# The structuring of ethnic-related health inequalities - A literature review

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### **Abstract**

**Aim:** This paper aims at listing the potentially explaining factors of inequalities in health between ethnic groups through a review of literature and to assess the most relevant ones. **Methods:** PubMed and ScienceDirect were used to search for literature on ethnic health inequalities. The resulting papers were screened for their relevance.

**Results:** 14 studies were selected and seven explaining factors were identified: environmental factors, socio-economic factors, racism and discrimination, ethnic density, health behaviour, access to healthcare and religion.

**Conclusion:** Socio-economic factors together with experience and awareness of racism are major explaining factors for health inequalities between ethnic groups. The lower socio-economic position of minority ethnic groups also influences other factors threatening their health. However, the differences in socio-economic positions should not be considered as autonomous, but produced by the long history of discrimination and racism.

**Keywords:** discrimination, ethnicity, inequalities, minority ethnic groups, socio-economic factors.

#### Introduction

If the general health of the populations has greatly improved after the World War II (1), inequalities in health have also grown between, within countries, but also within ethnic groups. With migration and other demographic pressures leading to a growing ethnically diverse population in many European countries (2), it is becoming crucial to investigate this field. Indeed, assessment and monitoring of health inequalities for minority ethnic groups is essential as health is a factor of integration. More investigations would enable the comparison between countries, a way of assessing good practices and helping to tackle those inequalities. But, regardless of its importance, this field does not encounter the same level of preoccupation everywhere in Europe and the studies on ethnicity remain scarce, mainly due to the poor availability of data. If enough studies exist today to assert this important heterogeneity across ethnic groups (3,4), what remains unclear are the factors underlying this heterogeneity. Indeed, when considering ethnicity in health issues, it is important to keep in mind that health outcomes are not determined by ethnicity itself, but by the factors associated with ethnicity.

The aim of this literature review is to list those explaining factors and assess their relevance in explaining this heterogeneity. It can give an insight to researchers who want to explore ethnic health inequalities in a given country or a population on which factors can be determinant and which data are to be looked for. This also gives an insight to policymakers about what has to be taken into consideration, on which factors to act when implementing a policy aimed at reducing the inequalities in health.

# **Methods**

Google Scholar was first used in order to find general core texts which could give an insight on the relationship between ethnicity and health, using keywords such as "ethnicity and health", "health inequalities and ethnicity" and "ethnic inequalities in health". American and English reports about health inequalities were mainly found, but also researches conducted on ethnicity and health issues. This first-hand research of literature gave an insight of what factors play or have the potential to play a role in ethnic-health related inequalities. Secondly, in order to find precise data and studies, PubMed database was used with the new keywords learned in the core texts, such as "socioeconomic health ethnicity inequalities", "selfperceived discrimination health ethnicity", "social determinants health ethnicity", "inequalities health ethnicity". ScienceDirect was also used to find articles, using the same keywords and the function "recommended articles", which links all the similar articles available.

Finally, it was necessary to find information about the use of ethnicity data and critics to analyze the different data found about ethnicity measurements. Relevant articles were found in searching with keywords such as "ethnicity data health studies" and "measuring ethnicity health", "assessing ethnicity health" still in PubMed database and ScienceDirect. Only the studies conducted after 1990 were chosen.

Overall, 638 studies were found. A few recent studies found explaining inequalities by genetic factors were rejected, as most of the papers on ethnic inequalities criticize this approach, stating that there is a "considerable lack of evidence and more than 100 years of research evidence exposing the limitations of such assumptions" (5). If there are some evidences that broad continental groups are genetically similar, there is little evidence that these correspond to ethnic categories. Indeed, there is a greater genetic variation between individuals within one ethnic group than there is between ethnic groups, where 93% to 95% of genetic variation is within population groups (6). Studies made outside Europe were also rejected although those showing example or similarities with studies made in the United States were kept. Studies where ethnicity was self-assessed were prioritized, but some studies assessing ethnicity by country of birth were also taken into consideration when believed that it probably does not affect the results. In the same way, studies assessing health by self-rated health were selected, as this measure is a good predictor of morbidity and allows for international comparisons (7), but also studies considering limiting long-standing illness. The different ethnic groups

considered in the different studies where not taken into consideration, as the focus here was on the potentially explaining factors. More general studies about the use of ethnicity in health researches were also found and used for the discussion but not considered in the results.

#### Results and Discussion

Fourteen studies where found, identifying seven potentially explaining factors, as presented in Table 1.

