

Health Promotion and Health Behaviors of Diverse Ethnic/Racial Women Cosmetologists: A Review

Supplementary Issue: Health Disparities in Women

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ABSTRACT: Women from diverse ethnic/racial backgrounds have higher chronic disease mortality rates when compared to White non-Hispanic women. Community-based programs, such as beauty salons, have been used to reach diverse ethnic/racial women, yet little is known about diverse ethnic/racial women cosmetologists' involvement in health promotion and their health behaviors, which is the purpose of this review. The growing beauty salon health promotion literature indicates that their roles in these studies have been varied, not only as health promoters but also as recruiters, facilitators, and in general major catalysts for investigator-initiated studies. However, the review also identified a major void in the literature in that there were few studies on health behaviors of diverse ethnic/racial women cosmetologists, especially African American women cosmetologists. Recommendations include increasing the capacity of diverse ethnic/racial women cosmetologists as community health leaders and investigating their health status, knowledge, attitudes, and practices.

KEYWORDS: cosmetologists, diverse ethnic/racial women, beauty salons, health promotion, health behaviors

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Introduction

Women from diverse ethnic/racial backgrounds have high disease burden for chronic diseases, which is an ongoing major concern in USA. For example, African American, American Indian/Alaska Native, and Hispanic women lead age-adjusted death rates for diabetes (38.6, 30.4, and 22.9 per 100,000) and for all cancers (171.2, 139.0, and 101.2 per 100,000, respectively) when compared to White non-Hispanic women (16.0 and 92.1, respectively).¹ African American women in particular carry a high disease burden. Using cardiovascular disease (CVD) as an example, national data show that this population has higher mortality rates attributed to CVD (248.6 per 100,000) compared to Caucasian women (188.1).² Furthermore, 2009 data show that African American women have the highest mortality rates for stroke (50.2 per 100,000) when compared to women from other ethnic/racial backgrounds (White non-Hispanic 37.0, Asian/Pacific Islander 29.6, Hispanic 28.0, and American Indian/Alaska Native 24.6).¹ Clearly, diverse ethnic/racial women, especially African Americans, are at high risk for these chronic diseases. Positive health behaviors, including health care use, are associated with preventing and/or delaying the onset of these diseases.^{1,2}

Healthy People 2020 recommends that comprehensive, community-driven approaches be used to reach underserved populations in natural settings.³ Beauty salons are places where women not only receive services but also foster ongoing relationships with cosmetologists. As natural helpers, cosmetologists can have free-flowing, informal conversations in a setting that is conducive to information dissemination.^{4–6} Thus, cosmetologists increasingly have been used as health promoters to assist in the delivery of health information. However, although women cosmetologists have served as promoters, the extent to which diverse ethnic/racial cosmetologists have been studied in terms of their health promotion involvement and health behaviors is unclear. A recent literature review focused on beauty salons and barber shops as settings for research, including feasibility, recruitment, and interventions.⁶ However, no reviews could be found that focused specifically on diverse ethnic/racial women cosmetologists, the role they play as health promoters, and their health behaviors. This focus is of increasing importance given the continued concern regarding the health of diverse ethnic/racial women, especially African American women, and the need for health behavior change in this population.^{1,2}



Diverse ethnic/racial women cosmetologists could potentially play a pivotal role in the process of improving health of this population not only as health promoters but also as role models for health.^{4,7} Thus, the purpose of this article was to review the existing literature on health promotion and health behaviors of diverse ethnic/racial women cosmetologists, with an attention to African American cosmetologists. Specific questions addressed in this review included: (1) What is the involvement of diverse ethnic/racial women cosmetologists in health promotion? (2) What are the health behaviors of diverse ethnic/racial women cosmetologists? and (3) To what extent are African American women cosmetologists considered in the health promotion and health behaviors literature?

Methods

To conduct this review of literature, the Academic Search Complete database, a comprehensive, multidisciplinary full-text database, with more than 7,000 peer-reviewed journals, was used. Supplemental reviews were conducted using Google Scholar, PubMed, and Web of Knowledge, among others. For this review, two substantive areas for this article were used in the search process (health promotion and health behaviors of diverse ethnic/racial women cosmetologists). Literature databases from 1995 to 2015 were examined by applying the following algorithm: (cosmetologist*) and (health* or public health* diverse ethnic/racial women* or health promotion* or health behaviors* or health activities* or health education* or lifestyles* or physical activities*). Because African American women cosmetologists were of particular interest in this review, a separate search was conducted (African American* women). This process yielded 91 journal articles. The references of these articles were then reviewed by the first author, and those related to the article's focus were retrieved for possible incorporation into the article. This process resulted in 21 articles, which were further reviewed by both authors for use in this article. Sixteen articles were selected, and five articles were excluded due to not meeting the inclusion criteria sufficiently. Because very few articles were found, selected mixed gender studies were included in this review. In order to create a detailed analysis of the studies selected for inclusion in the article, a synthesis matrix was created by extracting and summarizing key data from the included studies (information not shown).

