ORIGINAL RESEARCH

Change and continuity in health inequities related to skin color in Mexico

Luis Ortiz Hernandez, PhD; Cesar Ivan Ayala-Guzman

Abstract

We analyzed changes in disparities associated with ethnicity and skin color in lack of access to food and health in the Mexican adult population between 2002 and 2012 through the World Values Survey (WVS) databases, period during which disparities in life satisfaction decreased. In both years it was observed that, compared to whites, among dark and light brown people, the perception of poor and fair health status was more frequent. In 2012, the experience of food insecurity was more frequent among dark brown people; in addition, access to health services was lower among light and dark brown and indigenous people. These results show the need for policies aimed at reducing racist health disparities in Mexico, which not only affect indigenous people, but also dark brown people.
Keywords: ethnicity; happiness; food; race and health; racism.

Introduction

Considering that the topic addressed in this paper is a relatively new field of study in Mexico, it is important to clarify the use that will be made here of the terms race, geographic ancestry and skin color. The term "race" has been criticized in the biological sciences because it refers to the existence of genetically homogeneous groups that can be clearly distinguished from each other. However, such groups do not exist, a situation that is especially true for the population of Latin America[1]. Furthermore, the Mexican population does not use the term "race" in everyday life, such as people in other societies - the United States of America and Europe - do. Therefore, the term "geographic ancestry" has been adopted to denote the continent of origin of people's ancestors. Three ancestries are relevant in Mexico: the native American (or indigenous), the European, and the African.

In Mexico, skin color is a sociocultural marker of that geographic ancestry. To simplify the language, throughout the text the terms "*morenos*" (brown), "*blancos*" (white), and "*afrodescendientes*" (afrodescents) are used to refer to people who perceive themselves or are perceived as having brown, white, or black skin, and who are often assumed to be descendants of indigenous, European or African ancestors, respectively. It should be emphasized that it is an oversimplification to think that there is a correspondence between geographic ancestry and skin color. That is to say, it is inadequate to think that -for example- all brown people are descendants of indigenous people. To understand this, we will use the concept of "racialization" [2], a process that occurs when social relations are structured by the meanings associated with the phenotypical characteristics of humans. This process of signification results in the definition and construction of human collectivities. Most people have created stereotypes in which the phenotype (facial features, skin color or body structure) is equated with geographic ancestry and thus differences are thought to be more or less innate. These phenotypic variations are used as markers to create social categories which, in turn, are used to include or exclude 3. The sociocultural

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construction of skin color is not an "objective" matter, depending on the context and on the person who perceives it. In other words, the same skin pigmentation can value differently depending on the environment [4].

In American countries, stratification associated with geographic ancestry is one of the socio-cultural legacies of European colonialism. Thus, in English-speaking America (mainly in the United States of America)[1] differences between Native Americans/Afro-descendants and Euro-descendants (or whites) have been documented. In the case of Latin America, the marginalization and poverty in which indigenous people live is the clearest manifestation of this racial stratification.[2] Furthermore, in Brazil,[3] the social and health inequalities faced by people of African descent with respect to those of European descent have been demonstrated.

Stratification derived from geographic ancestry in Spanish-speaking America is also manifested in the disadvantages of people with dark skin.[4-7] In this region, the first study on differences in mental health according to skin color was conducted in a convenience sample of university students in Mexico City.[5] With representative samples from Mexico, Peru, Colombia, and Brazil,[8] it was shown that people with darker skin color had worse self-perceived health; these studies provide guidelines for further study of the subject. A first element that should be explored is whether differences in skin color affect other events related to health and well-being, such as food insecurity and access to health services. Another issue is that considering racism as a process that permeates virtually all spheres of life,[9] it is possible that multiple processes may be involved. Finally, it is necessary to analyze the evolution of health disparities associated with skin color and ethnicity.

One of the objectives of this study was to analyze differences in lack of access to food and health according to skin color (reflecting actual or perceived geographic ancestry) in the adult population of Mexico between 2000 and 2012. Another objective of the research was to explore possible processes by which such differences in well-being occur, including differences in socioeconomic position, living conditions, perception of the environment, and self-perception.

