

# Current Trends in Skin of Color



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The term 'skin of color' originated in an effort to differentiate the biology and skin reactions of darker skin toned patients in comparison to patients with white skin. People with skin of color respond to sun exposure with increased production of pigment known as melanogenesis more than Caucasians, and also respond to skin injury and inflammation with increased pigment production. However, these differences represent only the color of the skin and have no relation to race and ancestry. Because humans have mixed freely and extensively, it is believed that they share a common genetic pool. However, they do not necessarily share the same ethnicity. Even though the terms 'race' and 'ethnicity' have been used interchangeably, ethnicity refers to a group of people who share a common culture, language, religion, history, place of origin, and other identification sources, regardless of race and ancestry.

In this issue, we will consider skin conditions prevalent in 'Hispanic' and 'Latino' skin. These terms, while often used interchangeably, are slightly different. In general, the term Hispanic refers to people with origins in Spanish-speaking countries. The term Latino or Latina, on the other hand, refers more specifically to people with roots in Latin America. The terms mostly overlap, but not completely. The term Hispanic was introduced in the US 1970 Census as a generic term to refer to a population of Spanish-speaking households.<sup>1</sup> The US Government then officially adopted

the term in 1997 as the ethno term referring to anyone of Spanish descent, speech, or ancestry, non race related. Because Brazilians speak Portuguese, they are excluded from this classification. In the Census of 2010, the definition of Hispanic or Latino origin refers to a person of Cuban, Mexican, Puerto Rican, South and Central American, or other Spanish culture origin, regardless of race.<sup>2</sup> According to the 2010 Census, 16% of the US population is of Hispanic/Latino origin compared with 13% of the US population measured by the 2000 census. Mexicans account for three quarters of the increase in Hispanic population, while Puerto Ricans represent 36%, Cubans 44%, and others 22%, respectively. About three quarters of the Hispanic population in the US today belong to the first three groups, two-thirds of them are US-born.

While it is true that people with very light skin have the highest risk for skin cancer, people of color can develop skin cancer, too. People who identify as Hispanic and Latino, in fact, can be any race or mix of races and may have any color of skin. It all started when Christopher Columbus, an Italian, set sail from Spain with Spanish crew members and arrived in 1492 at various islands in the 'New World,' which at that time was mainly the Caribbean. Spaniard Ponce de León joined Columbus on his next voyage, looking for gold and the mythical fountain of youth, and the voyage ended in Florida. These exploration voyages led the way for European colonization, and soon waves of immigrants started arriving in Central and South America and eventually, North America, including Italians, Germans, and Portuguese. Others arrived from Africa, China, and Japan. Many of the immigrants mixed with the indigenous people and the ethnic pool became a melting pot. So, the genetics for light skin and risk for sun damage were woven into the culture along with the genetics for darker skin and greater natural protection against sun damage.

In 2012, the total number of patients treated for non-melanoma skin cancer (NMSC) in the US was estimated to be 3.3 million.<sup>3</sup> The only study available on the incidence of NMSC in Hispanics is a small 5-year retrospective study in one San Diego center that looked at Hispanic, Asian, and Caucasian patients. While the incidence of NMSC was much higher in Caucasians, the researchers found that the Hispanic patients were diagnosed at a significantly younger age (62 vs 70), and had more skin cancers in the "central face" area.<sup>4</sup> Basal cell carcinomas (BCC) are the most common skin cancer in Caucasian, Hispanics, Chinese Asians, and Japanese populations. An estimated 2.8 million are diagnosed annually. The incidence of BCC in Hispanics is 50-171/100,000 compared to 185-340/100,000 in Caucasians and 1/100,000 in blacks.<sup>5</sup> A study published in 2001, showed that the incidence of BCC in this population is significantly increasing in Arizona and New Mexico.<sup>6</sup> Squamous cell carcinomas (SCC) are the second most common skin cancer in Caucasians, Hispanics, Chinese, and Japanese populations. Again, the incidence of Hispanics developing SCC (14-33/100,000) lies between Caucasians (17-360/100,000) and blacks (3/100,000). Malignant melanoma (MM) is the third most common malignancy of the skin in Caucasians (18-19/100,000), Hispanics (4.7/100,000), and Asians and African Americans (0.5-1.5/100,000). Anatomically, MM are more commonly found on the trunk for whites, while lower limbs and hips were the predominant sites for African-Americans. For Hispanics, MM on the trunk and lower extremities and hip were similarly distributed. The most common pathology found in Hispanics and Caucasians is superficial spreading of melanoma and the most common for African-Americans, Puerto Ricans, and Japanese populations is acral lentiginous melanoma (ALM). In the past two decades, the incidence of MM has increased 20% in the Hispanic population.<sup>7</sup> Hispanics present at a younger age with thicker tumors (> 1mm; 35% vs 25%, respectively), regional involvement (12% vs 8%, respectively), distant metastasis (7% vs 4%, respectively), and have the worst survival rate as compared with non-Hispanic whites. Poor survival rates might also be related to the fact the 5- and 10- year

melanoma specific survival rate for ALM is 81% and 68%, respectively, compared to 89% and 85%, respectively, for overall cutaneous melanomas. Early stage diagnosis for MM is seen in 91% of Caucasians, 74% of Hispanics, and 48% of African Americans.

