

IFMSA Policy Document

Urban Health and Healthy Cities

Proposed by Team of Officials

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Policy Statement

Introduction:

In the past century, the world's population has grown rapidly and while concentrating in cities, resulting in the emergence of various public health challenges. These challenges can be addressed by placing importance on health in urban policies and programs, with the goal of creating a city that prioritizes the well-being of its residents in terms of physical, mental, and social health. A Healthy City promotes access to healthcare, clean environments, sustainable urban planning, social inclusion, and the adoption of a healthy lifestyle. By striving for healthy cities worldwide, we can strive for health equity and establish communities that prioritize the well-being of all individuals.

IFMSA position:

The International Federation of Medical Students Associations (IFMSA) recognizes the complex challenges that cities face in the 21st century, including rapid urbanization, climate change, social inequalities, and the burden of urban-related diseases. With an integrated and multi-sectoral approach, this policy statement aims to build resilience, enhance the quality of life, and create sustainable urban environments that foster the health and well-being of current and future generations. Finally, IFMSA encourages the continuous involvement of medical students and healthcare professionals in advocating, planning, and implementing programs, policies, and actions related to urban health and healthy cities, from local to international level.

Call to Action:

Therefore, the IFMSA calls for:

Governments to:

- Prioritize integrated urban planning approaches that consider health and well-being as core components.
- Prioritize the availability of affordable and safe housing for all residents, including low-income populations, addressing homelessness, improving housing quality and affordability, and combatting housing discrimination.
- Ensure universal access to quality healthcare services within cities, which also includes promoting preventative healthcare measures and health education.
- Prioritize environmental sustainability, including implementing measures to reduce pollution, promote renewable energy sources, improve waste management practices, encourage green building standards, energy-efficient and active transportation, and the preservation of natural habitats.
- Promote access to healthy and affordable food options within cities, by supporting local farmers' markets, community gardens, and urban agriculture initiatives, promoting nutrition education, and ensuring food safety standards.
- Have robust emergency preparedness plans and response mechanisms to effectively manage public health emergencies and disasters in urban areas.
- Invest in robust data collection and monitoring systems to assess the health status of cities and track progress toward health-related goals.
- Actively promote public participation and engage community organizations in decision-making processes that affect their health and well-being.
- Foster collaborations and partnerships with various stakeholders, including academic institutions, non-profit organizations, and private sectors.

UN Human Settlements Programme and other relevant UN Agencies to:

- Support the development and implementation of national and regional urban policies that promote healthy cities and communities.
- Provide technical assistance and capacity-building support to cities in developing and implementing urban health strategies and programs.
- Promote the inclusion of health indicators in urban development monitoring frameworks to track progress and inform decision-making.
- Facilitate knowledge exchange and collaboration among cities to share experiences, lessons learned, and best practices for creating healthy cities.

Private Sector to:

- Incorporate health-promoting features into their projects, such as access to green spaces, energy-efficient designs, and active transportation options.
- Adopt sustainable practices in their operations and prioritize employee health and well-being by implementing workplace wellness programs.
- Promote collaborations with non-profit organizations, and governments to share best practices and innovative solutions for creating healthy cities.
- Advocate for the development of innovative technologies and solutions that contribute to healthier cities, such as smart healthcare systems, digital health platforms, and data-driven urban planning tools.

Non-Governmental Organizations to:

- Actively engage with local communities, empowering them to participate in decision-making processes related to health and well-being in their cities.
- Collaborate with various stakeholders to develop evidence-based policies that prioritize health and well-being in urban settings.
- Develop and implement community health programs that address the specific health needs of urban populations, focusing on vulnerable groups.

Healthcare facilities to:

- Ensure equitable access to healthcare services for all urban residents, regardless of their socio-economic status, ethnicity, or geographic location.
- Adopt telemedicine and digital health solutions to increase access to healthcare for vulnerable and marginalized populations.
- Adopt environmentally sustainable practices, such as energy-efficient building design, waste management, and the use of renewable energy sources.
- Actively participate in research initiatives related to urban health, contributing to evidence-based practices and policies that promote healthy cities.

Universities and Educational institutions to:

- Conduct interdisciplinary research on urban health and share the findings through publications, conferences, workshops, and community programs to promote evidence-based policies and actions that make cities healthier.
- Collaborate with policymakers, government agencies, and community organizations to influence urban health policies and strategies.
- Integrate Healthy Cities concepts into their curricula across various disciplines.
- Support student-led initiatives and offer opportunities for involvement in community projects centered around urban health and well-being.
- Implement pilot projects and serve as living laboratories for sustainable urban development to showcase innovative solutions that can be replicated in cities.

IFMSA, NMOs and medical students to:

- Prioritize health promotion and education activities targeted to raise awareness and empower urban residents to make informed health decisions.
- Actively engage in advocacy efforts to promote urban health policies at local, regional, and national levels, collaborating with other stakeholders.
- Engage in research activities, interprofessional education programs, and collaborative projects related to urban health.
- Advocate for the inclusion of urban health and Healthy Cities concepts into medical education curricula.
- Exchange knowledge and experiences among medical students and healthcare professionals across different cities and countries, fostering international collaboration and mutual learning.