Table 1. Summary of the studies on ethnic-related inequalities and the respective potentially explaining factors

Potentially explaining factors	Studies
Environmental factors	Karlsen, Nazroo, & Stephenson, 2002 (8); Lorant, Van Oyen, & Thomas, 2008 (9); Mindell et al., 2014 (2); Bécares, Nazroo, Albor, Chandola, & Stafford, 2012 (10)
Socio-Economic factors	Kelaher, Paul, Lambert, Ahmad, & Smith, 2008 (11); Nazroo, 2003 (12); Mindell et al., 2014 (2)
Racism and discrimination	Karlsen & Nazroo, 2002b (13); Nazroo, 2003 (12); Bécares, Nazroo, & Stafford, 2009 (14); Karlsen & Nazroo, 2004 (15); Karlsen & Nazroo, 2002a (16)
Ethnic density	Stafford, Becares, & Nazroo, 2009 (17); Karlsen et al., 2002 (13); Bécares et al., 2009 (14); Karlsen et al., 2002 (15)
Health behavior	Mindell et al., 2014 (2)
Access to healthcare	Adamson, Ben-Shlomo, Chaturvedi, & Donovan, 2003 (18)
Religion	Karlsen & Nazroo, 2010 (19)

The literature search revealed that, while there are numerous studies demonstrating the inequalities in health between nationals and non-nationals, there are fewer papers investigating their causes. Additionally, a lot of studies have assessed ethnicity by country of birth, an unsatisfactory way of measuring ethnicity, but the only option available in most of the European countries. Indeed, the collection of data on ethnicity remains contested

in the majority of European countries due to historical and political backgrounds, and when available they are problematic due to a lack of an agreed definition of ethnicity. Ethnicity is however usually defined as a social construct and as a group that has a shared history, ancestry, and identity, and that shares characteristics such as a geographical affiliation, culture and traditions, language, and religious tradition (20).

Measuring ethnicity by country of birth is unsatisfactory as people may identify themselves to the country of their parents, especially if they used the habits and language of the country of origin at home. That way, the child is more likely to adopt the food habits and health behavior of her/his family, while born in the country. Self-assessed ethnicity is therefore often suggested as the most accurate way of assessing individuals' ethnicity (21). But, the validity and reliability of the data collected may still be problematic as ethnicity is a broad and complex concept. Not only the category constructed might not be relevant for some individuals, but Kaplan and Bennet (22) also proved that self-report may not fully capture the effects of discrimination and individuals might change their self-identification depending upon the context in which they are asked to so designate (22). Similarly, individuals might also be reluctant to mention it as they might fear discrimination, stigmatization, and exclusion.

The review of these studies demonstrated the fundamental importance of disaggregating the data on ethnicity as the explaining factors can be significant for certain groups, while absolutely not for others. An example is given by Mindell et al. (2), who found in their study that Black African men had a better selfreported health than White British men, while Black Caribbean had increased odds of poor self-reported health, and that the Indian population showed better self-reported health than Pakistani or Bangladeshi. Measuring ethnicity in health inequalities studies also encounter a lot of criticism. Some argue that the classification of individuals on the basis of socially constructed categories of ethnicity serves to reinforce the ethnic and racial divisions that already exist (23). Others argue that the categories developed for ethnicity are often used to compare minority groups to the majority of the population and these comparisons often focus on the negative aspects of the health and lives of minority group members (24). Therefore, the outputs of the studies are biased. Finally, some acknowledge that a focus on ethnic groups may lead researchers to believe or encourage them to disregard relevant social or cultural processes that are shared across group boundaries (25).

Neighborhood studies show that, in the UK, minority ethnic groups are over-represented in deprived areas (11), a path to investigate to understand the lower self-reported health of ethnic minorities. Karlsen et al. (13) found some statistically significant random area level effect for all the ethnic groups examined, but, on the whole, the study concluded that there were no statistically significant area level variables in the final models. Mindell et al. (2) did not find any relevant association neither while studying ethnic minorities in the UK. On the contrary, Bécares et al. (14) report that there is an association between increased area deprivation and poor self-rated health, which is stronger for white British people as compared to ethnic minority groups. The researchers suggest that the cumulative disadvantage experienced by minority ethnic people could lead to a stronger resilience to concentrated disadvantage than the one of white people. Lorant et al. (9) investigated the impact of contextual factors on the self-rated health and long standing illnesses of migrants in Belgium and also find that contextual factors play a role for some migrant groups. Those mixed results might be due, among other, to the different measurements used to evaluate the environment. Indeed, to assess it, Lorant et al. (9) computed factors covering four features of the context: Environmental hazards, public amenities, socio-cultural factors, and socio-economic segregation. On the other hand, Karlsen et al. (13) assessed the perception of quality of the local area, related to the quality of the local environment, the provision of local amenities and local problems of crime and nuisance. It might also be explained by the different effects on residents, depending on their ethnicity, that the different contextual characteristics of a neighborhood might have.

