

The Colors of Smoking: Relationship Between Race and Tobacco Use in Brazil

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As Cores do Tabagismo: Relação entre Raça e Consumo de Tabaco no Brasil

Los Colores del Fumar: Relación entre Raza y Uso de Tabaco en Brasil

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INTRODUCTION

It is quite solid and evident the relation between race (and ethnicity) and sickening in Brazil. The skin color of anyone holds a strong grip on its life, sickening and death¹. The death mortality rate by the coronavirus disease 2019 – COVID-19 was higher in Blacks than in Whites², a clear example of the association of mortality with race.

Social, environmental and genetic factors are associated with nicotine dependence, and tobacco-related diseases. Age, gender, social class, educational level, geographic location and race/ethnicity are some of the factors that may impact smoking use³. Race/ethnicity relation, among them, is perhaps one of the less explored and addressed when tobacco control in Brazil is discussed.

Paucity of studies exploring the impact of race and ethnicity over tobacco use and its outcomes makes this theme still more outstanding, because, regardless of the evident drop of its use in the last years the habit is still more prevalent among Blacks and Pardo Brazilians than in Whites⁴.

The issue of structural racism as social determinant is yet underestimated and, in some cases, disregarded. Scarce are the studies evaluating its impact over smoking.

WHAT IS KNOWN ABOUT THE THEME?

A retrospective qualitative analysis in June 2021 was carried out in the bibliographic databases PubMed (MEDLINE) and SciELO to support this discussion and show to what extent this theme is poorly studied in Brazil. The search used the following terms: (Smoking) AND (Race) AND (Brazil) OR (Smoking) AND (Afro-American) AND (Brazil) OR (Smoking AND “Special Populations” AND Brazil). The whole period available in the databases until the day of the search was investigated; inclusion criteria were articles published in English,

Portuguese and Spanish. Duplicate articles, not available in full and in other languages were excluded. Three articles addressing the relation race/ethnicity and tobacco use in Brazil were selected after the search.

Additionally, in order to discuss the genetic contribution to the main subject of the articles, a bibliographic search was conducted. The same terms were used, adding the descriptors: (genetic OR polymorphism). Two articles within the scope were found in accordance with the same inclusion and exclusion criteria.

Relevant unpublished or review articles to strengthen the scientific-technical backbone were included too.

DEVELOPMENT

In the United States, mostly, studies concluded that the ethnic origin is a risk factor for smoking, for instance, the prevalence in Hispanics is 10.1% while in native Americans is 2-fold higher, 21.9%⁵.

Studies indicate that tobacco prevalence is higher among Blacks and Pardo Brazilians in Brazil⁴. According to the National Health Survey of 2019⁴, the predominance among Blacks was 13.7%, 13.5% in Pardo Brazilians and 11.8% in Whites. In addition, Blacks and Pardo Brazilians had low education level and income as Table 1 shows. These are some of the many indicators revealing the racial inequality still imbedded in the Brazilian society.

Low education, low income and poor urbanization are risk factors for smoking in Brazil^{4,8}, partially attributed to social factors, since Blacks and Pardo Brazilians account for a large part of the low-income and low educated population, which contributes for the vulnerability of these individuals⁹.

Although no studies evaluating the impacts over health, smoke quitting or standard of tobacco use related to race/ethnicity in Brazil have been published, there are

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Table 1. Structure, prevalence of tobacco use, education and income of racial groups in Brazil

	Percentage of the Brazilian Population	Prevalence of tobacco use (%)	Illiteracy (%)	Individuals aged 25 years or older with Complete High School (%)	Month average income (R\$)	Percentage of individuals below poverty line (US\$ 1.90/day)
Whites	47.43	11.8	3.9	55.8	2.796	3.6
Blacks	7.61	13.7	9.1*	40.3*	1.608*	8.8*
Pardo Brazilians	43.13	13.5				
Yellow	1.09	No data	No data	No data	No data	No data
Indians	0.43	No data	No data	No data	No data	No data

(*) Blacks + Pardo Brazilians according to IBGE.

Source: Instituto Brasileiro de Geografia e Estatística⁴ and Malta et al.⁷

some evidences about the impact of smoking in Afro-descendants as high mortality by cerebrovascular diseases in Blacks¹⁰.