Position Paper

Background information:

During the last century, our planet has been rapidly evolving due to globalization, urbanization, economic development, and technological innovations. Our environments, connections, behaviors, and lifestyles have been influenced by these changes. [1] According to the WHO, more than half of the contemporary population is living in urban areas and this figure is expected to increase to 68% by 2050 [2].

These trends of urbanization and cities development can be either beneficial or harmful to the health of the population and to sustainable development, due to various factors, which will be explained in detail throughout the document. [1] Firstly, environmental pollution is a significant concern in urban areas, characterized by high levels of air pollution, noise pollution, and inadequate waste management systems. Such pollution not only poses health risks, including respiratory problems and cardiovascular diseases but also contributes to the degradation of the environment, undermining long-term sustainability. [3] Secondly, the challenges of overcrowding and poor housing due to lack of basic services and housing not meeting standards in addition to illegal and inadequate building structures, in rapidly urbanizing regions exacerbate these health issues. Insufficient living spaces, lack of proper sanitation facilities, and inadequate access to clean water can lead to the spread of infectious diseases and compromise the overall well-being. [4] In addition, health inequities, which are systematic differences in the health status of different population groups that have significant social and economic impacts on individuals and societies, are huge in cities. For example, as mentioned by the WHO, "in Glasgow, male life expectancy ranges from 66.2 years in Ruchill and Possilpark to 81.7 years in Cathcart and Simshill – a difference of 15.5 years. In London, when travelling east from Westminster, each tube stop represents nearly one year of life expectancy lost according to the findings of the London Health Observatory." [5]

Aware of these current and future challenges, the WHO created the Healthy Cities program in 1986, during the first International Conference on Health Promotion, in Ottawa. [6] The concept of Healthy Cities advocates for the need of an urban environment that promotes and prioritizes the physical, mental, and social well-being of its residents and promotes social equity and sustainable development. [7] Healthy cities provide a multitude of benefits for individuals, communities, and the environment, by prioritizing the well-being of residents, which leads to improved overall health, reduced rates of chronic diseases, and an enhanced quality of life for city dwellers. [1]

Healthy Cities foster social cohesion, inclusivity, and community engagement, which contribute to improved mental health through reduced social inequalities, and a stronger sense of community within neighborhoods. They prioritize environmental sustainability through practices like green infrastructure, renewable energy sources, and efficient waste management, leading to cleaner air, mitigating climate change impacts, and enhancing the well-being of residents and the ecosystem. Moreover, Healthy Cities also promote economic prosperity by emphasizing active transportation, walkable neighborhoods, attracting investments, driving economic growth, and creating employment opportunities. [7]

In summary, Healthy Cities offer a comprehensive approach to urban living, benefiting individuals, communities, and the environment. By prioritizing health, social well-being, environmental sustainability, and economic development, they create thriving, inclusive, and sustainable communities that improve the overall quality of life for their residents and should be actively worked towards.

Discussion:

1. Introduction to Urban Health

Urban health refers to the health and well-being of individuals who live in densely populated urban areas. It encompasses various aspects, including the social, economic, and environmental factors that influence health outcomes in urban populations. The field of urban health has gained significance as the world experiences rapid urbanization, with more than half of the global population living in urban areas. [8]

At the beginning of the 19th century, only 5% of the world's population was residing in urban areas. By 2003, about 48% of the world's population was residing in urban areas, which was expected to increase to 60% of the populations living in cities by 2030. In addition, previous estimates suggested that the trend toward an urbanizing world will progress into the 21st century and that the pace of urbanization will accelerate. For instance, although London took 130 years to grow from 1 million to 8 million inhabitants, it took Bangkok, Dhaka, and Seoul 45, 37, and 25 years respectively to achieve similar population growths. It was also expected that the pace of increase in urban areas is going to differ according to the region of the world and the initial city size. In particular, it was expected that most global population growth will take place in less wealthy regions of the world, with the fastest pace of growth expected to occur in Asia and Africa. It was estimated in 2005 that in the next thirty years more wealthy countries will account for only 28% of the predicted growth in the world's urban population. The handbook on Urban Health also mentions "While North America and Europe have the highest proportion of the population living in urban areas (approximately 79.1% in North America in 2000 and in Europe 72.7% in the year 2000), the absolute number of urban dwellers in the least urbanized region, Asia, was already in the year 2000 greater than the urban population in North America and Europe combined (1.36 billion inhabitants in Asia compared to 249 million inhabitants in North America and 529 million inhabitants in Europe)." [8]

It is important to increase the focus on urban health and relevant initiatives such as healthy cities due to the fact that over the next few years, low- and middle-income countries will cross a historic threshold, becoming more urban than rural for the first time. This shift will bring about novel health risks and challenges, as well as opportunities for addressing public health issues. In addition, the demographic landscape is changing, with cities and towns in poor countries projected to account for nearly 90% of the world population by 2050. Two-thirds of the inhabitants of these countries will live in urban areas with this shift having significant implications for urban health. Moreover, urban areas can face unique health challenges due to factors such as air pollution, overcrowding, inadequate sanitation, and the spread of infectious diseases. The burden of disease in urban areas is influenced by a complex interplay of social, economic, and environmental factors. [9]

