

Measuring Change Over Time in Socio-Economic Deprivation and Health. A methodological path to assess changes over time.

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Abstract

Background. The existence of an inverse association between socioeconomic status and health status is well established in the literature. Difference in health due to socioeconomic are unfair because could be avoided with better health and social policies. The relation between socioeconomic factors and health inequality may be proved at the individual level, or at the geographic-area level. In this work we follow the second stream of literature, i.e studies on deprivation relating the state of disadvantage suffered by an individual, with the living conditions of the area where the individual resides. Moreover areas of persistent disadvantage over time have the worst self-reported health and mortality outcomes. It is useful to identify whether geographic areas have changed their level of deprivation over time and be able to assess the impact for area-based planning initiatives or determine whether a change in the level of deprivation leads to a change in health. Urban planning, transports, touristic strategies can drive local development and even affect people health status.

Aims. The study objective is to measure, how deprivation has changed over time, finding out if socioeconomic inequalities and their association with health outcomes endure over time in a case study town.

The innovation of the work is the attempt to evaluate deprivation over time (1991-2011), trying to formalize a methodological path, potentially, replicable in every context.

Methods. A census based deprivation index have been developed using three different aggregation methods (Additive, Mazziotta-Pareto Index and Pena Distance method).

The association between the deprivation index and health have been carried out using the standardized (premature) mortality ratios. It has been showed how the standard mortality ratio change according to different deprivation areas.

Discussion. In literature it has been showed that area-level deprivation is not only a proxy of individual level when data are not available, but it can have an impact on its own. Moreover policy decisions, as resources allocation, health service organization, are made on a larger scale than individual or census section level. Developing a system able to compare deprivation indexes over time, using census data, could be a useful and inexpensive instrument able to support decision makers.

This work is a contribution to the existing literature because formalize a methodological path to compare deprivation and health inequalities over time. This structured approach can be replied in several contexts. It can be a first step to understand why some areas improve more than others over time. It will be useful to understand if there are some key factors that help area to improve their status.

Urban planning, transports, touristic strategies and local development can impact people socioeconomic conditions. Being a driving forces in local development this factor can indirectly positively affect health status.

The use this structured method to assess deprivation and health inequalities over time can be really useful to decision makers to evaluate policy impact (health policy, social policy and touristic strategies) and to allocate resources efficiently . In conclusion the instrument developed in this work can be useful to link tourism and local development with respect to socioeconomic conditions and their relation with people health status.

