



ANTALYA PRIVATE ACI COLLEGE MODEL UNITED NATIONS CONFERENCE 2025

AGENDA ITEM:

IMPLEMENTING EFFECTIVE STRATEGIES TO REDUCE NON-COMMUNICABLE DISEASES (NCDS) IN URBAN SETTINGS

UNDERSECRETARY GENERAL:
GULSAH DIRLIK

ACADEMIC ASSISTANT YAGIZ GUL

-WHO STUDY GUIDE-

Agenda Item: Implementing Effective Strategies to Reduce Non-Communicable Diseases (NCDs) in Urban Settings

-Table Of Contents-

- 1) Letters from the Secretariat
- 2) Letter from the Under-Secretary-General
- 3) Letter from the Academic Assistant
- 4) Introduction to the Committee
- 5) Introduction to the Agenda Item: Implementing Effective Strategies to Reduce Non-Communicable Diseases (NCDs) in Urban Settings
- 6) Definitions of Key Terms
- 7) Associated Organisations
- 8) Post UN Actions
- 9) Questions To Be Addressed
- 10) Bibliography

1) Letters From The Secreteriat

First of all, let me extend a huge and warm welcome to all of the participants to the very first official session of Private Açı High School Model United Nations Conference of 2025, which will be held in Antalya from September 2nd to 4th!

I, Yasemin Raithel, as the Secretary-General of this well-planned and coordinated conference, it is my immense pleasure to be able to present this organization with this position. I sincerely wish you a fulfilling and thriving one. Model United Nations Conferences are not just a conference, you have a wonderful opportunity to level-up your knowledge of international relations and today's issues, gaining confidence whilst being a representative in the committees. Especially, members of the Academic Team; our Under-Secretary Generals, Academic Assistants and Board Members are the best you could ever ask for in Antalya society. Each of our committees are carefully selected for you to have the best experience ever. From advanced committees to beginner ones.

My utmost gratitude to the Principals and Teachers of our school, their effort and guidance made this conference possible. Moreover, I want to thank every single attendee of AÇIMUN'25, particularly our Academic and Organization Teams, who worked hard and served their best. Also a special appreciation goes to the only other person of the Executive Team, his organization skills are beyond any measure.

Last but not least, I want to leave a quote from Founder Father of the Republic of Turkey, Mustafa Kemal Ataturk:

Turkish Youth, your first duty is to preserve and to defend Turkish Independence and the Turkish Republic forever. This is the very foundation of your existence and your future. This foundation is your most precious treasure.

Lastly, whether you are a first timer delegate or an experienced member of ours, I wish everyone a marvelous experience and success during the conference. Hope to see you soon!

Sincerely, Yasemin RAITHEL Secretary-General of AÇIMUN'25

2) Letter From The Under-Secretary-General

Honourable Delegates,

It is my great pleasure to welcome you all to ACIMUN'25 and the World Health Organization. My name is Gülşah, and I have the distinct honor of serving as your Under-Secretary-General, alongside my esteemed Academic Assistant, Yağız Gül.

Our agenda, "Implementing Effective Strategies to Reduce Non-Communicable Diseases (NCDs) in Urban Settings" is both timely and highly relevant. With urbanization accelerating across the globe, cities are becoming focal points not only of opportunity and innovation but also of health challenges. Non-communicable diseases such as cancer, diabetes, cardiovascular illnesses, and chronic respiratory conditions remain among the leading causes of mortality worldwide, and their prevalence is particularly pressing in urban environments. This agenda invites you to reflect on how governments, international organizations, and local communities can cooperate to promote healthier lifestyles, reduce risk factors, and build sustainable health systems. Your work in this committee will contribute to a discussion that goes far beyond debate—it touches the future of global health, development, and equity.

Although I am currently navigating my own university selection period—a process demanding focus and determination—I have approached the preparation of this committee with unwavering commitment. It has been both a challenge and a privilege, and I believe that the discussions you will hold will showcase the same level of dedication and enthusiasm.

I kindly urge you to read this study guide thoroughly and attentively. While it will provide you with a strong foundation, it should not be your only source. Independent research will be critical in deepening your understanding and enriching the debates to come.

