

Racial and ethnic-related differences in obesity and the migration factor

Diferenças raciais e étnicas relacionadas com a obesidade e a migração

Las diferencias raciales y étnicas relacionadas con la obesidad y el factor de la migración

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To the Editors,

I read the systematic review *The Impact of Migration on Body Weight: A Review* published in the February 2015 issue ¹. While the subject of this review is relevant to the global issue of obesity, there are significant concerns in the presentation of the findings by Goulão et al. In lieu of the limited number of studies on immigration and obesity in some ethnic groups, the authors should have expanded their review to include other databases such as EMBASE and the Cochrane Reviews, conference proceedings, and national surveys for those ethnic groups where limited studies were reported. Through the EMBASE database search, five out of 13 studies were relevant using the search terms immigrant, obesity, acculturation, and Latino (citations provided upon request). The literature search should have been inclusive of ethnic-specific terms as additional studies were found relevant to this review. There were significant limitations in the authors' presentation of Hispanics immigrants of various ethnic origins (Central and South Americans), considering the increasing diversity in developing countries ². African Caribbean immigrants were not adequately highlighted in this systematic review despite the increasing prevalence of obesity evidenced by the large number of published studies ^{3,4}.

It is commendable that Goulão et al. tried to address a very important topic such as migration and its associated racial and ethnic differences contributing to the prevalence of obesity in adult migrants. The authors addressed diet, physical inactivity, cultural values, and religion, very relevant factors in the context of migration. The authors also described the methodological limitations encountered by ethnic groups and summarized mediators of health status in migrants. Social factors, including marital and socioeconomic status, are important factors that need to be considered in the study of racial and ethnic group differences associated with migrants' increasing weight status ^{5,6}. Acculturation scales inclusive of indicators such as primary language and length of residence in migrating country should also be con-

sidered, in order to examine additional indicators of acculturation for first generation immigrants ^{7,8}.

While the authors indicated the type of reviews conducted prior to this systematic review, the inclusion of the factors described above would have contributed significantly to the quality of this systematic review. The carrying out of further studies addressing these factors should be advocated to better understand the racial and ethnic differences in the prevalence of obesity among first-generation adult immigrants. Due to the significant implications that systematic reviews have for clinicians and policy makers addressing obesity in adult immigrants, it is important that systematic reviews addressing global migration be inclusive of those racial and ethnic groups affected by the obesity epidemic.

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The authors reply

Os autores respondem

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In reply,

We thank Chang-Martinez for the letter in response to our systematic review article *The Impact of Migration on Body Weight: A Review*. We could not agree more with Chang-Martinez's view on the relevance of ethnic factors in obesity and acculturation, as we state in our conclusions. In fact, several ethnic and sociocultural factors are essential for understanding the impact of acculturation on obesity levels for multiple reasons, including: genetic pool variations, political environment during the migration process, cultural identity, body image perceptions, amongst others. As we have stated, research about migration impact on health tends to confuse geographic origin with such ethnic and sociocultural determinants. They should not be seen as equivalent. On the other hand, racial factors are referred to by the Chang-Martinez but even though the term is commonly used in the literature, we believe it has a negative connotation and should not be used in this context.

Any systematic review of the literature demands a clear definition of goals and criteria of inclusion and exclusion of the sample units (in this case, scientific articles), which makes it inherently, and necessarily, limited and restricted. Moreover, it is particularly difficult to include very specific ethnic subgroups due to a lack of literature on the subject and frequent omission of (or imprecise) ethnicity definitions. As a matter of fact, the concept of ethnicity is commonly used in medical literature, but it is complex, hard to define and, as a result, inconsistent. It is also a multidimensional concept that can involve aspects such as: shared origins or social background, shared distinctive culture or tradition maintained between generations and promoting a sense of identity and group, and common language and religious traditions ¹. Additionally, self-classification of ethnicity is commonly used (where people are asked to indicate to which ethnic group they feel they belong). Even though this self-defining approach has its advantages, the main drawback is its changeable nature – the self-perception of ethnicity may change over time and according to contexts. Better definitions and terminology are urgently needed to allow for scientific progress ². A few journal editors have also set standards by publishing explicit guidelines for the use of ethnicity ^{2,3}.

One of the main suggestions Chang-Martinez makes in her letter is the inclusion of ethnicities in all studies on this matter and not just the geographic region of birth of the immigrants, as well as a more clear definition of the ethnicities included. Without these changes, it is hard to compare studies and to take

appropriate conclusions from the literature on this topic. A further problem is the lack of agreement on how to define those different ethnic groups amongst experts on the field. The definitions vary according to the studies and over time ⁴, but without the terms of ethnicity explicitly defined, it is impossible to make local or international comparisons ².

Different groups of Hispanic immigrants can have immensely diverse health trajectories, as pointed out by Chang-Martinez. We agree that the presentation of stratified results for these subgroups would be ideal. It is important to keep in mind that historical and socio-political factors that influence migration (from both origin and host countries) vary across different Latino/Hispanic groups. In fact, this applies to any flow of migration: different momenta, reasons for migration, type of social ethnic subgroups and even their path can have an effect on future migrants' health in the host country. Societal contexts that promote and inhibit health must be studied in order to better understand the health differences amongst different ethnicities and subgroups within the same ethnicity ⁵. Abraído-Lanza et al. ⁵ give, as an example, the conditions in which Cuban immigrants entered the USA and how such conditions positively affected their health status. The impact that historical and political factors have on acculturation processes and health outcomes is likely to be immense but it is very rarely studied. Behavioural and social measures may not be enough to explain the difference between Hispanic subgroups, but there are obvious disparities among Cuban and South/Central American immigrant groups in the US, more closely comparable with the situation of other subgroups such as Puerto Ricans and Mexican immigrants in the same country ⁶.

Afro-Caribbean immigrants are a specific group of immigrants, usually included in studies conducted in the United Kingdom. For that reason, there's little information available on this subgroup that could further inform our systematic review article. However, it is important to make the distinction between this subgroup of African immigrants and others since they are different in terms of beliefs, risk factors and disease experiences ². The term Afro-Caribbean usually refers to people with African ancestral origins who migrated via the Caribbean islands ² but it is frequently used inconsistently ⁷ leading to confusion when applied and masking eventual differences between diverse subgroups coming from different islands. Mixing Afro-Caribbean with African populations from Africa can lead to even more variances being ignored. In the United Kingdom, a higher obesity prevalence has been reported for Black Caribbean women compared with women from the general population. However, men are less likely to have a raised waist-to-hip ratio compared with the general population ⁴. One possible contributing factor is how obesity is perceived in their home country, as healthy and overweight women are viewed as preferential compared with thin women ⁸. On the other hand, the health of 2nd and 3rd generations of African Caribbean groups might be quite different from their parents and grandparents ². Upward intergenerational social mobility of the 2nd and 3rd generation seems to play a protective role ⁹.

In conclusion, we believe Chang-Martinez's views are quite relevant and that ethnicity-based analyses,

amongst other factors, are essential when presenting studies about migration and its impact on health. However, the lack of consensus on ethnic definitions, as well as the complexity of the concept itself, and the fact that it is frequently obtained by self-classification present a challenge. There is need for further clarification in this field that might allow researchers to study these phenomena in greater depth and in more heuristic and insightful ways, namely through accurate and informative systematic reviews or meta-analysis.

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