Chapter 1
For the "Human" Development of Cities in an Era of Climate Change

Abstract The connection between health, well-being, and the quality of living spaces is not accidental. The organization of the city and, in general, of social and environmental contexts, is capable of conditioning and modifying emerging needs, lifestyles, and individual expectations. Faced with scientific evidence for these relationships, it is necessary for urban planning to realize that there is no time left to hope that economic growth and demographic change, by themselves, will be able to generate conditions conducive to people's quality of life. This invitation is energetically shared by the WHO's Healthy Cities Movement. Through an interdisciplinary group that met between 2009 and 2011, the UCL–Lancet Commission developed a series of recommendations for policy makers to improve the urban environment and to open a discussion on the role that urban planning can play.

Keywords Healthy cities movement · Urban human scale · Well-being
Quality of living spaces · Climate change

A 2014 report on CNN coined the slogan "…Our health is not just a by-product of how we live. It's also about where we live". This was based on the recognition that leaders in cities like Copenhagen and Okinawa, as well as Vancouver, Melbourne, New York, etc., had recently implemented urban policies to provide their citizens with healthy food, access to parks, good public transport, disease control, and assistance for vulnerable segments of the population. In the same report, it was observed that the success of these initiatives was not only to be found in good policies, but also in citizens' dedication to promoting them with their everyday behaviour.

Some years before, in 2011, in the documentary film *The Human Scale*, the Danish architect and professor Jan Gehl had argued for the need to recover the "human scale" in building cities, hoping that they would be built around people rather than technologies.

These two different voices invite researchers, technicians, and politicians to reflect on how the design of the urban environment influences health, well-being, and the quality of life in cities, and on the need to increase knowledge of this relationship and encourage physical designs for the urban space that deal with these aspects.

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The connection between health, well-being, and the quality of living spaces is not accidental. The organization of the city and, in general, of social and environmental contexts, is capable of conditioning and modifying emerging needs, lifestyles, and individual expectations. Until some decades ago, this opinion pertained to the "common feeling" of people; today it is supported by numerous studies and research. Scholars are particularly interested in the implications of the social context and characteristics of the urban space (Sampson 2003; Helliwell and Putnam 2004) because the research shows that their role is fundamental in determining—in both good and bad ways—the health and well-being of the community (Duhl and Sanchez 1999).

This was demonstrated in a 2013 study at the European Centre for Environment and Human Health at the University of Exeter, which explored the relationship between green areas and well-being. Based on a program that involved 10,000 participants over 18 years, it was verified how on average, individuals experience less mental discomfort and a higher level of well-being when they live in urban areas where there is significant green area. The program also highlighted how, while the effects on the individual level are important but not elevated, the potential overall benefit on the community level is substantial (White et al. 2013).

But this is not only about green areas. Another research project, this time from the University of Warwick, quantified the impact of scenic environments on health. According to the researchers, the aesthetics of the environment in which we live has quantifiable effects on our well-being, and harmonious architecture and design also produce a positive effect that is even more significant than the presence of green areas (Seresinhe et al. 2015).

Both of these studies highlight the need and opportunity to adopt adequate devices when designing urban spaces because their quality is related to our well-being and health. This is also the conviction of the World Health Organization (WHO) in reference to urban planning and its role of primary prevention, which contributes to good health (Duhl and Sanchez 1999). In connecting health to the urban dimension, health as an "individual good" becomes health as a "collective good", recalling the ethics and observance of rules of civil coexistence. Health becomes an objective for citizens, mayors, and local administrations to pursue and should be proposed as guaranteeing an equitable city, ensuring that community health is considered an investment and not a cost. The health-based city becomes a social and collective result, the result challenging globalization, social exclusion, and poverty.

The European Charter for the Safeguarding of Human Rights in the City, signed in 2000 by about 350 European cities (today numbering more than 400), identified the right to health, environment, and harmonious urban planning with some of the fundamental inspiring principles for European cities.[1] These principles were introduced in the document in a non-random sequence, almost to underline their close interrelation and consequentiality.