The disadvantages of indigenous, Afro-descendant and brown people may be the product of two processes: racism and white privilege.[10] Racism is constituted by the beliefs, attitudes, institutional arrangements or acts that tend to denigrate and exclude individuals or groups because of their phenotypic characteristics linked to their geographic ancestry or their affiliation to an ethnic group, which results in these individuals or groups not enjoying or exercising their human rights and fundamental freedoms in the political, economic, social and/or cultural spheres.[11] The concept of racism focuses on the identification of the disadvantages of indigenous people and people of African descent.[12] However, the notion of racism does not make explicit who is disadvantaged. White privilege, on the other hand, refers to the symbolic and/or material gains, advantages, or benefits obtained by light-skinned people, based on the positive stereotypes associated with European traits.[13] Both social norms have a "global" effect in the sense that they permeate different levels and spheres of social life: policies, regulations, institutional arrangements, and interpersonal relationships.

The inequities faced by Afro-descendants, indigenous and brown people are closely related to their low socioeconomic position[6,7] and to the fact that they experience discrimination more frequently.[5,8] However, other processes may be involved in racist inequities; experiences of discrimination may generate treatment expectations; that is, after repeated experiences of discrimination, people may think that future negative interactions are the result of racism. Discrimination and treatment expectations can make Afro-descendants, indigenous and brown people have less trust in those who are not part of their communities or who are not similar to them.[14,15] In turn, the existence of social capital - in which trust is a central element - has been shown to be related to different health events.[15,16] Furthermore, the perception that subjects have of their location in social hierarchies can have effects on health, independent of their objective situations.[17] The experience of subordination can have negative effects on interpersonal relationships, mood, cognition, and neuroendocrine processes.[18,19] Another experience associated with subordination is a perceived lack of control over events that decisively affect their

lives.[17,20] Perceived lack of power and control can negatively influence cognitive and behavioral aspects, potentially affecting health.[21]

Material and Methods.

Two nationally representative surveys were analyzed: the World Values Survey (WVS) 2000 (n=1,535)22 and 2012 (n=2,000).[23] In both, information was obtained from people aged 18 years and older. In this analysis, only information from participants with complete data was considered, so the analytical samples were 1,535 records for 2000 and 2,000 for 2012. Verbal consent was obtained from participants, ensuring confidentiality in data handling, which, in part, was achieved by not asking for personally identifiable data. The analysis reported here was approved by the *Consejo Divisonal de Ciencias Biológicas y de la Salud, Universidad Autónoma Metropolitana, Unidad Xochimilco*.

kin color and ethnicity. The interviewers classified people by skin color or ethnicity by observing the respondents. In both years, the 5 response categories were identical (white, light brown, dark brown, indigenous, black, and other), except that in 2000 the category "white" also had the following specification: "(*Güero*/White Skin)". The distributions of the categories in each year were: white: 254 in 2000 and 493 in 2012, light brown: 648 and 1,141, dark brown: 564 and 358, black: 3 and 2, and indigenous: 25 and 6. Because of the small number of cases, the last two groups had to be excluded from the analysis. Additionally, the languages spoken by people were taken into account, with there being 4 options: English, indigenous language/dialect, Spanish, and others. Indigenous people (2000, n=25; 2012, n=59) were considered to be those who answered affirmatively that they normally spoke an indigenous language at home.

Socioeconomic position (SEP). Interviewers inquired about the participant's schooling, asking "Up to what grade of school did you study? What is your last grade of studies?" Participants were subsequently classified into four levels: elementary school or less (options: “none, no formal education”, “unfinished elementary school”, “finished elementary school”) junior high school (“unfinished junior high school”, “finished junior high school”), high school (“unfinished high school”, “finishes high school”), and bachelor's degree or more (“unfinished bachelor´s degree”, “finished bachelor´s degree with diploma”). Subjective SEP was assessed by asking "People sometimes describe themselves as working class, middle class, upper class, or lower class. Would you describe yourself as from...?". The response options were high class, high middle class, lower middle class, working class, and lower class. The first two categories were collapsed into one and the group was named “high class”.

