

## **Have We Neglected the Importance of Housing Conditions in Life Course Research on Health?**

### Abstract

Life course research on housing conditions and health has declined in recent years relative to neighbourhood effects. Improved housing is rarely prioritised in public health narratives on environmental health. However, as most of our day is spent at home, a lack of research on the accumulation over the life course of health risks due to home hazards is puzzling. Moreover, a focus on traditional housing hazards, such as lead paint, water intrusion, and poor ventilation, may have diminished research on other housing conditions, such as home modifications and utilities/services for improving health. This talk highlights findings from three research studies on housing modifications and housing conditions in relation to disability and health among older adults living in the US, Europe, Hong Kong and mainland China.

Using longitudinal data from HRS, SHARE and ELSA, the research finds that housing modifications (such as installing ramps and rails) substantially reduced the number of Activities of Daily Living (ADL) problems over a period of 18 years, among over 90,000 older adults who were initially free from mobility impairments. Using cross-sectional data from Hong Kong, we show how housing modifications enabled caregivers of 2,960 older adults with physically disabling conditions to have better mental health than caregivers of older adults with similar conditions living in non-modified houses. Using longitudinal data from 8,423 older adults in CHARLS, we find that improvements in the physical housing environment and access to household utilities (i.e., gas, water, electricity, telephone and internet) were associated with lower ADL and higher lung function. Additionally, the protective effect of increased housing utilities was particularly marked among older adults living in homes with no or few utilities at baseline.

Improvements in the quality of housing and reducing home hazards cannot be ignored in life course research on environmental and public health.