To address urban health, a multidisciplinary perspective is necessary. The field of urban health draws upon various disciplines, including epidemiology, demography, sociology, anthropology, environmental health, and economics. Both qualitative and quantitative research methods are employed to understand and address urban health issues. This multidisciplinary approach allows for a comprehensive understanding of the complex interactions between urban environments, social determinants, and health outcomes. [10]

2. Definition of a Healthy City

A healthy city can be defined as an urban environment that promotes and prioritizes the physical, mental, and social well-being of its residents and promotes social equity and sustainable development through the implementation of local policies, strategies, and programs. It encompasses various dimensions, including access to quality healthcare, clean and safe environments, sustainable urban planning, social equity and inclusion, peace, social justice, gender equality, solidarity, community participation, and the overall promotion of a healthy lifestyle. Guided by principles like health for all, Universal Health Coverage, intersectoral governance for health, health-in-all-policies, community participation, social cohesion, and

innovation, a healthy city strives to create an environment where the health and quality of life and well-being of its inhabitants at all stages of life are at the forefront of decision-making and planning processes. [10]

2. Global Statistics

According to WHO, more than half of the population is living in urban areas and it is expected to increase to 68% by 2050. [2] In these areas, inhabitants are facing many health-related risks associated with this form of living, with more than 90% of the urban residents being exposed to air pollution, which increases the risk and prevalence of numerous health-related problems, like respiratory and cardiovascular disease, strokes, and others. [11] Also, a report published in the American Journal of Health Promotion shows that the probability of being overweight or obese and having sedentary behaviours is associated with the urban characteristics of our living area. [12][13]

Despite many challenges, many countries worldwide have developed and progressively implemented the concept of Healthy Cities in their territories. Copenhagen, the capital of Denmark, has notoriously developed the concept of cycling as one of the various sustainable forms of commute and transport, adopting some principles of a Healthy City. In this Danish city, 49% of all trips to school and college are made by two-wheelers, increasing by about 35% in just 10 years. In addition, Copenhagen has allocated investments equalling more than €40 per capita in bicycle infrastructure. While this figure is lower than investments made to public transport and private automobile infrastructure, it still shows that cycling is taken seriously, which is also reflected in that 97% of Copenhageners are satisfied with the cycling conditions in the city. Of those that do cycle, 75% continue to cycle through the Danish winters. Moreover, about 5.7 million kilometres are cycled between each serious accident, indicating more safety, which is also felt by the population, where polls indicate that more 75% of residents feel safe when cycling. This approach has a significant role in improving health and reducing air pollution, leading to directly and indirectly beneficial effects for its residents. [14]

In Asia, Shanghai serves as a role model of Healthy Cities, since it has initiated various health promotion programs and policies, including the development of parks and recreational facilities, improving healthcare accessibility, and implementing measures to control air pollution. [15] Likewise, Singapore has focused on creating a clean and green environment to support a healthy lifestyle. The city-state has implemented measures to ensure high-quality air, water, and sanitation, along with promoting active living and healthy eating through public campaigns and infrastructure development. [16]

3. Principles of Healthy Cities

According to the WHO Healthy Cities Project, eleven principles have been outlined for the creation and promotion of Healthy Cities. These principles are crucial in creating environments that promote the social, mental, and physical welfare of urban inhabitants. [1]

"The Principles of the WHO Healthy Cities project are:

1. An ecosystem that is stable now and sustainable in the long term.
2. The meeting of basic needs (food, water, shelter, income, safety, and work) for all the city's people.
3. A strong, mutually supportive, and non-exploitative community.
4. A high degree of participation in and control by the citizens over the decisions affecting their lives, health, and well-being.
5. A clean, safe physical environment of high quality (including housing quality).
6. Access by the people to a wide variety of experiences and resources, with the chance for a wide variety of contact, interaction, and communication.

7. A diverse, vital, and innovative economy.
8. A form that is compatible with and enhances the preceding characteristics.
9. High health status (high levels of positive health and low levels of disease).
10. An optimum level of appropriate public health and sickness care services, accessible to all.
11. The encouragement of connectedness with the past, with the cultural and biological heritage of city-dwellers and with other groups and individuals.”

4. Impact of Healthy Cities on Health

Recent research shows that urban plans that enhance healthy activities, such as walking, have positive health-related outcomes relating to physical activity, social engagement, mental health, and road safety. [17] Also, residents do perceive an improvement in their health when exposed to green spaces and safer environments related to criminality, when they are built and planned with health policies in mind. [17][18]

4.1 Impact on Physical Health

By the end of the 19th century and the beginning of the 20th, the rapidly growing urban spaces contributed to the return of a number of communicable diseases such as cholera and tuberculosis [21]. It is now understood that environmental strategies are effective tools for preventing and controlling the spread of these diseases in densely populated environments. [20] Water sanitation and hygiene (WASH) and the sewage system have been some of the greatest advances in urban environments to reduce diarrheal and intestinal infectious diseases, even though many low-income countries and rural areas worldwide still lack this system. [21][22]

