of media resources for promoting prevention information, which may increase knowledge on the topic.

“This cannot only [be] on one person; this behooves everybody in the community to get involved in it.” (Participant whose partner survived breast cancer)

“I think that’s where the problem lies and that we have not [been] educating ourselves and I believe that so this is just my opinion.” (Participant whose partner survived breast cancer)

“That’s difficult because with women, if it were in a group, a sorority something like that they would probably accept the information.” (Participant whose partner survived breast cancer)

“You know, in the school, the church, getting around the neighborhood.” (Participant with partner without a history of breast cancer)

“. . .you got to go to shops, when we used to do the black barbershop, you got to go to the salons, and the shops because you’re going to have the audience.” (Participant with partner without a history of breast cancer)

Second, men felt that it was the responsibility of academic researchers to partner with media professionals to disseminate research results on the topic of harmful chemicals and health risk. Information provided should be age-specific using a variety of mediums, including social media channels (i.e., Facebook, Instagram).

Personal stories of people impacted by the topic may provide *weight* to the types of information shared with the community. However, participants discussed posting information on social media will not be of interest to all persons. Regardless of the medium, many of our participants agreed that targeted strategies using a variety of resources and tools must be implemented to adequately disseminate information on this topic. Most importantly, word of mouth by Black women themselves will be an important method of information distribution. Lastly, information on consumer reporting agencies, like Consumer Reports/Smart Talk, should be publicized to community members and reporting of harmful products encouraged.

“I think it has something to do with the age group how the different age groups would react around our age mid 30s 40s you can become a little more conscious of health, you become a little more I need to take care of my health, when I go into these years its either going to be a rough ride a smooth ride, then let’s look at who’s probably going to get most of the business in terms of purchasing these types of products, these High schooler’s they are very up on how they look, very concerned college students, if there was I think if there was a little notification on the product this could cause cancer, a lot of people probably wouldn’t take a second look at it, there’s a lot of food products that say this could cause cancer. I don’t think it’s a reality that will hit home unless you have mass media or a social media if social media got on it real strong then maybe, one thing I do know about these high school kids they are on social media all the time.” (Participant with partner without a history of breast cancer)

“I know some people like my father that just started using a smartphone, and there’s no connection to social media whatsoever, he reads the newspaper and listen to channel 7 news. My mom just started getting into it, we as a people unless we are exposed to technology, unless you thirst for knowledge for technology and communication then you rely on what’s comfortable and what you know.” (Participant with partner without a history of breast cancer)

“Social media is going to be your main vein of information, like I said it has to be more than just I’m going to wear more than pink today, it has to be something they see. It may have to be an actual patient in the last stages to give an image that will burn into their psyche, this is serious, and this can be serious. It has to be more than pink or just a walk, everything has to carry some weight though. I can read stories all day but until it hits home. . .” (Participant with partner without a history of breast cancer)

“I could post something on Facebook and it would say 10 easy ways to improve your health and you say people understand what they’re seeing, scroll past that, and now they want to see what this girl looks like that he went to high school with but why pass the health conscious article that

could save his life?” (Participant with partner without a history of breast cancer)

“The question is what is the message? Is it something that has legs not should have legs but you know it’s interesting in its own right, then you talk about the strategy.” (Participant with partner without a history of breast cancer)

“You would have to attack it at multiple angles because we don’t know the direct source of breast cancer, we can’t say pink lotion gives cancer, it’s numerous things that contribute. . . if you had a seminar that showed ways to do your hair that was chemical free without the use of chemicals relaxers or perms. . . I think we need somebody on a platform something similar to that that can give you simple tips, because if we just talk about it in a focus group or discussion its just like oh I heard this in this group but if it’s like oh PhD this then the mass will think oh maybe I need to start changing the lifestyle.” (Participant with partner without a history of breast cancer)

“I think information needs to be centralized, I think regular people need to be in power to share out, something like a seminar but people need to get to them to hear the information, I think maybe if you could get women who had breast cancer, or women who care enough about their body to go out and spread the information and have those conversations, just a conversation about it need to happen, I think those are the first places we need to start.” (Participant with partner without a history of breast cancer)

“Do a lot of research to find out what are the proper reporting agencies that handle reporting of things of those products. But uh, it’s like I said people researching the internet, finding out the reporting agencies that handle these particular products to report em’. My wife gets the magazine which is called Smart Talk, which is part of Consumer Reports and it gives you all the information concerning home products and things like that.” (Participant whose partner survived breast cancer)

Lastly, the men felt that Black communities must engage policy makers in the education process by sharing their concerns and research on the topic.

