

SOCIAL INEQUALITY IN PERCEIVED AIR QUALITY USING COMBINATION OF INDIVIDUAL- BASED AND AREA- BASED SOCIOECONOMIC CHARACTERISTICS IN SEOUL, KOREA

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Background and Aims: The majority of urban air quality studies focused on scientifically measured air quality. Scant attention has so far been paid to the perceived air quality. Perceived air quality is another important component for health and quality of life. In this paper, we offer a current picture of urban air quality in which residents think about air pollution. This study investigated the relation between measured air quality and perceived air quality and the determinants of perceived local air quality focusing on the both individual and area characteristics.

Methods: we used representative survey (Seoul Citizen's Health Indicators Survey (SCHIS)) and integrated measured air quality (TAQ). The total study population was 15,856. We extracted individual-level sociodemographic and socioeconomic variables from SCHIS: age, sex, marital status, self-rated health, educational attainment and household income. We also considered community variables which may affect perceived air quality, such as percentage of college educated aged 20 over, satisfaction of public transportation and percentage of below poverty line. Multilevel analysis techniques were applied for parameter estimates.

Results: Mean distributions of air quality perception by community level was opposite against the total air quality patterns using simple linear statistics by plotting. There are area variances in perceived air quality and socioeconomic status across 25 KUs. We found that the degree of perceived air pollution was younger age (20-34 aged, odds ratio:1.397), higher educational attainment (graduate, odds ratio:1.667), lower household income. For area level, Communities more economically deprived and higher percentage of college educated aged 20 over were associated with poor perceived air quality.

Conclusions: This paper sought to show how the perception of air quality may be affected by individual SES and area level SES. Education was a stronger predictor of perceived air quality than economical measurement such as income and poverty line of this study

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