Spaces with high levels of walkability and green spaces reduce the risk of suffering from type 2 diabetes, while increased levels of noise and air pollution are associated with a higher risk of developing this endocrine disorder. [23] Highly dense areas without green spaces have been related to premature ejaculation, probably due to the loss of mental well-being. [24]

Air pollution has been found to be significantly higher in high-density areas worldwide due to industrialization and uncontrolled urbanization, air pollution is the most important environmental risk factor for cardiovascular mortality and disability globally. [26][28][29] Even short-term exposure to low concentrations of particulate matter has been proven to be associated with an increased rate of hospitalizations for coronary heart disease, equally for men and women. [28][28] Deaths related to this exposure are not limited to respiratory and cardiovascular diseases but also cause deaths related to the genitourinary and digestive systems and cause damage to most body organs. [30][31]

Obesity, defined as a Body Mass Index (BMI) equal to or higher than 30, is a major public health issue that has been largely related to an increased risk for heart disease, type II diabetes, and some cancers, in addition to other diseases, have added to an increased risk for all-cause mortality. [32] An increase in the use of technology linked with reduced physical activity has been established as being in direct causative relation with sedentary activities (television viewing mostly), which are significantly associated with higher BMI and the development of obesity. [33][34] Living in sprawling suburbs and cities has been linked to an increased risk for overweight and obesity. [35] In these environments, car use is encouraged, which discourages physical activity and increases the risk of this health issue. [38]

Being physically active has functional and health benefits. [39] Investing at least 10 minutes in walking per day has been reported to have a positive impact on human health and sleep. [40] Studies have concluded that it is important for cities to be designed with walkability as a priority for its positive impact on physical health [41][42].

4.2 Impact on Mental Health

The built environment has direct and indirect effects on mental health. [43] Design of the built environment rarely has intentional design elements which consider the mental spectrum, though many elements from the architecture and design are crucial and have important consequences on it, such as sunlighting and temperature. [44]

Living in less dense areas and neighborhoods has been related to fewer depressive symptoms, and a positive relation between green and blue spaces (green spaces refers to vegetation (grass, trees, forests, parks, etc.), whereas blue spaces are all visible surface waters in space (rivers, lakes, coastal water)) and mental health outcomes has been set, though more research is needed. [45][46][47] These spaces have also been tied to a reduction of cognitive impairment in the elderly. [48]

4.3 Impact on Social Well-being

Lack of social networks is considered a risk factor for depression. [49] It has been found that casual social interactions in neighborhoods tend to occur more frequently while walking, and well-connected streets in neighborhoods promote a sense of community and strengthen social bonds, fostering increased familiarity among the neighbors. [47][50] Additionally, having diverse land-use options nearby ensures the availability of various destinations. [45] Both factors promote social interaction, active travel, and physical activity, which in turn have antidepressant effects. [51] Several studies have found that social connections between neighbors including greater social cohesion, social capital, and reciprocal exchanges between neighbors are protective against depression. [46]

As a result of increasing urbanization, combined with a spatial planning policy of densification, more people face the prospect of living in residential environments with fewer green resources and spaces. [51] Especially people from low socioeconomic groups without resources to move to greener areas outside the cities will be affected. This may lead to environmental injustice with regard to the distribution of access to public green spaces. [53]

4.4 Impact on Environmental Health

Health is a complex matter that is influenced by mainly five broad factors, one of which is the environment. [54] Environmental health is defined as the branch of public health that is concerned with the relationship between people and the environment they live in, with the aim to promote human health and well-being through healthy and safe communities. [55]

The environment is a major contributor to morbidity and mortality on a global scale, as it was estimated in 2016 that 24% of all global deaths were attributed to environmental factors [56]. Some of these factors include air pollution, inadequate water, sanitation, chemical agents, biological agents, radiation, noise, occupational risks, built environments (housing and roads), and climate change. [59]

The impact of the environment on health is diverse, as it is linked to communicable and non-communicable diseases and unintentional injuries with uneven distribution of the burden of diseases across the life course, gender, and socioeconomic status. [58] The implementation of Healthy Cities is a process through which environmental factors of health are mitigated or eliminated. [59] Healthy cities will impact different aspects of environmental factors including:

- Reduction in the spread of communicable diseases: The environment is a factor of 3, along with host and agent factors, constituting the epidemiological triad that explains the causes of infectious diseases and how they are transmitted. [60] Realization of Healthy Cities encompasses improving

sanitation and hygiene, which reduces the number of cases of different diseases such as diarrheal diseases, polio, and intestinal worms. [61][62]

- Reduction in the number of cases of non-communicable diseases: non-communicable diseases compose 8.5 million out of 13.7 million deaths caused by environmental factors such as air pollution, chemicals, and radiation. [57][11] Through Healthy Cities, air pollution will be diminished, reducing the 6.7 million premature deaths annually from air pollution. [7]
- Achieving Health Equity: The greatest impact of the environment on health and the burden of disease is endured by low- to middle-income countries. [58] And as one of the main pillars of realizing Healthy Cities in the 21st century is promoting health equity, by realizing Healthy Cities around the world, health equity will be achieved. [63]

5. Relevance to Public Health

The World Health Organization proposed and initiated the idea of Healthy Cities in 1986, with the aim to respond to the emerging health issues due to increased urbanization and to prioritize health on the agenda of cities. A key aspect of Healthy Cities is to promote health, equity, and sustainable development. [64] Through realizing Healthy Cities, public health is tackled and improved in numerous ways including by promoting health and well-being, establishing health equity, and addressing social determinants of health.