Review of Literature

This review was organized using the substantive focus of this article: health promotion and health behaviors of cosmetologists. For health promotion, defined broadly as “the process of enabling people to increase control over and improve their health,”⁸ articles were organized by health content area. In addition, each description highlights the type of research, characteristics of the cosmetologists, and role of cosmetologists in health promotion. For health behaviors, defined as “knowledge, attitudes, and practices that contribute to actions regarding

improving health and well-being,”⁹ articles were organized by an identified behavior category.

Health promotion and cosmetologists. This section includes articles in the following areas: cancer prevention, chronic disease prevention, and general health. Given the mortality rates for cancer for diverse ethnic/racial women, it is not surprising that the majority of studies related to beauty salon health promotion were focused on cancer prevention. One major effort conducted by the University of North Carolina was the *Bringing Education and Understanding to You Project* that involved training cosmetologists as lay educators to promote cancer prevention in beauty salons. The project, which used community-based participatory research approaches, was described in three published articles.

The first article focuses on gaining a better understanding of the needs, interests, and preferences of African American cosmetologists in delivering cancer prevention information to clients.¹⁰ This descriptive study used survey methodology with a convenience sample ($n = 49$) of licensed salons in one rural town in North Carolina (98% female; 61% Caucasian, 31% African American, 8% Latina). As respondents in this study, cosmetologists reported that they discussed a range of topics with their clients including health (eg, health and illness, diet, medical care, and hair care). Furthermore, 82% of cosmetologists expressed interest in talking about health with their clients with preferences, including healthy eating (83.7%), dieting and weight control (83.7%), high blood pressure (83.7%), physical activity (81.6%), and stress management (81.6%). Cosmetologists had higher comfort levels in discussing topics related to healthy eating, dieting, physical activity, and stress management and less comfort levels in discussing high blood pressure, mammography, sun exposure, and smoking. Preferred methods of sharing health information with clients included distributing materials (69.4%), talking to clients (61.2%), posters (59.2%), and providing referrals to health professionals (44.9%).

The second article was an observational study to gain insight into naturally occurring conversations between cosmetologists and their customers and to assess features of the salon environment that might be used to inform the development of salon-based cancer prevention interventions.¹¹ The study was conducted in 10 privately owned beauty salons (five Caucasian and five African American) in the Raleigh–Durham and Chapel Hill, NC, USA, area. No characteristics of the cosmetologists were provided, and the role of the cosmetologists was to perform normal duties while being observed by trained staff. The study found that 18% of the 836 recorded passages included discussion of health-related topics with little variation by race of clientele (17.4% in African American salons and 19% in Caucasian salons). There were observed differences in the physical layout of the beauty salons, with African American salons having relatively open designs and waiting areas (no partitions), which facilitated social interaction, and some of the Caucasian salons having less openness (with partitions).



The third article reports the outcomes of a seven-week pilot study in a small county in North Carolina to test the feasibility of (a) recruiting and training licensed cosmetologists and (b) delivering the health intervention to clients ($n = 162$, 34–65 years, and 97.5% female) in the beauty salons.¹² Five cosmetologists from two beauty salons, one serving African American clients and one serving Caucasian clients, were recruited and participated in a four-hour training. No characteristics of the cosmetologists were provided. The results indicated that the cosmetologists would continue delivering messages following the intervention, and at 12-month follow-up, the majority of clients who responded ($n = 56$) recalled their discussions about changing health behaviors (eg, 78.6% maintaining a healthy weight and 73.2% getting at least 30 minutes of physical activity daily) and made changes in their health behaviors because of these conversations (55%).