In an attempt to elucidate the real incidence of MM among Hispanics, a retrospective, cross-sectional analysis of 41,072 cases of MM with known stage and ethnicity reported in Florida from 1990-2004 was done. Malignant melanoma incidence rates increased by 3% per year among non-Hispanic white men, 3.6 % among non-Hispanic white women, 3.4 % among Hispanic women, and 0.9% among white Hispanic men, while remaining stable among black men and women.<sup>8</sup>

The advanced stage upon diagnosis of MM in Hispanics can be related to lack of access to medical services, lack of understanding of their risk to skin cancer, or both. An in-clinic survey about sun exposure and protection was conducted. A total of 100 individuals of African-American, Asian, and Hispanic descent were interviewed about their perception of the effect on sun exposure.<sup>9</sup> Although 43% of the participants reported sun-burns upon sun exposure, 65% of the participants believed they were not at risk for skin cancer. In addition, they reported recreational sun exposure without sun-protection for themselves and their children. This might explain why in an epidemiologic study of the population of Florida, the incidence of MM was 20% higher in Hispanic male patients living in Florida than that of their male counter parts in catchment areas.<sup>10</sup> Another study looked at the skin cancer awareness in white Hispanics and white non-Hispanics in high school students in Miami, Florida.<sup>11</sup> The study found that white Hispanics were more likely to tan deeply, less likely to have heard of or perform self-skin examinations, and 2.5 times more likely to have used tanning beds in the past year as compared to the white non-Hispanics. Also, white Hispanics believed they were less likely to develop skin cancer. Even though Hispanics' lack of self-perception of risk for skin cancer is well documented and erroneous, this population lacks support when it comes to medical care. The US Census Bureau's 2011 American Community Survey revealed that 30% of Hispanics lack medical insurance compared to 15% of the total US population; making it the largest population without medical insurance in the US.<sup>12</sup> Health care professionals, especially Dermatologists, must inform and educate Hispanics on their risk for developing skin cancer and the need to adapt protective behavior outdoors upon sun exposure.

As a group, Hispanics should not be referred to by the label 'skin of color' because Hispanics are every 'color' and have very diverse genetic backgrounds. In my opinion, Hispanic skin should be identified by sex, country of origin, and shade of skin color: be that white, light beige, beige, medium beige, dark beige, light brown, medium brown, dark brown, light black, medium black, and black. That way, Hispanics are not identified by their 'skin of color' but by the color of their skin.

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## Disclosure

Dr. Perez has no conflicts of interest to declare.

## References

- Guzman B. The Hispanic population: census 2000 brief. May 2001. <http://www.census.gov/prod/2001 pubs/c2kbr01-3>.
- Ennis SR, Rios-Vargas M, and Albert N. The Hispanic population: 2010. 2010 census briefs <http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>.
- Rogers HW, Weinstock MA, Feldman SR, Coldiron BM. Incidence estimate of nonmelanoma skin cancer (keratinocyte carcinomas) in the U.S. population, 2012. *JAMA Dermatol.* 2015; 151(10):1081-6.
- Loh T, Ortiz A, Goldenberg, Jiang SIB. Incidence and clinical characteristics of non-melanoma skin cancer among Hispanic, Asian, and Caucasian patients in the US: 5 year, single Institution retrospective review. *J Am Acad Dermatol.* 2015; 72(suppl 1):464 <https://www.aad.org/eposters/Submissions/getFile.aspx?id=668&type=sub>.
- Gloster HM, Neal K. Skin cancer in skin of color. *J Am Acad Dermatol.* 2006; 55:741-760.
- Harris RB, Griffith K, Moon TE. Trends in incidence of nonmelanoma skin cancers in southeastern Arizona, 1985-1996. *J Am Acad Dermatol* 2001; 45:528-36.
- Coups EJ, Stapleton JL, Hudson SV et al. Linguistic acculturation and skin cancer-related behaviors among Hispanics in the Southern and Western US. *JAMA Dermatol.* 2013; 149:679-86.
- Hu S, Parmet Y, Allen G, et al. Trend Analysis of melanoma incidence and stage at diagnosis among whites, Hispanics and blacks in Florida. *JAMA Arch Dermatol.* 2009; 145:1369-74.
- Kim M, Boone S, West D, et al. Perception of skin cancer risk for those with ethnic skin. *JAMA Arch Dermatol* 2009; 145: 277-89.
- Rouhani P, Pinheiro PS, Sherman R, et al. Increasing rates of melanomas among non-whites in Florida compared with the United States. *JAMA Arch Dermatol* 2010; 146:741-6.
- Ma F, Collado-Mesa F, Kirsner RS. Skin cancer awareness and sun protection behaviors in white Hispanic and white non-Hispanic high school students in Miami, Florida. *Arch Dermatol.* 2007; 143(8):983-88.
- Motel S, Patten E. Statistical portrait of Hispanics in the United States, 2011. Pew Research Center web-site. <http://www.pewhispanic.org/2013/02/15/statistical-portrait-of-hispanics-in-the-united-states-2011/>.

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