It is my heartfelt hope that you not only engage in meaningful, constructive discussions but also form lasting friendships and memories throughout this conference. May ACIMUN'25 be an experience that is both intellectually rewarding and personally inspiring.

Sincerely, *Gülşah Dirlik*

Under-Secretary-General

3) Letter From The Academic Assistant

Esteemed Participants of the WHO Committee,

My name is Yağız Gül, and I will be serving as your Academic Assistant.

It is my uttermost pleasure to welcome you to the WHO committee, which will be focusing on a critical agenda item. NCDs such as cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes are now the leading cause of death worldwide, which makes the focus of the committee highly relatable to our daily lives.

I would like to thank my honourable Under-Secretary General Gülşah Dirlik, for providing me the opportunity to work alongside her, whom we made collateral efforts for this committee. Also, I would like to thank the Secretariat for their trusting me with this role.

Please do not hesitate to contact me if you have any questions regarding the committee. I am sure that ACIMUN'25 will be an amazing experience for all of us. I look forward to seeing you there.

Best wishes,

Yağız Gül

Academic Assistant

4) Introduction to the Committee

World Health Organization (WHO)

The World Health Organization (WHO) is a specialized agency of the United Nations, established on April 7, 1948, with the primary mission of promoting global health and coordinating international efforts to combat diseases. Headquartered in Geneva, Switzerland, the WHO works with 194 Member States to set health standards, provide technical support, monitor public health risks, and develop evidence-based health policies.



The organization plays a central role in responding to health emergencies, advancing universal health coverage, improving access to essential medicines and vaccines, and addressing global health challenges such as pandemics, non-communicable diseases, and health inequalities. Through its regional offices and partnerships, WHO acts as a global leader in guiding nations toward stronger and more resilient healthcare systems.

5) Introduction to the Agenda Item: Implementing Effective Strategies to Reduce Non-Communicable Diseases (NCDs) in Urban Settings

Non-communicable diseases (NCDs), also known as chronic diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioural factors. These are the health conditions that are not

caused by infectious agents and cannot be passed from person to person. They usually develop over a long period and progress slowly.

Non-communicable diseases come in various types, and some of them will be addressed thoroughly throughout the study guide.

1) Cardiovascular diseases (CVDs)

Cardiovascular diseases are a group of disorders of the heart and blood vessels. Some of the instances are coronary heart disease (heart attack, angina), cerebrovascular disease (stroke), peripheral artery disease, heart failure, etc.

Reasons (Causes and Risk Factors):

Heart diseases are primarily caused by a combination of behavioral, metabolic, and environmental risk factors. Unhealthy lifestyle choices play a major role in the development of heart diseases. Diets high in saturated fats, salt, and sugar can lead to high blood pressure, high cholesterol, and obesity, all of which increase the risk of cardiovascular conditions. Physical inactivity contributes to poor heart health by weakening the cardiovascular system and promoting weight gain. Tobacco use significantly damages blood vessels, raises blood pressure, and reduces oxygen in the blood, making the heart work harder. Similarly, excessive alcohol consumption can elevate blood pressure, cause irregular heart rhythms, and weaken the heart muscle over time. Together, these factors greatly increase the risk of developing heart disease.

Certain medical conditions, often referred to as metabolic risk factors, significantly contribute to the development of heart diseases. High blood pressure (hypertension) forces the heart to work harder than normal, leading to the thickening of arteries and increased risk of heart attacks and strokes. High cholesterol levels can cause fatty deposits to build up in blood vessels, restricting blood flow to the heart and brain. Diabetes, especially when poorly managed, damages blood vessels and increases the risk of coronary artery disease. Obesity, often linked with poor diet and lack of

physical activity, puts additional strain on the heart and is closely associated with all the other metabolic risk factors. These conditions often occur together, compounding the overall risk to cardiovascular health.

In addition to lifestyle and medical factors, several external contributors also play a significant role in the development and worsening of heart diseases. Air pollution, particularly exposure to *fine particulate matter (PM2.5), has been linked to inflammation of the blood vessels and increased risk of heart attacks and strokes. Chronic stress and poor mental health can lead to elevated blood pressure, unhealthy coping behaviors such as smoking or overeating, and direct physiological strain on the heart. Furthermore, socioeconomic inequalities and lack of access to quality healthcare prevent early detection, treatment, and management of cardiovascular risk factors, leaving vulnerable populations disproportionately affected by heart disease.

