PolyUnderstanding BIP Urban Health Module description by Alessandra Battisti, SAUR

MODULE – Urban Health

Information sheet

The concept of Urban Health refers to a strategic approach that integrates health protection and promotion actions into urban planning, emphasizing the strong interdependence between physical, mental, and social well-being and the urban environment. It highlights the correlations between the built environment—both indoor and outdoor—and the physical, psychological, and social well-being of inhabitants. To explore this topic, the module will begin with the definitions of fundamental concepts and an overview of the most recent scientific research. Subsequently, examples of healthy buildings and healthy spaces will be reviewed. Finally, the module will conclude with reflections on how climate change, conflicts and pandemics have reshaped architecture and public spaces.

Today, the rapid population growth, accelerated urbanization, and worsening environmental and climate crises increasingly threaten urban ecosystems and the well-being of their inhabitants. According to the 2018 UNIDESA report, the proportion of the global population living in urban areas is projected to rise from 54% to 68% by 2050. Urbanization significantly impacts not only socio-economic conditions but also public health, contributing to the proliferation of non-communicable diseases (NCDs) driven by sedentary lifestyles, vehicular traffic, air pollution, thermal stress, and inadequate housing conditions. At the international level, growing awareness of the effects of the built environment and urbanization on public health has underscored the importance of Urban Health. This approach highlights the role urban planning and architectural design must play in improving health outcomes by reshaping urban fabrics and confined environments.

The concept of health has undergone a significant epistemological evolution over the years. Initially understood as the mere absence of disease, health has come to encompass a state of physical, mental, and social well-being, as articulated in the World Health Organization's (WHO) 1948 constitution. This definition marked a paradigm shift, broadening the focus of health from being an exclusive domain of medicine to a subject of interdisciplinary inquiry involving housing and urban design. Nevertheless, as Michael Marmot, an epidemiologist and public health professor at University College London, emphasizes, societal well-being is often measured in economic terms, such as Gross Domestic Product (GDP). GDP, however, captures only the production and consumption aspects of society, whereas a comprehensive well-being index should consider factors like happiness, satisfaction, social cohesion, education, access to services, and living and working conditions. These socio-economic, behavioural, environmental, genetic, and healthcare-related factors, collectively known as the **social determinants of health**, were first identified by Dahlgren and Whitehead. Building on Dahlgren and Whitehead's model, Barton and Grant developed the **Settlement Health Map,** offering a holistic framework for understanding the relationships among people, their quality of life, and their local and global environments. These determinants of health significantly influence the prevalence of NCDs, which currently account for 86% of deaths and 77% of diseases in the European region. NCDs are closely linked to socio-economic, cultural, and environmental determinants.

Awareness of the role of factors such as pollution, sedentary lifestyles, poor nutrition, unhealthy housing conditions, social exclusion, and disempowerment in disease development has driven the adoption of a **salutogenic approach**. Unlike pathogenesis, which focuses on the origins of disease, *salutogenesis* emphasizes the causes of health and preventive strategies. The salutogenic approach advocates for preventive measures not only in healthcare but also across various sectors to reduce disease incidence. This requires addressing welfare and urban health through a multidisciplinary

perspective to create environments that safeguard human and environmental health while fostering resilient communities. This aligns with international efforts, such as the Sustainable Development Goals (SDGs) of the 2030 Agenda, in particular with Goal 11, which aims to make cities and human settlements inclusive, safe, resilient, and sustainable. Public participation in civic decision-making and access to social spaces within public environments significantly enhance quality of life. Additionally, factors such as safety, resource availability, and accessibility are essential for dignified and healthy living conditions.

Over the past two decades, numerous interdisciplinary contributions have focused on urban health. For example, the MIT-AIA Health and Urbanism Initiative documents correlations between the built environment and health, proposing scalable local strategies. Similarly, Harvard University's Health and Places Initiative explores alternative models for urban development and confined spaces that positively impact health and aging. The recognition that people, particularly in urban areas, spend nearly 90% of their time indoors has further spurred scientific inquiry into the quality of indoor environments. The WHO's "Housing and Health Guidance" report offers guidelines for adequate housing conditions that promote health. Key areas of intervention include overcrowding, precarious housing, thermal discomfort, inadequate accessibility, and domestic safety. Additional guidelines address water and air quality, noise pollution, and the presence of hazardous substances such as asbestos, lead, and radon. Joseph Allen's research at Harvard University highlights the importance of ventilation as a fundamental component of healthy buildings. Poorly ventilated spaces contribute to symptoms such as headaches, fatigue, respiratory issues, and cognitive impairments. Studies, including those from the Harvard T.H. Chan School of Public Health, demonstrate that higher ventilation rates significantly enhance cognitive performance and overall health. The benefits of improved ventilation—including reduced absenteeism, increased productivity, and lower energy costs—far outweigh the initial investment. Additional parameters identified by the WHO and Harvard studies include thermal and humidity comfort, cleanliness, safety, water quality, noise levels, lighting quality, and views. These factors underscore the critical role of the built environment in shaping public health, as evidenced by the WHO's findings and the ongoing development of strategies to optimize indoor and urban spaces for human well-being.

Suggested readings

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