Living conditions. As an indicator of living conditions, the following question was analyzed, which included five possible response categories: "During the past year, was your family able to save, was it barely enough, did you spend any of your savings or did you have to borrow money? This question gives information on the resources available to the family to satisfy the needs of its members.

Perception of themselves and their environment. Participants were asked about the trust they had towards their neighbors, acquaintances, people they met for the first time, people of another religion or of another nationality. For each item, there were four response options ranging from "do not trust at all" (score of 1) to "trust completely" (score of 4). To obtain a trust index, the scores for the five items were summed, the reason for which this confidence interval could have values between 5 and 20.

Health-related events. Five outcomes were evaluated:

a) Perception of happiness, there being four response options: very happy, somewhat happy, not very happy, or not happy at all.
b) For the self-rated health, people were asked “In general, how would you describe your health state today? I would say it is…”. There were four options that were compounded to create a dichotomous variable: poor health (“fair” and “poor” options) and good health (“very good” and “good” options). The last two categories were combined to create a dichotomous variable. The perception of health status is a predictor of mortality.[24]
c) Life satisfaction was assessed with the question "All things considered, how satisfied are you with your life at the moment? Using this card where 1 means you are "completely dissatisfied" and 10 means you are "completely

satisfied". At what point would you put your satisfaction with your life, overall?". This variable was analyzed as continuous.

(d) The existence of food insecurity was assessed with the following question, "In the last 12 months, how often did you and your family go without food?" There were four options that were compounded to create a dichotomous variable: with insecurity ("frequently" and "sometimes") and without insecurity ("rarely" and "never" options). Food insecurity has a negative impact on people's physical and mental health.[25]

e) Access to health services was inquired about in this way: "In the last 12 months, how often did you and your family go without any medical treatment or medications you needed?" For this question, there were four options: frequently, sometimes, rarely, or never. The first two responses were considered evidence of lack of access to health services, respectively. These two events were only assessed for the year 2012.

Statistical analysis. Estimates were made using the survey commands (*svy*) of the STATA version [14.2] program, thereby considering the design of the surveys (i.e. probabilistic, stratified, stepwise, and clustered). Absolute and relative means or frequencies were obtained for the variables for the total population. The chi-square statistic was used to compare proportions and 95% confidence intervals were estimated to compare means. Linear, logistic, or ordinal regression models were also estimated (according to the measurement scale of the dependent variables), where the dependent variables were health events and the independent variables were skin color, together with demographic and locality variables. The adjustment is necessary bacause there are demographic differences according to skin color. The interaction between the year of the survey and skin color was included in the regression models. From the interaction, which was significant, probabilities were estimated and plotted. With the khb[26] command for STATA, mediation analysis was performed to determine the extent to which differences in the five health events, according to skin color, were explained by differences in socioeconomic position, living conditions and self-perception. This technique allows continuous or categorical variables to be modeled, the sample design is considered, provides unbiased estimates of the contributions of mediating variables, and allows confounding variables to be included. The use of these models assumes that both events and mediators are more frequent in the exposed group and mediators are associated with health events. When these assumptions were met, mediation models were estimated.

Results

Between one-sixth (2000=15.8%) and one-quarter (2012=24.7%) of Mexicans were considered white (Supplementary Table 1). The majority were perceived as light brown, followed by dark brown. Less than 3% of the population spoke an indigenous language. Between 2000 and 2012, the proportion of people residing in urban areas increased. In comparison with white people, brown people more frequently reported an indigenous language or to be married or in union. Compared to whites and those who did not speak an indigenous language, brown and indigenous people more frequently resided in rural areas.

From 2000 to 2012, the proportion of people who perceived themselves to be happy, in good health, and rated their life satisfaction scale higher increased (Table 1). Compared to whites, more light and dark brown people perceived themselves to be in poor health, had food insecurity and less access to health services. More indigenous people perceived that they lacked access to health services.

After adjusting for other covariates, compared to whites, light and dark brown people were more likely to perceive their happiness as fair (Table 2). Considering the same reference group, dark browns were more likely to experience food insecurity. Lack of access to health services was more likely to occur among light, dark and indigenous browns.