Consequences:

Like many other diseases, the consequences of heart diseases can be thought of at two levels: personal consequences and community & societal consequences.

While personal ones include physical health issues, poor emotional well-being, reduced quality of life, financial burden, potential disability, and premature death, societal ones consist of increased healthcare costs, loss of workforce productivity, greater dependency ratios, pressure on health infrastructure, and intergenerational effects.

2) Cancers (Malignant neoplasms)

Cancer is a group of diseases where abnormal cells grow out of control and crowd out normal cells. Here are a few of the many varieties: Breast cancer, lung cancer, prostate cancer, liver cancer, cervical cancer, thyroid cancer, bladder cancer, pancreatic cancer, ovarian cancer, kidney cancer, leukemia, lymphoma, melanoma, brain cancer, bone cancer, testicular cancer, etc.

Causes and Risk Factors:

There are a lot of factors that cause cancer. They can be categorized as:

a) Lifestyle factors:

These can be listed as smoking, consuming alcohol, poor diet, physical inactivity etc.

b) Environmental factors:

These consist of air pollution, UV radiation, occupational hazards etc.

c) Biological factors:

These include genetics, age, gender, etc.

d) Infections that can lead to cancer:

Although cancer is an NCD-type of disease, HPV, hepatitis B/C, or some other infections can also cause cancer since certain viruses, bacteria, or parasites can damage DNA, cause chronic inflammation, or weaken the immune system, creating conditions where abnormal cells can grow.

Impact of Cancer

Personal level:

Cancer often causes significant physical suffering, such as pain, fatigue, and side effects from treatments like chemotherapy or radiotherapy. Many patients

experience a reduced quality of life, as their ability to work, study, or engage in daily activities is limited. The disease can also take an emotional toll, leading to anxiety, depression, and feelings of isolation. In addition, cancer treatment can be extremely expensive, creating a financial burden for patients and their families, especially in countries without universal healthcare.

Community level:

When cancer rates are high, communities face broader challenges. There is often a loss of productivity as people may be unable to work or may die prematurely, reducing the active workforce. The strain on healthcare systems increases as hospitals and clinics require more resources, staff, and specialized equipment to treat cancer patients. Finally, cancer imposes a large economic cost on societies, both from direct medical expenses and from indirect losses such as reduced economic output and increased dependency on social support systems.

Diagnosis and Treatment

1) Diagnostic methods

There are some methods that are being used when diagnosing cancer. Some of them are biopsy, imaging and blood tests. Since cancer is a disease that can progress without any obvious symptoms, it is extremely significant to have regular checkups and to consult a doctor as soon as the slightest symptom is noticed.

2) Treatment options

When the cancer is diagnosed, depending on its type and level, the treatment options that are planned to be applied may vary. While these treatments can be surgeries, there are various therapy options such as chemotherapy, radiotherapy, targeted therapy, and immunotherapy.

3) Challenges in low-resource settings.

In low-resource settings, cancer control faces significant barriers due to limited healthcare infrastructure and restricted financial resources. Many areas lack specialized diagnostic equipment, trained oncologists, and pathology services, which leads to late detection when the disease is harder and more expensive to treat. Access to essential medicines and advanced treatments such as radiotherapy or targeted therapy is often scarce or unaffordable. Public awareness about cancer symptoms and the importance of early screening is frequently low, contributing to delayed care-seeking. In addition, healthcare systems may already be overburdened by infectious diseases, leaving few resources for non-communicable diseases like cancer. As a result, patients in these regions often experience higher mortality rates and greater suffering compared to those in high-income countries.