Three additional breast cancer prevention studies focused on cosmetologists promoting health with others. Wilson et al¹³ assessed the effectiveness of hair stylists as lay health advisors in promoting breast health of African American and Afro-Caribbean women in low-income areas of Brooklyn, NY, USA. The study incorporated a quasiexperimental pre/post-design with comparison group. Twenty-nine cosmetologists who completed training participated in the study. The majority were African American or Afro-Caribbean (92% including 52% were born in the Caribbean). The role of the cosmetologist was to participate in two two-hour trainings and to serve as health promoters regarding breast health. Cosmetologists were provided with a reference handbook and ongoing technical support. The majority of cosmetologists were very willing to discuss breast health prior to the training (96%) but were slightly less willing (85%) to follow the training. In addition, after the training, 59% felt very well prepared, and 41% felt somewhat well prepared. More of the beauty salon clients ($n = 1,174$) in the experimental group (37%) were able to recall exposure to breast health messages compared to the control group (10%). Self-reported exposure to the messages was associated with improved breast self-examination rates and with greater intentions to have clinical breast examinations.

Sadler et al¹⁴ conducted a feasibility study to evaluate the utility of having cosmetologists deliver a breast health education program to their clients. Eight female African American cosmetologists in San Diego, CA, USA, participated in the study, with four randomly assigned to an active breast education program using storytelling techniques (active arm) and four to a passive health education program on weight control, exercise, and tobacco use (passive arm). The majority of Black female clients (≥ 34 years, $n = 145$) completing surveys before and after the program believed that Black women were at a high risk of breast cancer (59%) and felt well informed about breast cancer (69%). In addition, participants were more likely to report breast screening adherence if they were exposed to the program. The participating cosmetologists were initially apprehensive about their ability to incorporate the additional

responsibilities into their work, even in the passive arm. However, by the conclusion of the project, those in the passive arm expressed a desire to be more involved and those in the active arm were satisfied and even proud of their role in the project.

Sadler et al^{15–17} also conducted a study reported in several articles that used 20 stylists recruited by African American clergy and female lay church leaders in San Diego, CA, USA, to determine African American women's ($n = 1,055$) perspectives on the most serious health problems affecting African American women and their related knowledge, attitudes, and health-promoting behaviors. The role of the cosmetologists was to encourage clients to participate in the survey when the project's research assistant was present in the salons. Findings show that cancer (81%), diabetes (59%), cerebrovascular disease (52%), and heart disease (31%) were perceived by the clients as the most serious health problems affecting African American women.¹⁶ Awareness of the seriousness of these diseases was significantly associated with a greater likelihood of adherence to recommended behaviors. With regard to breast health, 31% reported performing breast self-examinations every month, and for those ≥ 40 , 57% reported having a clinical examination and 43% had a mammogram in the past year. However, only 30% reported feeling well informed about breast cancer.¹⁷

Beyond breast health education, three studies focused on using cosmetologists to promote the prevention of or screenings for other forms of cancer. Dorman et al¹⁸ evaluated cosmetologists' knowledge, motivation, and skills following a two-hour skin cancer prevention and early detection program entitled *Talkin' About Better Skin* (TABS) in Texas. The study also assessed cosmetologists' willingness to talk about health topics and discussed the development of TABS. A survey was administered to cosmetologists ($n = 189$) over a five-month period with results indicating that 89% talked to their clients about health concerns (eg, 73% discussed sun safety/skin care). Following the survey assessment, the TABS program was developed, and 11 cosmetologists completed the training. A majority of the cosmetologists were female, aged 33–44 years, and residents of two Brazos Valley area counties in Texas. No race/ethnicity data were reported, although it is implied that they were rural and of minority backgrounds. Pre/post data showed that the training increased their awareness of skin cancers and also their comfort with talking to their clients about skin cancer prevention.

Reiter and Linnan¹⁹ investigated the cancer screening behaviors of African American women ($n = 1,123$) enrolled in a community-based cancer prevention trial. Participants were recruited from 37 primarily African American beauty salons associated with the North Carolina Bringing Education and Understanding to You Project. No characteristics of the participating cosmetologists in the beauty salons were reported. The role of the cosmetologists was to provide their beauty salons for participant recruitment. Findings showed that 94% of women ≥ 18 years and older reported receiving a Pap smear



test within the last three years, 70% of women ≥ 40 years received a mammogram within the last year, and 64% of women were within the screening guidelines for colorectal cancer. The study concluded that more focus needs to be provided on increasing breast and colorectal cancer screenings. In another cancer screening study, Lee et al investigated the feasibility of utilizing ethnic beauty salons for cervical cancer screening education with Vietnamese and Korean American cosmetologists ($n = 18$) and their customers ($n = 44$, respectively) in Albuquerque, NM, USA. Survey results showed that 72.2% of the cosmetologists expressed interest in discussing cervical cancer-related topics and delivering information to their customers (72.2% and 100%, respectively). Customers were similarly interested in talking about cervical cancer-related topics (75%) and learning this information from their cosmetologist (88.6%). Both cosmetologists and customers expressed comfort with cervical cancer education in the beauty salon setting (72.2% and 88.6%, respectively).²⁰