Healthy Cities focus on creating environments that reduce the transmission of diseases, facilitate healthy lifestyles, and reduce risk factors associated with chronic diseases. [61] Initiatives such as the promotion of physical activity, access to nutritious food, tobacco control, and mental health support have a positive impact on population health and reduce the burden of diseases. Moreover, through addressing and improving the built environment, active living will be promoted, and unintentional injuries, sedentary behavior, and associated health risks will decrease. [58]

Healthy Cities also play an important role in addressing health inequalities as WHO emphasizes the importance of Universal Health Coverage (UHC), equity, and social justice in the Healthy Cities approach and seeks to reduce disparities in health outcomes between different population groups by tackling the social determinants of health such as socioeconomic status, education, employment, and social support networks. [63][65] By addressing these determinants, Healthy Cities aim to reduce health inequalities and improve overall health outcomes. This includes building inclusive communities, supporting affordable housing, promoting educational and employment opportunities, and fostering social connections. These efforts aim to ensure equal access to health-promoting resources and opportunities for all residents, regardless of socioeconomic status or demographic characteristics. [58]

6. Healthy urban planning

Urban planning is a “public health intervention that provides mechanisms to transform the physical and social environments, reducing harmful exposures and facilitating healthy lifestyles.” [66] Urban design and transport policies have the potential to reduce greenhouse gas emissions, safeguard the environment, increase equity, improve intergenerational solidarity, and increase our resilience to disasters like pandemics. [67] Urban planning can serve as a primary prevention factor for better health outcomes through increased collaborations between urban planners and public health professionals to formulate designs and policies for the population’s health. [68]

There are 12 objectives of Healthy Urban Planning which must be kept in mind while designing a Healthy City: [69]

1. Healthy lifestyle promotion through interventions like regular exercise.
2. Increasing the strength of social networks for enhanced cohesion of communities.
3. Increased access to good housing.
4. Enhanced employment and opportunities.
5. Good quality of education, culture, recreation, commerce, and health care with accessibility.
6. Promotion of local-grown food and healthy food outlets.
7. Focus on safety.
8. Increased social capital and equity.
9. Supportive environments with low noise and high air quality.
10. Focus on water and sanitation hygiene.
11. Promotion of conservation of resources and protection of land.
12. Protection of climate by decreasing emissions.

Thus, in order to implement healthy urban planning actions, there are four dimensions to be considered and to help structure the planned measures: [70]

- Dimension 1 - Planning and policymaking to decrease any risks to health.
- Dimension 2 - Planning to decrease conditions that have negative health or socio-economic impacts.
- Dimension 3 - Designing urban spaces to facilitate healthier lifestyles.
- Dimension 4 - Implementing processes and partnerships which provide co-benefits on integrating health.

Therefore, health can be integrated into urban planning through measures such as using international toolkits and guidance frameworks to support health and resilience, developing active transport infrastructure to increase healthier modes of commute (eg. cycle paths), redesigning city structures by intervention like widening sidewalks and increasing green spaces to increase the walkability and breathability of surroundings, predicting and preparing for health and environmental risks, implementing the "5-minute walk" design of urban spaces with a focus on urban compactness, evaluating and monitoring the socio-economic determinants of health for continued action while ensuring access to basic services and good connectivity. [71]

7. Sustainable environments

A sustainable environment in healthy cities includes plans and policies that prioritize environmental and public health. Providing green spaces in urban areas improves air quality, reduces the urban heat island effect, provides shade, reduces city noise and may also provide more food. [72] Thus, access to green spaces such as parks, gardens, and urban forest has a number of health benefits, including reduced symptoms of mental illness, obesity, hypertension, diabetes, and other physical and mental diseases. Similarly, it has a major role in conserving the ecosystem of the area, allowing its residents to be in direct and indirect contact with animals and plants. [73]

Proper and environment-friendly transportation also plays a major role in the development of a sustainable environment in healthy cities. Promoting walking and cycling not only reduces pollution but also improves the urban population's health. To achieve this, it is crucial to design cities with walkable and bike-friendly neighborhoods that will promote the adoption of a healthier lifestyle, while contributing to a sustainable urban environment. [74] Also, prioritizing public transportation, making it accessible, affordable, and responding to the residents' needs, not only contributes to the development of green cities but also

encourages social interaction and reduces air pollution, which improves environmental and human health, by increasing essential social support for promoting mental health and decreasing the risk of cardiovascular and respiratory diseases associated with the exposure to air pollutants. [75]

The most important factor for creating a sustainable environment is to reduce energy consumption and transition to renewable sources of energy. Promoting renewable sources of energy, by investing in cleaner energy and establishing programs to help residents on switching their power sources and home resources, helps to reduce air pollution in cities and is economically more beneficial. This transition enhances air quality, mitigates climate changes, and contributes to a healthier urban environment for humans, animals and plants. [59]

