

**Key messages:**

- Neighbourhood audits can provide useful supplementary information not captured by other community assessment methods and independent of residents' perceptions.
- Depicting the social gradient in the neighborhood micro-environment can trigger and contextualize the conversation about place effects on health among Public Health research and policy community.

## Objective and subjective assessment of the neighborhood health environment, Limassol, Cyprus

Daphne Kleopa

*D. Kleopa<sup>1,2</sup>, A. Panayiotou<sup>2</sup>, C. Kouta<sup>1</sup>, N. Middleton<sup>1</sup>*

<sup>1</sup>CII for Environmental & Public Health, Cyprus University of Technology, Limassol, Cyprus

<sup>2</sup>School of Health Sciences, Department of Nursing, Cyprus University of Technology, Limassol, Cyprus

Contact: dkleopa@gmail.com

### Background:

While neighborhood audit tools are commonly assessed for inter- and intra-rater reliability, validity and relevance are not always demonstrated.

### Methods:

A stratified random sample of 45 neighbourhoods in Limassol were audited with the 150-item Cyprus Neighborhood Observational Tool for urban environments (CyNOTes). Ratings were correlated with census indicators of socioeconomic disadvantage. The extent to which residents' neighborhood assessment (Place Standard, N = 444) and self-rated quality of life (SF-36 in second sample N = 450) differed across neighborhoods classified according to domain were explored in mixed random effect models.

### Results:

CyNOTes items are organized in 9 domains (internal consistency=0.5-0.9) with a 3-factor higher structure. In seven, a stepwise pattern of lower mean ratings was observed across increasing socioeconomic disadvantage, for domains rated generally high across neighborhoods (e.g. lack of physical disorder) and low (e.g. outdoor spaces). Though not always statistically significant, a systematic pattern of higher self-rated health was observed in better-off neighborhoods across most domains. "Pedestrian environment" captured the largest difference for both physical (1.34 95%CI 0.42,2.26),  $p = 0.005$  per tertile increase) and mental health (1.46 95% 0.54,2.40;  $p = 0.003$ ). "Social contact" and "Safety: lack of security-related features" were more likely to be rated favorably in disadvantaged neighborhoods, however no associations with quality of life were observed. While the residents' assessment was often in the expected direction, more for built environment features, this was not always the case.

### Conclusions:

The study demonstrated the content, construct, criterion and predictive validity of an audit tool for supplementary profiling the built, physical and social health-related neighbourhood environment. Concurrent validity against residents' perceptions was not always supported, raising questions about differential expectations.