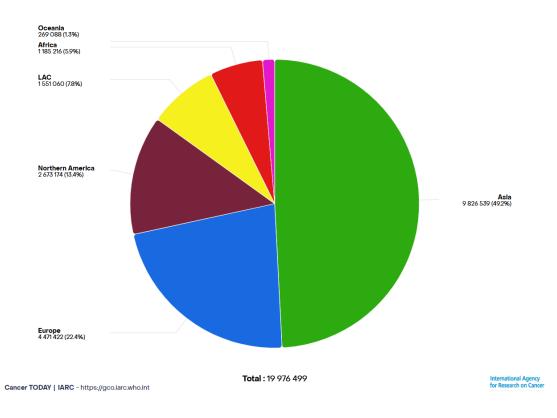
Prevention and Early Detection

There are a number of methods that can be used to take precautions before the disease occurs. One of them is vaccinations. Some vaccines can prevent certain types of cancer by protecting against infections that cause them. The human papillomavirus (HPV) vaccine helps prevent cervical, anal, throat, and several other cancers by blocking infection with high-risk HPV strains, while the hepatitis B vaccine reduces the risk of liver cancer by preventing chronic hepatitis B infection. These vaccines work by training the immune system to recognize and destroy the virus before it causes long-term damage that can lead to cancer. Another factor that can help to prevent cancer is changing lifestyles to a healthier one. At this point, a highly conscious society is the key part.

Global and Regional Statistics

Cancer is generally more prevalent in high-income regions, particularly Europe, North America, and parts of Oceania, mainly because of aging populations, lifestyle factors (such as diet, alcohol, and tobacco use), and widespread screening programs that detect more cases. However, mortality rates are often higher in low- and middle-income regions, especially in Africa and parts of Asia, because cancers are usually detected at later stages and access to effective treatment is limited.

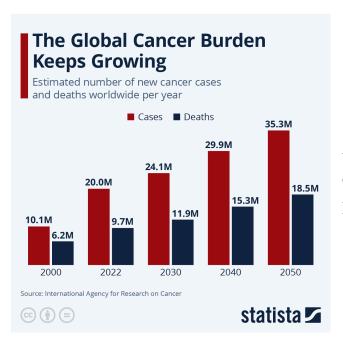
In terms of treatments and access, high-income countries typically have advanced healthcare systems with access to modern diagnostic tools, specialized cancer centers, surgery, radiotherapy, chemotherapy, targeted therapies, and immunotherapies. Early detection programs and cancer registries are common, improving survival rates. Lowand middle-income countries often face shortages of oncologists, radiotherapy machines, and essential medicines. Many patients must travel long distances for care or pay out-of-pocket for treatments, leading to delayed or incomplete therapy. Palliative care access is also limited in many of these settings.



Above is a pie chart that shows the number of cancer cases based on the continents.

Here is a very helpful link where you can access cancer statistics by continent, country, type, gender, etc. I highly recommend you to check out this site, which provides information on mortality rates, access to treatment options, cancer-related projects, and much more.

https://gco.iarc.fr/en



As can be seen from the graph, cancer cases throughout the whole world will keep increasing year by year.

International and National Responses

International and national responses to cancer focus on prevention, early detection, treatment, and palliative care, coordinated through both global health initiatives and country-level strategies. The World Health Organization (WHO) leads efforts such as the Global Action Plan for the Prevention and Control of Noncommunicable Diseases, which includes targets for reducing cancer-related deaths. Many countries have

developed *National Cancer Control Programs (NCCPs) that outline policies for public education, vaccination campaigns (such as HPV and hepatitis B), screening services, and expanded access to treatment. International partnerships, including the Union for International Cancer Control (UICC) and various non-governmental organizations, provide funding, technical assistance, and research collaboration. These efforts aim to reduce disparities between high- and low-resource settings, strengthen healthcare systems, and promote equitable access to effective cancer prevention and care worldwide.

Challenges in Combating Cancer

Challenges in combating cancer arise from a mix of medical, social, and economic barriers that hinder prevention, early detection, and effective treatment. A major difficulty is late diagnosis, especially in low-resource settings where public awareness is limited and access to screening is scarce. High treatment costs and the expense of advanced technologies like radiotherapy and targeted therapies make care unaffordable for many patients. Unequal access to medicines, skilled healthcare professionals, and specialized facilities creates disparities in survival rates between high- and low-income countries. Additionally, shortages of palliative care services, cultural stigma surrounding cancer, and weak health information systems further limit progress. Research and innovation are also unevenly distributed, with most cutting-edge developments concentrated in wealthier nations, leaving others behind. These combined factors make reducing the global cancer burden a persistent and complex challenge.

