

Hidden Harms of Hair Relaxers: A Call to Action

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To the Editor,

Chemical hair relaxers, widely used by Black women to straighten tightly coiled hair, are increasingly scrutinized for their potential reproductive and carcinogenic risks.¹ These products often contain endocrine-disrupting chemicals (EDCs) such as phthalates, parabens, and heavy metals.² These substances can mimic or interfere with hormonal pathways, potentially affecting reproductive health and increasing the risk of hormone-sensitive cancers. Studies have linked these compounds to hormone imbalance, infertility, fibroids, and increased risks of breast and uterine cancers.³ As studies mount, dermatologists must lead efforts not only to identify and counsel patients on these risks but also to advocate for safer alternatives, transparency in labeling, and culturally competent care. Five peer-reviewed studies (2005–2023) examined the link between hair relaxer use and maternal health risks. The NIH's Sister Study demonstrated a statistically significant association between frequent hair relaxer use and increased risk of uterine cancer, particularly among postmenopausal Black women (HR = 2.55; 95% CI = 1.46 to 4.45).¹ Women who used relaxers more than four times per year had an even higher risk (HR = 2.55, 95% CI: 1.46–4.45). Similarly, the Black Women's Health Study reported an increased but less conclusive association for uterine cancer (HR = 1.18, 95% CI: 0.81–1.71) among heavy relaxer users compared to non-users.⁴ While causation has not been firmly established, the cumulative body of literature calls for precautionary interventions, particularly given the disproportionate exposure among Black women.

Breast cancer has also been linked to hair relaxer use. One study found that Black women who used permanent hair dye and relaxers had a higher risk of developing breast cancer than non-users (HR = 1.27, 95% CI: 0.99–1.62).² Another case-only study involving 2,998 breast cancer patients showed that relaxer use was associated with higher-grade, larger tumors, especially in Black women compared with White women.¹ Regarding pregnancy outcomes, the Black Women's Health Study found no significant link between lifetime relaxer use and preterm delivery among more than 6,000 births analyzed.⁴ Alternatives to chemical hair relaxers, such as keratin treatments or Japanese hair straightening, may not be safer, as they often include formaldehyde or similar chemicals.² Lye-

based relaxers, which rely on sodium or potassium hydroxide instead of EDCs, can still cause burns, scarring alopecia, and traction-related damage, especially in women with tightly coiled hair.¹ Beyond the clinic, effective public health strategies must leverage community outreach. Encouraging natural hairstyles is a vital public health and cultural intervention. Movements that promote afro-textured hair have been linked to increased self-esteem, identity affirmation, and reduced dependence on chemical straighteners. However, the stigma around natural hair, often seen as “unprofessional,” persists in workplaces and schools. Supporting policies like the CROWN Act, which bans race-based hair discrimination, is one way dermatologists can contribute to structural change. Reducing exposure to harmful hair products requires coordinated action by physicians, researchers, regulators, and communities. Dermatologists are uniquely positioned to lead this effort—not only by treating hair-related conditions but by shaping safer practices, supporting cultural empowerment, and narrowing health disparities tied to beauty norms.

DISCLOSURES

The authors declare no conflicts of interest.

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