“Write your congressman, write your senators, write your state representatives and so forth. But if people just talk to people so much information can just get out about certain things.” (Participant whose partner survived breast cancer)

Discussion

Societal acceptance of the Black community continues to be debated in research, media, and personal discussions. The 1947 Clark and Clark (Kenneth & Clark, 1947) study known as the “Doll Test” was one of the earliest studies to provide context on the detrimental effects of skin color and identity for Black children. Later coined by scholars

as the “Bad is Black” effect (Alter et al., 2016), society’s views of darker skin, its associated African centered features (e.g., kinky or natural hair), and social acceptance or lack thereof (e.g., marriage, incarceration rates), while mixed, are primarily negative. For example, though darker skin Black men are more likely to be married (Teteh et al., 2020; Udry et al., 1971), they are also more likely to be discriminated against by police and the criminal justice system (Alexander, 2020; Horowitz et al., 2019).

So, in a radically racialized society where straight hair and fair skin govern acceptable beauty standards, initially, Black men’s preference for natural hairstyles was unexpected. Particularly when Black women’s hairstyles are politicized (Washington, 2008) and natural hair textures—brittle, coarse, kinky, nappy, short, and woolly—signify less social appeal and are seen as less professional (Chapman, 2007; Johnson & Bankhead, 2014; Robinson, 2011). For many of the participants in this study, hair devoid of chemicals or alterations was thought to exemplify high self-esteem, pride, and confidence. With more than half of the participants being married, one must wonder if their preference for natural hairstyles is due to the adoption of their spouse’s preference rather than their own, or potentially the result of a combination of other influences and experiences that have shaped their beliefs.

Hair styling is cultural—box braids, locks, and other Black hairstyles can be traced back to Ancient Egypt and societies throughout Africa (Horne, 2019). While each style has cultural significance, an individual’s perspective and beliefs are shaped by their lived experiences (Banaszak & Ondercin, 2016). For instance, hairstyles are influenced by social and political environments (Byrd & Tharps, 2014). The shift to achieve straight hair after the Emancipation Proclamation or the donning of natural hair styles during the Civil Rights movement were efforts to conform to acceptable societal and cultural standards for Black women at those times. Our participants predominantly belonged to the late-middle age group (primarily aged 50–59) and had their formative years around the Civil Rights and natural hair movements, which may have shaped their preference for natural hairstyles. Societal and familial influences on opinions of hairstyles were persistent themes. If their families were either supportive or a participant in these movements, the men’s beliefs might have been directly or indirectly informed by these historical events. It is not clear how different the results might have been if we focused mainly on younger, nonprofessional men. Nevertheless, while most men stressed their support for “natural” hair, when asked about what they thought Black women would do, most felt that the European beauty standards continue to dominate and that they would not be likely to change unless there was significant education and community outreach on the issue.

For the men in our study, Black women’s hair is an outward expression of identity that’s primarily influenced by social standards. Though our participants were generally a highly educated group of Black men, the addition of health—specifically the connection between breast cancer and chemicals in hair products—to this discourse was not well-known to them. Most men in our study were not informed about social, behavioral, and lifestyle risk factors for breast cancer. The men with partners who survived the disease were more knowledgeable about breast cancer risk factors, diagnosis, and treatment. While Black men share in the concerns about the potentially harmful chemicals impacting the health of Black women (Teteh et al., 2017), they are affirmed in their beliefs that Black women will not forgo these products even at the risk to their health. This outcome supports our previous findings (Teteh et al., 2017), highlighting the tension and struggle that Black women face with regards to their hair, health, and identity. The question then becomes what will it take to impact changed behaviors if neither Black men’s support for natural hair nor the knowledge of harmful chemicals can dissuade women from using products that are harmful to them? Clearly knowledge alone, in the perspective of our male participants, will not be enough to modify Black women’s behavior; many feel that the only solution is a community-wide intentional effort that shares evolving science about risk as well as promotes a robust discussion about needed interpersonal changes about how the community needs to support women to change everyone’s views about Black beauty.

