## Commentary

## The complex interrelationship between ethnic and socio-economic inequalities in health

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Ethnicity matters in medicine and public health. Health professionals, both in public health and medicine, should be aware of the influence of ethnicity on health (care) and target health (care) services accordingly. In his paper, Bhopal discusses some of the issues that are relevant to health professionals who want to get familiar with this issue. These include the classification of ethnic groups, the use of ethnicity versus race as a basis for classification of groups and the use of absolute versus relative risks to describe inequalities in health.

Bhopal also discusses some of the factors that produce ethnic inequalities in health. If health (care) policy is to respond effectively to these inequalities, we need to have a clear understanding of the factors that account for these inequalities, e.g. the higher burden of diabetes mellitus in immigrant populations with a South Asian background can only effectively be prevented if we have a detailed insight into the factors that are responsible for the increased risks of these groups. Currently, there is a paucity of evidence on these factors and mechanisms, and further research into these issues is warranted.

An explanation that gets very little attention in Bhopal's paper is that from socio-economic factors. Ethnic minority groups, in general, do have a lower socio-economic status than the 'majority' population in the host country. Given the well-known association between socio-economic status and health, it is not surprising that ethnic inequalities in health are, to at least some extent, socio-economic in nature. Many empirical studies support this hypothesis. As a general rule, explanation of ethnic inequalities in health should recognize that these inequalities are rooted in socio-economic factors.

This is not to say, however, that ethnic inequalities in health can simply be understood by generalizing insights in

socio-economic inequalities in health in the 'majority' population towards immigrant populations. Instead, we should aim to understand the complex way in which ethnic inequalities are linked up with socio-economic inequalities.

The first point to realize is that socio-economic position is a multidimensional concept. It includes key components such as educational level and occupational class, but also employment status, income level and other indicators for material welfare. Different types of socioeconomic determinants may be relevant to ethnic minority groups as compared with the majority population. For example, first-generation migrants may be disproportionally affected by lack of formal education. The lack of formal education, together with migrants' problems of acculturation and integration, may particularly affect their later socio-economic career, including occupational positions, wealth accumulation and residential career. Thus, a 'false start' early in the socio-economic career may affect migrant groups in particular. This implies that, if ethnic inequalities are to be addressed by policies on socioeconomic determinants of health, particular emphasis may need to be placed on the root socio-economic factors shaped in the early life of migrants.

Second, the pervading relationship between socioeconomic factors and health (care) may take different forms in different ethnic groups. Recent studies showed that socioeconomic inequalities in health within ethnic minority groups often were smaller (or sometimes larger) than in the total national population. Illustrations for this were provided for example in recent Dutch studies on mortality by cause

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of death, metabolic syndrome prevalence and hospitalization rates. 1,2 Such an effect modification has been found to be due to different lifestyle responses to material wealth, which in turn may be due to differences between ethnic groups in epidemiologic transition processes (e.g. the timing of the smoking epidemic). These findings imply that socioeconomic indicators cannot simply explain ethnic inequalities in health. Instead, ethnic inequalities are larger or smaller depending on the socio-economic class that is considered. For health policy, these modifications imply that tackling socio-economic determinants of health may have different effects on health of migrant groups than would be expected on the basis of the evidence for national populations at large.

To conclude, insight into socio-economic inequalities in health is a necessary but not a sufficient condition for understanding ethnic inequalities in health. Similarly, addressing socio-economic determinants of health in the national population is essential but will not automatically lead to an

elimination of ethnic inequalities in health. Sure, ethnic minority groups are subject to similar forces of inequality as other socially disadvantaged groups, but health effects may evolve in different ways. Thus, ethnic inequalities add diversity to socio-economic inequalities in health. In order to improve our understanding of these two inequalities, we strongly recommend closer collaboration between the corresponding research areas. In the end, this collaboration may enrich and strengthen policies that aim to improve the health of all socially disadvantaged groups.

## References

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- 2 Agyemang C, van Valkengoed I, Hosper K *et al.* Educational inequalities in metabolic syndrome vary by ethnic group: evidence from the SUNSET study. *Int J Cardiol* 2009 [Epub ahead of print].