On the other hand, regarding concentration, some studies show that increased ethnic density is associated with protective effects on mental health and on some physical health outcomes through the ethnic density effect, which stipulates that as the size of an ethnic minority group increases, their health issues will decrease (11). Those positive health outcomes are attributed to the protective effect of mutual support, sense of community and stronger social cohesion showed in areas where ethnic minority people concentrate (14).

However, those studies precise that evidences are mixed and the findings of Karlsen et al. (13) suggest that there is no ethnic density effects on selfassessed health for ethnic minority groups. Those mixed results could have several explanations. The protective effects could be experienced only at an individual level, and the variations in the ethnic density effect between ethnic groups might be because living among co-ethnics does not have the same impact for all ethnic groups or for all health outcomes (14). It also could be linked to the fact that potentially explaining factors of the impact of ethnic density on health, as social support, racism, lower stigmatization, do not relate to ethnic density as defined, assessed or measured here. Protective effects can also come from the religious beliefs and affiliations. Karlsen et al. (15) showed evidences of a strong and independent role for religion, with risks for the different health indicators varying between the same ethnic but different religious identifications. Those findings could be attributed to the pursued health behaviors, or the social cohesion resulting from the identification to a religious group.

Investing racism as an explaining factor of the impact of health density produced significant relationships. Bécares et al. (14) found that the experience of racism is lower in places of high ethnic density, and indicate a tendency for weaker association between racism and health as ethnic density increase. Indeed, experiences of and awareness of racism appear to be central to the lives of ethnic minority people (12). Karlsen et al. (13) studied the relationship between racism and health and concluded that there was a strong independent association between poor or fair self-rated health and experience of racism and perceived racial discrimination. Those findings are shared by

all the other studies found (5,22), reporting that the different ways in which racism may manifest itself, as interpersonal violence, perceptions of racism in the society, institutional discrimination, or socioeconomic disadvantage all have independent detrimental effects on health, regardless of the health indicator used. Racism has been proven to have direct physical consequences as hypertension, but it can also be internalized, lowering the self-esteem, and social support when isolated (13). Discrimination can also be experienced in the access to healthcare, as studies and statistics show that ethnic inequalities in access to secondary and tertiary health care exist. Adamson et al. (18) concluded that the access to health care by ethnicity and socio-economic position are not likely to be caused by patients in the groups failing to access health care. Therefore, it must be the result of barriers at the referral, diagnosis or treatment stage of health care provision which might be due to communication problems or discrimination.

Therefore, it seems essential to consider the centrality of racism when trying to explain ethnic inequalities in health. Personal experiences of racism are not only likely to influence health, but racism as a social force plays a central role in structuring the social and economic disadvantage faced by ethnic minority groups (12).

Socio-economic status is indeed a major explaining factor of health inequalities (2), as it also impacts on other factors influencing health as health behavior and the living environment. Studies investigating other factors which have also taken socio-economic status under consideration reach the same conclusion: When adjusted to socio-economic factors, some minority ethnic groups had similar or even a better self-reported health status than the white people (3,5,12,26). Kelaher et al. (11) add that the impact of the socio-economic status on health differs in importance depending on the type of measure used. The inclusion of assetbased measures, such as car ownership and ability to obtain £10,000, tended to amplify ethnic differences in health, whereas education level and home ownership tended to have little effect or reduce ethnic differences in health. Therefore, there is a need to pay attention when choosing a socio-economic measure as it affects the conclusions of the research.

While acknowledging that it is the socio-economic differences between ethnic groups that mainly produce health inequalities by influencing other factors, it is also important to keep in mind that these socioeconomic differences do not have to be considered as somehow autonomous. The socio-economic disadvantage generally faced by those groups is mostly coming from a long history of racism and discrimination that has produced the levels of disadvantage which are currently observed (5). Similarly, at an individual level, investigating the effect of the accumulation of disadvantage over the life course instead of a measure reflecting the current position would certainly bring new paths for action.

Conflicts of interest: None declared.

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