

# CSB IAS ACADEMY

THE ROAD MAP TO MUSSORRIE...

MAINS Impact- 2025 – 16/11/2024

## NON-COMMUNICABLE DISEASES

### SYLLABUS:

GS 2 > Social Justice >> Health

### REFERENCE NEWS:

The World Bank's 2024 report, Un-locking the Power of Healthy Longevity, highlights a rapidly aging population and the rise of NCDs in Low-and Middle-Income Countries (LMICs).

### NON-COMMUNICABLE DISEASES:

According to WHO, the term **NCDs** refers to a group of conditions that are not mainly caused by an acute infection, result in **long-term health consequences** and often create a need for long-term treatment and care.

- NCDs now account for **over 70% of global deaths annually**, and this trend is set to continue. **By 2050**, the total number of deaths is projected to rise from 61 million in 2023 to **92 million** as per WHO.

**Non-Communicable Diseases (NCDs)** are chronic medical conditions that are not transmitted from person to person. They are typically long-lasting and progress slowly. The major types of NCDs include cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes. These diseases are primarily driven by **lifestyle factors** and **environmental influences**, such as poor diet, lack of physical activity, tobacco use, and excessive alcohol consumption.

### PREVALENCE OF NCDs IN INDIA:

- According to the World Health Organization (WHO), NCDs account for approximately **63% of total deaths** in India, with cardiovascular diseases leading the burden at **27%**.
- India has witnessed a shift from communicable diseases to non-communicable diseases as the leading cause of mortality and morbidity, a phenomenon known as the **epidemiological transition**.

- The Indian Council of Medical Research (ICMR) projects that the number of people living with NCDs will continue to increase, largely due to aging, urbanization, and changing lifestyles.
- **Between 2019 and 2023, per capita health spending grew modestly**—0.4% in LICs and 0.9% in LMICs—compared to pre-pandemic growth rates of 4.2% and 2.4%, respectively.
- **Cardiovascular Diseases (CVDs):** CVDs, including heart disease and stroke, are the leading cause of death in India, contributing to over **25% of total deaths**.
  - The rise in hypertension and obesity is a major contributor to heart disease. According to the National Family Health Survey (NFHS-5), **24% of men and 21% of women** in India are hypertensive.
- **Diabetes:** India is known as the “**Diabetes Capital of the World,**” with over **77 million** people living with diabetes as of 2020, according to the International Diabetes Federation.
- **Chronic Respiratory Diseases (CRDs):** Chronic obstructive pulmonary disease (COPD) and asthma are leading respiratory conditions. In India, COPD is responsible for around **10% of total deaths**.
  - Air pollution, both indoor and outdoor, is a significant factor contributing to respiratory diseases. The Global Burden of Disease (GBD) study highlighted that **India has the highest rate of deaths due to chronic respiratory diseases globally**.
- **Cancers:** Cancer cases in India have been steadily increasing, with an estimated **1.39 million** new cases in 2020, according to the ICMR. The most common cancers include breast, cervical, and oral cancer.
  - Tobacco use is a major risk factor for cancers in India. It is estimated that **40% of all cancers in India are related to tobacco use**, including lung and oral cancers.

### Government Initiatives to Combat NCDs

- **National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS):** Aimed at reducing the burden of

NCDs by focusing on lifestyle interventions, early diagnosis, and health education. This is being implemented under National Health Mission

- **Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (PM-JAY):** Provides financial protection for secondary and tertiary care, including NCD treatment, to economically disadvantaged populations.
- **Fit India Movement:** Encourages physical activity and healthy living to address rising obesity and lifestyle-related diseases.
- **Tobacco Control Measures:** Increased taxes on tobacco products, pictorial warnings on packaging, and anti-tobacco awareness campaigns have been key measures to reduce tobacco use.
- Oncology in its various aspects has a focus in case of new AIIMS and many upgraded institutions under **Pradhan Mantri Swasthya Suraksha Yojana**
- **Affordable Medicines and Reliable Implants for Treatment (AMRIT)** Deendayal outlets have been opened at 159 Institutions/Hospitals with an objective to **make available Cancer and Cardiovascular Diseases drugs and implants at discounted prices to the patients.**
- **Jan Aushadhi stores** are set up by the Department of Pharmaceuticals to provide generic medicines at affordable prices.

