

Key messages:

- The topic of urban nature is becoming central for healthy and sustainable urban planning, not the least for population groups like adolescents and children.
- The relation between urbanization, with decreasing access to green spaces, and the impact on physical as well as mental health presents an important issue and a big challenge for Public Health.

Urbanization and greenness in HBSC survey: association with life satisfaction and health complaints

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Background:

Several studies have shown that neighborhood greenness is associated with lower problematic behaviors in children and better perceived well being. While urbanization showed opposite results. The aim of the study was to assess the relationship between urbanization and greenness levels with perceived health, life satisfaction and health complaints on adolescents.

Methods:

The study is based on data from 2018 Health Behavior in School-aged Children in the region of Piedmont(Italy), which involved 3022 11-,13-,15-year olds, sampled in 122 schools across the region. Every school was georeferenced. Greenness was measured by Normalised Difference Vegetation Index (NDVI-satellite images) and urbanization by population density, traffic intensity (satellite measurements) and air pollution concentration (sampling stations). Health complaints were evaluated with a set of 8 psychosomatic symptoms (reported more than once a week). Life Satisfaction (LS) was measured by using the Cantril scale (low LS < 5, high LS ≥ 6). Self-Rated Health was measured by means of a four points scale (fair or poor, good or excellent).

Results:

More than 66% of adolescents reported frequent health complaints; 11% declared low life-satisfaction and 9% of adolescents scored poor or fair self-rated health. The proportion of the three variables increased with age in both genders, and was higher among girls. Gender differences increased from 11- to 15-years of age. Preliminary results showed a positive association between greenness and life satisfaction, urbanization and health complaints.

Conclusions:

In times of increasing urbanization and reduced availability of green areas, characterizing the association between urbanization, greenness and perceived health is revealed to be the challenge for Public Health. Redefine the urban spaces accordingly requires collaboration between different disciplines. Coherently with the recent studies, communities can be actively involved through qualitative approaches.