Table 1. Health events according to survey year, skin color or ethnicity

	Survey year			Skin color				Ethnicity		
	2000	2012		W	LB	DB		NI	I	
	%	%	*p*	%	%	%	*p*	%	%	*p*
Perception of happiness										
Not happy at all	1.0	0.4	0.000	0.7	0.6	0.5	0.201	0.7	1.4	0.612
Not very happy	7.2	5.3		5.1	5.9	7.4		6.0	8.6	
Somewhat happy	34.8	26.7		27.8	30.3	31.9		30.3	26.4	
Very happy	56.9	67.5		66.4	63.2	60.2		62.9	63.5	
Self-rated health										
Poor	4.1	2.2	0.000	2.9	2.3	4.0	0.000	2.9	5.0	0.406
Fair	34.4	25.1		20.6	29.0	34.7		29.0	34.1	
Good	42.1	46.6		47.6	45.2	41.7		44.9	37.3	
Very good	19.4	26.1		28.9	23.5	19.6		23.2	23.5	
Food insecurity										
Never	-	61.2		67.1	60.8	54.2	0.001	61.5	54.2	0.708
Rarely	-	20.6		18.9	21.3	20.7		20.5	23.7	
Sometimes	-	14.5		10.8	14.4	20.7		14.5	16.9	
Frequently	-	3.6		3.2	3.5	4.4		3.5	5.1	
Lack of access to health services										
Never	-	55.4		60.6	55.6	47.8	0.000	56.1	30.5	0.000
Rarely	-	14.0		13.8	14.6	12.6		14.0	15.2	
Sometimes	-	22.0		19.9	21.0	27.6		21.3	42.3	
Frequently	-	8.6		5.7	8.8	12.0		8.5	11.9	
	m	m		m	m	m		m	m	
Satisfaction with life*	8.13[a]	8.51[a]		8.44	8.41	8.23		8.35	8.23	

Source: authors.

Abbreviations: W, white; LB, light brown; DB, dark brown; I, indigenous; NI, non-indigenous; m, mean; -, not evaluated. * Mean on a scale from 1 (lowest perceived satisfaction) to 10 (highest).

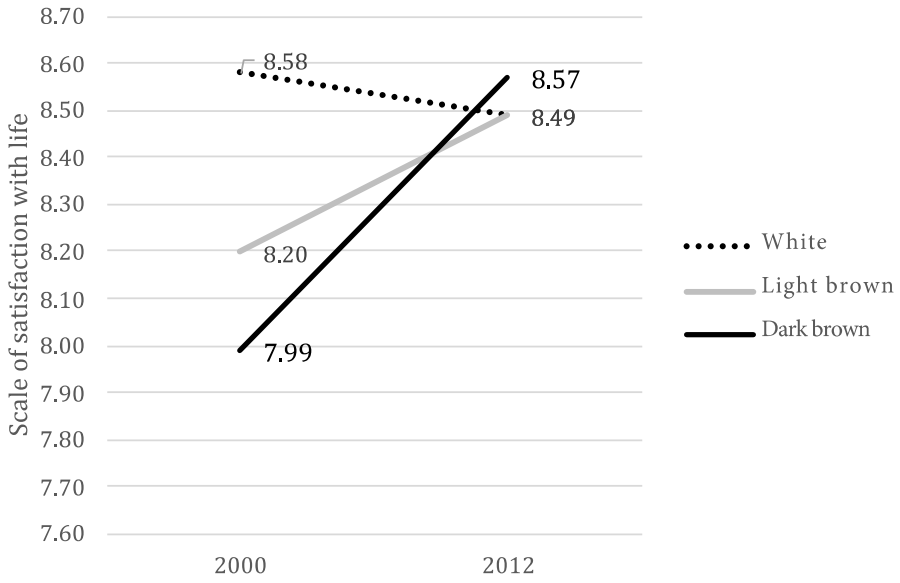
Table 2. Regression models with health events as dependent variables and skin color and ethnicity as independent variables