### IMPACT OF NON-COMMUNICABLE DISEASES ON INDIA:

#### Impact on the Indian Economy

- **Economic Burden and Healthcare Costs:** NCDs impose a substantial financial burden on India's healthcare system due to the cost of long-term treatments, hospitalizations, medications, and diagnostics.
  - The World Health Organization (WHO) estimates that NCDs could cost India around **\$4.58 trillion** in economic output by 2030 due to healthcare costs and reduced labour productivity. According to the **Public Health Foundation of India (PHFI)**, NCDs account for approximately **25% of all hospital admissions** and nearly **50% of all healthcare expenditures** in India, indicating the high economic strain they cause.

- **Loss of Productivity:** NCDs affect the working-age population, leading to **absenteeism**, reduced productivity, and early retirements. The loss of a healthy workforce directly impacts economic growth and development.
  - The Indian Council of Medical Research (ICMR) suggests that adults between the ages of **30 and 60**, the prime working age group, are increasingly affected by NCDs, leading to a decline in labour force participation.
- **Increase in Out-of-Pocket Expenditure (OOPE):** The high cost of managing chronic conditions often leads to significant out-of-pocket expenses for Indian households, pushing many families into poverty.
  - The **National Sample Survey Office (NSSO)** report (2018) highlighted that **over 70%** of healthcare costs in India are borne by households, with a substantial portion attributed to the treatment of NCDs.

### Impact on Indian Demography

- **Increased Morbidity and Mortality:** NCDs are now the leading cause of death in India, accounting for about **63% of all deaths**, according to the WHO. The burden has shifted from communicable diseases to NCDs, impacting life expectancy and health outcomes.
- **Premature Deaths and Life Expectancy:** NCDs are increasingly affecting younger age groups in India, leading to premature deaths and reducing the country's potential demographic dividend.
  - According to a study by the ICMR, NCDs account for nearly **60% of all premature deaths** in India, affecting individuals aged between 30 and 69.
- **Demographic Shift:** As India's population ages, the prevalence of NCDs is expected to rise, leading to increased demand for healthcare services, including long-term care and geriatric support.
  - The number of elderly in India (aged 60 and above) is projected to increase from **104 million in 2011 to 340 million by 2050**. This demographic shift will likely exacerbate the NCD burden, straining healthcare systems.

### Impact on Indian Society

- **Shift in Disease Patterns (Epidemiological Transition):** The shift from infectious diseases to NCDs has altered India's public health landscape, requiring a change in health priorities, resources, and infrastructure.
- **Impact on Social Dynamics and Family Structure:** Chronic NCDs lead to long-term financial burdens on families and can create emotional stress, impacting social stability. The care required for NCD patients often falls on family members, affecting their quality of life.
  - The NSSO reported that **over 18%** of household income in India is spent on healthcare, and in cases of severe chronic illness, this percentage can be significantly higher, impacting household well-being.
- **Increased Urbanization and Lifestyle Changes:** Rapid urbanization and lifestyle changes have contributed to a rise in NCDs. Increased consumption of processed foods, sedentary lifestyles, and stress have led to higher rates of obesity, hypertension, and diabetes.
  - Air pollution, a major urban issue, is a leading cause of chronic respiratory diseases in India. According to the GBD study, **India has some of the highest rates of deaths due to air pollution-related diseases**, affecting both urban and semi-urban populations.

