

World congress on
HEALTH AND MEDICAL SOCIOLOGY
&
International Conference On
MOLECULAR BIOLOGY & BIOCHEMISTRY

December 03-04, 2018
Osaka, Japan

The effect of household air pollution on ethnic differences in child stunting in Nepal

Dirga Kumar Lamichhane and Mangyo E
Nagoya University, Japan

Recent studies suggest ethnic inequalities in air pollution and health. Very few studies have investigated the role of air pollution on ethnic differences in child health. We used data from the 2016 Nepal Demographic and Health Survey for children aged 0-59 months ($n = 2373$) to examine whether the association between being exposed to household air pollution from burning solid fuels and child stunting varied by ethnicity and socioeconomic status (SES), employing the ordinary least squares (OLS) and instrumental variable (IV) models. We found strong evidence that exposure to solid fuel smoke increases the probability of being stunted, as well as reduces the height-for-age (HAZ) measure. The difference in means between the HAZ score of children exposed to solid fuels and those not

exposed to it was 0.61. The OLS model estimated that up to 42.6% ($\beta = 0.26$, $p = 0.010$) of this difference is due to exposure to solid fuel, after controlling for potential risk factors, while the IV model estimated about 67.2% ($\beta = 0.41$, $p = 0.003$) of the difference. The stratified IV models showed lower HAZ score and stunting among indigenous people compared to the upper caste people. Further stratified analyses indicated that the impact of solid fuel smoke is stronger among indigenous people with low SES, but did not explain SES differences in the impact of solid fuels among the upper caste people. Children from indigenous communities are likely to be more susceptible to the health effects of solid fuel smoke.

Biography

Dirga Kumar Lamichhane has completed his PhD in 2017 from Inha University and Postdoctoral Studies from School of Medicine, Inha University, South Korea. He is currently working for Nagoya University as a designated Associate Professor (visiting faculty). He has published more than 20 papers in reputed journals.

dirga_lamichhane@yahoo.com

Notes: