

Wood fuel consumption and mortality rates in Sub-Saharan Africa: evidence from a dynamic panel study

ABSTRACT

This study examined the impact of wood fuel consumption on health outcomes, specifically under-five and adult mortality in Sub-Saharan Africa, where wood usage for cooking and heating is on the increase. Generalized method of moment (GMM) estimators were used to estimate the impact of wood fuel consumption on under-five and adult mortality (and also male and female mortality) in the region. The findings revealed that wood fuel consumption had significant positive impact on under-five and adult mortality. It suggests that over the studied period, an increase in wood fuel consumption has increased the mortality of under-five and adult. Importantly, it indicated that the magnitude of the effect of wood fuel consumption was more on the under-five than the adults. Similarly, assessing the effect on a gender basis, it was revealed that the effect was more on female than male adults. This finding suggests that the resultant mortality from wood smoke related infections is more on under-five children than adults, and also are more on female adults than male adults. We, therefore, recommended that an alternative affordable, clean energy source for cooking and heating should be provided to reduce the wood fuel consumption.

Keyword: Adult mortality; GMM estimators; Health outcomes; Indoor air pollution; Under five mortality; Wood fuel consumption