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Hispanic/Latinos and Skincare: Disparities in Product Development, Marketing, and Toxicity

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INTRODUCTION

"Hispanic" and "Latino" (also known as Mestizo) describe a diverse racial and ethnic group, with a range of cultures, languages, and biological ancestry. It includes individuals of Mexican, Central-to-South American, and Spanish-Caribbean (eg, Cuban, Puerto Rican, and Dominican) descent.[1] Individuals of Hispanic/Latino race and ethnicity represent a heterogenous group of people with different skin tones and Fitzpatrick phototypes. Hispanic/Latinos are the fastest growing population in the United States (US) - projected to increase from 55 million in 2014 to 119 million in 2060, an increase of 115%.[2] By 2060, more than one-quarter (29%) of the US is projected to be Hispanic/Latino.[2]

Hispanic/Latinos are also the fastest growing ethnic beauty market segment and represent the "heaviest buyers" in skincare.[3,4] They spend more money ($59 vs. $35 per month), use more products (6.5 vs 5), and invest more time in their daily beauty routine (41 vs 34 minutes), compared with other demographic groups in the US.[5] Despite this, a majority (69%) of older Latinos (age 50+ years) feel like an "afterthought" in the beauty industry. More than three-quarters (76%) feel underrepresented in advertising, and many do not believe skincare brands create products specifically for their age (38%) or skin tone (17%).[5] The peer-reviewed literature confirms that a relative paucity of data exists on the specific aesthetic needs of Hispanic/Latino patients compared with other racial/ethnic groups.[1]

Exposure to toxic chemicals in skincare products, which can adversely impact health, disproportionally affects Hispanic/Latinos and other consumers with skin-of-color.[3] These include phthalates, parabens, phenols, polycyclic aromatic hydrocarbons, siloxanes, formaldehyde-releasing preservatives and metals (mercury, aluminum, lead, arsenic, copper); however, disclosure requirements for cosmetics are limited and inconsistent.[3] Exposure to one or more of these compounds, via dermal absorption, inhalation or ingestion, has been linked to endocrine disruption, cancer, reproductive harm and impaired neurodevelopment in children.[3] The heavier use of skincare products by Hispanic/Latinos compared with other demographics could lead to disproportionally increased chemical exposure per product per day, with progressive toxic accumulation over the course of a lifetime. Indeed, Hispanic/Latino women have higher levels of endocrine-disrupting chemicals, such as phthalates and parabens, in their bodies compared to white (Caucasian) women in the US, and these racial/ethnic differences are not explained by socioeconomic factors.[3] In a study of 108 Mexican women, elevated urinary phthalate levels were associated with increased use of antiaging facial cream, body lotion and other beauty products.[6] Even small doses of these compounds at sensitive periods of development could trigger adverse health consequences, and Hispanic/Latino women and their offspring may be particularly vulnerable if toxic skincare products are used during preconception, pregnancy, and/or peripubertal. Three studies in Hispanic/Latino populations in California, Mexico, and Chile have reported an association between prenatal and peripubertal exposure to phthalates, parabens, and phenols with early onset of puberty in girls.[7-9] Earlier age at puberty has been linked with increased risk of mental health problems and risk-taking behaviors, as well as increased risk of breast and ovarian cancer.[7] However, a definitive causative link between systemic absorption of topical skincare products and endocrine-disrupting effects remains to be proven.

Hispanic/Latinos commonly use skin-lightening compounds to either treat disorders of hyperpigmentation (such as melasma and post-inflammatory hyperpigmentation) or because of a desire to lighten skin for other cosmetic reasons.[3] As a result, this population is at particular risk of exposure to toxic chemicals that may be present in these products, including mercury. Mercury is a known suppressor of tyrosinase (the rate-limiting enzyme in the melanin pathway), thereby decreasing melanogenesis and pigment production. However, as it is absorbed through the skin, toxicity can occur following the use of mercury-containing skincare products. The US Food and Drug Administration (FDA) banned the use of mercury in cosmetics in 1973 and has since set a maximum allowable level of 1 ppm (part-per-million). However, skincare products containing mercury remain unregulated and available outside of the US and continue to be imported and used by Hispanic/Latinos within the US. In one study, skin-lightening creams were identified as a source of increased urinary mercury levels in foreign-born Dominican women in New York City.[10] In a separate case report, elevated blood mercury levels were linked to use of face creams containing over 20,000 ppm of mercury in a pregnant Mexican American woman in California.[11] Many cases of mercury poisoning,