Faced with scientific evidence for these relationships, it is necessary for urban planning to realize that there is no time left to hope that economic growth and

[1] Art. XVII sets out the cities' commitment to promoting actions in the economic, cultural, social, and urban planning areas to promote health for all inhabitants, based on their active participation.

demographic change, by themselves, will be able to generate conditions conducive to people's quality of life. On the contrary, there is time for openness to experimentation. The risk factors for health and well-being should become important variables in activities to design modern cities.

This invitation is energetically shared by the WHO's Healthy Cities Movement. This movement was created in Toronto (Canada) in 1984 at the Beyond Health Care Conference with the objective of engaging local authorities in health development through a process of political commitment, institutional change, capacity-building, partnership-based planning and innovative projects. In more than thirty years, it has increased awareness that risks to health in urban environments are not being addressed appropriately (Kenzer 1999). Today, however, more than understanding how these risks can influence the health of city inhabitants, it aims to understand how well-planned and well-designed cities can produce benefits for health, as underlined in the WHO's declaration of 2010 as the Year of Urban Health.

Through an interdisciplinary group that met between 2009 and 2011, the UCL–Lancet Commission developed a series of recommendations for policy makers to improve the urban environment and to open a discussion on the role that urban planning can play (Rydin et al. 2012).

These recommendations are based on the wide definition of health set out by the WHO in 1948: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". The recommendations clearly state that:

- public health should necessarily be the object of interdisciplinary work. There is a particular need for an alliance between urban planners and experts in the health sector;
- in planning and designing the urban environment, a key objective should regard the elimination of social inequalities and address access to health services between the different urban areas of a given city;
- the city should be modified to maintain the so-called "urban advantage for health", identifying new points of reference for urban planning;
- political responsibility on the national and local scales are particularly important for understanding the complexity of the theme of health and the overlapping of roles and skills that influence urban policies, as well as the effects of these policies on the health of city inhabitants;
- the effectiveness of actions in matters of health is pursued through experiments and designs on the local scale. These activities necessarily involve local communities and interest holders.

In particular, the Commission pointed to a gap between aspirations and outcomes in terms of urban and environmental health with a warning. This is because the presumed achievements of the city (urban areas have greater resources, better infrastructure, and a wider availability of services than rural areas) are difficult to preserve and implement over time. In addition, the first WHO–UN Habitat report of 2010, "Hidden cities: Unmasking and overcoming health inequities in urban settings", highlighted that even where the prosperity of cities is increasing, there is always a

"hidden" side. This relates to poverty in the most rundown neighbourhoods, even in the richest cities in the world. Continuing down this road, there is a risk of seriously blocking the objectives of development established by the new Sustainable Development Goals (SDGs) to stop poverty, protect the planet, and ensure prosperity for all (UN 2016).

Although generalizations cannot be made, the WHO's 2016 Global Report on Urban Health suggests that tested solutions exist to address the challenges of health and well-being. Progress in this direction has not only regarded the efficiency of health services, but also the capacity to shape urban environments (WHO 2016). If it is in fact true that "…Not every city can do an 'extreme makeover' for health", it is also true that "…every city can take steps in the direction of healthier planning".

According to the WHO's report, working in this direction means several things: making daily places easily accessible; interpreting the theme of urban compactness and density in an innovative way, reasoning about the composition of spaces and functional *mixité*; making cities age-friendly; and rethinking cities so that they become more resilient to the impacts of natural phenomena and climate change (including floods, earthquakes, urban heat islands, droughts, fires, etc.).

These impacts can really test both infrastructures and human health, as stated in the IPCC's Fourth Assessment Report. There are three main mechanisms by which climate change may affect human health: direct exposure to extreme climate events; indirect effects from changes to the determining factors of human health; and effects of climate events on social welfare by disrupting social and economic systems (Parry et al. 2007).

Combining mitigation, adaptation, and health strategies constitutes the challenge for a transition towards a more sustainable, healthy society. In this challenge, cities can offer "…unique opportunities to marshal resources and wealth to build resilience and health-protective policies and programs" (Barata et al. 2011). However, it is necessary to be aware that health-care adaptation measures will be different from city to city because the social, economic, cultural, and political realities are different. However, the basic objectives should be shared by all for the safety of cities and our own safety.

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