These data hold similarity with USA's where Afro-descendants, in despite of late-beginning and less cigarettes smoked than Whites, are more prone to die by tobacco-related diseases like strokes^{11,12}.

There are no studies addressing the desire to quit smoking in Blacks in Brazil and the exposure of this population to secondhand smoking. Based in the literature, USA's Afro-Americans express more desire to quit, though unsuccessful when compared with Hispanics, Whites and Asians¹³. Non-smokers of this group would be more propense to secondhand smoking¹⁴.

More than 70% of USA's Afro-Americans preferred menthol over regular cigarettes, in addition to high prevalence of young Blacks using this type when compared with other ethnicities¹⁵. No similar studies exist in Brazil.

This preference in USA is typically associated with targeted tobacco industries (TI) strategies since the decade of 1960 when urbanization in Afro-descendants living areas started, possibly explaining different tobacco use patterns¹⁶.

The literature still hints that Afro-descendants smokers of mentholated cigarettes fail more when attempting to quit smoking, although the mechanisms for this process are yet unclear.

So far in Brazil no targeted TI strategies for Blacks have been detected, notwithstanding the beguiling advertising strategies mostly among youngsters, as in music festivals and social media, as "*Folha de São Paulo*" published in an article¹⁸; it is not far-fetched to surmise that these strategies could be easily centered to specific groups.

Genetics is another less investigated factor but that could easily be part of this scenario; some studies say it might be a strong component for tobacco behavior and

show how interindividual genetic variations can impact the response to environmental risk factors^{19,20}.

The genetic influence of tobacco use in the Brazilian population revealed in another study concluded that heritability contributed in more than 50% for tobacco initiation, with variation from 23% to 32% for persistence and number of cigarettes smoked per day²¹.

In addition, ethnicity has been indicated as a possible factor influencing the relation between genetic variability and tobacco use²²⁻²⁴.

The influence of ethnicity in the genetic-smoking relation of the Brazilian population, whose ethnic profile is heterogenous and highly miscegenated²⁵ is complex and poorly investigated²⁶. Mostly, the studies evaluate the variable race as a self-referred characteristic with additional genetic markers related to ancestry, which contributed to minimize the limitations of this type of study in the context of miscegenation of the Brazilian population^{1,26}. Regardless of genetic influence, the socioeconomic inequalities can be a more important factor than ancestry in relation to tobacco use and its consequences²⁶.

Data about Brazilian Afro-descendants and tobacco use are scarce making them invisible in public policies. Further to these findings, an article denouncing an alleged censorship by the Ministry of Health of data about the health of this population group²⁷ has been published. Therefore, the lack of studies do not reflect the dimension of the issue.

CONCLUSION

Tobacco use and its impact over African descendants is influenced by social determinants, structural racism and genetic factors. More studies would be required to reveal the burden of each factor (education, income and urbanization, for instance) which are clearly unfavorable

for tobacco dependence. It is clear that Blacks smoke more than other racial groups.

The TI has many advertising campaigns for different target-groups. The lack of analysis of Blacks-targeted campaigns does not mean they do not exist. Actually, it would be another type of investigation. The difficulty in pulling apart race/ethnicity from education and income level is another issue deserving more attention.

The definition of these factors is important because contributes to define new strategies to cope with tobacco use since the current model is based in exclusive communication patterns and does not address different social, cultural and racial aspects, which, despite its global success, can be improved.

Having African ascendants in Brazil, by association with risk factors such as low income and poor education, together with possible genetic contribution is a kind of perfect storm for smoking and tobacco-related diseases, however, due to scarce studies, this population goes unnoticed by legislators of tobacco-related health policies and investigators. In order to improve the already successful Brazilian National Tobacco Control Policy and minimize the risks caused by tobacco in this population, more studies are paramount.

CONTRIBUTIONS

André Luiz Oliveira da Silva contributed substantially for the study design and/or conception, acquisition, analysis and/or interpretation of the data, wording and/or critical review. Caroline de Lima Mota, Renata Aparecida Pereira, Simone Mitri Nogueira and Josino Costa Moreira contributed substantially for the acquisition, analysis and/or interpretation of the data, wording and/or critical review. All the authors approved the final version to be published.

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DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

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