	Skin color					Ethnicity
	LB		DB		I	
	PR	*p*	PR	*p*	PR	*p*
Perception of happiness						
Not happy at all	0.91	0.877	0.61	0.495	n.e.	
Not very happy	1.13	0.556	1.24	0.355	1.99	0.127
Somewhat happy	1.18	0.122	1.09	0.478	1.23	0.474
Very happy	Ref.		Ref.		Ref.	
Señf-rated health						
Poor	1.07	0.823	1.62	0.155	0.93	0.929
Fair	1.85	0.000	2.26	0.000	0.63	0.226
Good	1.21	0.088	1.26	0.092	0.69	0.266
Very good	Ref.		Ref.		Ref.	
Food insecurity						
Never	Ref.		Ref.		Ref.	
Rarely	1.28	0.077	1.45	0.044	1.23	0.561
Sometimes	1.40	0.052	2.21	0.000	0.99	0.987
Frequently	1.22	0.524	1.92	0.101	1.46	0.569
Lack of access to health services						
Never	Ref.		Ref.		Ref.	
Rarely	1.12	0.472	1.16	0.513	1.93	0.130
Sometimes	1.08	0.573	1.51	0.021	2.78	0.002
Frequently	1.60	0.039	2.66	0.000	1.63	0.320

Source: authors

Abbreviations: LB, light brown; DB, dark brown; I, indigenous; PR, prevalence ratio; Ref, reference group; n.a., not estimable.

Figure 1. Interaction of survey year with skin color on perception of life satisfaction



Source: authors.

The interaction of survey year with skin color was statistically significant (β=0.33, t= 2.87, *p*=0.004) in the model where life satisfaction was the event, so these results were plotted (Figure 1). In 2000 white-skinned people rated higher on the satisfaction with their lives scale compared to light and dark brown people. While in 2012 the life satisfaction of white people decreased slightly (-0.09), but that of light and dark brown people increased (+0.29 and +0.58, respectively); with the average score reported by whites and light brown people being similar (8.49).

With respect to the premises of the mediation analysis, it was observed that, compared to whites, light and dark brown people had less schooling, reported belonging to the lower social class and had to borrow money (Supplementary Table 2). Indigenous people had less schooling and did not save money. In addition, from 2000 to 2012 the respondents' perception of freedom and control over their lives increased; being higher in those who were not indigenous. Whites, to a greater extent than browns, believed that children must be independent and reported greater confidence, in general.

Those who had less schooling, low subjective socioeconomic position and who were unable to save were more likely to be in poor health, face food insecurity and lack access to health services (Supplementary Table 3). People who reported poor health, food insecurity and lack of access to health services were associated with lower scores for the confidence scale, in general, and for perception of freedom and control over their lives. While those who ranked themselves as having poor health and food insecurity scored lower on the children's independence scale.

The higher risk of perceived poor health in light brown and dark browns, relative to whites, was related to schooling, SEP, savings, and the belief that children should be independent (for 2000 and 2012), while for 2012, trust, in general, was also a contributing variable to differences in perceived poor health (Table 3).The risk of food insecurity in dark brown people was related to schooling, savings, SEP, confidence, in general, and the belief that children should be independent. These same variables, except for children's independence, contributed to the differences in lack of access to health services among dark browns.

Table 3. Mediation models to assess the contribution of mediating variables. The independent variable is skin color or ethnic characteristics, and the dependent variables are unhappiness, poor health, food insecurity and lack of access to health services.