### WAY FORWARD:

#### **Strengthening Primary Healthcare System**

- The **High-Level Expert Group (HLEG) on Universal Health Coverage** in 2011 emphasized the need to strengthen the primary healthcare system to manage NCDs.
- **Thailand's Universal Health Coverage Scheme** is a notable example where primary healthcare was made the cornerstone of NCD management. The scheme focuses on **community-based health** promotion and NCD prevention, significantly reducing hospitalization rates for chronic diseases.

#### **Implementing Comprehensive Preventive Health Programs**

- The **National Health Policy 2017** advocates for a preventive approach to healthcare, with an emphasis on lifestyle changes, early screening, and community awareness to reduce NCD risk factors.
- **Finland's North Karelia Project** is a globally recognized success in reducing cardiovascular diseases. The project focused on promoting dietary changes,

increasing physical activity, and reducing tobacco consumption, leading to a significant decline in heart disease mortality.

### Targeted Screening and Early Detection

- **Cuba's Comprehensive Primary Healthcare System** is renowned for its proactive screening and preventive care for NCDs. It has a robust network of primary care centers that conduct regular screening for diabetes, hypertension, and cancers, leading to early diagnosis and better outcomes.

### Promoting Multi-Sectoral Collaboration

- The **NITI Aayog's Strategy for New India @ 75** (2018) emphasizes a **multi-sectoral approach** to combat NCDs, involving various ministries such as health, education, urban development, agriculture, and finance.
- **Australia's National Strategic Framework for Chronic Conditions** employs a multi-sectoral strategy, involving collaboration between the healthcare sector, local governments, and non-health sectors to address the social determinants of health and reduce NCD prevalence.

### Strengthening Tobacco and Alcohol Control Measures

- The **WHO Framework Convention on Tobacco Control (FCTC)**, which India is a signatory to, recommends strict regulation of tobacco products, higher taxation, and public awareness campaigns to reduce tobacco consumption.
- **Australia's Plain Packaging Law** for tobacco and the increased excise tax on cigarettes have significantly reduced smoking rates, leading to lower incidences of tobacco-related diseases.

### Adopting Technology and Data-Driven Approaches

- **Singapore's National Electronic Health Record (NEHR)** system provides an integrated platform for healthcare providers to track patient data, monitor NCD management, and deliver coordinated care.

### Expanding Access to Affordable Medicines and Treatment

- **Brazil's Farmácia Popular Program** subsidizes essential medicines for NCDs, including diabetes and hypertension, making them affordable for low-income populations.

### Scaling Up Health Workforce Capacity

- **Sri Lanka's Capacity Building Initiative** trained primary healthcare workers and community health volunteers in NCD management, leading to improved diagnosis and care at the grassroots level.

### **Fostering Public-Private Partnerships (PPP)**

- The **NITI Aayog's Health Sector Roadmap** recommends leveraging public-private partnerships to improve healthcare infrastructure, technology, and delivery of NCD care.

### **Life-Course Approach to NCDs**

- WHO report advocates a life-course approach to managing NCDs, emphasizing prevention, early diagnosis, and continuous management across all ages. This approach requires reforms across health, labour, and social protection sectors to support long-term care and reduce NCD burdens.

### **Addressing Gender and Social Equity**

- Targeted health and social protections for women are necessary to address the challenges they face as caregivers and as individuals who experience a greater burden of NCDs in older age.