Aside from cancer, chronic disease prevention was the focus of three studies. Kleindorfer et al²¹ used a pre/postintervention design to educate African American women on stroke risk factors and warning signs in Cincinnati, OH, USA, and Atlanta, GA, USA. The study utilized 22 African American cosmetologists who were aged over 40 years (68%) and had attended some college (82%). The cosmetologists who participated in a luncheon training session recruited Black women to participate in the study, administered the survey, and then educated the clients while styling their hair on stroke warning signs and risk factors. At the end of the appointment, cosmetologists distributed a packet that included brochures describing stroke, heart healthy cookbooks, and a wallet card with the warning signs of stroke. The results showed that knowledge of at least three warning signs increased from 40.7% at baseline to 50.6% at five-month follow-up. However, no significant change was noted in the knowledge of risk factors between baseline and follow-up (16.5% and 18.2% respectively).

To address kidney disease, a condition that disproportionately affects African Americans due to high rates of diabetes and hypertension in this population, Madigan et al²² describe *Healthy Hair*, a beauty salon-based intervention to increase awareness, promote healthy living, and reduce diabetes, hypertension, and chronic kidney disease. The program trained nearly 700 stylists and reached more than 14,000 clients in eight Michigan cities. No characteristics of cosmetologists were provided, but it is implied that they were African American. Cosmetologists were trained in a four-hour workshop and then implemented two health chats with their clients, distributed educational materials (soul-food cookbook and beauty products), and administered surveys at the end of each chat. The health chats highlighted disease risk factors and encouraged clients to take one or more prevention steps (eg, improve diet, increase exercise, and stop smoking) or to take medication if the person already was diagnosed with diabetes or hypertension.

Of the clients who completed surveys following the two chats and reported that they would make specific lifestyle changes, 46% reported increasing fruit and vegetable consumption and selecting low-fat foods, and 36% increased the number of days per week in which they exercised. In addition, over 2,700 clients reported talking to their physicians during the program about their risk for diabetes, hypertension, and kidney diseases.

Finally, the study of Sadler et al¹⁵ on African American women in San Diego, CA, USA, reported earlier in this article, found that only 32% had been screened for diabetes in the past year and only 19% were able to correctly identify at least one warning sign of diabetes.

In terms of general health, a study conducted by Johnson et al²³ investigated the effectiveness of a beauty salon-based health intervention in improving diet, physical activity, and water consumption in African American women. This quasiexperimental study used a pre/posttest with comparison group design with a random sample of African American women ($n = 20$, ages of 18–70 years) in two beauty salons in South Carolina. No characteristics of the cosmetologists were provided, although the study implied that they were African American females. The role of the cosmetologists was to deliver three scripted motivational sessions (role modeling, motivating to promote behavior change, and checking on status and recognition) and to distribute an informational packet (on improving diet, physical activity, and water consumption) and a starter kit (whole fruit and bottle of water) to clients. The findings indicated that the treatment participants at posttest had a significant increase in mean intake of daily fruit and vegetable servings and a trend in increase in water consumption, while the results for comparison participants did not have these changes.

Finally, two recent studies concerning general health were explored using cosmetologists to facilitate health promotion on the topics of concern. Leader conducted a study to assess change in knowledge, awareness, and intentions to vaccinate against human papillomavirus (HPV) of African American women ($n = 240$; 60% caregivers of girls 9–17 years and 40% females 18–26 years) using cosmetologists in 10 predominantly African American beauty salons in West and North Philadelphia, PA, USA.²⁴ No characteristics of the cosmetologists were provided. The cosmetologists were trained in each salon to act as facilitators for client recruitment and for in-salon health education sessions for clients tailored for those aged 18–26 years and also for mothers/guardians of girls aged 9–17 years. The results showed that knowledge (percent of correct answers) improved from 33% at baseline to 75% at postintervention with retention of 74% one month following intervention. Intention to vaccinate against HPV significantly increased at postintervention for participants in both communities, including intention to talk to health care professionals about the vaccine.

