

## Why urbanisation and health?

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In 2007 more than 50% of the world's population were living in metropolitan cities, which was the first time in history that the urban population level had risen above 50%. The urban population have grown ever since and will continue to do so according WHO estimates. By 2030 it has been estimated that 6 people out of 10 will live in urban agglomerates and an estimate of 70% of the inhabitants will be living in urban environments by 2050.

During the last 50 years there has been a change in the population with people are moving from rural to urban areas (Fig. 1).

According to the WHO there will be a steady increase in the numbers of people concentrated in the

big cities, attracted by the mirage of welfare, employment and a different quality of life. The small and medium sized income countries will experience a population growth of 1.84% per year between 2015 and 2020 (Fig. 2).

This is an unstoppable social phenomenon and an irreversible tendency to be administered by many different stakeholders. The phenomenon is studied from different points of views; such as urban planning, transport, the industrial context, employment, and health.

**Cities and their development models are today in the forefront of the fight against the potential problems caused by an increasing urbanization. Public health is one of the core issues.**

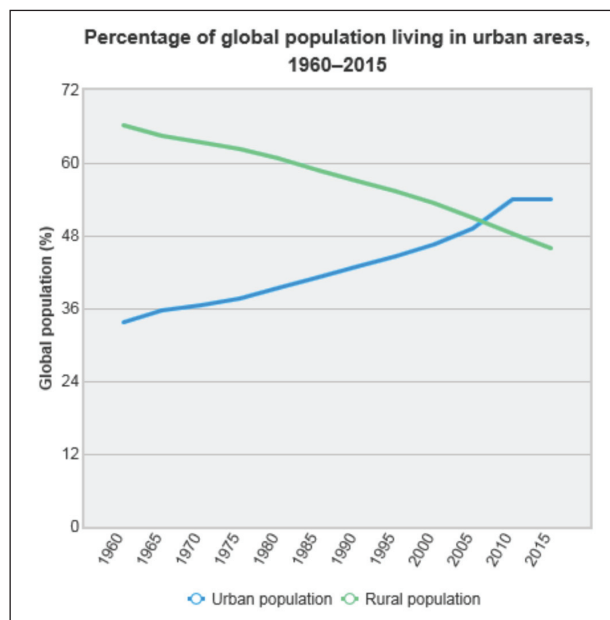


Figure 1. Source: WHO - World Urbanization Prospects 2014

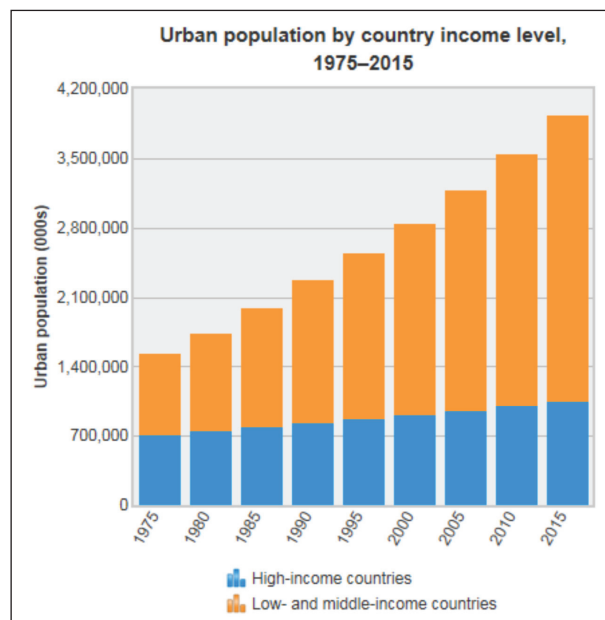


Figure 2. Source: WHO - World Urbanization Prospects 2014

In September 2015, 193 members of the United Nations met in New York with the aim of adopting a series of 17 targets in the Sustainable Development Goals (SDGs). The new SDGs cover a wide range of critical global issues, such as an end to poverty, the achievement of universal education and the fight against climate change. It is, however, important that a specific goal (SDG 11) has been added **in order to make cities inclusive, sustainable and able to deal with changes**. The key instruments in achieving goals, such as: housing development, air quality, good nutrition and transport, and the importance of the **determinants of health in the cities**.

The SDG 3 is part of the more general context of better health, as a global priority in the 2016-2030 planning. This goal is to focus on the improvement of mental and physical wellbeing for everyone at all age. The prevalence of health within in metropolitan cities with a high density of population consists of several risk factors affecting health, health inequalities, social and economic impact, are to be dealt with and discussed. Short-term interventions will not solve the basic problems and to understand the challenge ahead.

**Today Cities are not only economic engines but also innovation centres which have to manage and face dramatic demographic and epidemiological transitions.**

In 2014, a group of mayors and leaders of the world's largest cities met and committed to tackle global climate change, thus reducing greenhouse gas emissions. This initiative has been launched and promoted by United Nations (UN) through a network made up by *Cities Climate Leadership Group (C40)*, *United Cities and Local Governments Network (UCLG)* and *International Council for Local Environmental Initiatives (ICLEI)*.

Through this agreement 206 cities with a total population of 270 million people, were able to commit to a specific programme in order to reduce the level of fine dust emissions in urban areas, thereby reducing the vulnerability of their territories.