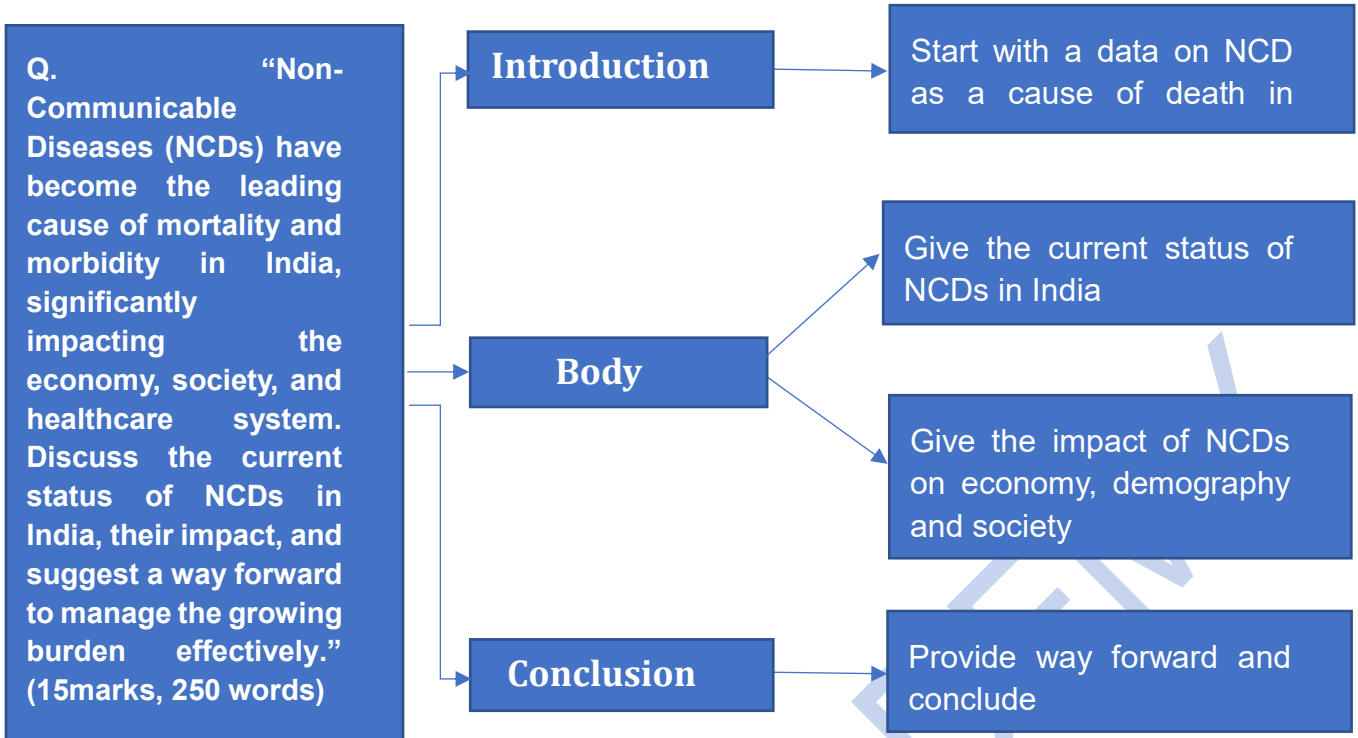
### **Agenda for Sustainable Development**

- As part of the 2030 Agenda for Sustainable Development, **heads of state and government committed to develop ambitious national responses, by 2030**, to reduce by one third premature mortality from NCDs through prevention and treatment (SDG target 3.4).

### **PRACTICE QUESTION:**

**Q. "Non-Communicable Diseases (NCDs) have become the leading cause of mortality and morbidity in India, significantly impacting the economy, society, and healthcare system. Discuss the current status of NCDs in India, their impact, and suggest a way forward to manage the growing burden effectively." (15marks, 250 words)**

### **APPROACH:**



### MODEL ANSWER:

According to the World Health Organization (WHO), NCDs account for over **63% of all deaths** in India. The country has undergone an epidemiological shift from infectious diseases to NCDs, posing a major public health challenge.