Ahlers-Schmidt et al²⁵ evaluated the feasibility of using cosmetologists as health promoters for infant safe sleep to reduce infant mortality. Cosmetologists ($n = 149$) from Sedgwick



County surveyed for the study were primarily female (89.3%) and Caucasian (80.2%). African Americans (5.9%), mixed race (6.9%), and those reporting other race (6.9%) were included in the study. Findings indicate that cosmetologists reported discussing personal and social topics, including health (eg, healthy eating, diet/weight control, exercise/physical activity, and stress management), were comfortable or very comfortable promoting health topics, preferred to talk to clients (72%), hand out pamphlets/written materials (44%), and refer clients to health professionals (42%) but were unsure (56%) or did not feel that infant mortality was a problem (41%) in their community.

Health behaviors of cosmetologists. In this section, we highlight studies identified concerning health behaviors of diverse ethnic/racial women cosmetologists using the reviewed articles that matched our search criteria. Following this discussion, we also present a synthesis of related articles identified using broader populations. These articles provide information that may have implications for diverse ethnic/racial women cosmetologists.

There is limited information about the health behaviors of diverse ethnic/racial women cosmetologists in the articles reviewed. Two studies reported the perceived health rating of cosmetologists. Linnan et al¹⁰ found that 61% of the cosmetologists studied ($n = 49$) reported somewhat better to much better health compared to others of their age. However, 24% were current smokers. Ahlers-Schmidt et al²⁵ found that the majority of cosmetologists ($n = 149$) surveyed rated their personal health good (68.9%) followed by fair (19.4%) and excellent (11.7%). Studies reviewed also indicate that diverse ethnic/racial cosmetologists had an interest in health^{10,11,20} and were comfortable or very comfortable in talking about health topics.^{20,25} Two studies reported that cosmetologists improved their knowledge levels, including knowledge about skin cancer²⁴ and knowledge about stroke risk factors and warning signs.²¹ Studies indicated that cosmetologists were interested in learning more about health with one noting that they preferred to use flexible ways to learn on their own time (reading pamphlets and watching videos).^{10,25} Finally, although some studies reported that cosmetologists clearly saw the link between beauty and health,^{10,25} only one study screened cosmetologists via interviews to determine whether change in health behaviors had occurred prior to participating in the study.²³

With regard to studies using broader populations of cosmetologists that might inform work on diverse ethnic/racial women cosmetologists, articles were found on a range of topics. Three recent studies explored low birth weight, preterm infant births, and/or maternal complications with a diverse samples of cosmetologists, two in New York state^{26,27} ($n = 15,003$, 5.1% non-White; $n = 125$ treatment/ $n = 158$ control, 7.2% non-White, respectively) and one in California with primarily Vietnamese cosmetologists ($n = 24,832$) and manicurists ($n = 56,373$) (comparison groups: other working groups 53,056 and general population 406,025).²⁸ Studies with international populations examined eating disorders

and dissatisfaction of body weight among female cosmetologists ($n = 170$) and noncosmetologists ($n = 676$) in Taiwan,²⁹ eating attitudes and body attitudes of female cosmetologists ($n = 255$) in Hungary and Transylvania,³⁰ and hygiene practices and risk of blood borne diseases of cosmetologists in Italy ($n = 105$, 18.1% female).³¹ A meta-analysis of 247 studies on the associated risk of cancer in the work-related environment was identified,³² along with an experimental study to investigate genotoxic risk and DNA damage to cosmetologists in São Paulo, Brazil ($n = 69$).³³ These studies highlight the occupational and work-related environmental risk factors in the cosmetology field.

Discussion

The purpose of this article was to review the existing literature on health promotion and health behaviors of diverse ethnic/racial women cosmetologists with attention to African American women. Table 1 presents a summary of key results

Table 1. Diverse ethnic/racial women cosmetologists' involvement in health promotion.

