

# Non Communicable Diseases, the New Global Public Health Concern



**Alissar Rady, MD, MSc, MPH**  
National Professional Officer  
Head technical team  
WHO Lebanon

Non Communicable Diseases (NCDs) were ranked as one of the major global threats to economic development, and estimated to cost billions of dollars every year in lost productivity; the Global Economic Forum calculated that for every 10% rise in NCDs, the annual economic growth falls 0.5%.

Over the past few decades, NCDs are more and more causing premature deaths. Thirty-eight million people die each year from NCDs, most of them in developing countries, and mainly from cardiovascular diseases, cancers, chronic respiratory diseases and diabetes. Of these, over 14 million occur between the ages of 30 and 70.

The global recent evidence indicates that 13% of all deaths are attributed to hypertension (HTN). The data also shows that the prevalence of HTN ranges from 46% (African Region) to 35% (American Region), whereby men have slightly higher prevalence than women. Alarmingly, 1/3 of adults has HTN: 1/10 are 20-30 years old, and 5/10 are more than 50 years old

Risk factors for NCDs are multiple and interrelated. While genetic risk factors are seldom modifiable, many NCDs risk factors are related to individual choices and behaviors, and some are related to the environment. The common risk factors related to individual behavior include: physical inactivity, unhealthy diet and the harmful use of alcohol and tobacco consumption. The recent correlation between environmental risk factors and NCDs has gained increasing attention worldwide. Evidence indicates that ambient (outdoor) and household air pollution together caused

more than 6 million deaths from cardiovascular diseases, chronic respiratory diseases and lung cancer in 2012. Indoor exposure to second-hand tobacco smoke, exposure to chemicals, radiation and noise, and occupational risks are critical environmental risk factors heavily impacting on NCDs prevalence and care.

The global data indicates that 23% of all deaths could be prevented through healthier environments. Nearly two thirds of the 12.6 million deaths caused by the environment each year are due to NCDs. Ambient and household air pollution caused, respectively, 2.8 and 3.7 million NCD deaths from ischemic heart disease (IHD), stroke, chronic obstructive pulmonary disease (COPD) and lung cancer in 2012. We know now that almost one third of the cardiovascular disease burden is attributable to ambient and household air pollution (13% and 17% respectively), second-hand tobacco smoke (3%) and exposure to lead (2%). Around 29% of COPD deaths are attributable to household air pollution, 8% to ambient air pollution and 11% to air pollution in workplaces. Recent global research points out to the fact that early life exposure to environmental risks, such as chemicals and air pollutants, might increase NCD risk throughout the life course.

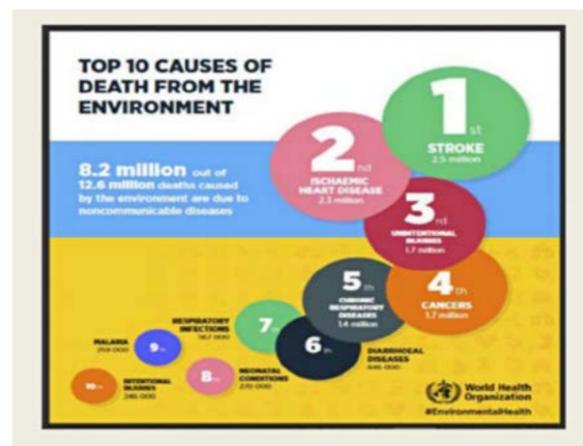


Fig1- top causes of deaths from environment( WHO, NCD global report 2014)

The world responded to this global NCDs epidemic by a UN General Assembly political declaration in September 2011 calling for the development of national multisectoral plans to prevent and control NCDs, and to consider the development of national targets to focus efforts and assess progress made. The UN GA declaration on NCDs acknowledged WHO leadership role, together with several time bound assignments.

The vision of the Global NCD program developed by WHO shortly after the UNGA declaration on NCDs aimed at a world free of the avoidable burden of non-communicable diseases. Its main goal is to reduce the preventable and avoidable burden of morbidity, mortality and disability due to non-communicable diseases by means of multisectoral collaboration and cooperation at national, regional and global levels, so that populations reach the highest attainable standards of health and productivity at every age and those diseases are no longer a barrier to well-being or socioeconomic development. The global NCD program is built on overarching principles of a life-course approach, empowerment of people and communities, evidence-based strategies, universal health coverage, management of

conflicts of interest in NCDs prevention and care, human rights approach, equity-based approach, and a multisectoral action reflected in national action and international cooperation and solidarity.

The global NCD action plan defined 6 strategic objectives as defined in table 1 below:

In the era of the Sustainable development goals, NCDs early detection, prevention and care are not only a health goal- SDG3; NCDs are directly affected by food security and safe nutrition (SDG 2), by access to safe water and sanitation (SDG6), by safe and renewable energy (SDG 7), by healthy cities (SDG 11), by climate change (SDG 13), and by societies that are inclusive (SDG 16) so that no one is left behind.

In line with the global epidemiologic context, and in line with the SDGs, WHO committed, in its 13th Global Program of Work (2019-2023), that health and wellbeing will be accessible to everyone everywhere, and placed NCDs early detection, prevention and care as a main pillar for Universal Health Coverage.

objective	DEFINITION
1	TO RAISE THE PRIORITY ACCORDED TO THE PREVENTION AND CONTROL OF NCD GLOBAL, REGIONAL AND NATIONAL AGENDAS AND INTERNATIONALLY AGREED DEVELOPMENT GOALS, THROUGH STRENGTHENED INTERNATIONAL COOPERATION AND ADVOCACY
2	TO STRENGTHEN NATIONAL CAPACITY LEADERSHIP, GOVERNANCE, MULTISECTORAL ACTION AND PARTNERSHIPS TO ACCELERATE COUNTRY RESPONSE FOR THE PREVENTION AND CONTROL OF NCD
3	TO REDUCE MODIFIABLE RISK FACTORS FOR NCD AND UNDERLYING SOCIAL DETERMINANTS THROUGH CREATION OF HEALTH-PROMOTING ENVIRONMENTS
4	TO STRENGTHEN AND ORIENT HEALTH SYSTEMS TO ADDRESS THE PREVENTION AND CONTROL OF NCD AND THE UNDERLYING SOCIAL DETERMINANTS THROUGH PEOPLE-CENTRED PRIMARY HEALTH CARE AND UNIVERSAL HEALTH COVERAGE
5	TO PROMOTE AND SUPPORT NATIONAL CAPACITY FOR HIGH-QUALITY RESEARCH AND DEVELOPMENT FOR THE PREVENTION AND CONTROL OF NCD
6	TO MONITOR THE TRENDS AND DETERMINANTS OF NCD AND EVALUATE PROGRESS IN THEIR PREVENTION AND CONTROL

Table 1- WHO global NCD plan of action 2013-2020