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# Association between Carbon Dioxide (CO2) Emission and Under-Five Mortality: Panel Data Evidence from 100 Countries

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**Abstract :** Recent studies have found association between air pollutants and mortality, particularly how concentration of air pollutant explains under-five mortality across the countries. Thus, the present study evaluates the relationship between Carbon dioxide (CO2) emission and under-five mortality, while controlling other well-being determinant of Under-five mortality in 100 countries using panel unbalanced cross sectional data. We have used PCSE and GMM model for the period 1990-2011 to meet our objectives. Our findings suggest that, the positive relationship between lagged periods of carbon dioxide and under-five mortality; the percentage of rural population with access of improved water is negatively associated with under-five mortality, while in case of urban population with access of improved water, is positively related to under-five mortality. Access of sanitation facility, food production index, GDP per capita, and concentration of urban population have significant negative impact on under-five mortality. Further, total fertility rate is significantly associated (positive) with under-five mortality which indicates relative change in fertility is related to relative change in under-five mortality.

**Keywords :** arbon dioxide (CO2), under-five mortality (0q5), gross domestic product (GDP), urban population, food production, panel corrected standard errors (PCSE), generalized method of moments (GMM)
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