Health content focus
Cancer prevention 10
General (5)
Breast cancer (2)
Skin cancer (1)
Cancer screening (2)
Chronic disease prevention 3
General health 3
Type of research
Feasibility 4
Observational 1
Descriptive 5
Pre/post 4
Quasi-experimental 2
Demographics
Implied African American 7
Stated African American 2
Mixed ethnic/racial populations 4
Not reported 3
Role of cosmetologist¹
Health promoter/educator 7
Recruiter of participants 3
Administered surveys 2
Responded to surveys 4
Distributed materials 3
Observed in beauty salon setting 1
Solely provide facilities for research 1
Training received
Yes 7
N/A 8

Note: ¹Reflects more than one possible role per study.



regarding the review on health promotion. With regard to content, of the 16 articles that involved health promotion and diverse ethnic/racial women cosmetologists, 10 articles were focused on cancer prevention, and only three articles were focused each on chronic disease prevention and on general health. Although not surprising, considering the funding levels and infrastructures available for cancer research,³⁴ this skewness toward cancer is at odds with the national health status data that highlights higher mortality rates for CVD and related risk due to diabetes and obesity. To be fair, some of the cancer prevention strategies around diet and exercise highlighted^{12,22} would go a long way in preventing CVD and diabetes. However, bringing awareness about these chronic diseases is equally important. As noted in Sadler et al's work, only 31% of the women studied perceived heart disease as a major health problem.

The type of research conducted included four feasibility studies, one observational study, five descriptive studies, four pre/poststudies without control group, and two quasiexperimental studies (Table 1). Of concern is the extent to which the field has not evolved further to include more rigorous methodologies. Of the two experimental studies reviewed, one had a very small sample.²³ Wilson et al's¹³ study was the only large, quasiexperimental study in the literature thus far.¹³ Linnan et al's⁶ recent article agrees with this assessment in relation to the broader beauty salon and barbershop studies examined in their review.

With regard to characteristics of the cosmetologists, of the 16 articles reviewed, most of the studies included African American cosmetologists, either implied ($n = 7$) or stated as the population ($n = 2$). Within the studies using mixed ethnic/racial cosmetologists ($n = 4$), populations included were African American, Caucasian, Korean American, Latino, and Vietnamese American. Three studies did not report demographics for the cosmetologists. The role of the cosmetologist included serving as health promoter, recruiting study participants, administering surveys, responding to surveys/interviews, distributing materials, and being observed in terms of client interaction. The actual health promotion role varied from merely facilitating (eg, encouraging clients to complete surveys) to implementing fairly sophisticated information after training. Seven studies provided formal training programs, although the type of training varied in length and depth. Linnan et al¹⁰ point out in their earlier feasibility study that how to conduct trainings with cosmetologists is complicated by their work schedules and limited time commitments they can make as business people. Furthermore, Wilson et al¹³ reported in their breast cancer prevention study that training and health messages may have been too complex and may have actually lowered cosmetologists' confidence and comfort levels in health promotion. Thus, increasing the well thought-out training programs, perhaps using technology that can be accessed on their own time, might be a direction the field needs to take and to also continue to keep messages as simple as possible.

Perhaps the most concern regarding the role of diverse ethnic/racial women cosmetologists was the passive nature of their involvement. In most of the studies, they were being observed, responding, facilitating, or distributing. They were not the community leaders around health promotion, which is in contrast to studies in other community-based organizations, such as churches where pastors have become community leaders for health.^{35–37} Part of this is due to the nature of the organization (beauty salons are businesses after all) but also the approach taken by investigators. It is noted that some of the investigators have used gold standard community-based participatory research approaches and in the process built cosmetologists as community leaders for health.^{4,5,7,10–13,15–17,38} Yet clearly more work needs to be done to raise the level of community health leadership among cosmetologists.

The review results regarding health behaviors of diverse ethnic/racial women cosmetologists can be summarized as slim at best. Within the 16 studies examined concerning health promotion and cosmetologists, two reported data on perceived health, four reported data on health interest/comfort reporting health, and two reported data on improving health knowledge. Studies investigating cosmetologists from broader populations note concerns regarding occupational health related to low weight, preterm and maternal complications, eating disorders and body attitudes, and environmental issues regarding exposure to chemicals. Yet diverse ethnic/racial women were not included in these studies in any substantial way. Although it might follow that the health behaviors of diverse ethnic/racial women cosmetologists would be similar to diverse ethnic/racial women in general, this review points out that their perceived health ratings were in the good to very good category and that they largely connected health and beauty. Furthermore, it is interesting that only one study screened cosmetologists prior to their involvement in the research to check on their attempts to change health behaviors.²³

Finally, this review shows that African American women cosmetologists as a group are understudied in health promotion, especially in health behavior research. Only two studies were identified that solely included African American women cosmetologists, and no study directly investigated the health behaviors of this group. This is of particular concern given the health issues of African American women. Clearly, we need to know more about African American women cosmetologists and the role they can play in improving their health behaviors.