	PH*		PH**		FI**		NAHS**	
Light brown	OR	95%CI	OR	95%CI	OR	95%CI	OR	95%CI
Reduced model [1]	1.63	1.30-2.05	1.65	1.24-2.19	1.26	0.93-1.72	1.15	0.90-1.47
Complete model [2]	1.35	1.07-1.70	1.32	0.99-1.76				
Difference [3]	1.20	1.11-1.31	1.24	1.11-1.40				
Components of difference [4]		%		%		%		%
Subjective socioeconomic position		6.06		4.47				
Education		24.88		26.81				
Saved money		5.13		3.89				
Independence		2.22		0.86				
Trust		-		7.78				
Dark brown	OR	95%CI	OR	95%CI	OR	95%CI	OR	95%CI
Reduced model [1]	1.95	1.50-2.52	1.86	1.31-2.65	1.95	1.34-2.85	1.66	1.22-2.26
Complete model [2]	1.34	1.02-1.75	1.28	0.90-1.84	1.42	0.97-2.08	1.41	1.03-1.93
Difference [3]	1.45	1.32-1.60	1.45	1.27-1.65	1.37	1.18-1.59	1.17	1.06-1.30
Components of difference [4]		%		%		%		%
Subjective socioeconomic position		9.72		4.69		6.23		4.04
Education		38.01		38.12		21.80		9.36
Saved money		5.93		4.06		12.78		12.39
Independence		2.54		1.42		1.56		-
Trust		-		11.20		4.83		6.42

Source: authors.

1 Models without mediating variables. 2 Models adjusted for mediating variables. Both the reduced and full models were adjusted for skin color or ethnicity, sex, age, marital status, locality and year of the survey. 3 Differences between the full and reduced models. 4 Percentage contribution of each variable to the difference between models. * Estimated with data from 2000 and 2012; ** Estimated with data from 2012.

Abbreviations: PH, poor health; FI, food insecurity; NAHS, no access to health services; OR, odds ratio in a logistic regression model; 95% CI, 95% confidence interval; -, not applicable.

Discussion

This study aims to contribute to the emerging field of study[5,8] on the existence of racist disparities in health conditions in the Spanish-speaking Latin American population. In this region, the concept of racism tends to document the disadvantages of the indigenous and Afro-descendant populations,[12,27] and in our theoretical approach, we consider it essential to incorporate the category of white privilege,13 according to which a racist gradient is expected in life experiences and, therefore, in levels of well-being and health. Two results are congruent with this perspective:

a) Inequalities with respect to the white population are not limited to the indigenous population; they are also observed in the light brown and dark brown population.
b) Disparities are greater in the groups that are most symbolically distant from the white population: indigenous and dark brown. Future studies should be guided by both categories because they are complementary and will allow us to define hypotheses on the effects of existing racist hierarchies in Mexico and other Latin American countries.

In addition to verifying the existence of health disparities associated with skin color, this

study analyzed the role of potential mediators in such disparities. In the Mexican population, low schooling, and SEP account for an important proportion of the higher risk that dark-skinned people have of experiencing negative events, such as poor self-perceived health, lack of access to health services, and food insecurity (the last two only apply to dark-skinned people). These results confirm previous observations[6,7] regarding the close relationship between skin color and schooling, occupation, and income in Mexico. Analyzing the differences in living conditions, according to skin color or geographic ancestry, allows us to show how the inequalities derived from racism and white privilege materialize in people's lives. The dissatisfaction of needs was greater among dark-skinned people than among whites. Low SEP may result in less access to goods (e.g., food) and services (e.g., health care), although it is also linked to the experience of subordination.[21]

Along with dissimilarities in material living conditions, trust explained the differences in welfare levels between whites and browns. Low levels of trust are associated with poorer perceptions of health status; in addition to not seeking alternative support or assistance outside the family.[15] The lower access to health services by brown skinned people may be the result of a combination of economic deprivation, experiences of discrimination in services, and lack of trust in health workers.

Some of the differences between indigenous people and whites differed from those observed with brown people. They did not exist in the perception of health status and food insecurity between indigenous and non-indigenous people; but the former were more likely to experience lack of access to health services. The first two are indicators of mental health, so it can be hypothesized that belonging to an ethnic group and/or living in localities where the indigenous population predominates may have a protective effect on mental health. At the same time, the lack of access to basic services may be a product of the poverty in which most of the indigenous population lives[2] and perhaps because of the greater risk of suffering from preventable diseases.[28]

An unexpected result is the difference in life satisfaction between whites and browns, which decreased during the study period. It is possible that this trend is a result of the re-valorization of the indigenous, which has occurred in recent years in Mexico. The emergence of the Zapatista movement in the 1990s made evident the conditions of marginalization to which most of the Mexican indigenous population is subjected and that one of the legacies of the colonial era is the devaluation of the indigenous condition.[29] It has been suggested that this political movement [29,30] has favored the vindication of the indigenous, so that more people are interested in assuming such an identity. This could imply a positive re-signification of brown skin color and could explain the disappearance of the difference in life satisfaction observed in our analysis.

