

## Podcast script: Hair Care and Black Women's Health

[Intro music]

**Ashley Ahearn (Narrator):** You're listening to Environmental Health Chat - a show from the National Institute of Environmental Health Sciences that explores the connections between our health and our world.

I'm Ashley Ahearn.

Our hair changes throughout our lives – the texture, thickness, the condition of our scalps. Some of us lose hair as we age. Others struggle to manage all the hair we have. Women can sometimes have glossy, rich hair during pregnancy and then lose some of that luster after giving birth.

**Jasmine McDonald:** Your hair is a journey, you're going to change your hair care products over time, but can decide to have a healthy hair journey.

**AA:** Jasmine McDonald is not a hairdresser. She's actually an assistant professor of epidemiology at the Mailman School of Public Health at Columbia University.

She's focused her research on personal care products – and the chemicals contained in those products – that may cause cancer.

McDonald says Black women purchase the most hair care products of any group. Black women are also more likely to die of breast cancer.

One possible explanation for that association? Is a family of chemicals commonly found in hair and personal care products that mimic our natural hormones. They're known as endocrine disruptors and they can include phthalates, parabens, and bisphenol A, among others.

**JM:** Endocrine disruptor chemicals do exactly as they say – they disrupt your endocrine system. And your endocrine system is responsible for your hormonal regulations within your body. We're talking about hormones, we're talking about estrogens, androgens, progestins. And since breast cancer is a hormonal cancer, the disruption of your natural endogenous hormones could increase your susceptibility for cancer or even promote or progress an existing cancer.

**AA:** You'll find endocrine disruptors in some shampoos, conditioners, fragrances, dyes, chemical hair relaxers, straighteners, and oils – among other personal care products – and they're associated with elevated breast cancer risk.

When it comes to exposure to endocrine disrupting chemicals, timing is everything. For many young girls, beginning to use hair and beauty products is almost a rite of passage – and unfortunately it often corresponds with puberty – and the important hormonal and development changes that come with it.

**JM:** This is also a period of time where the breast tissue itself is developing. And then you introduce a constant exposure of these endocrine disrupting chemicals directly to the scalp and this could impact

the age in which a girl starts their first period or menses. And what we found is that girls who use these products in early life, specifically hair oils, had an earlier age at menarche than girls who did not use these products.

**AA:** Earlier menarche, or first menstruation, is associated with higher breast cancer risk. McDonald's research has found a connection between earlier menarche and the usage of products containing endocrine disruptors.

**JM:** And if you consider the use of these products during stages where you're in a window of susceptibility for breast cancer, because the breast tissue may be in a very highly dividing or proliferative or changing state. Can you imagine using these chemicals in early life before you've even started menses and then continuing to use these products across your life?

**AA:** Now, McDonald is focusing her research on another key period in our hormonal lives: pregnancy. She's launching a new pilot study, with funding from the NIEHS, on pregnant women of color and phthalate levels in their bodies at key points in gestation and postpartum.

She's partnered with a community group based in Harlem, called WE ACT for Environmental Justice. The group started a campaign called Beauty Inside Out to inform women and femme-identifying people of color about the health risks of the cosmetic products they use.

McDonald is enrolling 50 pregnant Black and Hispanic women from northern Manhattan in her study. She'll start by meeting with each participant to deliver what's called an educational intervention – participants will watch a 10-minute video about endocrine disruptors and personal care products. And then McDonald will talk with them about actions they can take to decrease their exposure. They'll also submit urine samples, so McDonald can measure their phthalate levels before and after the intervention and they'll respond to a questionnaire about the hair care products they use.

**JM:** We start out really just by engaging, "When is the earliest period of time that you remember, someone putting a product in your hair?" So really going back to the individual, and those kind of connected stories.

**AA:** McDonald says she relates to her study participants through her own hair journey.

**JM:** I was reflecting on *all* the products that were put on my hair, I remember the perm that did not go well. I remember wanting to look like Halle Berry in Boomerang. I remember all of the hair choices I made, not by thinking about how it impacts my health, like really just trying to be cute.

**AA:** The goal of the research intervention is to empower women of color to control the things they can control when it comes to cancer risk. McDonald says we can't control our genetics, for example, but we can control which products we use on our bodies and when we use them. Phthalates are not long-lived chemicals, so a small change can make a difference.

**JM:** They are a product that if you decided today that you were no longer going to use this phthalate-containing product, within three days, we could see that difference, we could see that there is a difference in your phthalate exposure. So they're not long-lived chemicals. So the next product you put

on your hair, you can choose for it not to have phthalates, you can reduce your exposure. And I think that creates a less scary thing that they don't live in your body forever.

**AA:** But McDonald knows all too well how fiercely loyal women can be to their beauty regimens and products.

**JM:** As a Black woman, I know it's so hard to find the right product. And when you do find the right product, I mean, you would actually go to the justice of the peace, if you could [laughter]. It is definitely a challenge. And I know that changing a product after a product has worked is definitely hard.

**AA:** There are so many different cultural and social pressures that affect how people make decisions about their looks. From an early age, many Black women are made to feel that their natural hair is unattractive or undesirable – that it needs to be straightened and tamed. In the workplace, Black women with natural hair may be treated as less professional or be subjected to policies that discourage or even ban natural hair styles. But there's a growing movement among women of color to embrace their natural hair instead of sculpting it into submission with products.

**JM:** But I think if you talk to any woman with natural hair, it is a lot of work. And so we can't assume that every woman who uses a relaxer or perm or straightens their hair is conditioning themselves to a European look. I know that seems to be mainstream, but that's not the whole story. It is part of the story, we do want to see more of our natural hair state in wide stream media so that our little girls know that a fro is beautiful. But I tell you, keeping my fro takes a lot of work. So seeing little girls in pigtails and things of that nature – that's important to see, and barrettes and bows and natural states and dreads. And the importance is just showing the diversity of all hair, but especially ethnic hair. We want to tell women we embrace the texture your hair naturally exists at. We embrace the hairdos that you like, whether it's weaves, perms – whatever you choose. It's just that when you make that choice, make sure it's the healthiest choice.

**AA:** McDonald says there's always more research to be done on the health effects of endocrine disrupting chemicals in personal care products, but it's never too early to start informing people about the risks, in the hopes that they'll change their beauty routines.

I'm Ashley Ahearn, thanks for listening to Environmental Health Chat.

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