With regard to implications, there are future directions to be considered as a result of this review. First, the literature on lay health leaders indicates that fidelity is improved if the full treatment implementation includes receipt (participant understanding and demonstrating knowledge/ability to use treatment skills) and enactment (degree to which participant applies treatment skills learned to daily life).³⁹ Lay health leaders not experiencing *enactment* may be less effective in the implementation process. Thus, a clear future direction for the



field is to engage diverse ethnic/racial women cosmetologists in ways where their health behaviors are assessed and where they have an opportunity to grow in knowledge and action around health. For example, studies are needed that identify the health of diverse ethnic/racial cosmetologists in a comprehensive and proactive way. This research might include determining their health knowledge and attitudes and motivators for and barriers to health. Furthermore, their health goals can be identified along with specific activities to implement these goals, including diet, physical activity, weight control, health care, and chronic disease management. This assessment would provide the necessary baseline data about diverse ethnic/racial cosmetologists that could be tracked and provided as feedback to help in their health improvement and lay the foundation for enactment experiences.

A second future direction concerns the engagement process with diverse ethnic/racial cosmetologists, especially raising their visibility as community health leaders. Clearly, consistent with community-based participatory research approaches and as highlighted by Sadler et al,¹⁵⁻¹⁷ Browne et al,^{7,13,38} and Linnan et al,^{4,5,10-12} engagement needs to be initiated long before a study is being conceptualized to develop ongoing relationships, identify needs, and develop mutually beneficial initiatives. Furthermore, more work is needed in the engagement process to bring diverse ethnic/racial cosmetologists into broader community groups that are advocating health. However, there are ongoing challenges in engaging cosmetologists, including their long work hours and the need to focus their time on running businesses.¹⁰ One strategy might be to use those community groups to identify possible cosmetologist leaders as Sadler et al¹⁵⁻¹⁷ demonstrated. For example, diverse ethnic/racial cosmetologists are involved in community organizations, such as churches and neighborhood associations. Moreover, community group members are consumers of cosmetology themselves and may view their own cosmetologist as a possible community health leader. In bringing diverse ethnic/racial cosmetologists into these broader community groups, the community can learn about barriers, hear about their ideas for promoting health in their businesses, which can serve as the basis for innovations, and together forge partnerships to improve health in the community.

This review has both strengths and limitations. A key strength is that it is the first review of literature, to our knowledge, that highlights the health promotion involvement and health behaviors of diverse ethnic/racial women cosmetologists. Specifically, this review has identified a growing body of research concerning the cosmetologist as health promoter and teased out some of the key information regarding diverse ethnic/racial women's involvement. The study also attempted to review extant literature on health behaviors of this population as well which was hampered by the clear lack of available studies. Limitations of the review include not expanding to other literature sources, including dissertations, reports from community-based organizations, and other available data that

might expand our knowledge base regarding diverse ethnic/racial women cosmetologists. Furthermore, the settings for expanded hair choices, including for example braiding, dreadlocks, and other natural options for African Americans, were not included in this review and clearly need to be considered based on current diverse hair style preferences.

Conclusion

This review has highlighted the involvement of diverse ethnic/racial women cosmetologists in health promotion research. Their roles have been varied, not only as health promoters but also as recruiters, facilitators, and in general major catalysts for investigator-initiated studies. It is recommended that work continue to engage African American women cosmetologists to grow their leadership in community health. This can be done through increasing efforts to use community-based participatory research approaches where these cosmetologists can increasingly become coleaders in all elements of the research process and key partners within broader community groups. This review also identifies a major void in the literature on health behaviors of diverse ethnic/racial women cosmetologists. It is clear that investigators have been concerned about involving these individuals in intervention studies and determining the feasibility to do so. Thus, it is recommended that research be undertaken to learn more about the health status, knowledge, attitudes, and practices of diverse ethnic/racial women cosmetologists and to identify programs that might improve their health and grow their stature as role models for health in the community. Finally, it is recommended that, considering the health issues of African American women, specific investigations focus on this population in terms of health promotion and health behaviors. Clearly, the health issues of diverse ethnic/racial women could be proactively addressed by empowered cosmetologists working shoulder to shoulder with other community partners to improve the health of this important population.

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