

HEALTHY & RESILIENT CITIES IN THE COVID-19 ERA: TRANSDISCIPLINARY RESPONSES ARE NEEDED

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Transmission of the coronavirus SARS-CoV-2, and health, economic and social impacts of Covid-19 are complex, emergent and unpredictable. This keynote presentation argues that the current pandemic should be considered as a societal challenge that requires concerted actions in the context of uncertainty. The virtuous relations between three prerequisite conditions - multilevel governance; knowledge and types of resources; and individual and collective behaviours - that should be combined in transdisciplinary responses by concerted action at international, national and local government levels. We know that cities assume an important role in implementing effective responses that reduce the multiple impacts of the pandemic.

First, multi-level governance of this global pandemic is fundamental. Governance denotes the way that governments, public administrations, private enterprises and community associations interpret the pandemic, and how they decide collectively to respond to it. In order to reduce known unknowns about this beta-type coronavirus with species jump, the coordinated synthesis of interdisciplinary information and knowledge, professional know-how, and public perceptions is necessary; then this improved understanding can be applied to define the appropriate allocation of many types of resources required to implement effective responses at different geo-political levels. Cities have a major role and responsibility in containing infections and reducing mortality.

The second prerequisite condition is the importance of specialized knowledge and professional know-how in several disciplines and professions required to understand and counteract a new virus for which there is still no proven medical or pharmaceutical remedy. The unknowns about this coronavirus can be identified and studied using principles of One health, Ecological public health, and Planetary health during transdisciplinary research and practice in community settings to 'collect facts on the ground' beyond the walls of laboratories. In addition to health, medical and veterinary knowledge and know-how, this pandemic confirms the crucial function and contribution of access to many types of resources when they are needed: in particular, access to reliable data and information; the coordination of supply chains of medical equipment and pharmaceutical products across the health care system; and adequate numbers of doctors, nursing staff, and auxiliary personnel in hospitals, medical centres and nursing homes.

The third prerequisite condition that influences effective national, city and communal responses concerns individual, household and community adherence to behavioural norms and new regulations introduced by national and local governments. Some interventions by governments and public administrations focus on regulating personal behaviour and interpersonal contacts; for example, norms and rules include different degrees of quarantine and confinement, controlled access to outdoor public spaces, markets and shops, social distancing, wearing masks and washing hands regularly. Public adherence to these social prescriptions cannot be assumed owing to cultural, social and psychological reasons including religious customs, spiritual beliefs, group identity and the notion of individual liberty.

Our livelihood and our health are vulnerable and strongly influenced by the ecological, biological, financial, political, and cultural milieu in which we live. Our habitat and our livelihood, are founded on fundamental monetary and non-monetary values that are drivers of globalization and urbanization which have direct and indirect consequences for public health. The extraordinary

situation of the current pandemic should be a catalyst for rethinking the hierarchy of values used implicitly and explicitly to sustain our societies and cities. The capacity of public authorities, private enterprises, scientists, practitioners and community associations to respond effectively to major public health threats, such as this coronavirus, should be founded on in-depth understanding of the veterinary, medical, and societal variables that influence health and quality of life at city and community levels. The exponential propagation of this pandemic has confirmed that socio-economic inequalities influence and are influenced by health, housing and other inequalities in countries, and within large cities, including London, Mexico, New York and Tokyo, adding to the burden of underprivilege.

Concerted action benefits from building bridges between transdisciplinary research and practice that co-produce coordinated responses between and within countries and at the city level. Transdisciplinary inquiry should be the foundation of resilience and communal responses to uncertainty and vulnerability in these extraordinary circumstances.

Key references

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