3. Chronic respiratory diseases (CRDs)

These are chronic diseases of the lungs, including the air passages and the lung tissue. Among the most common chronic lung diseases are pulmonary hypertension, asthma,

chronic obstructive pulmonary disease (COPD), occupational lung diseases (such as asbestosis and silicosis), and interstitial lung disease.

Reasons

Chronic respiratory disease occurs due to a combination of biological, behavioral, and environmental factors. Being exposed to harmful substances such as air pollution, dust, cigarette smoke, small particles, and chemical vapors over a long period of time is one of the primary reasons. Small particles such as PM2.5 can penetrate deep within the lungs and lead to long-term inflammation, which gradually weakens the lungs. Smoking remains the simplest cause of chronic obstructive pulmonary disease and other lung issues. Smoking not only affects the person who smokes individually, rather harms non-smokers around the smoker via second-hand smoking.

Some of the other risks are hazards of mining and construction work, early symptoms of disease of the lungs, poor air circulation in the house, and genetic issues such as low levels of alpha-1 antitrypsin. Failure to exercise and poor nutrition can also damage the lungs and decrease recovery from lung disease.

Consequences

CRDs can lead to persistent shortness of breath, a chronic cough, fatigue, and difficulty with daily activities for every individual. According to patients, quality of life decreases and patients become anxious or depressed as a result of things the disease renders them incapable of performing. In extreme cases, patients may require oxygen therapy in order to breathe or may suffer premature death.

Both within populations and at society as a whole, CRDs result in increased healthcare costs, higher rates of hospitalizations, and reduced productivity of the workforce. The chronic need for pharmacologic therapy and respiratory support places high demands on health systems, particularly in urban settings with high levels of pollution.

Diagnosis and Treatment

Diagnosis will sometimes involve tests to see how well the lungs function, like spirometry, and imaging tests such as X-ray or computed tomography(CT) scan. At times, it might be necessary to perform allergy tests or a bronchoscopy. CRDs are not curable but can be slowed down by proper care with the aid of proper medication and the formation of new habits such as not smoking and staying away from pollution. Surgery or lung transplantation may also have to be done in extreme cases. It is generally difficult to obtain inhalers, oxygen therapy equipment, and respiratory care

professionals without resources. Delays in diagnosing and treating patients lead to sickness and death.

Prevention and Early Detection

It is extremely important to avoid exposure to tobacco smoke, air pollution, and work hazards. Employing clean fuel for cooking, ensuring there is adequate airflow, and adhering to safety principles at work can significantly reduce exposure. Vaccination against respiratory infections such as the flu and pneumococcal disease can prevent conditions from worsening. Periodic lung tests, particularly for high-risk individuals, are vital for detecting problems early and taking prompt action.

4) Diabetes

Diabetes is a group of chronic metabolic disorders in which the body cannot regulate blood sugar (glucose) levels properly. The main forms are Type 1 diabetes, Type 2 diabetes, gestational diabetes, and some less common types linked to genetic or other medical conditions.

Causes and Risk Factors

Type 1 diabetes is an autoimmune condition where the body's own immune system attacks and destroys the insulin-producing cells in the pancreas. While the exact cause has not been fully understood, a combination of genetic vulnerability and environmental factors is said to be implicated.

Type 2 diabetes, on the other hand, is usually associated with lifestyle variables like a diet which includes high consumption of refined sugars and saturated fats, lack of exercise, and being overweight.

Gestational diabetes is encountered during pregnancy when hormonal fluctuations cause the body to become less sensitive to insulin, threatening mother and infant. A few other possible causes for diabetes include pancreatic diseases, certain hormonal disorders, and long-term use of some medicines.

<u>Consequences</u>

Poorly controlled diabetes can lead to serious complications. These include heart disease, kidney impairment, nerve damage, blindness, and slow wound healing, etc. On a daily basis, symptoms such as fatigue, frequent urination, thirst, and recurring infections can reduce life quality. For societies, the impact is equally significant. The approaching cost of long-term treatment, along with the resources needed to control

complications, strains healthcare systems. Productivity lost due to disease or disability also adds to the economic cost.