Education/outreach interventions and advocacy efforts led by and for the Black community at large were therefore recommended by the men. During the data collection process of this study, enlightening discoveries unfolded in the barbershops, salons, living rooms, and churches of our participants. The most revolutionary act is having these conversations in academia but, more importantly, in these public informal spaces. Research has illustrated that barbershops and Black hair salons are productive spaces for health education conversations geared toward the Black community (Linnan et al., 2014). Social and traditional media channels were discussed as tools for education. Targeted social media campaigns could be developed for specific sociodemographics that may be missed in traditional educational efforts. For example, Facebook is a useful tool for health research recruitment (Whitaker et al., 2017), and its utility in health education modalities should be explored in future studies but, at the same time, for a younger audience, other media might be more successful in reaching both Black men and women. In addition, exposure to harmful chemicals in personal care products, in part, stems from a lack of adequate oversight by the Food and Drug Administration and the outdated Federal Food, Drug, and Cosmetic Act, which in its

current form has been in place since 1938 (Food and Drug Administration, 2018). The importance of engaging policymakers on this issue was discussed by our participants, which highlights the knowledge among Black men on antiquated legislative systems that need to be altered.

The men in our study emerged as active participants in conversations around education and the legislative process as practical tools to decrease harmful chemical exposures in hair and personal care products. The more reflective these men became, the more readily they shared their own hair journeys and were grateful to have been invited into the discussion. There is limited information on personal care product use among men and even less on potential racial/ethnic differences in product selection. Future studies may consider including Black men's experiences with their hair and the potential health implications of their personal care product usage. There is limited existing research on personal care products as a source of chemical exposures among men. In a prospective cohort study, Nassan et al. (2017) examined the associations between personal care product use and urinary concentration of EDCs (phthalate metabolites and parabens). They reported that the use of 10 personal care products within 6 hr strongly predicted increased levels of monoethyl phthalate (MEP) and paraben urinary concentrations. Similarly, Duty et al. (2005) reported associations between use of five personal care products within 48 hr with higher MEP urinary concentrations, and Ferguson et al.'s (2017) findings indicate that mouthwash was associated with higher urinary paraben levels among men.

There are several limitations of our study, including the convenience sample of our participants, limited details of field notes used in our analysis, and low or missing perspectives from younger, single, and divorced participants. Additionally, most of our participants did not have partners who survived a breast cancer diagnosis ($n = 62$). We acknowledge that behaviors and attitudes may differ regionally within California and across the United States, which may limit the generalizability of our findings. Despite these limitations, this research adds important cultural implications of hair and health for Black women by offering Black men's perspectives on hair care and product selection. To our knowledge, this is the first study to provide qualitative data on the relationship between Black men's perspective on Black women's hairstyles, EDCs, and breast cancer risk.

Conclusion

There are a variety of beliefs, knowledge, and perspectives about Black hair and product use held by Black men. The complex relationship between social perceptions, beauty standards, and familial influences was observed to play a critical role in Black women's

hairstyle preferences and hair product selection. However, the underlying theme of our findings was that Black men across all groups genuinely care for the health of their partners and the Black women in their communities. They are clear on the continuing effects of societal influence on Black beauty standards. Many felt that it would be more challenging for women to change their behaviors than it would be for their partners to support them in this journey. All men stressed the importance of engagement through a variety of channels, highlighting the importance of education as a method of empowerment and a means for community-driven change. Therefore, considering the connections between beauty standards, familial influences, and hair product use is essential to fully understand breast cancer etiology and to develop opportunities for community and legislative interventions.

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ORCID iD

Dede K. Teteh  <https://orcid.org/0000-0001-9552-148X>

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