Urban Green Spaces and Public Health Outcomes: a systematic review of literature

Carlo Signorelli

V Gianfredi¹, M Buffoli², A Rebecchi², R Croci¹, A Oradini-Alacreu¹, G Stirparo¹, A Marino¹, A Odone³, S Capolongo², C Signorelli¹

¹University Vita-Salute San Raffaele, Milan, Italy

²Architecture, Built Environment and Construction Engineering Department, Politecnico di Milano, Milan, Italy

³Department of Public Health, Experimental and Forensic Medicine, University of Pavia, Pavia, Italy Contact: signorelli.carlo@hsr.it

Background:

As stressed by COVID-19 pandemic, urbanicity might represent a risk factor for chronic non-communicable diseases or generally impacting on healthy lifestyle, among them physical activity.

Methods:

In light of this, we performed a systematic review aimed to explore the association between urban greenspaces and two important health indicators for both mental and physical health. In particular, our aims were to analyze the association between publicly accessible urban greenspaces exposure, and mental health outcomes (MH) and objectively-measured physical activity (PA). The review was conducted from 2000/01/01 to 2020/09/30 searching in two electronic databases: PubMed/Medline and Excerpta Medica dataBASE (EMBASE). Only articles in English were included.

Results:

Out of 356, a total of 34 studies were included in our review, of which 19 assessed MH outcomes, the remaining dealt with PA.

Only a few included studies found a non-effect or a negative effect on MH outcomes, whereas, all the others demonstrated a positive effect of urban greenspace and both MH and PA. However, our results stressed not only the importance of green space presence, but also the importance of maintenance, renovation, closeness to residential areas, the presence of interactive activities, and perceived security aspects.

Conclusions:

To conclude, even some methodological limitations of the included studies, results are concordant in demonstrating that urban greenspaces show potentially beneficial effects on mental health and physical activity. Our results are significant for public health experts and policymakers involved in urban planning, community health promotion, and improvement of health and social equity.

Key messages:

- Urban green spaces are important factors, impacting on both physical and mental health.
- Policymakers involved in urban planning should pay more attention in urban green spaces.