8. Healthy living conditions

WHO defines a healthy city as one that continuously creates or improves its physical and social surroundings and expands those communal resources that allow people to help one another in carrying out all of life's activities and reaching their full potential. [76] This highlights the significance of healthy living conditions in creating healthy cities. The socioeconomic determinants of health must be taken into account in urban planning and governance, which is an essential component of Healthy Cities. [77] Our way of life, including our decisions, routines, and diet, has always been the main determinant of our health. Cities can make their environments healthier and raise the standard of living for their citizens by addressing these determinants through programs, policies, interventions, increasing health literacy and education. [77]

Social determinants such as poverty, discrimination, and unequal access to healthcare greatly affect both an individual's and a community's health. Cities need to give top priority to programs that address these fundamental challenges. Cities may lay the groundwork for people to live healthier lives by putting poverty-reduction strategies in place, such as affordable housing projects, job training programs, and specialized social welfare laws. Moreover, campaigns for public awareness, diversity programs, and anti-discrimination laws might be helpful in curbing discrimination and promoting equality. Another important step in creating healthier cities is ensuring equal access to healthcare through community health clinics, mobile healthcare centers, and partnerships with local healthcare professionals. [78]

Maintaining good health requires access to safe and affordable housing. To ensure that all citizens have access to these commodities, Healthy Cities are meant to give affordable housing programs the utmost importance. Cities can work to create comprehensive plans to address the population's needs for healthy and affordable housing based on information from local inhabitants and community-based groups. [79] The following framework outlines four intervention pillars:

- Creating new, specifically designated affordable housing units.
- Maintaining and enhancing the current affordable housing stock.
- Assisting families in gaining access to healthy homes.
- Preventing displacement while enhancing housing and community infrastructure. [79]

Cities can provide stable living conditions that help enhance health outcomes by investing in affordable housing initiatives and legislation. [79]

A healthy lifestyle requires access to nutritious foods. A balanced diet and optimal well-being are impossible without access to healthful foods. Additionally, communities are lacking the commercial hubs that support thriving local economies if grocery shops and other fresh-food retailers are absent. [80]

Therefore, it is critical for healthy communities to provide all citizens, regardless of their socioeconomic status, with access to affordable and healthy food choices. [81] Here are some strategies cities may use to help people have access to affordable, healthy food options:

- Create a Food Policy Council.
- Increase Supplemental Nutrition Assistance Program enrollment.
- Encourage and provide incentives to help the community's sales of local foods.
- Support the construction of farmers' markets and the sale of local dishes across the neighborhood by providing incentives.
- Encourage legislation that supports and safeguards community gardens.
- Adopt food regulations stating minimum nutrient requirements for food and drinks that are bought with public cash.
- Demand that everyone has access to free, clean drinking water in public areas.
- By restructuring bus lines, offering free shuttles, or using other methods, make sure that locals can acquire nutritious and reasonably priced food.
- Promote the opening of grocery stores and supermarkets in underserved areas, also known as "food deserts." [81]

Access to technology has evolved into a critical component of daily life in today's increasingly digital environment. The so-called "digital divide" was brought about by the fact that not everyone has equitable access to technology and the benefits it offers. The gap between individuals who have access to and use Information and Communication Technologies, including internet connectivity, devices with online capabilities, and digital literacy skills, and those who do not is known as the "digital divide." Access to all three is necessary for communities to have a strong and long-lasting relationship with the internet, especially as basic pillars of society like education, workforce development, and innovation shift to the online mode. Internet access is viewed as a vital component of digital human rights and the basis for inclusion in a digital society. The advantages of digital technologies, participation in the digital society, and access to digital service offers are structurally mutually exclusive without strong, inexpensive, sustainable, and inclusive internet connectivity. [82]

Conducting an evaluation of the digital divide to determine its magnitude, using a digital divide taxonomy to identify the specific challenges, and co-creating a plan for digital inclusion with stakeholders are all steps that may be taken to solve this issue. A financial model is chosen to ensure sustainable funding while choosing a framework for action aids in guiding the implementation process. Then finally, the plan is executed, monitored, and evaluated. [82]

Additionally, public Wi-Fi should be made available in public areas such as parks, libraries, and community centers. Additionally, partnerships with for-profit and charity businesses should be formed in order to provide technological training courses and broaden access to low-cost internet services. Communities can take these actions to contribute to the development of a more inclusive and empowered society in the digital age. [82]

9. Healthy governance

Urban governance for health refers to "the attempts of governments or other actors to steer communities, countries or groups of countries in the pursuit of health and well-being". [83] An inter-sectorial form of participatory governance is essential for the implementation of the concept of Healthy Cities in our municipalities. [83][84]

The Healthy Cities governance approaches include 3 key elements [83].