Diagnosis and Treatment

Diabetes is typically diagnosed with fasting blood sugar, oral glucose tolerance tests, or HbA1c, a test which indicates average blood glucose levels over a span of several months. Continuous glucose monitors are increasingly used to monitor fluctuations in real time.

Type 1 diabetes requires lifelong insulin therapy, while Type 2 diabetes can sometimes be managed with diet and oral medication before insulin is required. Gestational diabetes typically goes away after birth but requires careful monitoring to prevent future Type 2 diabetes.

In the majority of resource-poor settings, issues such as the cost of insulin, restricted availability of blood glucose monitoring equipment, and insufficient patient education render it difficult to manage effectively, leading to unnecessary complications.

Prevention and Early Detection

Although there is no known method of preventing Type 1 diabetes yet, early detection facilitates simpler management and reduces the risk for complications. However, Type 2 diabetes can generally be prevented or postponed by having a healthy lifestyle. Maintaining a healthy weight, consuming a healthy diet rich in whole foods, and being active are the main components of such a lifestyle.

5. Other important NCD categories

a) Neurological disorders

A neurological condition is any condition that affects the brain, spinal cord or nervous system. Some of the most known ones are Alzheimer's disease & other dementias, Parkinson's disease, epilepsy, multiple sclerosis (MS), migraine & chronic headache disorders etc.

b) Mental health conditions

A mental disorder is characterized by a clinically significant disturbance in an individual's cognition, emotional regulation, or behaviour. Some instances are depression, anxiety disorders, bipolar disorder, schizophrenia, etc.

c) Chronic kidney disease

Chronic kidney disease (CKD) is a long-term condition where the kidneys gradually lose their ability to filter waste and excess fluid from the blood, often leading to serious health problems over time.

d) Autoimmune diseases

Autoimmune diseases are conditions in which the body's immune system mistakenly attacks its own healthy cells and tissues, thinking they are harmful, leading to inflammation and damage in various organs. Some varieties are lupus, rheumatoid arthritis, and multiple sclerosis.

e) Endocrine disorders

Endocrine disorders are medical conditions that occur when the body's endocrine glands produce too much or too little of certain hormones, or when the body cannot respond to them properly, disrupting normal processes like growth, metabolism, and reproduction. Thyroid diseases are an example of endocrine disorders.

f) Musculoskeletal disorders

Musculoskeletal disorders are conditions that affect the muscles, bones, joints, tendons, ligaments, or other supporting structures of the body, often causing pain, stiffness, and reduced mobility. Some examples are osteoarthritis and osteoporosis.

g) Chronic liver diseases

Chronic liver diseases are long-term conditions in which the liver gradually loses its ability to function properly, often caused by infections (like hepatitis B or C), alcohol abuse, fatty liver disease, or autoimmune disorders, leading to complications such as cirrhosis, liver failure, or liver cancer. Some instances are cirrhosis, non-alcoholic fatty liver disease, etc.

h) Oral diseases

Oral diseases are conditions that affect the mouth, teeth, gums, and related structures, including cavities (dental caries), gum disease (periodontitis), oral infections, and oral cancers, which can impact overall health and quality of life.

i) Vision and hearing loss

Vision and hearing loss are impairments of the eyes or ears, often caused by chronic, non-infectious conditions like macular degeneration, cataracts, or noise-induced hearing damage, affecting daily life and independence.

6) Definitions of Key Terms

NCDs (Non-communicable Diseases): Noncommunicable diseases (NCDs), also known as chronic diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioural factors.

Fine Particulate Matter (pm 2.5): Fine particulate matter, often called PM_{2.5}, refers to tiny particles in the air that have a diameter of 2.5 micrometers (μm) or smaller — that's about 1/30th the width of a human hair. Because they're so small, PM_{2.5} particles can travel deep into the lungs when inhaled, and some can even enter the bloodstream. They're made up of a mixture of solid particles and liquid droplets, and can come from various sources, such as ombustion processes (car engines, coal-fired power plants, industrial facilities), residential heating (wood stoves, fireplaces), wildfires, secondary formation (when gases like sulfur dioxide or nitrogen oxides react in the atmosphere to form particles)...