A strength of this study is that it is based on the analysis of a representative survey of adults in Mexico conducted at two points in time. However, the research also has limitations that must be considered: this paper analyzed survey databases whose design was not primarily aimed at documenting the consequences of racism and white privilege. Thus, some of the variables that were analyzed do not adequately reflect the concepts put forward in the theoretical model. Nor was it possible to assess the contribution of self-perceived beauty and experiences of discrimination to well-being, which have been shown to be relevant in explaining racist disparities.[5] The sample size of the MVA is small and this probably resulted in not observing significant differences in some variables since, for example, the number of indigenous people was limited. Finally, some of the health events were assessed with only one question, so more comprehensive measures are needed in the future.

The measurement of skin color and geographic ancestry of the participants used here is based on the classification by the interviewers according to predefined categories. In this classification, the evaluation of the phenotype of the persons is combined with the ethnic affiliation; therefore, the classifications are not mutually exclusive (e.g., most indigenous people are brown). In contrast, in another study, a color palette was used to assess skin color and ethnicity was probed by questions.[8] Given that this is a nascent field, it is difficult to establish the best procedure for assessing geographic ancestry and skin color. However, it should be noted that we are

not interested in evaluating a biological trait (i.e., skin pigmentation), but rather in understanding the effect of socially constructed inequalities linked to symbolic constructs (racism and white privilege), for which the relevant factor is how the subjects perceive themselves and are perceived by the people with whom they interact. In this sense, the categories that include skin color and ethnicity better reflect the racialized subjects and groups that exist in Mexico, since, for example, being brown in urban contexts differs from being brown and belonging to an ethnic group in rural areas.[31] The concept of ethnicity focuses only on the disadvantages of the "minority" indigenous population, emphasizing that the problems they face derive from their sociolinguistic differences with respect to the mestizo majority. In contrast, the notions of racism and white privilege draw attention to the advantages enjoyed by a (white) minority to the detriment of those faced by the "majority" (brown) of the Mexican population. In this sense, the approach developed here implies that racist inequalities have their origin in the power associated with sociocultural constructs (i.e. the prejudices associated with being indigenous or Afro-descendant and the positive stereotypes associated with being European) and which permeates society as a whole.

Our results and those of other authors[5,8] indicate that the progressive reduction of racism and white privilege should be incorporated into the public policy agenda, as they negatively affect the majority of the Mexican (and perhaps Latin American) brown population in different spheres of life. Institutions and policies aimed at combating discrimination need to broaden their focus, adding to discrimination based on ethnicity (i.e. towards indigenous or Afro-descendants) other expressions of racism, such as the disadvantages of brown people. Reversing racism and white privilege will be a difficult and long-term task because they have been internalized by Mexican society for centuries, so the extent that they are now naturalized. Even individuals assume certain internalized attitudes towards themselves, depending on their location in the hierarchies created around racism and white privilege.

The documentation and reporting of racist disparities should continue, although the best way to evaluate geographic ancestry is yet to be defined. It is urgent that skin color and geographic ancestry be systematically investigated in official statistics (census and surveys), in order to have data on the evolution of racist inequalities. Research needs to be designed and conducted to document in a more detailed and specific manner the existence and effects of racism and white privilege. Future research is needed to assess whether there are differences between men and women and between age groups with respect to the experience of racism and white privilege and their effects on health and well-being.

In summary, this study showed that most disparities in the perception of general health status, food insecurity, and lack of access to health services among blacks compared to whites were due to the latter having low schooling and subjective SEP. White privilege and racism are closely related to socioeconomic stratification, making it difficult to separate these two forms of inequity. At the same time, low trust in others may also contribute to such differences. In the case of indigenous populations, although they share some experiences with brown people, they also have specificities that must be recognized. It should also be recognized that these racist disparities have changed and, in some indicators, appear to have been reduced.

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