Insights

UUs divided by deprivation class - 1991

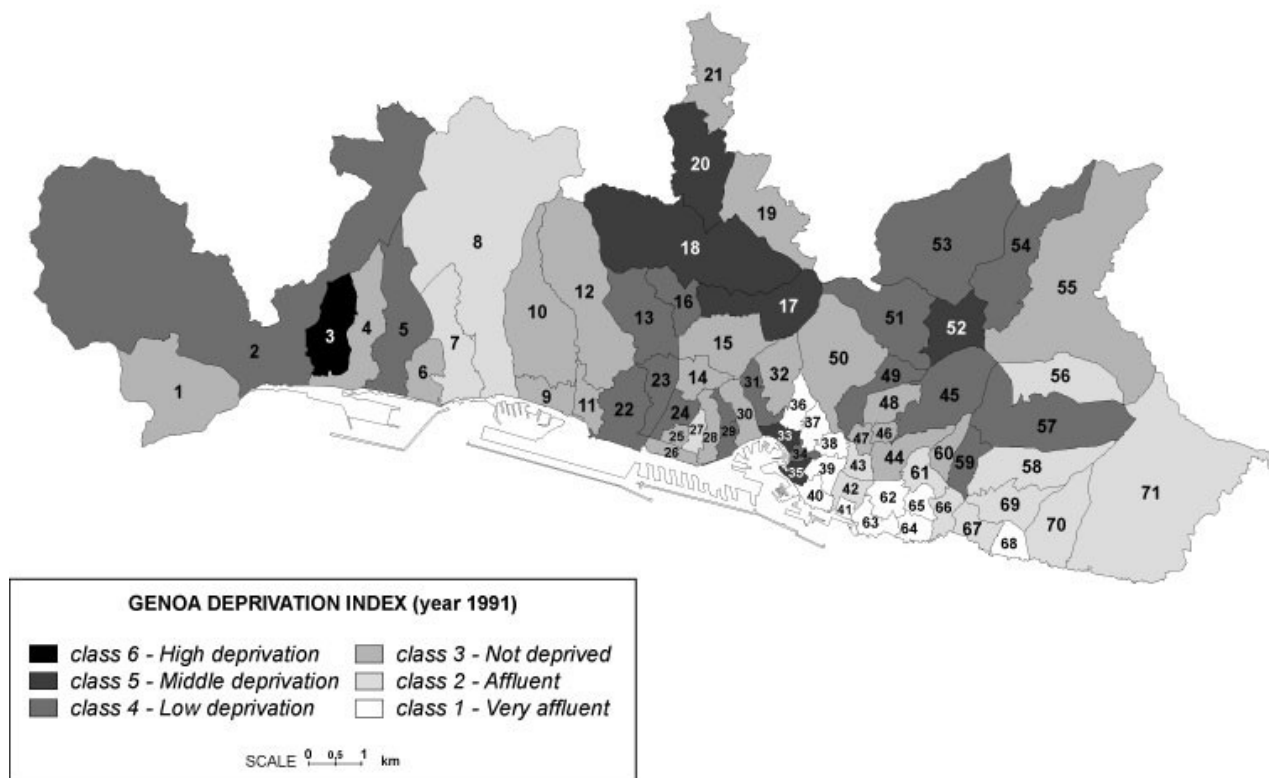


Figure 4 – UUs divided by deprivation class – 2001

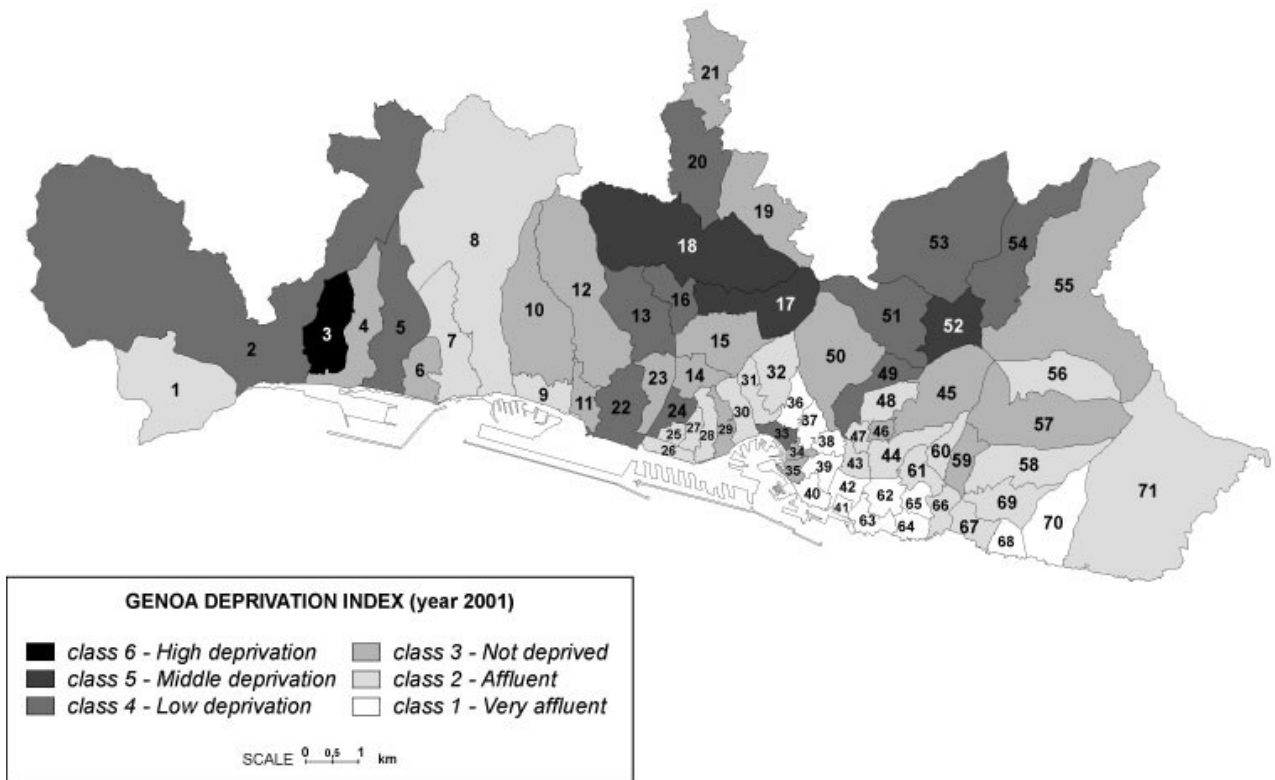


Figure 5 – UUs divided by deprivation class - 2011