 $PM_{2.5}$ is a major air pollution concern because prolonged exposure is linked to respiratory diseases, cardiovascular problems, and premature death. The World Health Organization (WHO) sets guideline limits for $PM_{2.5}$ to protect public health — currently recommending an annual mean of no more than 5 micrograms per cubic meter ($\mu g/m^3$).

NCCPs (*National Cancer Control Programs*): NCCPs are National Cancer Control Programs. They are strategic plans developed by countries to reduce the burden of cancer. They outline policies and actions for prevention, early detection, diagnosis, treatment, and palliative care, aiming to improve survival rates, reduce inequalities, and strengthen healthcare systems' capacity to manage cancer effectively.

<u>SDG 3.4:</u> Sustainable Development Goal 3.4 is about non-communicable diseases and mental health. The main goal is to reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being by 2030.

7) Associated Organizations

There are loads of organizations that help to prevent and cure non-communicable diseases throughout the world. While some of them carry out projects to supply aid to people who are in need, other organizations try to raise awareness.

International Agency for Research on Cancer (IARC):

The International Agency for Research on Cancer (IARC) is a specialized agency of the World Health Organization (WHO) focused on studying, preventing, and controlling cancer worldwide. It works by conducting epidemiological and laboratory research to identify cancer risk factors, including lifestyle, environmental exposures, infections, and genetics, and publishes the IARC Monographs, which classify substances according to their carcinogenic potential. IARC runs projects such as establishing population-based cancer registries, supporting screening and vaccination programs (like HPV research), and providing training and technical assistance to researchers, healthcare professionals, and policymakers, especially in low- and middle-income countries. These efforts are highly beneficial, as they provide scientific evidence for policy decisions, improve access to cancer prevention and care, strengthen research capacity, and help reduce cancer incidence and mortality worldwide.

https://www.iarc.who.int/

Global Alliance for Chronic Diseases (GACD):

The Global Alliance for Chronic Diseases (GACD) is an international collaboration of major health research funding agencies that supports research to prevent and manage chronic non-communicable diseases (NCDs), such as heart disease, diabetes, cancer, and chronic respiratory diseases. GACD funds large-scale, collaborative studies that address global health challenges, particularly in low- and middle-income countries, focusing on prevention strategies, health system improvements, and innovative interventions. Its work helps generate evidence-based solutions to reduce the burden of chronic diseases worldwide and informs public health policies and programs.

https://www.gacd.org/

you can also access to associate members via this

link: https://www.gacd.org/about/people-and-organisation/associate-members

Non-Governmental Organizations (NGOs):

Several non-governmental organizations (NGOs) play a key role in addressing non-communicable diseases (NCDs) by promoting awareness, prevention, research, and policy advocacy. Some of the major NGOs include:

- a. **World Heart Federation (WHF):** Focuses on cardiovascular disease prevention, education, and advocacy worldwide.
- b. **International Diabetes Federation (IDF):** Works on diabetes awareness, prevention programs, and global policy initiatives.
- c. Union for International Cancer Control (UICC): Supports cancer prevention, early detection, treatment access, and global research collaboration.
- d. **World Obesity Federation:** Promotes policies and programs to prevent and manage obesity, a major risk factor for NCDs.
- e. **Global Alliance for Clean Cookstoves:** Helps reduce air pollution exposure, which contributes to respiratory NCDs, in low- and middle-income countries.
- f. **American Heart Association (AHA):** Provides education, research funding, and advocacy on cardiovascular health.

These NGOs often work in partnership with governments, international agencies, and local communities to reduce the global burden of NCDs, improve access to care, and raise public awareness about prevention strategies.

8) Post UN Actions

In the last two decades, both the World Health Organization (WHO) and the United Nations (UN) have initiated various programs to counter non-communicable diseases, with special emphasis on urban residents where lifestyle-related and environmental risk factors merge in higher concentrations.

United Nations Actions

In 2011, the UN General Assembly held its first High-Level Meeting on NCDs, which led to the Political Declaration on the Prevention and Control of Non-communicable Diseases. NCDs were for the first time identified as a key global development challenge calling for action.

The UN made reduction of NCDs part of the 2030 Agenda for Sustainable Development in 2015. In particular, Sustainable Development Goal (SDG) 3.4 aimed to reduce premature deaths from NCDs by a third by 2030 through prevention, treatment, and care of mental health and well-being.