### CURRENT STATUS OF NCDs IN INDIA:

- **Prevalence and Rising Burden:** NCDs are now the leading cause of death, with cardiovascular diseases contributing to **27%** of all deaths. India has one of the highest numbers of diabetes cases, with over **77 million** affected as of 2020.
- **Major NCDs Impact:**
  - **Cardiovascular Diseases (CVDs):** CVDs are the top cause of mortality, driven by rising hypertension and obesity rates. The National Family Health Survey (NFHS-5) indicates **24% of men and 21% of women** in India are hypertensive.
  - **Diabetes:** India is known as the “Diabetes Capital of the World,” with a high prevalence in urban areas due to lifestyle changes.
  - **Chronic Respiratory Diseases (CRDs):** COPD and asthma are prevalent, with indoor and outdoor air pollution contributing significantly. India has the highest rate of deaths due to chronic respiratory diseases globally.
  - **Cancers:** Increasing tobacco use is linked to **40% of cancer cases** in India, particularly lung and oral cancers

### IMPACT OF NCDs ON INDIA:

- **Economic Impact:**



- **Healthcare Costs:** NCDs impose a heavy financial burden due to long-term treatments and hospitalizations. According to WHO, they could cost India around **\$4.58 trillion** by 2030, impacting economic productivity.
- **Loss of Productivity:** NCDs affect the working-age population, leading to absenteeism and early retirements. The Indian Council of Medical Research (ICMR) reports that NCDs significantly reduce labor force participation
- **Out-of-Pocket Expenditure:** High healthcare costs lead to substantial out-of-pocket spending, pushing families into poverty. The National Sample Survey Office (NSSO) noted that over **70% of healthcare costs** are covered by households, with a large portion attributed to NCD treatment
- **Demographic Impact:**
  - **Increased Morbidity and Mortality:** NCDs account for nearly **60% of premature deaths**, particularly affecting individuals aged 30-69 years. This impacts the country's potential demographic dividend
  - **Ageing Population:** As India's population ages, the NCD burden is expected to rise, leading to increased demand for geriatric and long-term healthcare.
- **Social Impact:**
  - **Changing Disease Patterns:** The transition from infectious diseases to NCDs has altered healthcare priorities and infrastructure needs.
  - **Impact on Families:** The financial and emotional strain of managing chronic diseases affects household stability, with over **18% of household income** spent on healthcare, particularly for severe illnesses
  - **Urbanization and Lifestyle Changes:** Rapid urbanization has led to sedentary lifestyles and dietary shifts, increasing obesity, diabetes, and cardiovascular diseases.

#### WAY FORWARD TO MANAGE NCDs IN INDIA:

- **Strengthening Primary Healthcare:** Implement the **High-Level Expert Group's (HLEG)** recommendations to improve primary healthcare for NCD management. Equip Primary Health Centers (PHCs) to provide preventive care, early diagnosis, and chronic disease management.
- **Promoting Preventive Health Programs:** Focus on lifestyle interventions, such as healthy eating, increased physical activity, and reducing tobacco and alcohol use. The **National Health Policy 2017** calls for preventive measures to tackle NCD risk factors.
  - Finland's **North Karelia Project** significantly reduced cardiovascular diseases by promoting healthy diets and active living.

- **Early Detection and Targeted Screening:** Integrate NCD screening into routine healthcare at primary and community levels, using mobile health (mHealth) apps for remote areas. Utilize the **National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)** for mass screening.
- **Strengthening Tobacco and Alcohol Control:** Increase taxes on tobacco and alcohol, introduce plain packaging for tobacco products, and enforce strict regulations to limit advertising. India is a signatory to the **WHO Framework Convention on Tobacco Control (FCTC)**, which supports these measures.
- **Adopting Technology for Data-Driven Decisions:** Use digital health platforms for tracking NCD cases, monitoring patient health, and delivering personalized care. Develop a **National Health Registry** for NCDs to monitor trends and improve healthcare delivery.
- **Public-Private Partnerships:** Foster collaboration between the government and private sector to enhance healthcare infrastructure, technology, and delivery. Encourage private investment in setting up NCD clinics, diagnostics, and telemedicine.

The growing prevalence of NCDs in India presents a significant challenge, impacting the economy, demography, and society. A comprehensive strategy involving preventive healthcare, early detection, technology integration, and multi-sectoral collaboration is essential to manage the NCD burden. Learning from global best practices and implementing strong policy measures will be crucial in ensuring a healthier future for India.