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Co-producing a typology for Green and Blue spaces for a longitudinal, national dataset of Green and Blue spaces

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Background with rationale

Spending time in green-blue spaces (GBS) is beneficial for mental health and wellbeing. There are few longitudinal studies, and definitions of GBS differ within academic studies and between policy, practice and research.

Main Aim

Quantify the impact of longitudinal exposure to GBS on wellbeing and common mental health disorders, for a national population (2008-2018) for use in a population-wide natural experiment.

Methods

We co-produced a GBS typology with planners and policy makers at a day-long workshop using validated public participation methods. Using this typology, we built a national, longitudinal GBS dataset created from local government audits and satellite data for 1.4 million homes in Wales, UK.

Results

We produced a nested national typology to define GBS that built on previous academic literature and considered policy and local government planning priorities. The typology differentiated between inland and coastal GBS and facilities available at the GBS e.g. benches, public toilets etc. We created a national, longitudinal dataset of GBS and a cross-sectional dataset of household-level access to GBS for 2018. Access to GBS varied by socio-economic status, urban/rural classification and type of GBS.

Conclusion

We worked with policy and planners to produce a typology that will enable us to translate our findings to be used in evidence based policy and planning. We will use the dataset to create quarterly household access to GBS for eleven years (2008-2018). We will link GBS access scores to individual level mental health for 1.7 million people with primary care data and survey data (n = 12,000) on wellbeing. The results from the wider study will inform the planning and management of GBS in urban and rural environments and contribute to international work on impacts of the built environment on mental health and wellbeing.

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