UN created the Inter-Agency Task Force on the Prevention and Control of NCDs (UNIATF) in 2013, which leads support among UN agencies to support countries in developing their prevention and control plans for NCDs.

2014 and 2018 Follow-up High-Level Meetings on NCDs reviewed global progress, recommended additional action like control of tobacco and alcohol, and made a call to implement NCD prevention into transportation systems and urban development.

World Health Organization's Actions

WHO Member States in 2013 adopted the Global Action Plan for Prevention and Control of NCDs 2013–2020, later extended to 2030. The strategy includes global targets with special focus, for instance, tobacco use reduction, harmful alcohol consumption, physical inactivity, and unheathy diet.

WHO has established the Global Monitoring Framework for NCDs, which offers countries a framework of indicators and voluntary goals — including up to 2025, a reduction by 25% in premature death from NCD — by which to monitor progress.

The WHO Framework Convention on Tobacco Control, since its activation in 2005, remains one of the strongest global health treaties, which legally binds countries to a set of actions aimed at a reduction in tobacco use and exposure.

WHO developed the list of "Best Buys" and other recommended interventions, a series of low-cost policy interventions that can reduce NCD risk factors, some of which directly address urban issues, such as promoting active transport, regulating food marketing, and clean air.

Since then, WHO in cooperation with city councils globally through the Healthy Cities Network has been strengthening NCD prevention as an integrated

element of city developmental planning in transport, housing, and environment policies.

In 2021, WHO revised its Global Air Quality Guidelines setting much tighter limits on air pollutants like PM2.5 and PM10 in order to reduce the risk of cardiovascular and respiratory disease in the highly dense urban environment.

9) Questions To Be Addressed

- 1) In what ways can NGOs, community organizations, and public-private partnerships be leveraged to deliver prevention and care programs?
- 2) How can screening and early detection programs be expanded effectively in urban communities?
- 3) What prevention programs can cities implement to reduce NCD risk factors such as poor diet, physical inactivity, and tobacco use?
- 4) How can cities monitor and evaluate NCD interventions to ensure they are effective and reach vulnerable populations?
- 5) How can vaccination campaigns (e.g., HPV, hepatitis B) be scaled up in urban areas to prevent NCD-related cancers?
- 6) What strategies can improve access to affordable treatment, medications, and healthcare services for urban populations?
- 7) How can international cooperation and knowledge-sharing between countries and organizations strengthen urban strategies to prevent and reduce NCDs?
- 8) How can international funding mechanisms support urban NCD prevention programs in low- and middle-income countries?
- 9) How can international organizations support capacity-building and training of healthcare workers in urban areas?
- 10) What strategies can be implemented at local, national, and international levels to effectively raise awareness about NCD risk factors and healthy lifestyles in urban populations?

10) Bibliography

https://www.statista.com/chart/20706/new-cancer-cases-per-year/

https://www.cancer.org/cancer/understanding-cancer/what-is-cancer.html

https://gco.iarc.fr/en

https://www.who.int/news-room/fact-sheets/detail/mental-disorders

https://my.clevelandclinic.org/health/diseases/12194-cancer

World Health Organization, Global Report on Noncommunicable Diseases 2023, Geneva: WHO, 2023.

World Health Organization, Chronic Respiratory Diseases, WHO Fact Sheets, Geneva: WHO, 2023. https://www.who.int/health-topics/chronic-respiratory-diseases

World Health Organization, Diabetes, WHO Fact Sheets, Geneva: WHO, 2023. https://www.who.int/news-room/fact-sheets/detail/diabetes

World Health Organization, Global Action Plan for the Prevention and Control of NCDs 2013–2030, Geneva: WHO, 2022.

Centers for Disease Control and Prevention, Chronic Respiratory Diseases, Atlanta: CDC, 2023. https://www.cdc.gov/chronic-respiratory-diseases

Centers for Disease Control and Prevention, All About Your A1C, Atlanta: CDC, 2022. https://www.cdc.gov/diabetes/managing/managing-blood-sugar/a1c.html

National Heart, Lung, and Blood Institute, COPD National Action Plan, Bethesda, MD: NHLBI, 2017.