1. Health in all policies, which takes into account the health implications of all policies and governance decisions, while synergizing various sectors and preventing negative health impacts on public health and health equity. [84]
2. Whole-of-government, which increases action for health and accountability through vertical (between levels of government) and horizontal (between various sectors at the city level) integration of planning through shared goals and action principles. [84][85]
3. Whole-of-society, which involves multiple stakeholders in the community like families, NGOs, media, religious institutions, civil society, and the private sector among others for the promotion of health as an overarching social goal. [84]

The implementation of these three approaches will enhance the synchronization of policies, accountability for health, multi-sectorial coordination, and trust for partnerships among various local and national stakeholders for the formulation of an integrated health city development program. [83][84]

Good governance for health can be made possible, thus, by adopting the 5 principles for the governance of Healthy Cities:

1. Integration of Health in All Policies by formulation of multi-faceted policies in all sectors with positive health impacts as a core principle while engaging relevant stakeholders in partnerships for health.
2. Addressment of social, economic, and environmental determinants of health through the implementation of healthy urban planning with the aim of alleviation of poverty, reduction of health inequities, achievement of individual rights, growth of social capital, improvement of social inclusion, and promotion of sustainability in the use of resources.
3. Active community engagement through the implementation of proactive strategies for health promotion at schools and workplaces to improve health literacy and disseminate awareness for healthy lifestyle practices.
4. Recalibration of social services in tandem with healthcare systems towards equity to achieve the ultimate goal of Universal Health Coverage.
5. Constant evaluation and monitoring of the various determinants of health in the city to acquire data that helps design relevant changes in both policy and implementation to improve the state of health. [85]

10. Linkage to the Sustainable Development Goals

Healthy cities and the Sustainable Development Goals (SDGs) are significantly interconnected and are mutually supportive concepts aimed at promoting sustainable development and improving people's well-being. [7] Healthy cities and urban areas serve as experimental settings at the national level, where collaborative efforts take place to accomplish diverse SDGs and foster large-scale innovation. [86] The Sustainable Development Goals, agreed upon by heads of state at the UN General Assembly in September 2015, are composed of 17 goals that serve as a blueprint to achieve a more sustainable future. [59] One of the SDGs, Goal 11 "Sustainable Cities and Communities", specifically focuses on making cities and human settlements inclusive, safe, resilient, and sustainable. [86]

The concept of healthy cities also contributes to the realization of multiple SDGs including [61]:

Goal 2: "Zero Hunger"

In the context of promoting healthy cities, innovative measures can be adopted to improve food production and availability and ensure access to safe, nutritious, and sufficient food. These measures

include increasing the availability of healthy options through initiatives like green markets, providing clear information to empower individuals to make healthier choices, through methods like calorie labeling and graphic labeling, implementing restrictions or disincentives for unhealthy food and beverages through economic zoning policies, and delivering nutrient-dense meals to the poor to combat malnutrition.

Goal 3: “Good Health and Well-Being”

Healthy cities prioritize accessible healthcare services, disease prevention and control measures, promotion of healthy lifestyles, mental health support, disaster preparedness, emergency response, and equity in healthcare access. By incorporating these initiatives into urban planning and governance, healthy cities contribute significantly to achieving SDG 3 and improving the overall health and well-being of their residents. [7]

Goal 6: “Clean Water and Sanitation”

The efforts of healthy cities include improved infrastructure, and technology, access to safe drinking water, improved sanitation, proper waste disposal, pollution management, and good hygiene. These measures contribute to the physical, mental, and social health of its residents while creating a clean and welcoming environment for all.

Goal 11: “Sustainable Cities and Communities”

Healthy Cities play a key role in advancing SDG 11, which focuses on building sustainable cities and communities. By prioritizing issues such as improving housing and sanitation, reducing overcrowding, and modernizing slums, healthy cities meet public health priorities while promoting sustainable urban development. They emphasize better urban planning, including safe transportation systems, green spaces, and improved access to public facilities. In addition, healthy cities contribute to resilient communities by implementing effective emergency responses to natural disasters, reducing road deaths, improving air quality, and promoting physical activity. [87]

Goal 12: “Responsible consumption and production”

Unsustainable consumption and production patterns that damage the environment have negative health consequences, including air pollution, polluted water supplies, and food waste. Healthy Cities, therefore, strive to become sustainable cities by encouraging national and multinational companies and individuals to adopt practices that promote the health of both the planet and its inhabitants

Goal 13: “Climate Action”

Healthy cities’ approach acknowledges the significant impact of climate change, such as an increase in frequency and severity of extreme weather events, and its consequences on health, including disruptions in food supply chains, the spread of vector, water, and foodborne illnesses, displacement and migration, and physical injuries. Healthy cities aim to reduce carbon emissions, improve air quality, and promote physical activity, for example, by promoting walking and cycling over car usage. As a substantial portion of the population, two-thirds of all humanity by 2050 will reside in cities, adopting a Healthy Cities approach is a crucial pathway for mitigating climate change. [87]

Goal 16: “Peace, Justice, and Strong Institutions”

Healthy cities foster peaceful and inclusive environments by providing safe spaces for people to live, work, and engage in recreational activities. They also prioritize effective, transparent, and accountable intersectoral governance to advance health, achieve universal health coverage, and progress toward other SDGs. Additionally, healthy cities serve as catalysts for pro-health social activism, ensuring access to justice for all, particularly for the marginalized and displaced populations