characterized by skin rashes, neuropsychiatric disorders, and other adverse health effects, have been reported following the use of skin-lightening products among Hispanic/Latinos in the southwestern US (Arizona, California, New Mexico, and Texas) and Mexico.[12]

While the US FDA closely monitors the chemicals that go into foods, drugs, and medical devices, cosmetics are not subjected to similar scrutiny.[13] Cosmetics do not have to obtain FDA approval before going to market, unless the product claims to treat or prevent disease or alter the body in any way (in which case the product is classified as a drug). To date, only 11 chemicals are prohibited or restricted by the FDA for use in cosmetics.[13] A number of independent organizations and other advocacy groups have started to provide information to consumers of potential toxins, while promoting the formulation of safer products by skincare brands. These include the Environmental Working Group (Skin Deep® Cosmetics Database), Made Safe®, Campaign for Safe Cosmetics, and Cosmetic Ingredient Review.[13] Dermatologists, aestheticians, and other skincare providers should also strive to make their patients aware of the growing literature around the use of chemicals in cosmetics – in particular, helping to educate Hispanic/Latinos and other populations with skin-of-color to make more informed skincare choices. However, to date, few patients are counseled regarding safe cosmetics use. In one study, only ~23% of 128 women surveyed had received advice in this regard.[14]

The burgeoning "Clean Beauty" movement advocates for the avoidance of known or suspected toxic compounds in skincare products, and the use of natural and organic ingredients that are believed to be safer while still effective.[15] Natural products are becoming increasingly popular among consumers as alternative topical skincare solutions. In 2019, they represented the top growth contributor of US skincare sales, with 30% market share.[15] Importantly, more than 40% of Hispanic/Latino women have expressed a preference for skincare solutions made with natural, organic ingredients.[16] However, a recent systematic analysis revealed relatively few (n=7) peer-reviewed clinical studies evaluating safety and efficacy of natural skincare ingredients (for hyperpigmentation) in women of Hispanic/Latino race and ethnicity.[17] The paucity of robust cosmetic trials in this setting reflects the reported generalized low representation of Hispanic/Latino subjects compared with other groups (including African Americans) in clinical studies in dermatology.[18] Human clinical trials for safety and efficacy of skincare products must strive for representative study cohorts especially with respect to ethnic diversity, in particular Hispanic/Latinos.

Anatomical and biochemical variations between Hispanic/Latinos and other demographic groups influence the rate of onset, severity, and type/pattern of age-related skin changes, prioritizing cosmetic concerns among individuals.[1,19,20] It is important to recognize that racial, ethnic, and social identity among Hispanic/Latinos also imbues a cultural influence on standards of beauty, attitudes toward appearance, and treatment choices and expectations.[1,19,20]

Product development and marketing by the global skincare industry sets cosmetic standards across cultures, but has long promoted many Western concepts of beauty (ie, aesthetic and societal benefits of lighter/whiter skin).[3] This can lead to an internalizing of skin color/tone dissatisfaction among Hispanic/Latinos and other racial/ethnic groups, while at the same time promoting colorism and externalizing discrimination in skincare and beauty.[3] Colorism describes within-group and between-group prejudices that favor and privilege lighter over darker skin types.[3]

CONCLUSIONS

Widespread preconceptions and targeted advertising take advantage of mainstream beauty norms to influence the use of Caucasian-focused skincare solutions, and in some cases, potentially toxic and harmful products, while simultaneously hindering the design and testing of racially and ethnically inclusive skincare solutions that are both safe and effective.

DISCLOSURES

Ms. Dow is the founder of si Skin Organics®. Dr. Murphy has no conflicts of interest to report.

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