



Associations of the natural and built environment with mental health and wellbeing during COVID-19: Irish perspectives from the GreenCOVID study

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Abstract

Background In several countries public health efforts to contain the COVID-19 pandemic have included movement restrictions that confine residents to their home or to reduced catchment areas. Household characteristics and assets of nearby spaces may be particularly relevant to support wellbeing and mental health in this context. The aim of this study was to explore wellbeing and mental health associations with factors of the immediate natural and built environment among adults in Ireland during the first wave of the COVID-19 pandemic.

Methods We did cross-sectional analyses using Irish data from the GreenCOVID study. Participants were recruited online between June and July, 2020, with a convenience sampling approach. All respondents who provided informed consent and data on variables of interest were included in analysis. Wellbeing was assessed with the WHO-5 Wellbeing Index, and mental health with the Kessler Psychological Distress Scale. Means and SD were used to describe the perceived importance of views to green and blue spaces and physical access to outdoor spaces (range 0–10). We used χ^2 tests and multiple linear regression models to explore associations of wellbeing and mental health with household type, household problems, number of bedrooms, number of co-habitants, spaces enabling physical access to the outdoors, quality of views and views to green spaces from home. Regression models were controlled by age, gender, city versus non-city household location, marital status, and self-perceived health.

Findings We included data from 243 participants; mean age was 43 years (SD 16) and most participants were women (n=174 [72%]). Participants perceived that the outdoors helped them cope with restriction measures to a high extent (mean score 8·54 [SD 1·79]; 43% of respondents reported the maximum score), and highly valued views to blue (7·82 [2·45]) and green spaces (8·84 [1·76]). Household problems were significantly associated with lower wellbeing scores (beta=-9·78 [95% CI -15·675 to -3·885]) and increased likelihood of mental disorders (0·583 [0·284 to 0·889]).

Interpretation Our findings show high perceived benefits of views to green and blue spaces and access to the outdoors from home during the first wave of COVID-19. Moreover, those living in a household with problems had higher likelihood of poor mental health outcomes. This study highlights the importance of natural and built environment in helping people cope with the negative effects of the restrictions imposed during the COVID-19 pandemic.

Funding Health Research Board (HRB), grant no. SPHeRE-2019-1.

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Declaration of interests

We declare no competing interests.

Published Online
March 11, 2021

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