11. Global Efforts on Healthy Cities

The concept of healthy cities, born as early as the middle of the 19th century in the Health of Towns Commission, which originated in England in 1843, emerged as a flagship project at the WHO Regional Office for Europe in January 1986. [6][88] *The Ottawa Declaration of 1986* propelled the shift of focus of the achievement of public health objectives from only the healthcare sector to broader multi-sectoral settings, encouraging the involvement of local governing bodies in health promotion. [88]

Under the leadership of WHO, a number of programs, projects, and networks have been established to work for the achievement of “Health for All” through the Healthy Cities pathway:

- (i) The European Healthy Cities Network (1987-88) has brought together 100 flagship cities and 30 national networks to provide the assistance necessary for them to achieve the Healthy Cities’ goals and objectives. [89]
- (ii) The Alliance for Healthy Cities (2003) is the network established on “the international efforts on Healthy Cities worldwide.” The members, including local and national governing bodies, NGOs, the private sector, international agencies, and academic institutions, all support Healthy Cities as an approach to health promotion. [90]
- (iii) The WHO Global Network for Age-friendly Cities and Communities (2010) aims “to connect cities, communities, and organizations worldwide with the common vision of making their community a great place to grow old in.” [91]
- (iv) The Urban Health Initiative (2021) “aims to reduce the deaths and diseases caused by air pollution and lack of clean energy access in cities.” [92]
- (v) The Partnership for Healthy Cities is “a global network of 70 cities whose leaders have committed to prevent NCDs – including cancer, diabetes, heart disease, and chronic lung disease – and injuries through proven interventions.” [93]

After the 9th WHO Global Conference on Health Promotion in 2016, several cities from across the world committed to the Shanghai Declaration which ultimately led to the establishment of a Healthy Cities Network by WHO’s Southeast Asia Regional Office (SEARO) and the Regional Laboratory on Urban Governance for Health Welfare (UGHW), in 2021. [94] A Healthy Cities Project, initiated by WHO Africa, commenced work in Senegal, Cameroon and Congo among others, in the 1990s, while 6 Latin American cities joined a policy-making program under Partnership for Healthy Cities in 2022. [88][95][96][97]

12. Role of Youth and Medical Students

Youths and medical students, through their active participation and distinctive ideas, play critical roles in establishing and implementing Healthy Cities worldwide. Youth involvement in urban health projects can improve health outcomes and foster a sense of community. [98]

A key part of policy advocacy that supports Healthy Cities principles establishment is played by young people and medical students. Youth activists have been successful in influencing neighborhood policies for active transportation, healthy food access, and tobacco control through grassroots initiatives. Similarly, medical students can advocate for evidence-based policies by drawing on their knowledge and research findings. [99]

Communities can leverage the immense potential of youth and foster healthier and more livable environments for everyone by recognizing the distinctive contributions of young people and giving them chances to lead. Their advocacy, involvement in the community, partnership with stakeholders, and substantive participation in decision-making processes all contribute to positive transformation and a lasting improvement in the overall health of the community. [99]

Cities may make use of youth's dynamism, creativity, and peer-to-peer connections by involving them in the development and execution of health programs. [98] Overall, engaging youths in the urban planning process is an inclusive strategy that recognizes their significant role in influencing the future of urban life. [100]

13. Healthy Cities and post-pandemic Recovery

From the early days of the pandemic, cities have been on the frontline of COVID-19. The spread of the virus globally through trade, travel, and mobility meant that a large number of first-detected infections appeared in urban areas. In fact, as with previous public health crises, the key determinants of risk of infection for urban residents were inequality, inadequate housing, and high levels of air pollution which have played a major role in the transmission of viruses. [101]

The pandemic highlighted the critical need for a robust and well-equipped healthcare system in urban areas. The public health crisis exposed the need for increased investment in hospitals, medical facilities, and healthcare professionals, being markedly worse for healthcare providers in South Asia. [102]

Due to the challenges the world population in general faced during the pandemic, especially related to the mandatory lockdowns, it was brought to attention the need for accessible green spaces, wider sidewalks, bike lanes, and pedestrian-friendly infrastructures that enable social distancing and promote active transportation. [103] Online education, online banking, telemedicine, and high-speed internet became essential during the pandemic, having accelerated initiatives to improve digital infrastructure and expand broadband connectivity to urban areas. [104]

The pandemic highlighted the relationship between urban development and environmental sustainability. Lockdowns and reduced human activities resulted in decreased pollution levels and improved air quality in many cities. This realization sparked discussions about the importance of sustainable urban planning, including green building practices, renewable energy integration, and the promotion of public transportation. [105]

The COVID-19 crisis has exacerbated the structural weaknesses of our healthcare systems, particularly in urban areas. This topic is being addressed by the World Economic Forum's Healthy Cities and Communities Initiative in three worldwide cities. [106] Making cities more inclusive must be part of post-pandemic recovery efforts, according to UN Secretary-General António Guterres in remarks to the event. [108] Cities house 60% of refugees and up to 80% of internally displaced persons. That is why cities' COVID-19 recovery and rebuilding plans must try to address long-standing vulnerabilities and go beyond resolving COVID-19's health impacts to address the persisting inequities that the poor and vulnerable face. [108]

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