On 15 October 2015 at EXPO, mayors from 115 metropolitan cities with a total of 400 million inhabitants, signed the *Milan Urban Food Policy Pact*. This commitment involves a series of local actions in order to face global emergencies as hunger, malnutrition and

food waste. The cities signed the agreement and committed to develop sustainable food systems and healthy food at affordable prices, in order to reduce food waste.

These two examples highlight the role that mayors and cities play in order to face the development of the planet and its people through a proactive approach.

In the *Sustainable Development Goals*, the health goals relating to the achievement of urban development, such as SDG 3.3 and 3.4 are set. These are goals with a specific focus on the HIV epidemic and mortality reduction of **non-communicable diseases (NCDs)**. It is known that HIV is mainly concentrated in cities, whereas urban lifestyle is a determining factor for the growth of NCDs. NCD's have only recently had a specific focus on city environment. The increasing of urbanization and non-communicable chronic diseases are two closely interconnected factors.

Policymakers and administrators, and mainly mayors, must deal with the increasing urbanization through a new approach. The new approach is to understand the burden of the disabilities related to chronic diseases, will affect the development and sustainability of their cities.

An entire new **urban welfare** model is to be understood, analysed and studied under different aspects. It is a welfare that, also referring to a national framework, must be assessed also locally through new questions and scenarios. It is necessary to ask whether the welfare systems in big cities and small cities differ, whether we are moving from a state of welfare to a local welfare and whether cities will be available to implement strategies enabling changes and innovations in planning and affecting socio-economic issues. Only the administrators and citizens will be more inclined to support the improvement of life quality and health through a gradual improvement of lifestyle.

**An integrated approach to the SDGs will be useful in achieving health targets in cities, which are facing many challenges and will require multi-sectorial cooperation.**

Clearly the increase in life expectancy and good life quality is related to the reduction of preventable deaths due to non-communicable diseases, will lead to the establishment of **coordination structures between different sectors of urban governance interacting with health**. A coordination through the involvement

of government- local, regional and national levels and they must be supported by global actions and as a primary factor from a dynamic view of the determinants of health in cities.

**Another big challenge for the world's health authorities is to fight the NCDs' evolution and among these diabetes has an important role.**

Diabetes can be considered the biggest epidemic in human history.

According to the International Diabetes Federation (IDF), in 2013 more than 82 million people suffered from diabetes. By 2035 this number will rise to 595 million.

**It is in the big cities that the majority of with type 2 diabetes lives in. The current estimates indicate that the disease will affect two people out of three.** In fact, according to data provided by the International Diabetes Federation (IDF), 246 million urban people (65%) in the world are diagnosed with type 2 diabetes compared to 136 million living in rural areas. This number is expected to grow. **It has been estimated that in 2035, 70% of people in the world will have, diabetes: 347 million urban compared to 147 million in rural areas.** It seems that cities are the "catalyst" for diabetes: those who move to the city does have higher chances of getting diabetes than people living outside big cities. This is of great concern, especially considering that for the first time in human history, the majority of the population live in urban areas. **From these propositions the Cities Changing Diabetes came about, an ambitious programme aiming to challenge the diabetes epidemic in big cities.** It started in Mexico City followed by Beijing, Beirut, Buenos Aires, Copenhagen, Hangzhou, Houston, Jakarta, Johannesburg, Koriyama, Leicester, Madrid, Mérida, Milan, Rome, Shanghai, Tianjin, Xiamen, Vancouver.

The project is intended to actively involve municipality authorities of the world's largest metropolitan cities, including Italy, in analysing the underlying reasons for the increase of the disease and in identifying specific interventions in order to stop it.

**There is an obvious need for a Health Observatory in cities which can identify the critical mat-**

**ters and facilitate the best practices to harmonise the benefits in order to avoid further discrimination.**

In fact, health benefits in cities can be significantly different between people. It is known that in the same urban contexts there are different life expectations. In London, for example, people live longer if they are residents in Westminster, which is few metro stops from the *City*, whereas inhabitants of a decentralized suburb of Baltimore live shorter than people resident in other areas of the city.

The epigenetics have been studied for a long time and the correlation between circadian rhythm, environment and outbreak of certain diseases. Recent studies indicate that there is a strong correlation between genetic factors, individual lifestyle and the environment where we live. These are factors to be studied through a methodical approach and are relevant to identify in order to get the underlying reasons for the different situations between cities and its regions.

**A roadmap on urbanization and health should be created.** In order to raise awareness of health challenges related to urbanization and in order to increase the need to face these challenges through urban planning and inter-sector actions is it recommended that a *roadmap* I made to promote concrete actions and government strategies on health risks. The *roadmap* should take into account how urbanization increasingly exposes citizens to environmental factors (as air, water and noise pollution, problems related to public hygiene, sewage and waste disposal, etc.) and, therefore, to different health risk factors. **The roadmap should indicate actions to be promoted in the different cities, in order to avoid inequalities and to enable citizens to live a healthy life, as a common good and as an engine for everyone's development and wealth.**

Italy could be at the forefront of the study on health issues related to urbanization if government, mayors, universities, health authorities and experts interact through a virtuous and multidisciplinary approach and not through a virtual, sectoral and individualistic one thus avoiding the logic of silos, which means the lack of cooperation between the different institutions involved.